

Annual Report 2019

of the Certified Breast Cancer Centres (BCCs)

Audit year 2018 / indicator year 2017



Deutsche Gesellschaft für Senologie

(German Society for Senology)



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General information

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Kennzahl Nr. 17: Mastektomien.....	
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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

	Kennzahldefinition	Alle Standorte 2017		
		Median	Range	Patienten Gesamt
Zähler	Primärfälle mit inv. Mammakarzinom, bei denen der Nodalstatus bestimmt wurde	131*	45 - 735	41911
Nenner	Operierte Primärfälle mit invasivem Mammakarzinom	133,5*	47 - 752	43203
Quote	Sollvorgabe ≥ 95%	98,04%	80,56% - 100%	97,01%***

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.

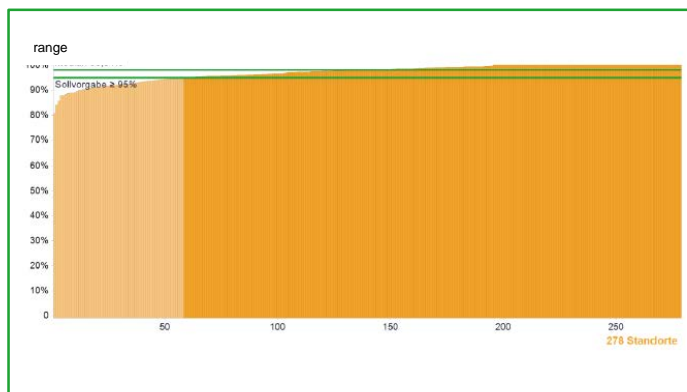
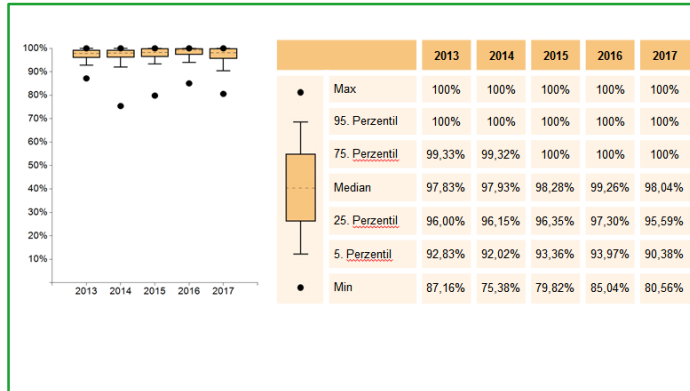


Diagram:

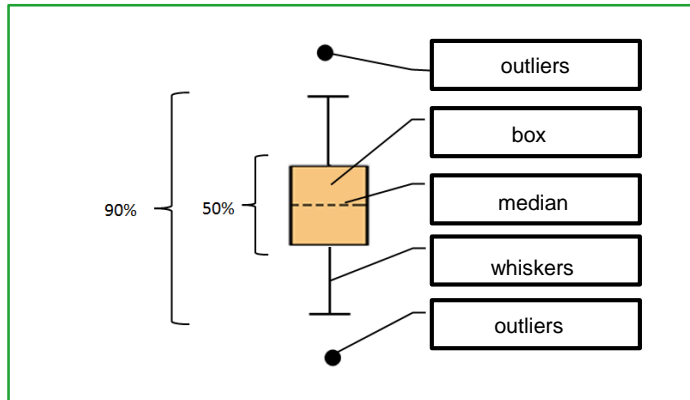
The x-axis indicates the number of Centres, the y-axis gives the values in percent or number (e.g. primary cases). The target value is depicted as a horizontal green line. The median, which is also depicted as a green horizontal line, divides the entire group into two equal halves.

General information



Cohort development:

The cohort development in the years **2013, 2014, 2015, 2016** and **2017** 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

	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013
Ongoing procedures	4	2	2	2	4	2
Certified centres	237	234	230	228	224	218
Certified clinical sites	280	280	280	279	277	274
BCC with 1 clinical site	199	193	186	183	177	169
2 clinical sites	35	38	40	41	43	44
3 clinical sites	1	1	2	2	2	3
4 clinical sites	2	2	2	2	2	2

Included clinical sites

	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014	31.12.2013
Clinical sites included in the Annual Report	278	275	275	275	273	268
Equivalent to	99.3%	98.2%	98.2%	98.6%	98.6%	97.8%
Primary cases total*	55,715	54,385	53,837	52,965	52,904	50,195
Primary cases per centre (median)*	200	198	196	193	194	187
Primary cases per centre (median)*	178	175	177	169	172	170.5

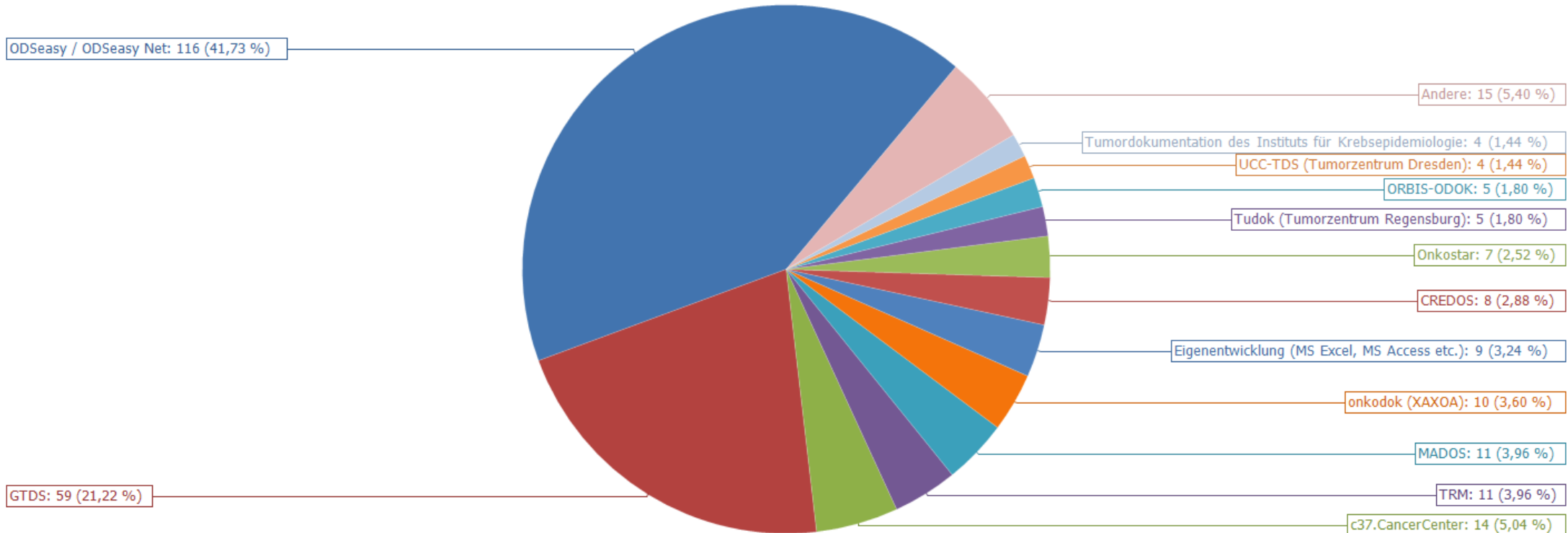
*The figures are based on the clinical sites listed in the Annual Report.

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 includes 278 of the 280 certified center sites. 1 clinical site, which was certified for the first time in 2018 (complete data submission of calendar year for initial certifications not obligatory) and 1 clinical site, which did not have an audit in 2018 due to the insolvency of the clinic group (no data sheet available). In all 279 locations, a total of 55,862 primary cases of breast cancer were treated. An up-to-date overview of all certified locations is shown at www.oncomap.de.

The indicators published here refer to the indicator year 2017. They are the basis for the audits conducted in 2018.

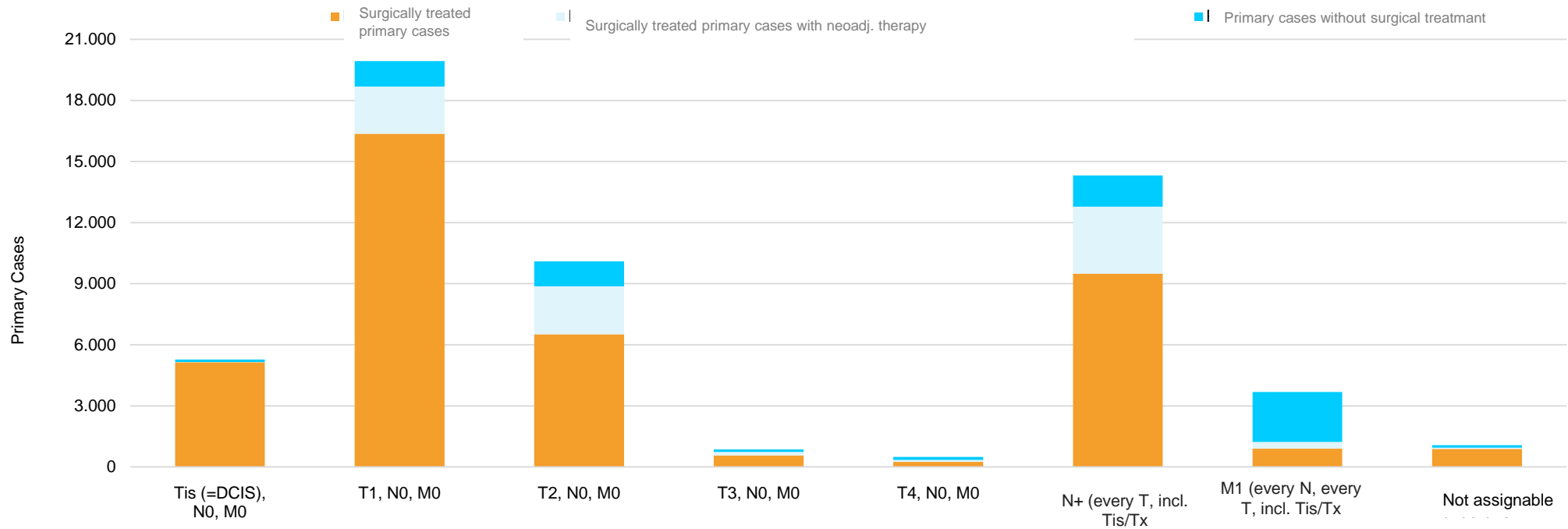
Tumour documentation systems used in BCCs



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.

Legend	
Others	System used in < 4 clinical sites

Basic data – Primary Cases Breast Cancer



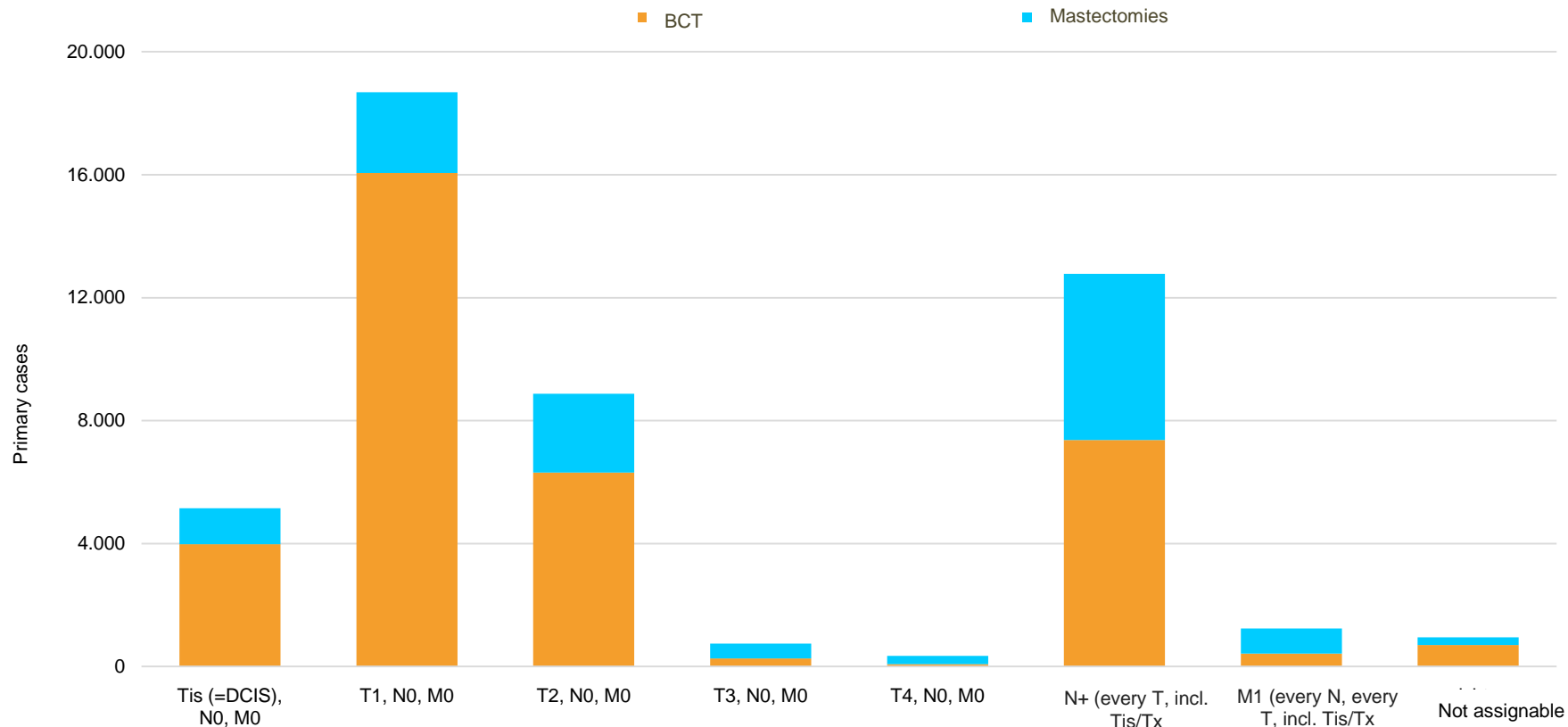
	Tis (=DCIS), NO, MO	T1, NO, MO	T2, NO, MO	T3, NO, MO	T4, NO, MO	N+ (every T incl. Tis/Tx), M0)	M1 (jedes N, every T incl. Tis/Tx)	Not varifiable*	Total
Primary cases nicht operiert	124 (2.35%)	1,244 (6.24%)	1,222 (12.11%)	116 (13.54%)	151 (30.51%)	1,538 (10.74%)	2,444 (66.47%)	122 (11.40%)	6,961
Primary cases operiert mit neoadj. Th.**	13 (0.25%)	2,319 (11.63%)	2,359 (23.37%)	176 (20.54%)	102 (20.61%)	3,276 (22.88%)	339 (9.22%)	62 (5.79%)	8,646
Primary cases without neoadj. Th.***	5,138 (97.40%)	16,370 (82.13%)	6,511 (64.52%)	565 (65.93%)	242 (48.89%)	9,502 (66.37%)	894 (24.31%)	886 (82.80%)	40,108
Primary cases Total	5,275	19,933	10,092	857	495	14,316	3,677	1,070	55,715

*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

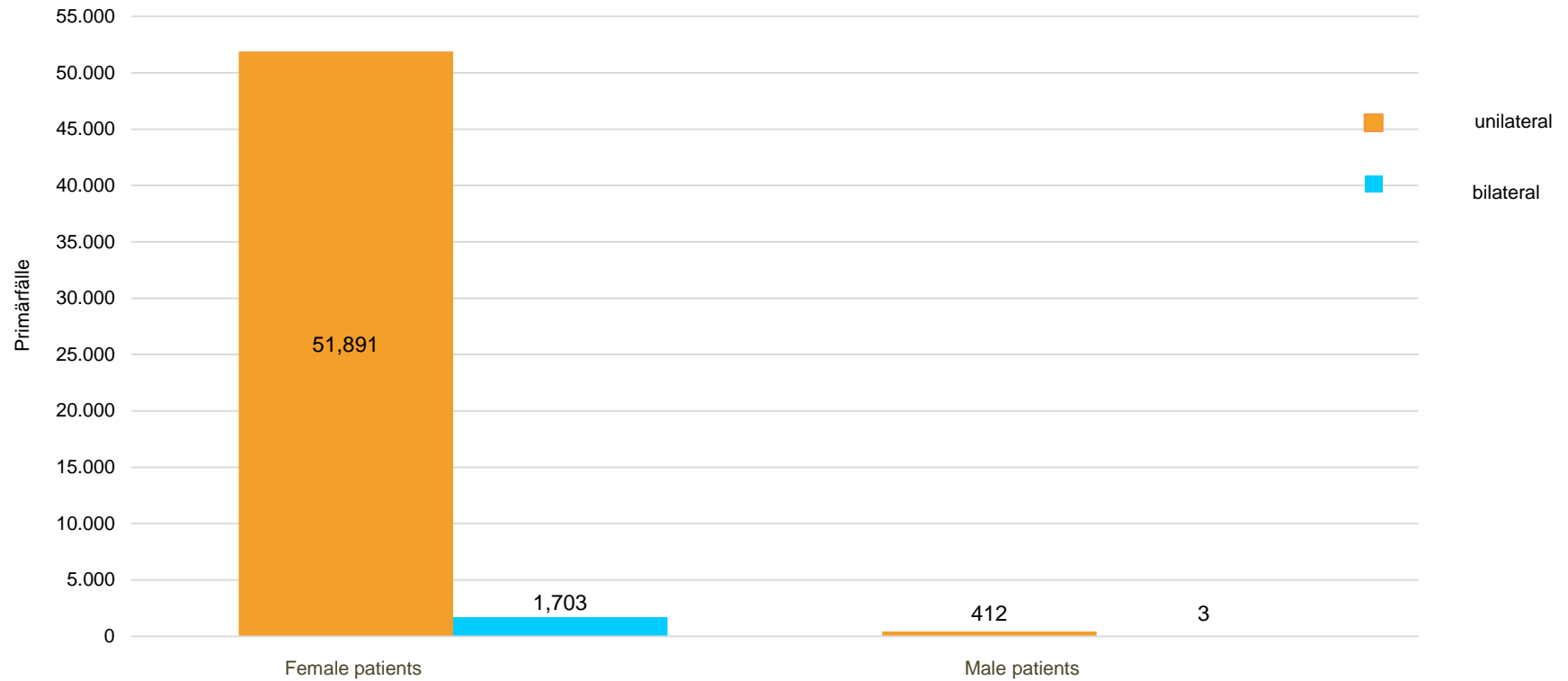
Basic data – Distribution of surgically treated primary cases



	Tis (=DCIS), NO, M0	T1, NO, M0	T2, NO, M0	T3, NO, M0	T4, NO, M0	N+ (jedes T inkl. Tis/Tx), M0)	M1 (jedes N, jedes T inkl. Tis/Tx)	Not classifiable*	Total
Mastectomies	1,170 (22.71%)	2,634 (14.09%)	2,557 (28.83%)	483 (65.18%)	265 (77.03%)	5,407 (42.31%)	811 (65.77%)	248 (26.16%)	13,575
BCT	3,981 (77.29%)	16,055 (85.91%)	6,313 (71.17%)	258 (34.82%)	79 (22.97%)	7,371 (57.69%)	422 (34.23%)	700 (73.84%)	35,179
Surgically treated Primary cases Total	5,151	18,689	8,870	741	344	12,778	1,233	948	48,754

* Not classifiable: e.g. T1, N0, Mx

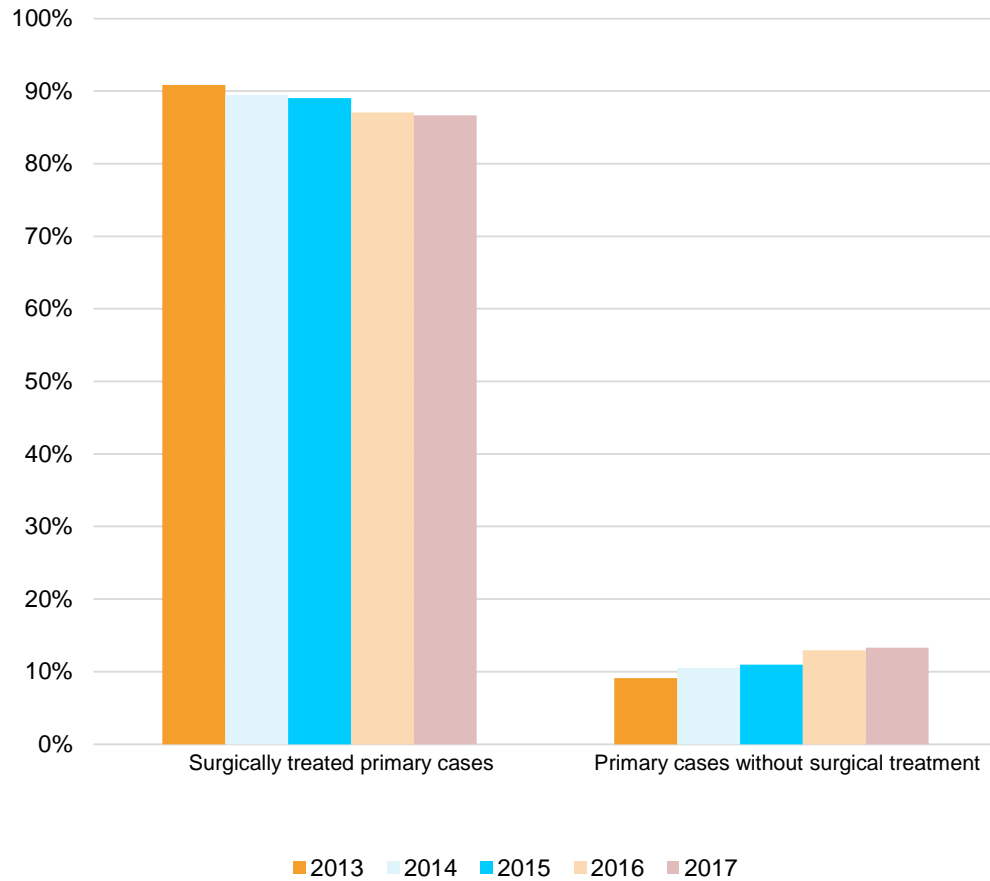
Basic data – Gender distributuon



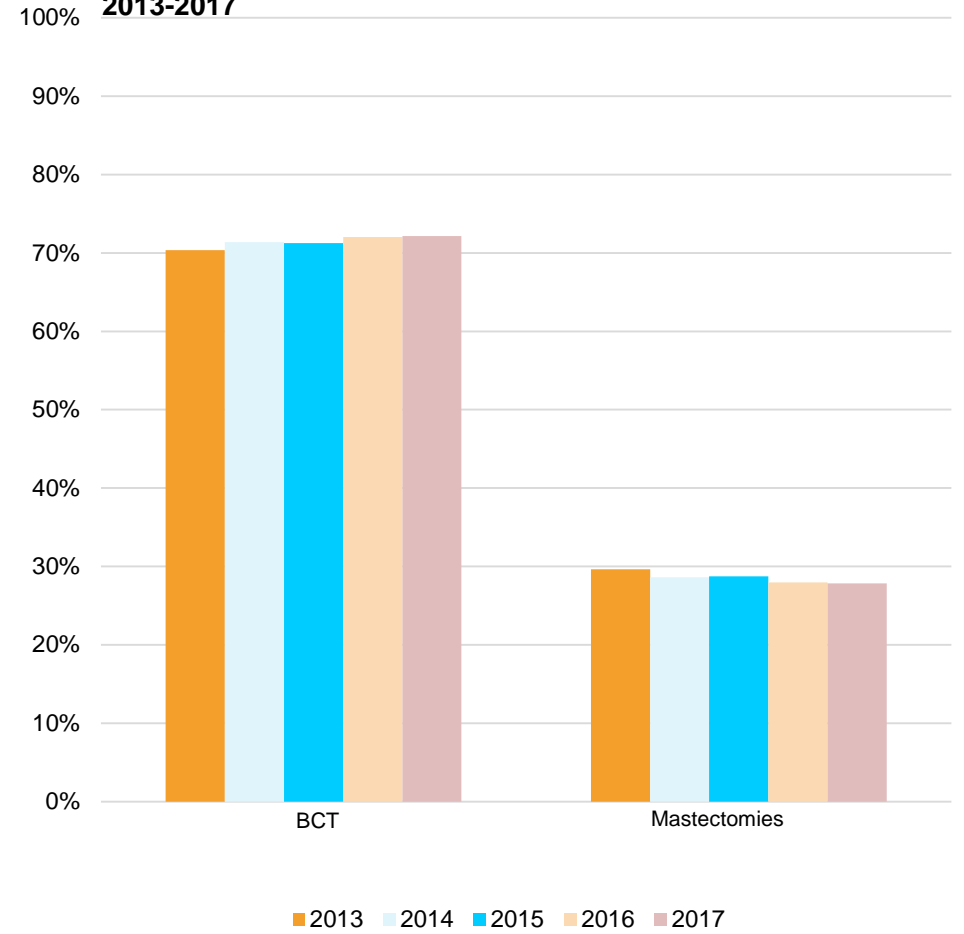
	Female patients		Male Patients	Primary cases Total
unilateral		51,891 (96,82%)	412 (99,28%)	52,303
bilateral (simultaneous)		1,703 (3,18%)	3 (0,72%)	3,412
				55,715
Total		53,594	415	

Basic data – Development 2013 - 2017

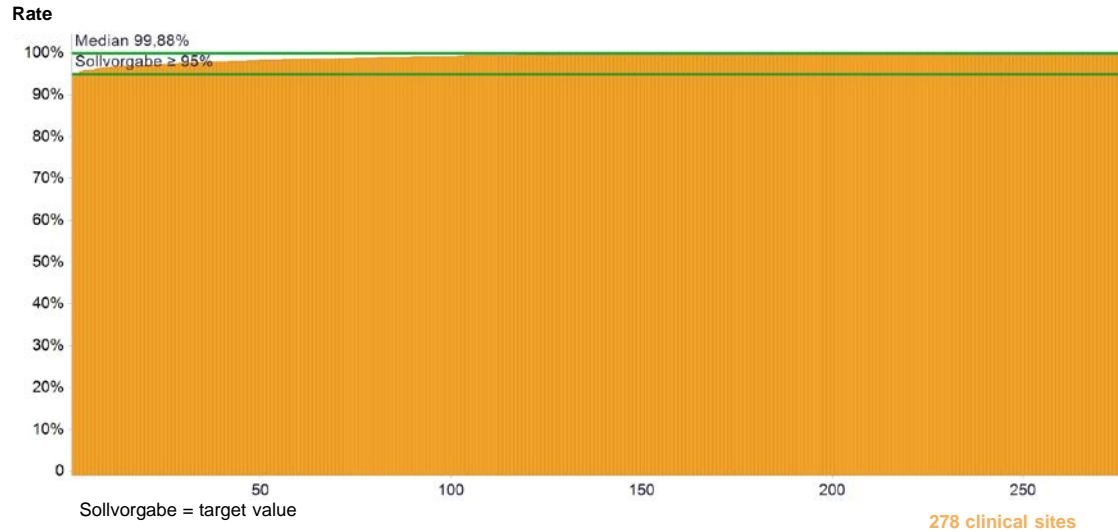
Distribution of primary cases with surgical vs. non-surgical treatment 2013-2017



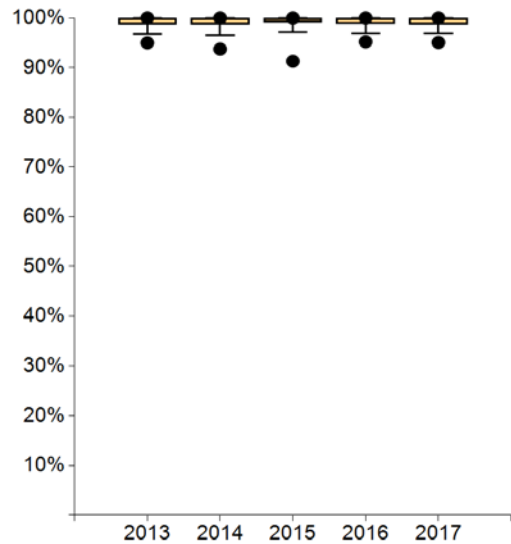
Distribution of primary cases with surgical treatment 2013-2017



1. Postoperative case presentation



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	All surgically treated primary cases presented in the tumour board	149.5*	51 - 858	48,355
Denominator	Surgically treated primary cases (for definition of a primary case see 1.2.0)	150*	52 - 858	48,754
Rate	Target value ≥ 95%	99.88%	95.07% - 100%	99.18%**



	2013	2014	2015	2016	2017
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%	99.88%
25 th percentile	98.69%	98.76%	99.11%	98.82%	98.73%
5 th percentile	96.77%	96.55%	97.20%	96.95%	96.85%
Min	95.00%	93.75%	91.30%	95.21%	95.07%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	278	100.00%

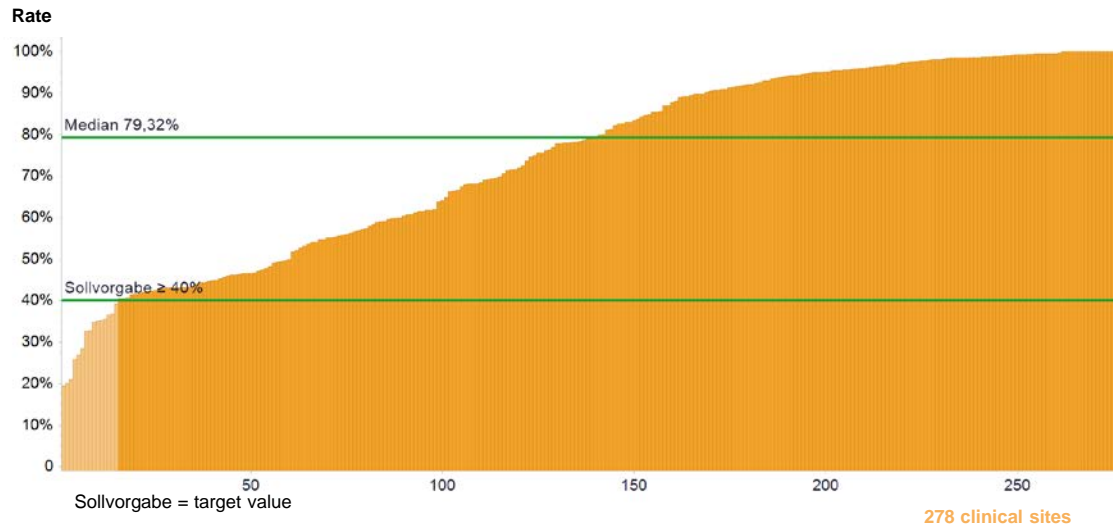
Comment

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

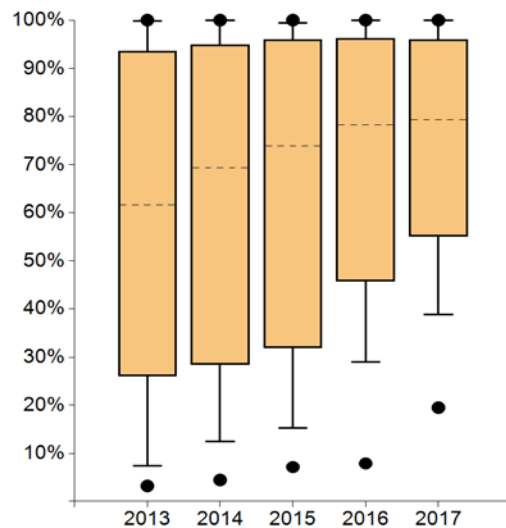
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator

2. Pretreatment case presentation



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Number of primary cases presented in the pre-therapeutic tumour board	126*	27 - 724	41,204
Denominator	Primary cases	178*	62 - 907	55,715
Rate	Target value: ≥ 40%	79.32%	19.47% - 100%	73.5%**



	2013	2014	2015	2016	2017
● Max	100%	100%	100%	100%	100%
95 th percentile	99.77%	100%	99.41%	100%	100%
75 th percentile	93.63%	94.90%	96.02%	96.18%	95.92%
Median	61.60%	69.40%	73.84%	78.29%	79.32%
25 th percentile	25.97%	28.47%	32.00%	45.71%	55.14%
5 th percentile	7.26%	12.47%	15.33%	29.05%	38.88%
● Min	3.18%	4.41%	7.14%	7.89%	19.47%

Clinical sites with evaluable data		Clinical sites meeting the plausibility limit	
Number	%	Number	%
278	100.00%	263	94.60%

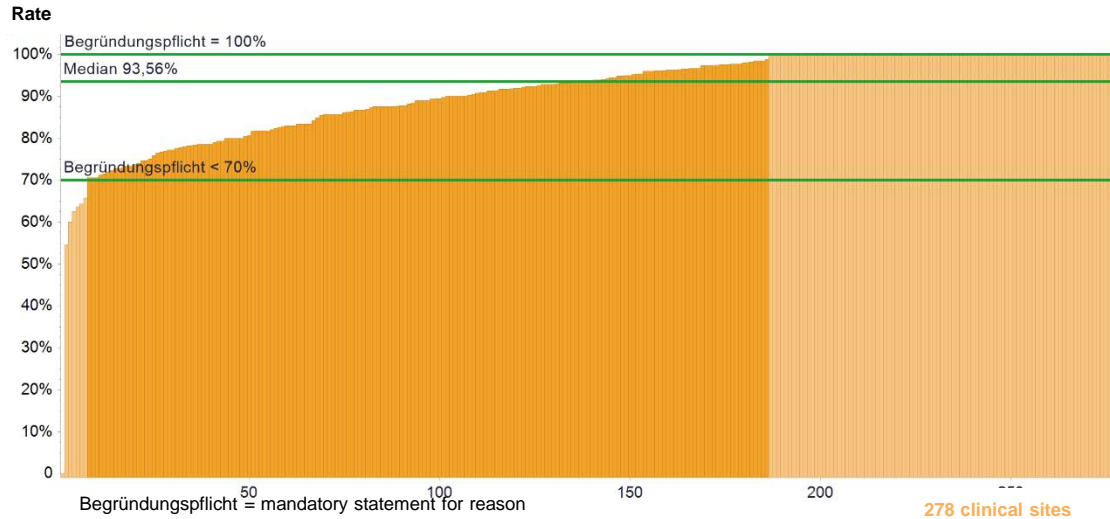
Comment

Compared to the previous year more sites met the target value of ≥40% presentation rate in the pre-therapeutic conference (94.6% versus 87.55% of the sites the previous year). Since the introduction of the target value in indicator year 2016, ongoing increase in the median and marked rise in the minimum value for the indicator. 165 Centres were able to maintain or increase their rate compared with the previous year. 15 Centres failed to meet the target value and the reasons they gave were the presentation only of neoadjuvant treated primary cases, documentation difficulties and the foregoing of a renewed discussion of patients who had already been discussed in the screening tumour conference or the senological-radiological conference.

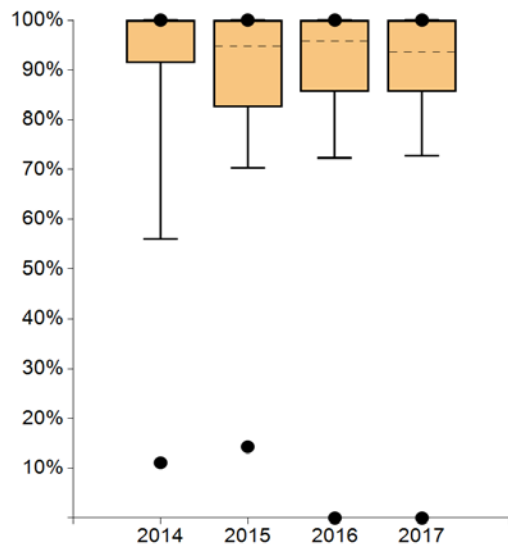
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator

3. Case discussion of local recurrence/metastases



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Number of cases with local recurrence/newly diagnosed metastases presented in the tumour board	23*	0 - 178	8,206
Denominator	Patients with first local recurrence and/or newly diagnosed metastases (excluding patients with metastases at initial presentation)	25*	1 - 180	9,061
Rate	Mandatory statement of reasons** <70% and =100%	93.56%	0,00% - 100%	90,56%* **



	2013	2014	2015	2016	2017
● Max	-----	100%	100%	100%	100%
95 th percentile	-----	100%	100%	100%	100%
75 th percentile	-----	100%	100%	100%	100%
Median	-----	100%	94.80%	95.74%	93.56%
25 th percentile	-----	91.37%	82.42%	85.71%	85.71%
5 th percentile	-----	56.04%	70,34%	72,29%	72.67%
● Min	-----	11.11%	14.29%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the plausibility limit	
Number	%	Number	%
278	100.00%	179	64.39%

Comment

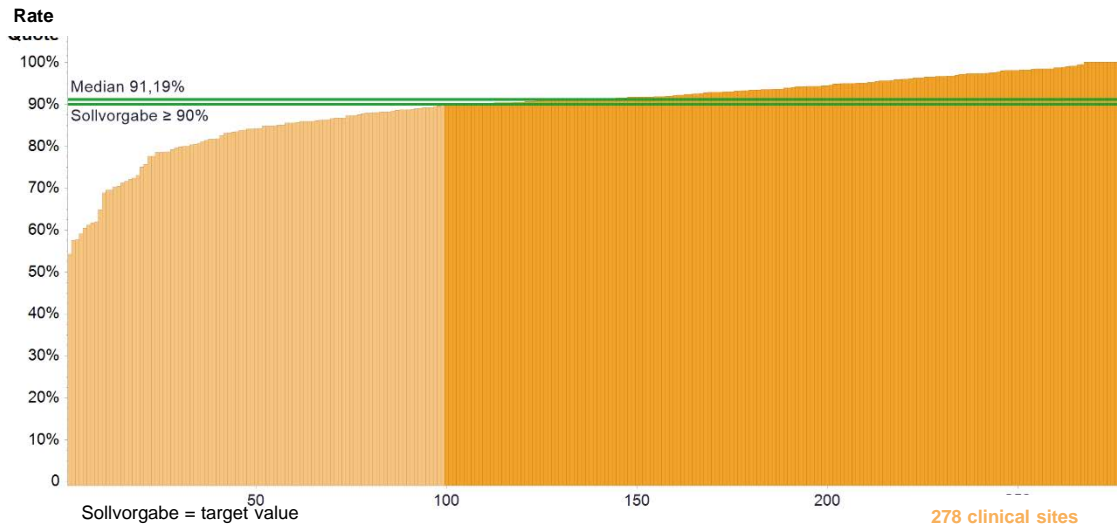
Ongoing very good implementation of the indicator with a slight fall in the median. 4 out of 5 Centres with a presentation rate of <70% the previous year were able to markedly improve their results. In 7 Centres the presentation rate was <70% in indicator year 2017. The reason given by the Centres for this was that patients with recurrence/secondary remote metastasis were treated, in part, by practice-based physicians or were treated in other clinics and not presented in the Centre. To increase the presentation rate the Centres try to improve networking cooperation particularly with practice-based physicians and to firmly establish internal standards.

*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.

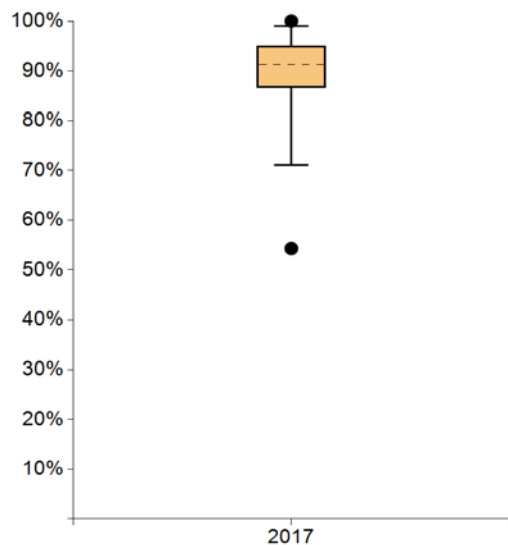
** For values outside the plausibility limit(s) the Centres must give the reasons.

*** Percentage of centre patients who were treated according to the indicator

4. Radiotherapy after BCS in the case of invasive mammary carcinoma



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Primary cases with inv. Mammary carcinoma and BCS, in which radiotherapy was recommended	83*	26 - 589	27,393
Denominator	Primary cases with an invasive mammary carcinoma and BCS (without primary M1 pat.)	95*	27 - 592	30,556
Rate	Target value ≥ 90%	91.19%	54.33% - 100%	89.65%**



	2013	2014	2015	2016	2017
● Max	----	----	----	----	100%
95 th percentile	----	----	----	----	99.07%
75 th percentile	----	----	----	----	95.07%
Median	----	----	----	----	91.19%
25 th percentile	----	----	----	----	86.62%
5 th percentile	----	----	----	----	71.06%
● Min	----	----	----	----	54.33%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	179	64.39%

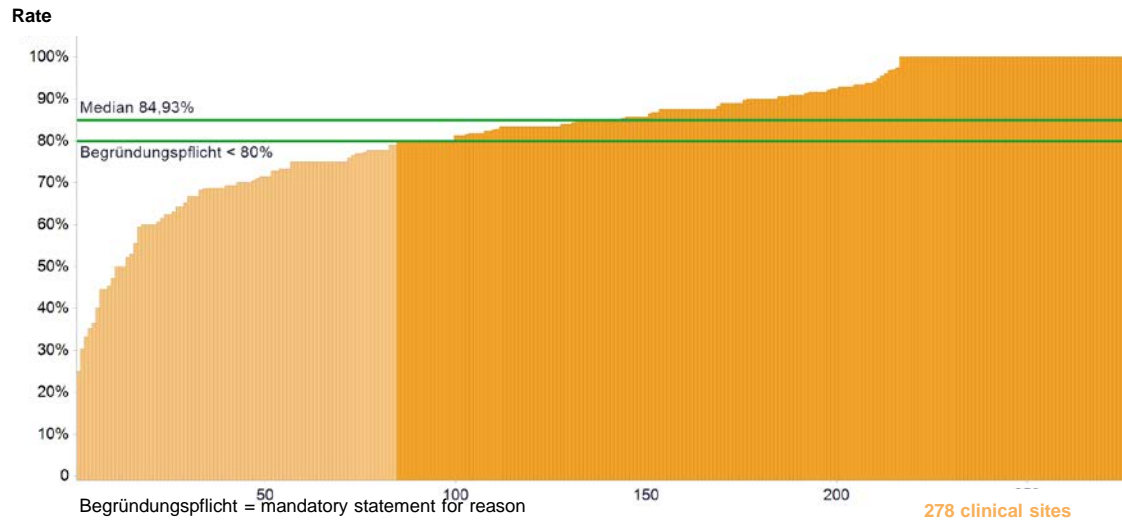
Comment

For this indicator an adjustment of the numerator definition was undertaken from indicator year 2017 (formerly Indicator 4.1) and since indicator year 2018 only the recommended radiotherapies have been recorded. 179 Centres met the target value for primary cases that underwent breast-conserving surgery. 99 centres failed to meet the target value of ≥90% and 12 of the 99 Centres had a rate of <70%. The reasons given by the Centres with a low radiotherapy rate were the foregoing of a recommendation for radiotherapy in the case of a patient with multimorbidity or scheduled mastectomy and recommended but not yet started chemotherapy or chemotherapy still ongoing at time of recording.

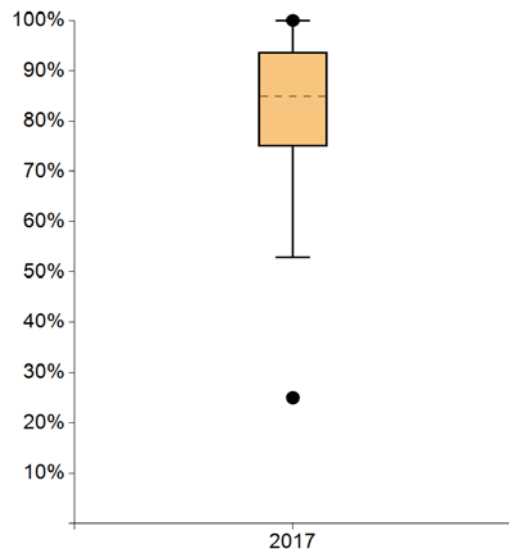
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator

5. Radiotherapy after BCS in the case of DCIS



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Primary cases with DCIS with BCS, in which radiotherapy was recommended	10*	1 - 66	3311
Denominator	Primary cases with DCIS and BCS	12*	1 - 68	3991
Rate	Mandatory statement of reasons** ≥ 80%	84,93%	25,00% - 100%	82,96%* **



	2013	2014	2015	2016	2017
Max	----	----	----	----	100%
95. Percentile	----	----	----	----	100%
75. Percentile	----	----	----	----	93.75%
Median	----	----	----	----	84.93%
25. Percentile	----	----	----	----	75.00%
5. Percentile	----	----	----	----	52.82%
Min	----	----	----	----	25.00%

Clinical sites with evaluable data		Clinical sites meeting the plausibility limit	
Number	%	Number	%
278	100.00%	194	69.78%

Comment

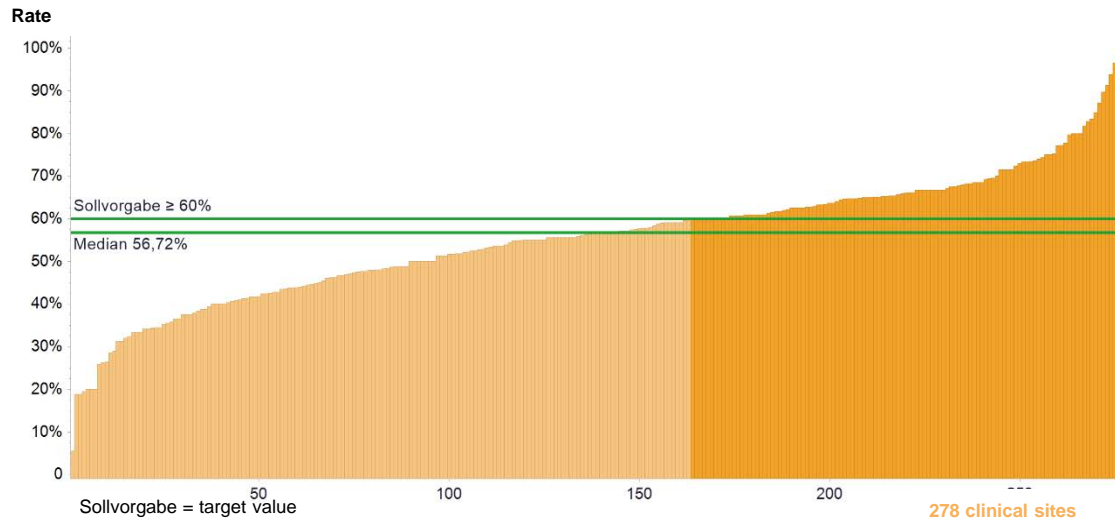
For this indicator an adjustment of the numerator definition was undertaken from indicator year 2017 (formerly Indicator 5.1) and since indicator year 2018 only the commenced radiotherapies have been recorded. 194 Centres achieved a rate of ≥80%. The reasons given by the Centres for the non-performance of radiotherapy were low grade DCIS, very small histological finding, lack of information about further treatment, comorbidity or rejection of treatment by the patients.

*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.

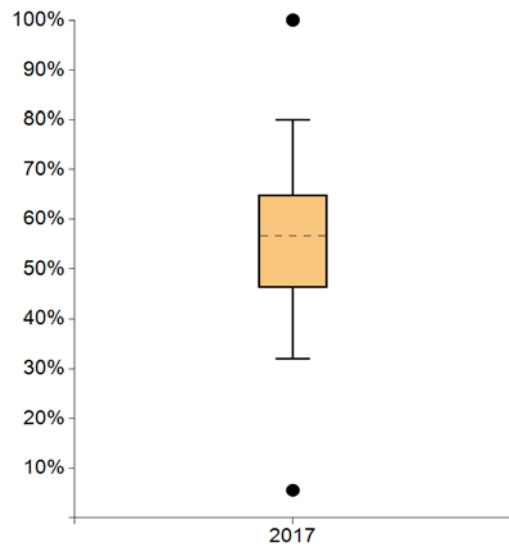
** For values outside the plausibility limit(s) the Centres must give the reasons.

*** Percentage of centre patients who were treated according to the indicator

6. Chemotherapy in the case of rec. pos. and nodal pos. Result



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Rec. pos. and nodal pos. Primary cases with invasive mammary carcinoma and for which chemotherapy was recommended	21*	1 - 124	6,616
Denominator	Primary cases with invasive mammary carcinoma with rec. pos. and nodal positive result (without primary M1 pat.)	38*	5 - 191	11,742
Rate	Target value ≥ 60%	56.72%	5,56% - 100%	56.34%**



	2013	2014	2015	2016	2017
Max	----	----	----	----	100%
95. Percentile	----	----	----	----	80,00%
75. Percentile	----	----	----	----	64,90%
Median	----	----	----	----	56,72%
25. Percentile	----	----	----	----	46,28%
5. Percentile	----	----	----	----	31,89%
Min	----	----	----	----	5,56%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	115	41.37%

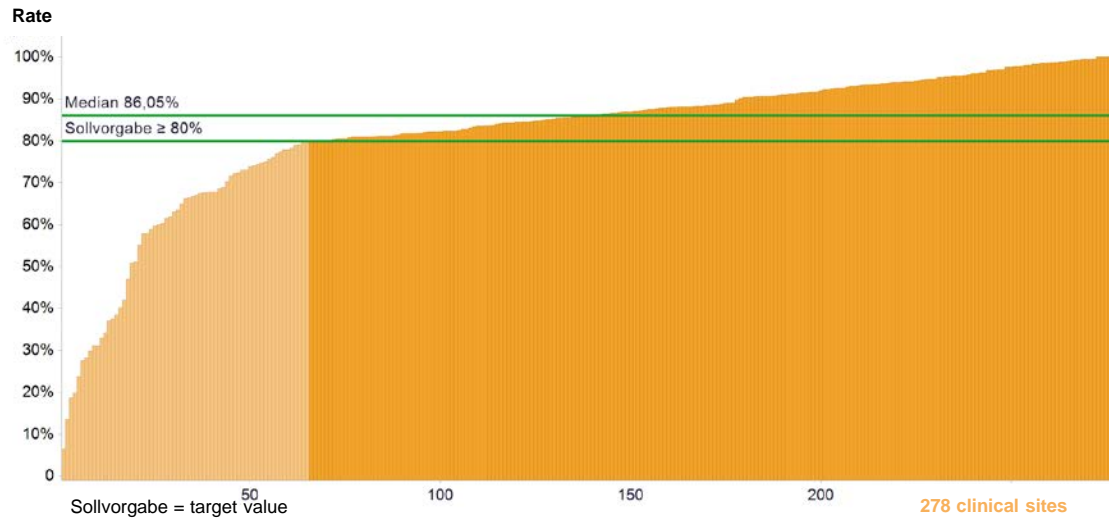
Comment

From indicator year 2017 onwards the numerator for this indicator with an unchanged denominator definition was adjusted and since indicator year 2018 only the recommended chemotherapies have been recorded. 163 Centres failed to meet the target value of ≥60%. The reasons given by the Centres for this were the presence of micrometastases or <3 pos. lymph nodes, rejection of therapy by the patients, existing comorbidities, advanced age or tumour biology with good prognosis. The results were examined in detail during the audits and underwent individual case analysis to check plausibility.

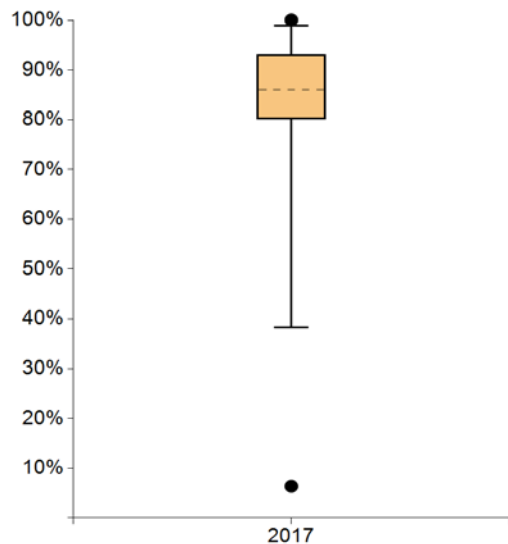
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator

7. Endocrine therapy in the case of steroid rec. positive result



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Steroid rec. positive Primary cases for which recommended endocrine therapy was recommended	103*	11 - 655	31,995
Denominator	Primary cases with invasive mammary carcinoma in the case of steroid rec. positive result (without primary M1 pat.)	126*	29 - 659	39,248
Rate	Target value \geq 80%	86,05%	6.40% - 100%	81.52%* *



	2013	2014	2015	2016	2017
Max	----	----	----	----	100%
95 th percentile	----	----	----	----	98.87%
75 th percentile	----	----	----	----	93.04%
Median	----	----	----	----	86.05%
25 th percentile	----	----	----	----	80.13%
5 th percentile	----	----	----	----	38.32%
Min	----	----	----	----	6.40%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100,00%	213	76,62%

Comment

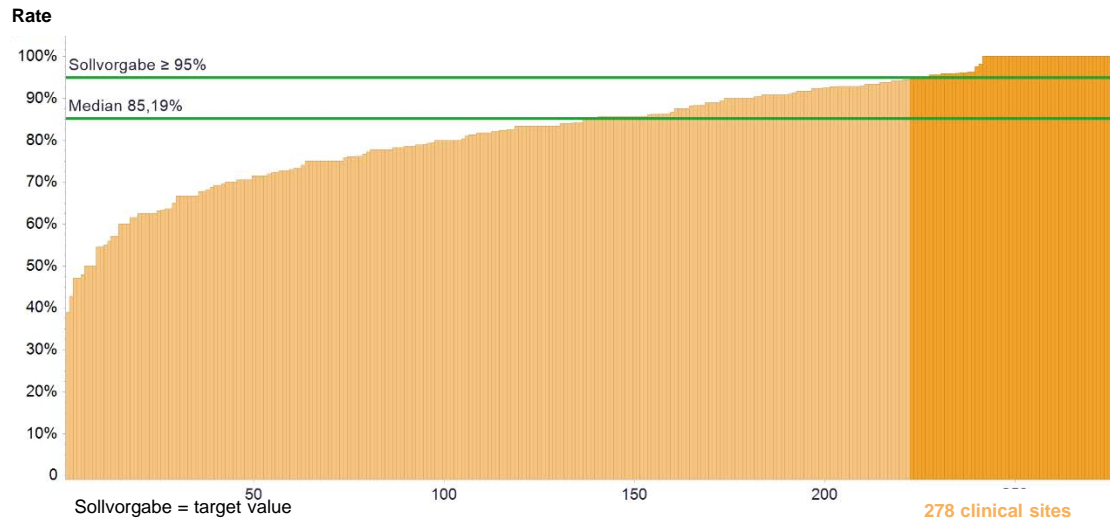
From indicator year 2017 onwards the numerator for this indicator with an unchanged denominator definition was adjusted and since indicator year 2018 only the recommended endocrine therapies have been recorded.

In 213 Centres endocrine therapy was initiated in the case of \geq 80% primary cases with a steroid receptor-positive mammary carcinoma. 65 Centres failed to meet the target value and the main reason they gave was the lack of information from the practice-based physicians. Other reasons cited were the rejection of therapy by the patients, the foregoing of endocrine therapy because of multimorbidity or urgent treatment of a second carcinoma, that Not yet completed primary therapies were given as another reason. The auditors made a series of remarks.

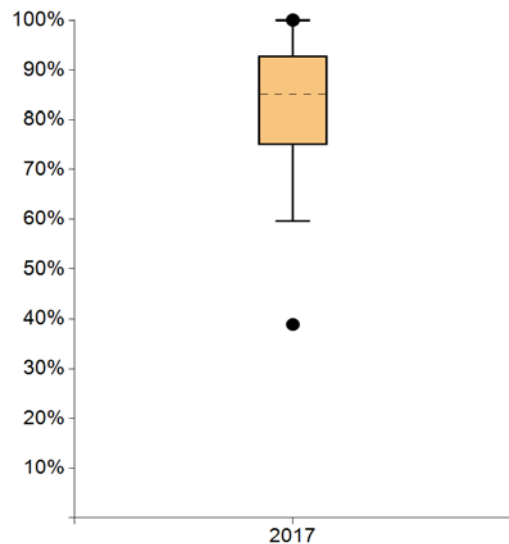
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator.

8. Trastuzumab therapy over 1 year in the case of HER-2 pos. result



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Her-2 pos. Primary cases with invasive mammary carcinoma for which trastuzumab therapy over 1 year was recommended	15*	2 - 82	4,799
Denominator	Primary cases with invasive mammary carcinoma with HER-2 positive result (without primary M1 pat.)	18*	4 - 83	5,721
Rate	Target value $\geq 95\%$	85.19 %	38.89 % - 100%	83.88%**



	2013	2014	2015	2016	2017
Max	----	----	----	----	100%
95 th percentile	----	----	----	----	100%
75 th percentile	----	----	----	----	92.86%
Median	----	----	----	----	85.19%
25 th percentile	----	----	----	----	75.00%
5 th percentile	----	----	----	----	59.57%
Min	----	----	----	----	38.89%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	56	20.14%

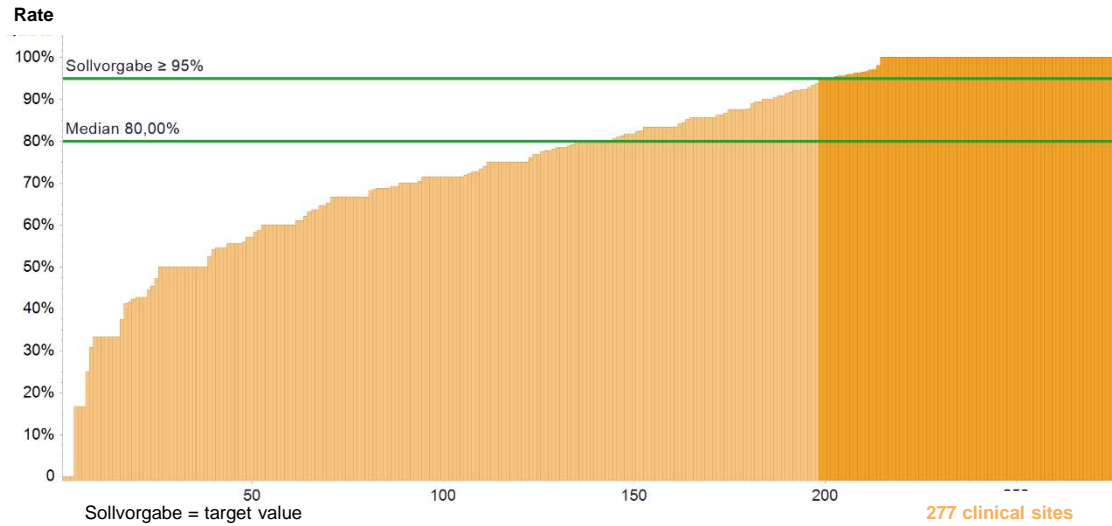
Comment

For this indicator an adjustment of the numerator definition was undertaken from indicator year 2017 (formerly Indicators 10.1/10.2) and since indicator year 2018 only the recommended trastuzumab therapies are recorded over the course of one year. Only 56 Centres met the target value of $\geq 95\%$ trastuzumab therapy rate for M0 primary cases with an Her2-positive mammary carcinoma. 125 out of 222 Centres that failed to meet the target value, achieved rates of between 80% and $<95\%$. The reasons given by the Centres for the low rates were therapy that had not yet begun but was scheduled, rejection of the therapy by the patients, foregoing of therapy because of advanced age/multimorbidity, post-operative death of the patients and a second carcinoma that determined the prognosis. The plausibility of the information from the Centres was verified during the audits using individual case checks.

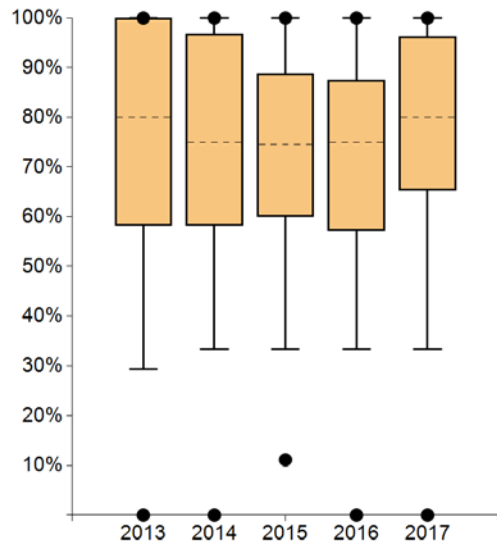
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator

9. Endocrine Therapy for metastasis



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Pat., who were started on endocrine based therapy in the metastasised stage as first-line therapy	8*	0 - 108	3,169
Denominator	Pat. with steroid rec. pos. and HER2-negative inv. mammary carcinoma with 1st Remote metastasis (incl. primary M1 pat.)	11*	1 - 113	4,031
Rate	Target value ≥ 95%	80,00%	0,00% - 100%	78,62%**



	2013	2014	2015	2016	2017
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	96,77%	88,89%	87,50%	96,30%
Median	80,00%	75,00%	74,54%	75,00%	80,00%
25 th percentile	58,33%	58,28%	60,00%	57,14%	65,22%
5 th percentile	29,36%	33,33%	33,33%	33,33%	33,33%
● Min	0,00%	0,00%	11,11%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
277	99.64%	79	28.52%

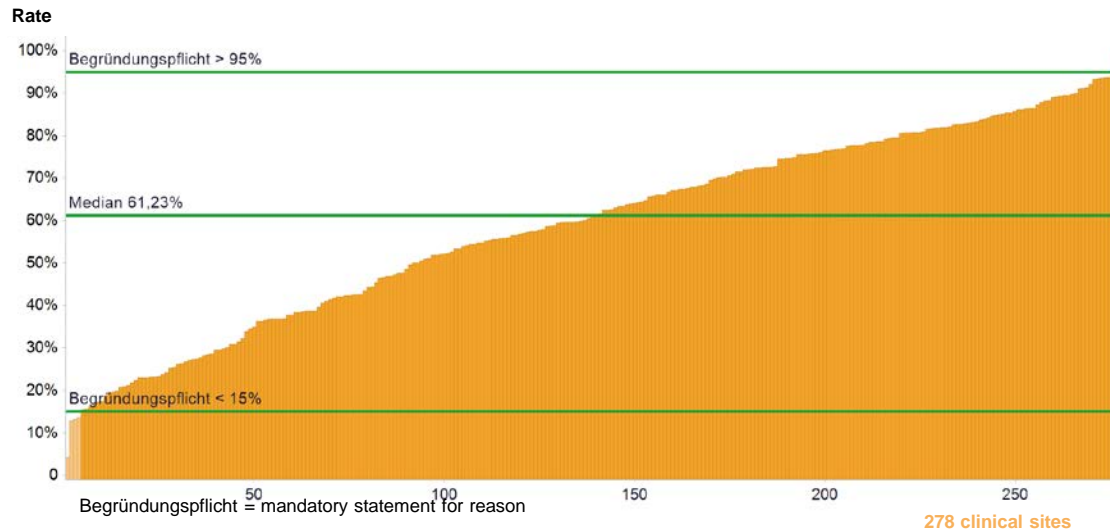
Comment

In comparison to the previous year a better implementation of the indicator with an increasing median. In 92 Centres the rate of endocrine first-line therapies had fallen. 177 Centres were able to maintain or increase their result from the previous year. 198 Centres did not meet the target value. The reasons they gave were a decision in favour of chemotherapy in order to achieve remission mainly in young patients, death of patients prior to commencement of therapy or rejection of therapy. Each of the 3 Centres with the lowest result (0%) had a very small population (1-5 patients in the denominator). The plausibility of the information from the Centres was verified using individual case checks. The auditors made remarks about improving networking cooperation and optimisation of the aftercare of outpatients.

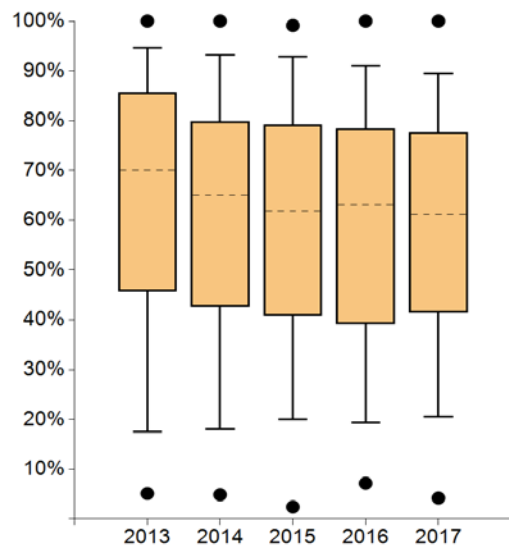
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator

10. Psycho-oncological care (consultation >25 min)



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Number of primary patients, who received psycho-oncological care (length of consultation > 25 Min.)	122*	8 - 939	38,507
Denominator	All primary cases including patients with local recurrence/newly diagnosed metastases (without primary M1 pat as they are already included in primary cases)	203*	65 – 1,087	64,776
Rate	Mandatory statement of reasons** <15% und >95%	61,23 %	4.21% - 100%	59.45%***



	2013	2014	2015	2016	2017
Max	100%	100%	99,12%	100%	100%
95 th percentile	94.60%	93.20%	92.81%	90.90%	89.54%
75 th percentile	85.60%	79.84%	79.18%	78.38%	77.60%
Median	70.07%	65.06%	61.82%	63.14%	61.23%
25 th percentile	45.74%	42.67%	40.82%	39.15%	41.46%
5 th percentile	17.57%	18.04%	20.05%	19.31%	20.60%
Min	5.11%	4.87%	2.44%	7.19%	4.21%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	272	97,84%

Comment

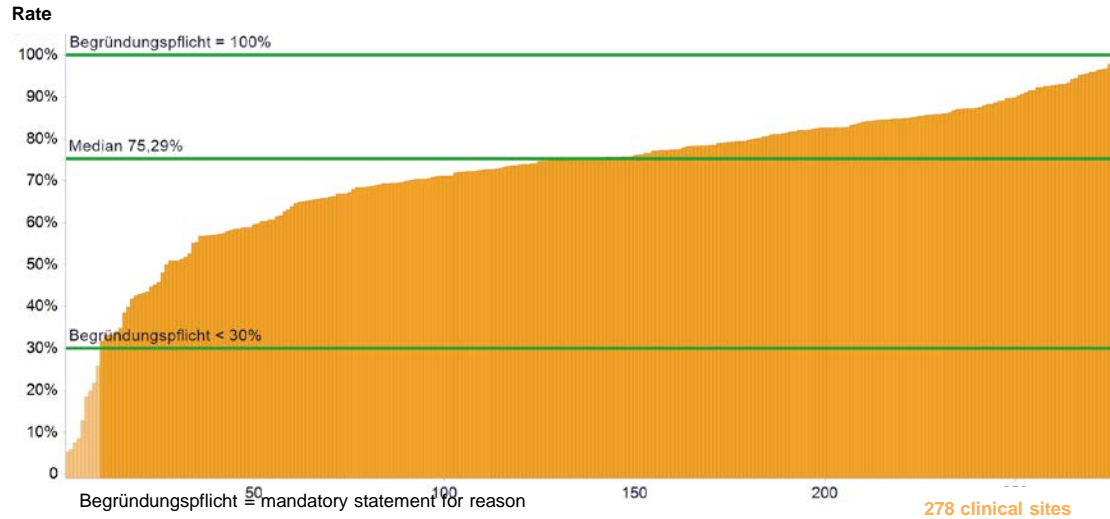
Ongoing good implementation of the indicator coupled with a slight decrease in the median and minimum value. In 127 Centres the psycho-oncological counselling rate could be improved compared with the previous year. In 4 Centres < 15% of patients had a psycho-oncological counselling session. The 6 Centres with the lowest result (<15%) the previous year were able to improve their counselling rate in indicator year 2017. The reasons given for the low counselling rates by the Centres were limited take-up or rejection of counselling by patients. The auditors pointed out the need to optimise the standard operating procedures (SOPs) for psycho-oncological care.

*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.

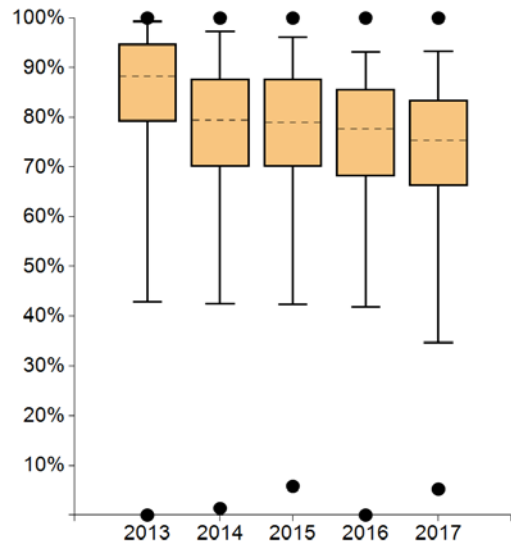
** For values outside the plausibility limit(s) the Centres must give the reasons.

*** Percentage of centre patients who were treated according to the indicator

11. Social service counselling



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Number of primary patients, who received social services counselling	145*	9 - 955	47,005
Denominator	All primary cases including patients with local recurrence/newly diagnosed metastases (without primary M1 pat as they are already included in primary cases)	203*	65 - 1087	64,776
Rate	Mandatory statement of reasons** <30% and =100%	75,29%	5,23% - 100%	72,57 %***



	2013	2014	2015	2016	2017
Max	100%	100%	100%	100%	100%
95 th percentile	99.34%	97.31%	96.12%	93.21%	93.32%
75 th percentile	94.76%	87.81%	87.72%	85.67%	83.60%
Median	88.33%	79.37%	78.99%	77.75%	75.29%
25 th percentile	79.14%	69.99%	70.02%	68.22%	66.16%
5 th percentile	42.97%	42.56%	42.33%	41.86%	34.66%
Min	0.00%	1.35%	5.81%	0.00%	5.23%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	268	96.40%

Comment

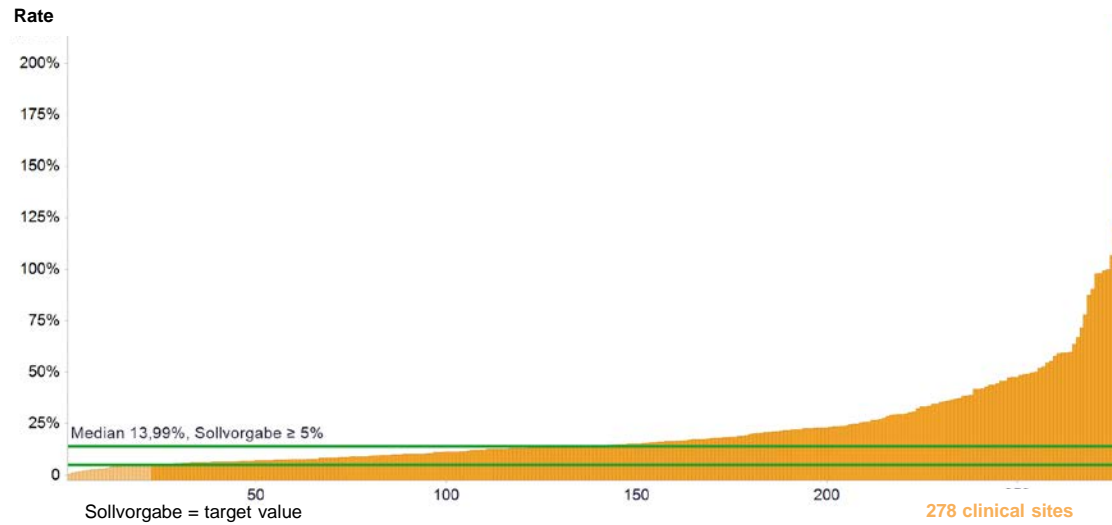
Over the course of time the median of the counselling rate in the Centres fell. In 137 Centres the social services counselling rate was lower than the previous year. 131 Centres were able to increase the proportion of patients receiving social services counselling. 7 of the 9 Centres with the lowest social services counselling rates (<30%) are located abroad where the statutory provisions for social services care differ from the situation in Germany. The reasons given for the low counselling rates in the German Centres were low take-up by patients or short hospital stay. Opportunities for improving social services care are discussed in quality circles.

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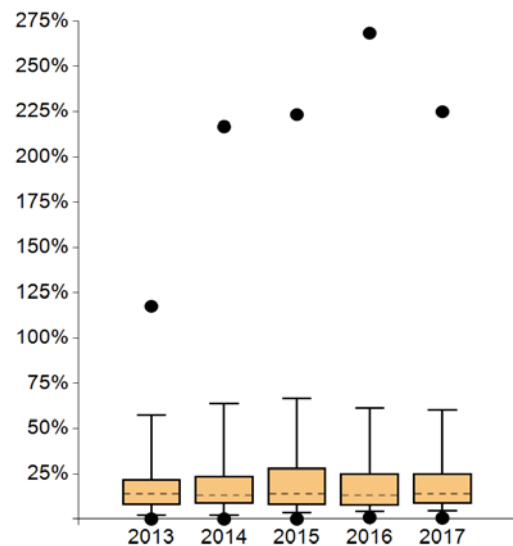
** For values outside the plausibility limit(s) the Centres must give the reasons.

*** Percentage of centre patients who were treated according to the indicator

12. Study participation



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	All patients who were included in a study subject to an ethics vote	27*	1 - 775	13,693
Denominator	Primary cases	178*	62 - 907	55,715
Rate	Target value \geq 5%	13,99%	0,56% - 224,90%	24.58%**



	2013	2014	2015	2016	2017
Max	117.50%	216.67%	223.28%	268.38%	224.90%
95 th percentile	57.11%	63.65%	66.65%	61.16%	60.09%
75 th percentile	21.99%	23.80%	28.18%	25.36%	25.12%
Median	14.11%	13.33%	13.95%	13.24%	13.99%
25 th percentile	7.92%	8.54%	7.92%	7.43%	8.39%
5 th percentile	1.85%	1.84%	3.31%	4.08%	4.35%
Min	0.00%	0.00%	0.00%	0.88%	0.56%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	256	92,09%

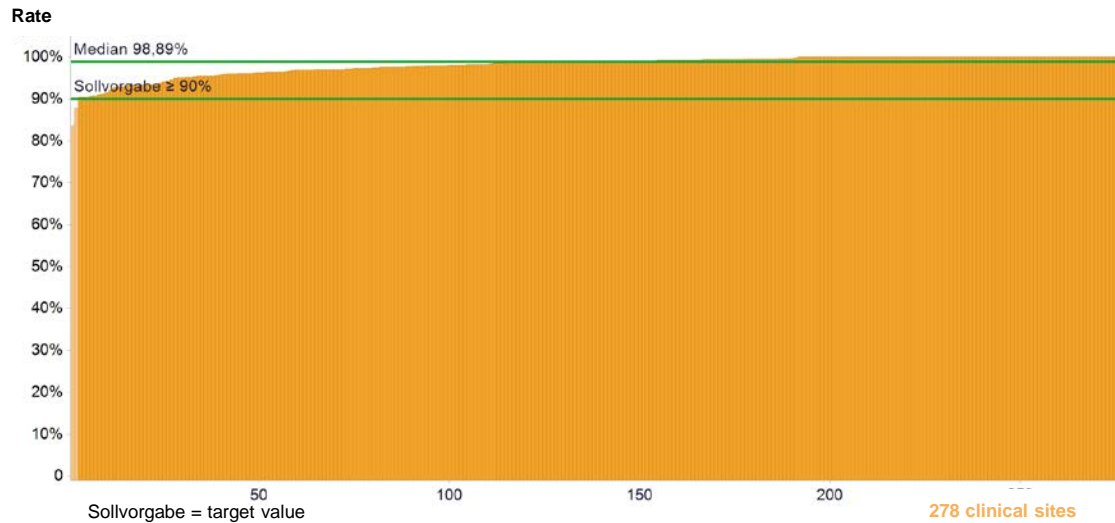
Comment

Ongoing good implementation of the indicator in the Centres. Compared to the previous year 143 Centres increased their rate; in 126 Centres the proportion of patients treated in studies fell. 22 Centres failed to meet the target value (previous year: 16 Centres). The reasons given for this were staff changes or staff bottlenecks, rejection of study participation by patients and a lack of studies on offer. The information provided by the Centres was discussed during the audits. In the Centres various measures to improve the study rate are being implemented, e.g. greater efforts to secure registration as a study centre for existing studies and initiation of in-house study projects.

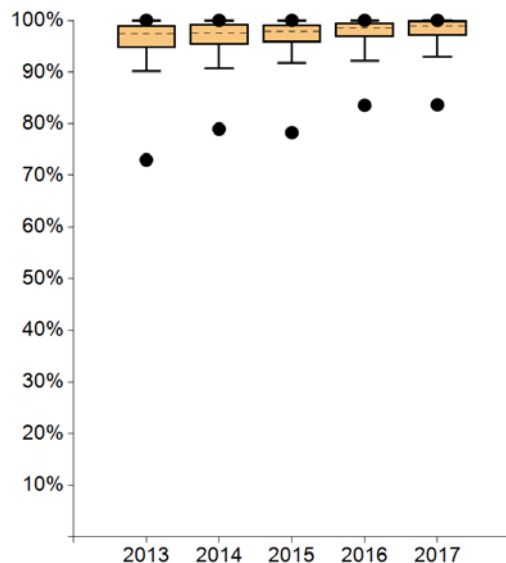
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator.

13. Pre-therapeutic histological confirmation (GL QI 1)



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Primary cases with pretherapeutic histological diagnosis confirmation by punch or vacuum-assisted biopsy	148.5*	47 - 836	47,802
Denominator	Primary cases with initial surgery and histology of invasive mammary carcinoma or DCIS	150*	52 - 858	48,754
Rate	Target value ≥ 90%	98.89%	8.,61% - 100%	98.05%* *



	2013	2014	2015	2016	2017
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	99,06%	99,23%	99,21%	99,55%	100%
Median	97,37%	97,55%	97,89%	98,53%	98,89%
25 th percentile	94,70%	95,34%	95,73%	96,79%	97,04%
5 th percentile	90,19%	90,69%	91,74%	92,08%	92,95%
Min	72,97%	78,95%	78,26%	83,52%	83,61%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100,00%	276	99,28%

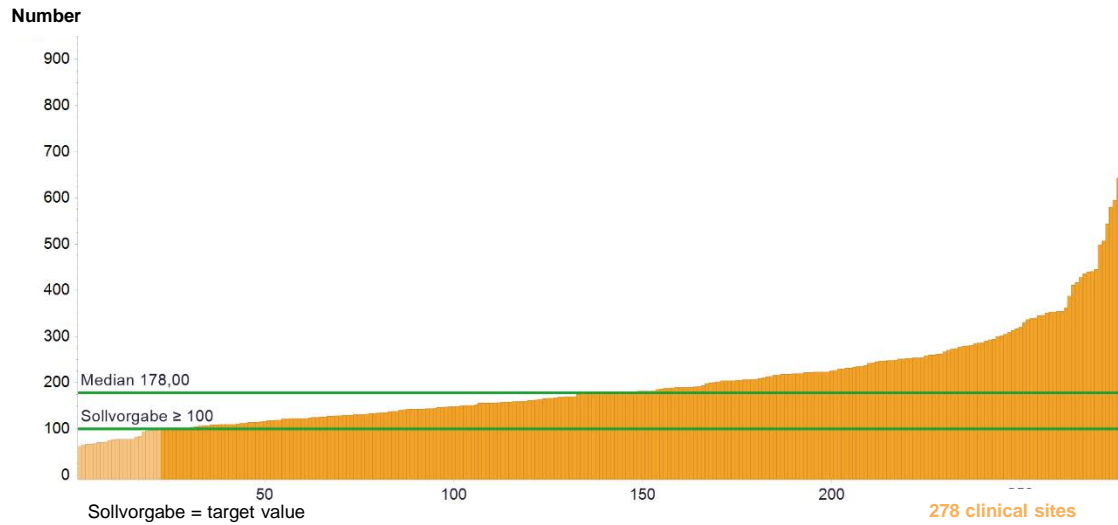
Comment

Ongoing very good implementation of the indicator and, by extension, of the Guideline recommendation in the Centres. Only 2 Centres (only just) failed to reach the target value. The reasons they gave were the refusal of histological confirmation by the patients or breast size. In one of the Centres the auditors pointed out the need for a change in the standard operating procedure (SOP).

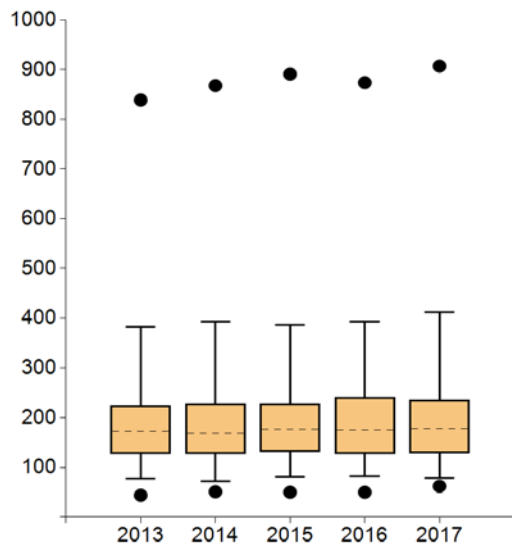
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** Percentage of centre patients who were treated according to the indicator.

14. Primary cases BC



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Number	primary cases	178	62 - 907	55,715
	Target value ≥ 100			



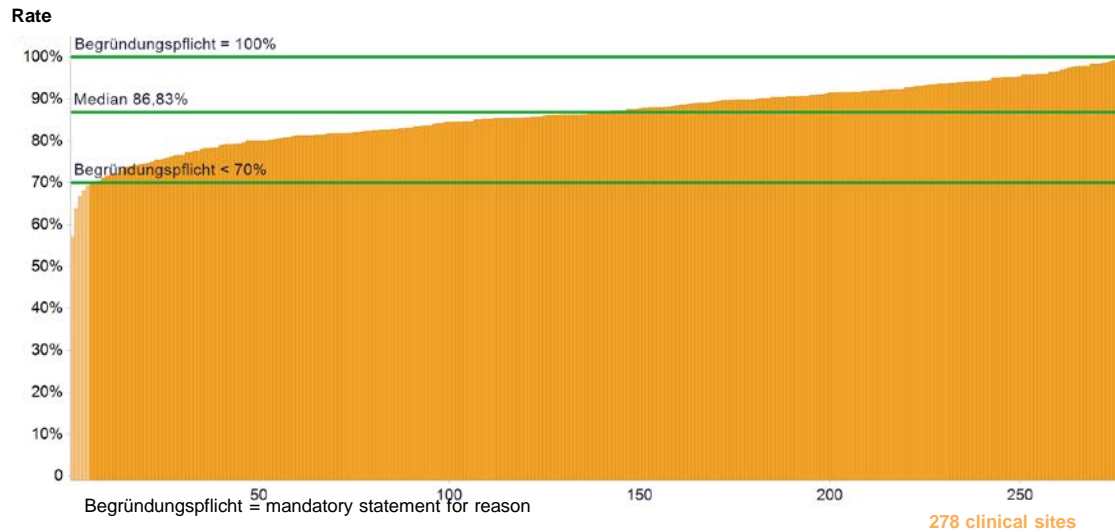
	2013	2014	2015	2016	2017
Max	839.00	868.00	891.00	874.00	907.00
95 th percentile	383.00	393.50	386.40	393.00	411.90
75 th percentile	224.00	228.50	228.00	241.50	236.50
Median	172.00	169.00	177.00	175.00	178.00
25 th percentile	128.00	127.00	131.00	127.50	128.25
5 th percentile	77.60	72.00	81.70	83.10	78.00
Min	44.00	51.00	50.00	50.00	62.00

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	256	92.09%

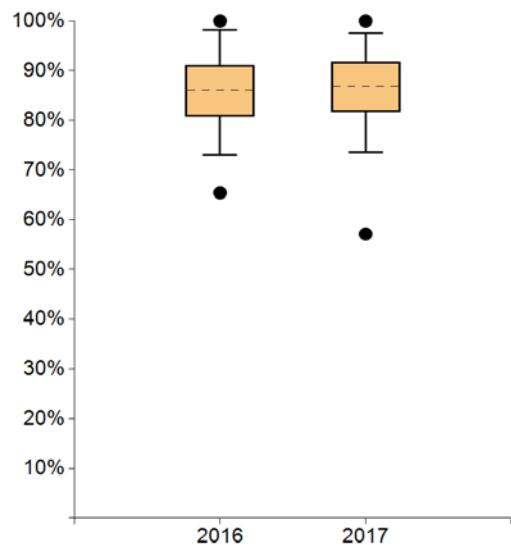
Comment

Growing number of primary cases in the Centres compared with the previous year. 22 Centres did not reach the target value of 100 primary cases. 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 2018 in these Centres (documentation of a primary case number required for the re-audit [every 3 years]). In indicator year 2017 55,715 primary cases were treated in certified Centres, of which 53,460 in German centres. Consequently, 76.5% of initial treatments for breast cancer in Germany were carried out in a certified Centre (incidence Germany 2014: 69,871, www.krebsdaten.de).

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



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Primary cases with only one surgical procedure up to final surgical condition BET	94*	23 - 619	30,011
Denominator	Operated primary cases with BET and R0	109*	28 - 666	34,613
Rate	Mandatory statement of reasons** < 70% and = 100%	86.83%	57.14% - 100%	86.70%**



	2013	2014	2015	2016	2017
Max	----	----	----	100%	100%
95 th percentile	----	----	----	98.17%	97.62%
75 th percentile	----	----	----	91.10%	91.79%
Median	----	----	----	86.02%	86.83%
25 th percentile	----	----	----	80.81%	81.73%
5 th percentile	----	----	----	73.02%	73.64%
Min	----	----	----	65.43%	57.14%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	272	97.84%

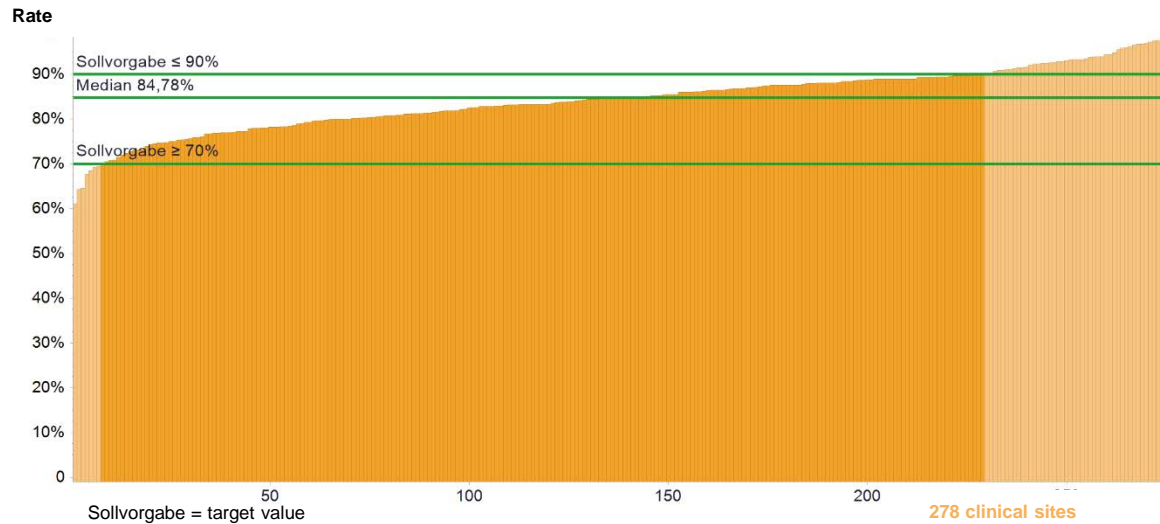
Comment

This quality indicator was introduced for the first time from indicator year 2016 and since indicator year 2017 its presentation has been mandatory. 5 Centres achieved a R0 situation with the initial procedure for <70% of primary cases involving breast-conserving surgery. The reasons given by the Centres were mainly an additional, margin-positive DCIS or a DCIS with a very small safety margin. Case reviews with structural consideration in quality circles and training of radiological and surgical teams for preoperative wire marking were agreed as measures to improve results.

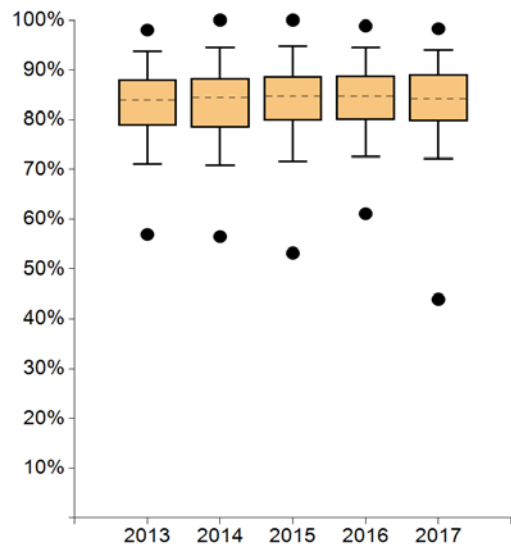
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator.

16. Breast conserving therapy in cases of pT1 primary cases



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Number BCT (final state after surgery) in cases of pT1 (incl. (y)pT1)	61*	12 - 409	19,588
Denominator	Surgically treated primary cases with (y)pT1	73.5*	20 - 465	23,426
Rate	Target value 70 - 90%	84.16%	43.90% - 98.28%	83.62%**



	2013	2014	2015	2016	2017
Max	98.00%	100%	100%	98.81%	98.28%
95 th percentile	93.75%	94.53%	94.78%	94.53%	94.02%
75 th percentile	88.03%	88.33%	88.74%	88.89%	89.03%
Median	83.91%	84.48%	84.75%	84.78%	84.16%
25 th percentile	78.79%	78.35%	79.86%	80.00%	79.69%
5 th percentile	71.07%	70.79%	71.57%	72.60%	72.21%
Min	56.96%	56.52%	53.19%	61.11%	43.90%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	224	80.58%

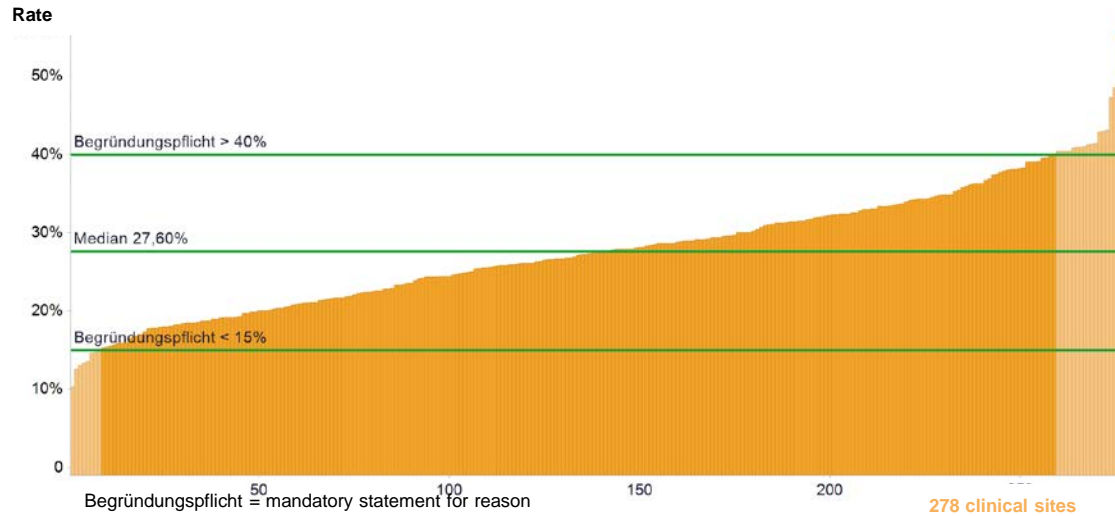
Comment

This indicator has an upper and a lower limit that must be reached to ensure that no specific surgical procedure is imposed but, more importantly, that any existing wish of patients regarding surgical procedures is taken into account. 6 Centres had a BET rate <70% for pT1 tumours. The reasons they gave for this were the presence of a BRCA1 or 2 mutation, wish of patient for a mastectomy, for instance in the case of multimorbidity, multicentricity or prolonged accompanying DCIS and condition after radiotherapy 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 and a high proportion of neoadjuvant therapy concepts.

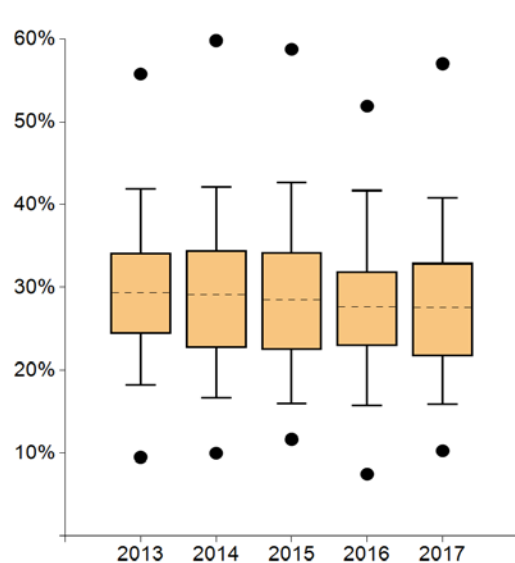
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator.

17. Mastectomies primary cases



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Number of mastectomies (final state after surgery)	40.5*	10 - 250	13,575
Denominator	Surgically treated primary cases	150*	52 - 858	48,754
Rate	Mandatory statement for reasons** <15% und >40%	27.60%	10.29% - 57.02%	27.84%***



	2013	2014	2015	2016	2017
Max	55.79%	59.81%	58.77%	51.89%	57.02%
95 th percentile	41.85%	42.08%	42.64%	41.72%	40.82%
75 th percentile	34.15%	34.50%	34.24%	31.96%	32.95%
Median	29.41%	29.13%	28.52%	27.68%	27.60%
25 th percentile	24.41%	22.77%	22.53%	22.96%	21.66%
5 th percentile	18.21%	16.67%	16.02%	15.74%	15.91%
Min	9.52%	10.00%	11.68%	7.48%	10.29%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	251	90.29%

Comment

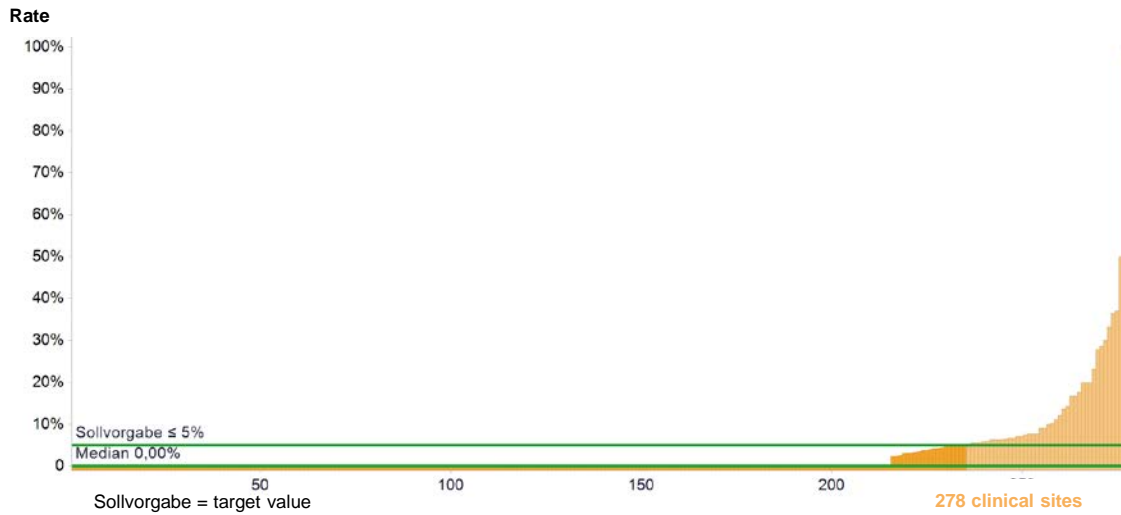
The proportion of mastectomies in operated primary cases was almost unchanged over the course of time. The reasons given by the Centres for the high mastectomy rates were the presence of BRCA mutations, multicentricity, patient wish, advanced age of patients and comorbidities or an unfavourable breast/tumour ratio (particularly in the case of male patients). The Centre with the highest rate had incorporated the modified mastectomy with immediate reconstruction as an option into its primary treatment concept.

*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.

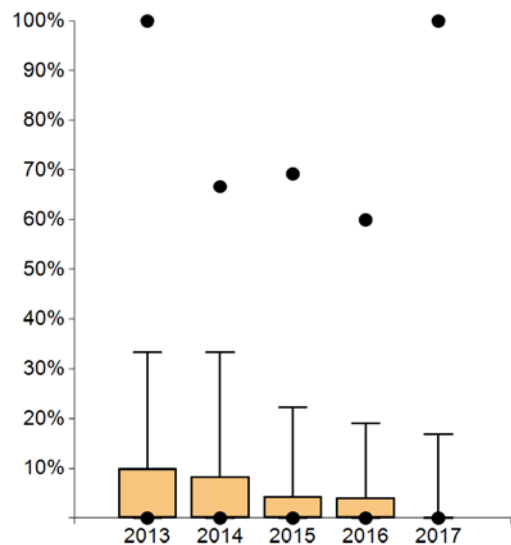
** For values outside the plausibility limit(s) the Centres must give the reasons.

***Percentage of centre patients who were treated according to the indicator.

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



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patients with axillary lymph node removal	0*	0 - 10	107
Denominator	Patients with a primary diagnosis of DCIS and completed surgical treatment and BCT	13*	1 - 68	4,188
Rate	Target value ≤ 5%	0.00%	0.00% - 100%	2.55%**



	2013	2014	2015	2016	2017
Max	100%	66,67%	69,23%	60,00%	100%
95 th percentile	33,33%	33,33%	22,22%	19,13%	16,82%
75 th percentile	10,00%	8,33%	4,35%	4,13%	0,00%
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	%
278	100.00%	235	84.53%

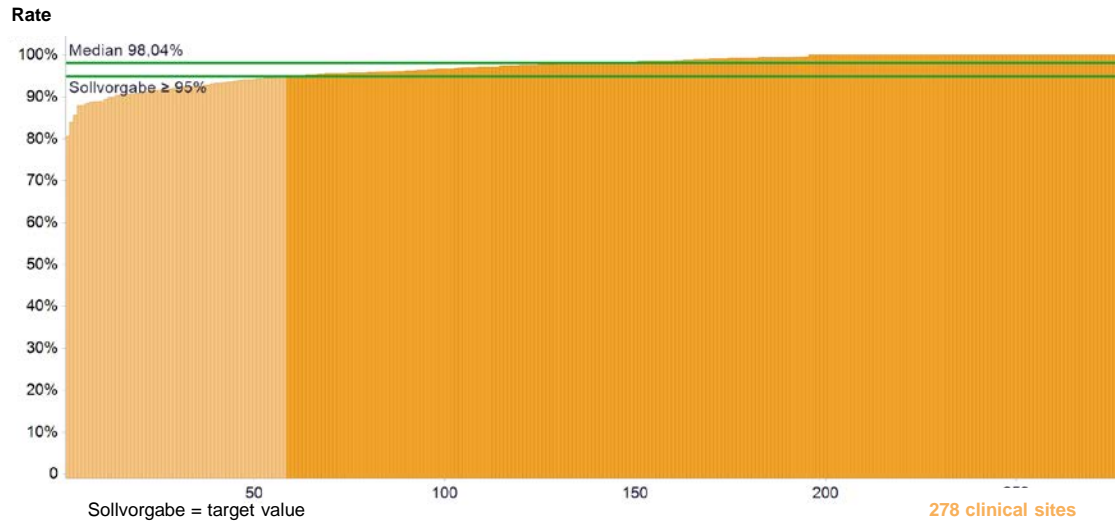
Comment

Ongoing good implementation of the quality indicator 235 Centres failed to meet the target (215 the previous year). 43 Centres exceeded the target value (of which 21 Centres with a rate of <10%). The reasons they gave for this were the prolonged/high grade DCIS, multicentricity, tumour location close to axilla, clinical/imaging suspicion of invasive components or lymph node involvement, malignancy not reliably ruled out by punch biopsy and condition after neoadjuvant therapy with residual DCIS. The auditors critically reviewed the results on site and discussed them in the Centres. The Centre with the highest value (100%) had only 1 patient as the population who wanted the sentinel biopsy because of a suspected high-grade carcinoma. 47 out of the 60 Centres that exceeded the target value the previous year, were able to reduce their result to ≤5% in audit year 2017.

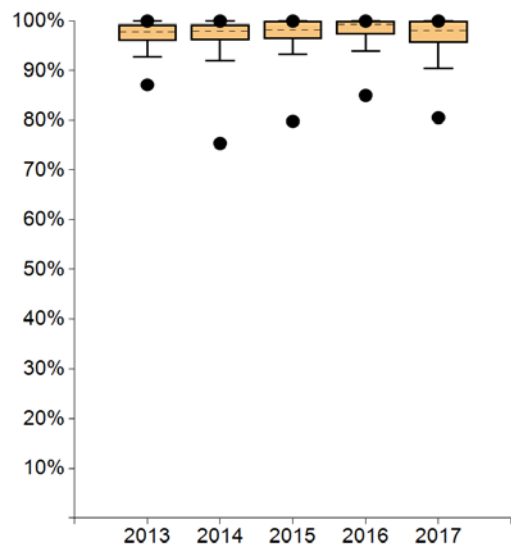
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.

** Percentage of centre patients who were treated according to the indicator.

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



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Number of primary cases with inv. breast cancer for which the nodal status was determined	131*	45 - 735	41,911
Denominator	Surgically treated primary cases with invasive breast cancer	133.5*	47 - 752	43,203
Rate	Target value ≥ 95%	98.04%	80.56% - 100%	97.01%**



	2013	2014	2015	2016	2017
Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	99.33%	99.32%	100%	100%	100%
Median	97.83%	97.93%	98.28%	99.26%	98.04%
25 th percentile	96.00%	96.15%	96.35%	97.30%	95.59%
5 th percentile	92.83%	92.02%	93.36%	93.97%	90.38%
Min	87.16%	75.38%	79.82%	85.04%	80.56%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	220	79.14%

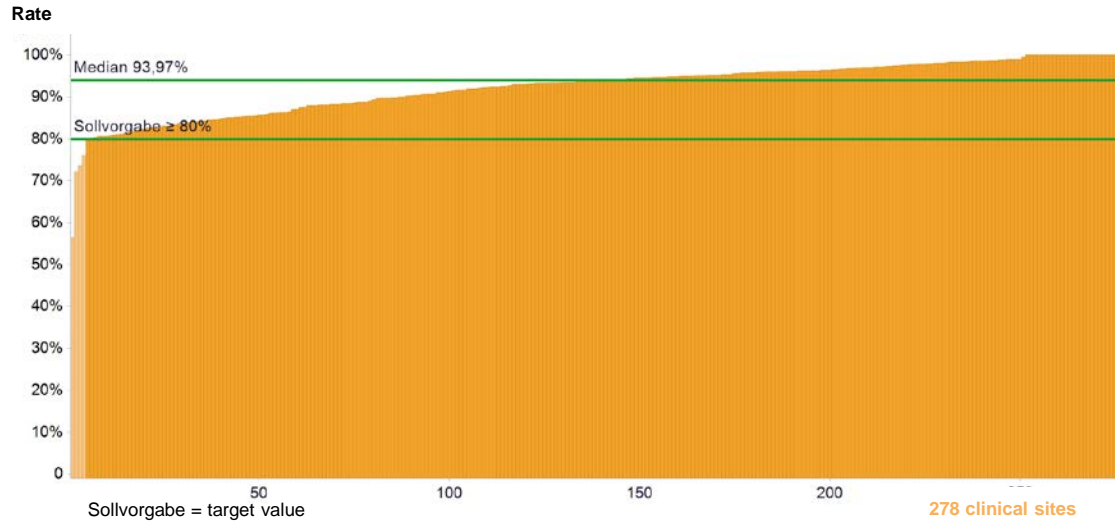
Comment

Ongoing very good implementation of the indicator in the Centres.
In 58 Centres nodal status was determined in less than 95% of surgical primary cases. The reasons given by the Centres that failed to meet the target value were comorbidity/advanced age of patients, rejection of sentinel biopsy, inclusion in the INSEMA study, condition after prior axillary lymph node dissection and a palliative disease situation or second malignomas that determined the prognosis.

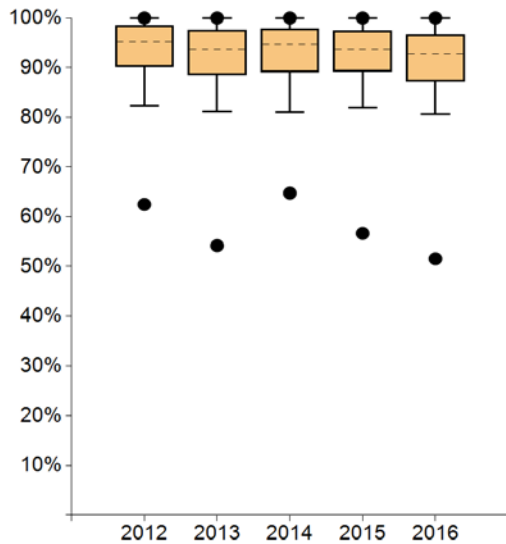
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** Percentage of centre patients who were treated according to the indicator.

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



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patients with a sentinel node biopsy only	68*	19 - 408	21,643
Denominator	Patients with invasive breast cancer as a primary disease and negative pN staging without preoperative tumour-specific therapy	73.5*	23 - 415	23,318
Rate	Target value ≥ 80%	93.97 %	56.52% - 100%	92.82%**



	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	%
278	100.00%	274	98.56%

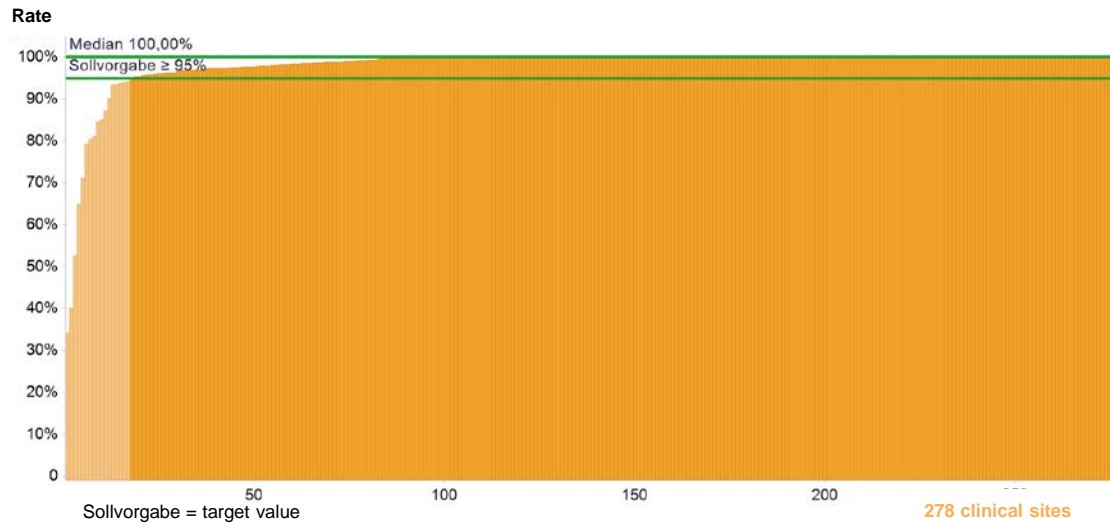
Comment

The indicator continued to be implemented well in the Centres. 274 Centres met the target value. In 4 Centres only sentinel biopsies were conducted for <80% of the cohort. The reasons given by the Centres that failed to meet the target value were additional sampling in the case of lymph nodes that appeared suspicious on palpation, primary axillary lymphonodectomy in the case of non-detectable sentinels and foregoing of SLNE because of multimorbidity/advanced age or wish of patients. The plausibility of the information was checked during the audit on the basis of individual case reviews.

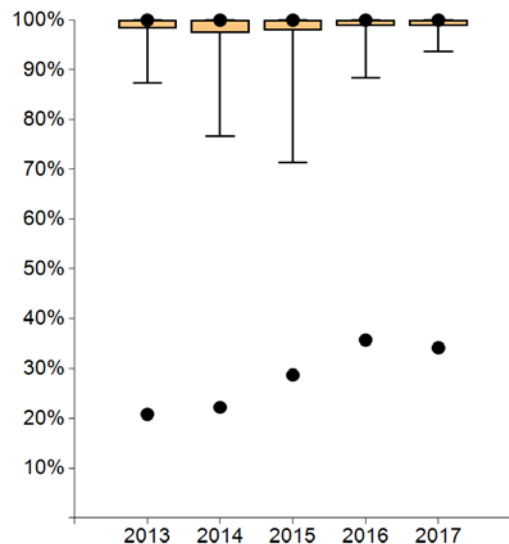
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** Percentage of centre patients who were treated according to the indicator.

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



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Procedures with intraoperative sample x-ray or with intraoperative sample sonography	66*	4 - 531	22,982
Denominator	Surgical procedures with preoperative wire marking guided by mammography or sonography	66,5*	4 - 543	23,503
Rate	Target value ≥ 95%	100%	34,18% - 100%	97.78%**



	2013	2014	2015	2016	2017
● 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	98.36%	97.50%	97.94%	98.83%	98.83%
5 th percentile	87.36%	76.61%	71.39%	88.47%	93.71%
● Min	20.83%	22.22%	28.72%	35.75%	34.18%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	261	93.88%

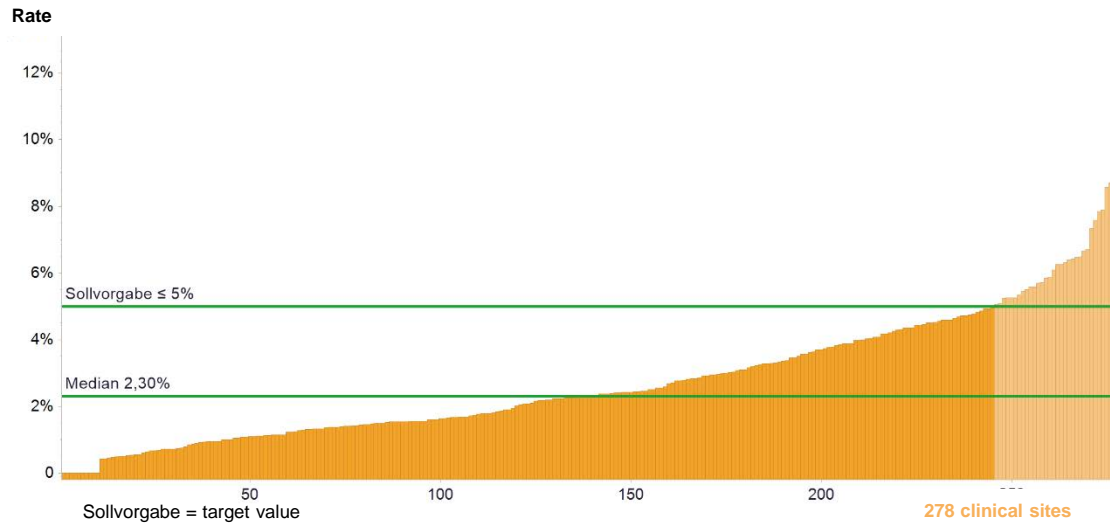
Comment

Ongoing very good implementation of the indicator over the course of time. 17 Centres failed to meet the target value. The reason they gave was priority control of sonographically wire marked results by frozen section. In the case of mammography guided wire marked results, regular monitoring using specimen radiography was reliably implemented in the Centres. The auditors pointed out once again that intra-operative specimen sonography is to be used systematically. This is increasingly becoming established in the Centres and anchored in quality circles. In the Centre with the lowest value the expert formulated a deviation. The standard operating procedure for pre-operative marking was adjusted with immediate effect in line with the Guideline.

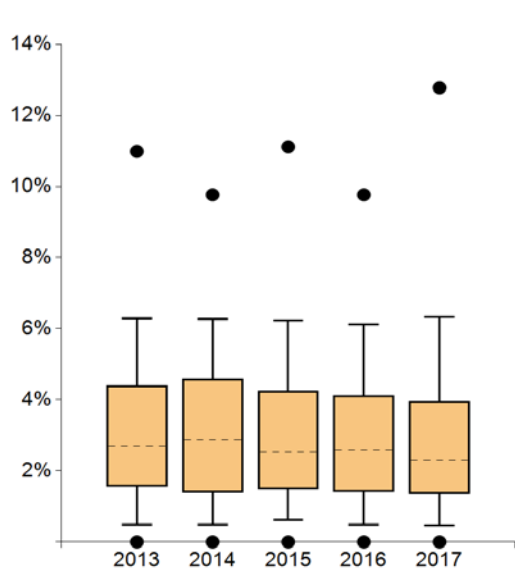
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** Percentage of centre patients who were treated according to the indicator.

22. Revision operations primary cases



	Definition of indicator	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Revision surgery due to postoperative complications (only surgically treated primary cases)	4*	0 - 38	1,330
Denominator	Surgically treated primary cases	150*	52 - 858	48,754
Rate	Target value ≤ 5%	2.30%	0,00% - 12.77%	2.73%**



	2013	2014	2015	2016	2017
● Max	10.98%	9.76%	11.11%	9.76%	12.77%
95 th percentile	6.28%	6.27%	6.24%	6.12%	6.33%
75 th percentile	4.40%	4.58%	4.25%	4.13%	3.95%
Median	2.70%	2.88%	2.52%	2.59%	2.30%
25 th percentile	1.57%	1.39%	1.49%	1.41%	1.36%
5 th percentile	0.50%	0.49%	0.61%	0.49%	0.48%
● Min	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
278	100.00%	245	88.13%

Comment

Ongoing good implementation of the indicator, increase in the maximum value compared with the previous year. 12 out of the 25 Centres that exceeded the target value the previous year, were able to improve their revision rate to ≤5% in audit year 2017. The Centre with the highest revision rate (12.77%) was awarded initial certification in audit year 2017. The auditor formulated a deviation and, in the Centre, individual case and structural analyses were carried out and improvement measures introduced (lowering of the rate to 3.73% in indicator year 2018). The reasons given by the Centres for exceeding the target value were a high share of oncological 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 revision rate, for instance optimisation of peri-operative management and training for the surgical team.

*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.

WISSEN AUS ERSTER HAND (FIRST-HAND KNOWLEDGE)



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Authors

German Cancer Society (DKG)
German Society for Senology (DGS)
Certification Committee Breast Cancer Centres
Jens-Uwe Blohmer, Spokesman Certification Committee
Anton Scharl, Spokesman Certification Committee
Simone Wesselmann, German Cancer Society (DKG)
Christoph Kowalski, German Cancer Society (DKG)
Jumana Mensah, German Cancer Society (DKG)
Ellen Griesshammer, German Cancer Society (DKG)
Julia Ferencz, OnkoZert

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Publisher and responsibility regarding content:
Deutsche Krebsgesellschaft (DKG)
Kuno-Fischer-Straße 8
DE 14057 Berlin, Germany
Tel: +49 (030) 322 93 29 0
Fax: +49 (030) 322 93 29 66
Vereinsregister Amtsgericht Charlottenburg,
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