



Annual Report 2017

of the Certified Neuro-oncology Cancer Centres

Audit year 2016 / Indicator year 2015

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General information

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Quality indicators of the guidelines (LL 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 of the guidelines programme oncology. Further information: www.leitlinienprogramm-onkologie.de/English-Language

	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 Indicator 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.

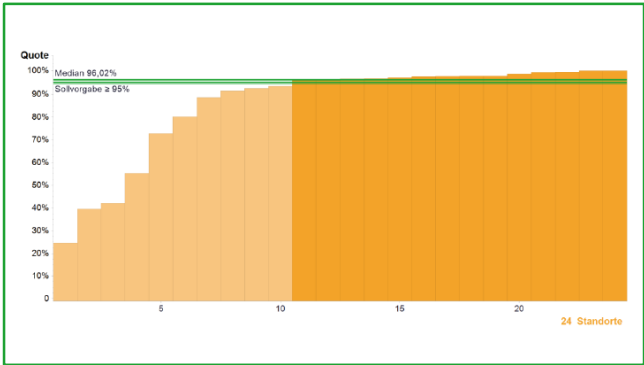
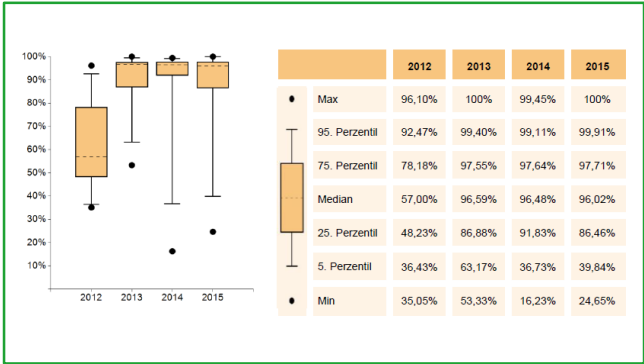


Diagram:

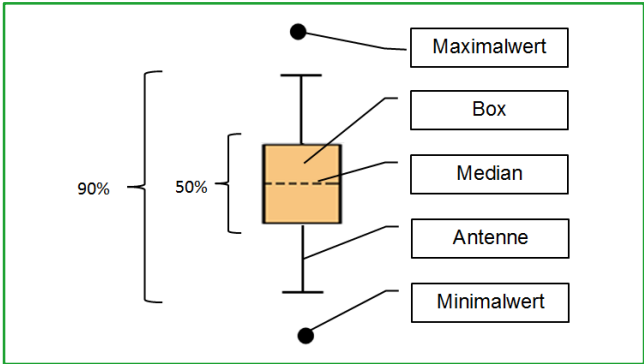
The x-axis indicates the number of Centres, the y-axis gives the values in percent or number (e.g. primary cases). The target value is depicted as a horizontal green line. The median, which is also depicted as a green horizontal line, divides the entire group into two equal halves.

General information



Cohort development:

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



Box plot:

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 for Neuro-oncology Cancer Centres 2016

	31/12/2016	31/12/2015	31/12/2014	31/12/2013
Ongoing procedures	8	4	5	6
Certified Centres	26	21	15	7
Certified clinical sites	27	22	16	8
Neuro-oncology Cancer Centres with 1 clinical site	25	20	14	6
2 clinical sites	1	1	1	1
3 clinical sites	0	0	0	0
4 clinical sites	0	0	0	0

Clinical sites taken into account

	31/12/2016	31/12/2015	31/12/2014	31/12/2013
Clinical sites included in the Annual Report	24	19	12	7
equivalent to	88.9%	86.4%	75.0%	87.5%
Primary cases total*	5067	3952	2498	1526
Primary cases per clinical site (mean)*	211.1	208	208.2	218
Primary cases per clinical site (median)*	202.5	213	196.5	175

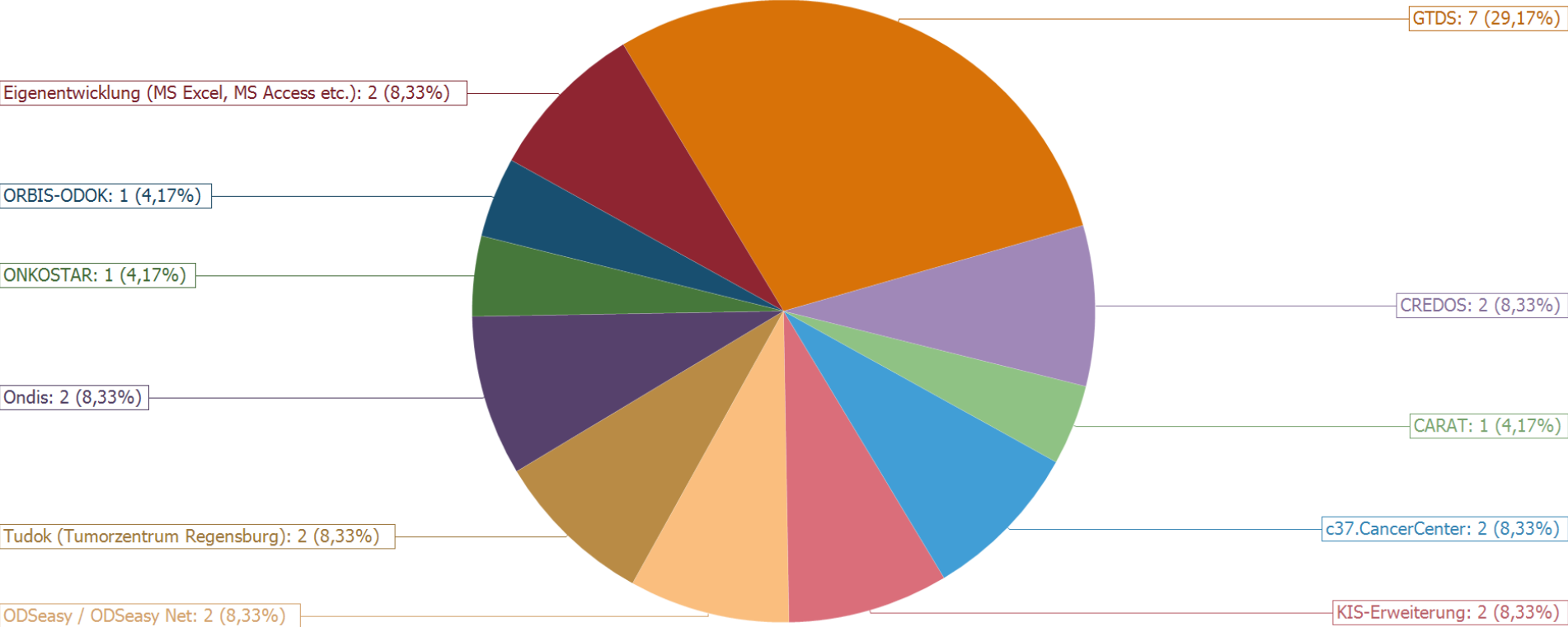
*The figures are based on the clinical sites listed in the Annual Report.

This Annual Report looks at the Neuro-oncology Cancer Centres certified in the Certification System of the German Cancer Society. The Indicator Sheet is the basis for the diagrams.

24 out of the 27 certified clinical sites of the Centres are included in the Annual Report. 3 clinical sites, certified for the first time in 2016, are not included (data depiction of a full calendar year is not mandatory for initial certifications). An up-to-date overview of all certified clinical sites is given on www.oncomap.de.

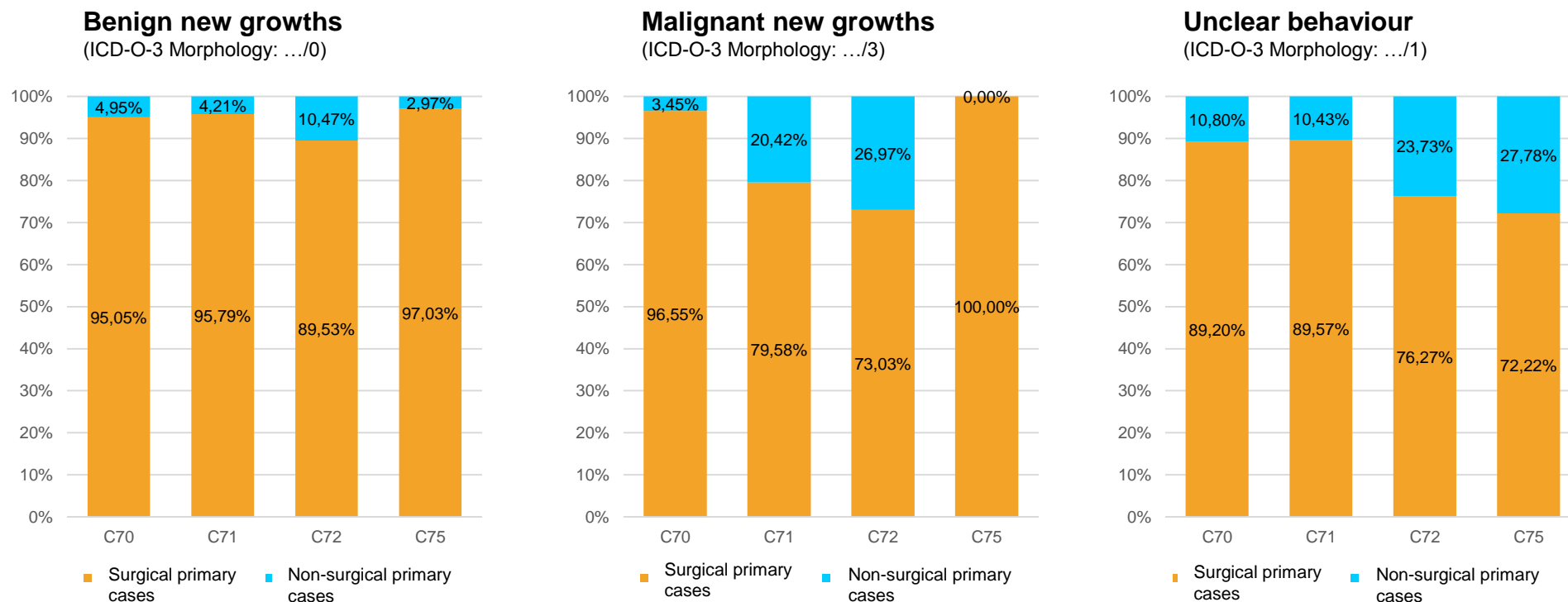
The indicators published here refer to the indicator year 2015. They are the assessment basis for the audits conducted in 2016.

Tumour documentation systems in the Centre's clinical sites



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

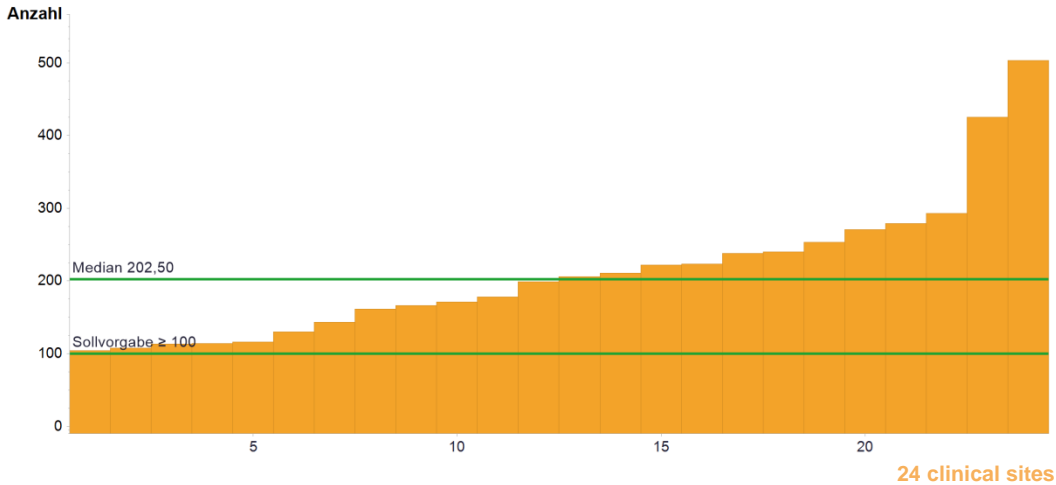
Basic data – Stage distribution primary cases



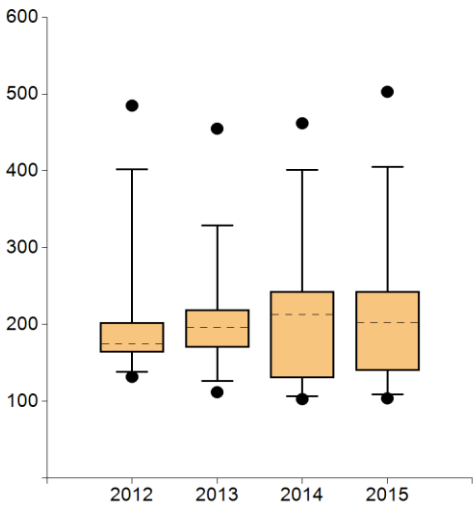
	Benign new growths (ICD-O-3 Morphology: .../0)				Malignant new growths (ICD-O-3 Morphology: .../3)				Unclear behaviour (ICD-O-3 Morphology: .../1)				Total
	C70	C71	C72	C75	C70	C71	C72	C75	C70	C71	C72	C75	
Non-surgical	74 (4.95%)	4 (4.21%)	49 (10.47%)	15 (2.97%)	1 (3.45%)	389 (20.42%)	24 (26.97%)	0 (0.00%)	23 (10.80%)	17 (10.43%)	14 (23.73%)	10 (27.78%)	620
Surgical	1,421 (95.05%)	91 (95.79%)	419 (89.53%)	490 (97.03%)	28 (96.55%)	1,516 (79.58%)	65 (73.03%)	10 (100%)	190 (89.20%)	146 (89.57%)	45 (76.27%)	26 (72.22%)	4,447
Primary cases total	1,495 (100%)	95 (100%)	468 (100%)	505 (100%)	29 (100%)	1,905 (100%)	89 (100%)	10 (100%)	213 (100%)	163 (100%)	59 (100%)	36 (100%)	5,067

C70: New growth of meninges; **C71:** New growth of brain; **C72:** New growth of medulla and cerebral nerves; **C75:** Other endocrine glands and related structures
in line with ICD-O-3 topography

1. Number of primary cases



	Indicator definition	All clinical sites 2015	
		Median	Range
Number	Primary cases def. in line with 1.2.1	202.5	104 - 503
	Target value ≥ 100		

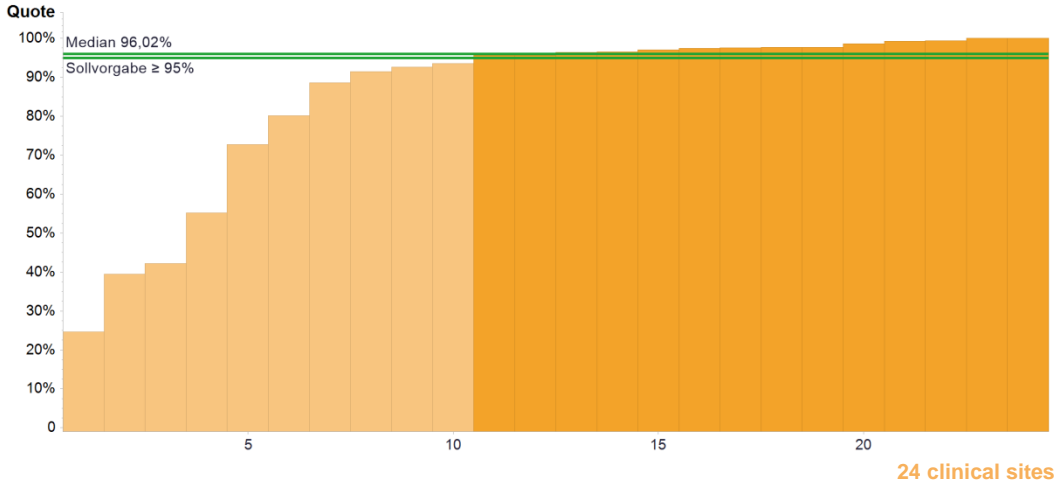


	2012	2013	2014	2015
Max	485.00	455.00	462.00	503.00
95 th percentile	401.60	329.05	400.80	405.20
75 th percentile	203.00	219.00	243.50	243.25
Median	175.00	196.50	213.00	202.50
25 th percentile	164.00	170.00	130.50	139.75
5 th percentile	138.60	126.85	106.60	108.75
Min	132.00	112.00	103.00	104.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
24	100.00%	24	100.00%

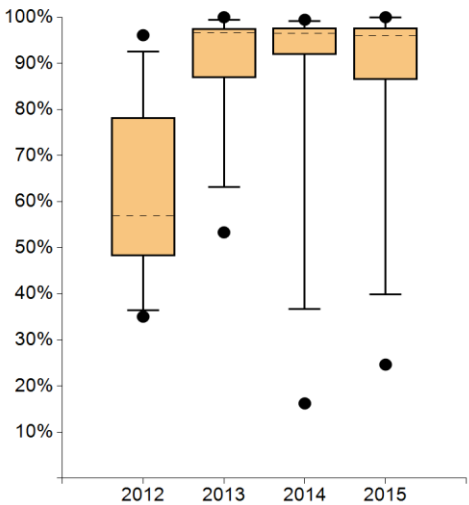
Comments:
All 24 Centres met the target value of 100 primary cases in 2016. Compared to the previous year 12 Centres were able to increase the number of their primary cases.

2. Interdisciplinary case reviews



	Indicator definition	All clinical sites 2015	
		Median	Range
Numer ator	Primary cases (elective patients:pre-intervention, emergency patients: post-intervention) who were presented in the tumour conference	163*	41 - 309
Denom inator	Primary cases (= Indicator 1)	202.5*	104 - 503
Rate	Target value ≥ 95%	96.02%	24.65% - 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.

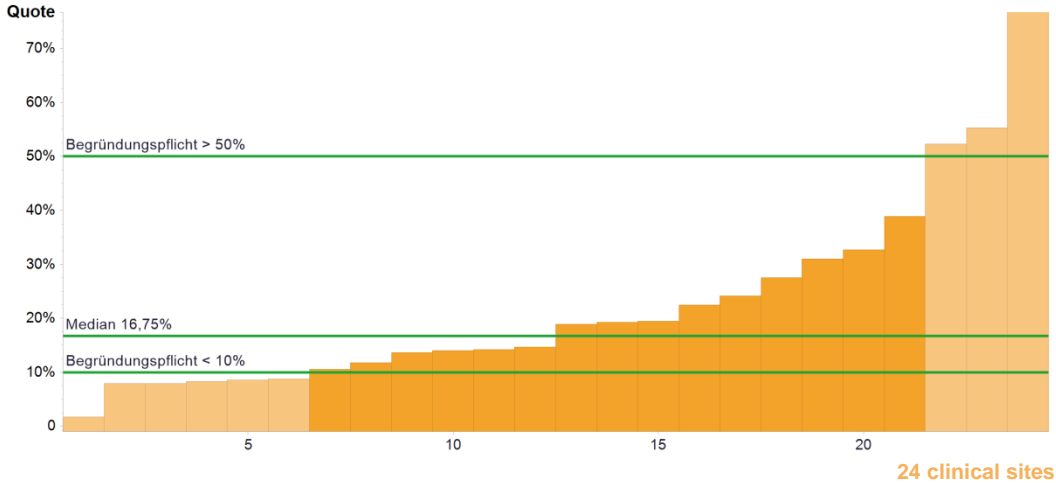


	2012	2013	2014	2015
Max	96.10%	100%	99.45%	100%
95 th percentile	92.47%	99.40%	99.11%	99.91%
75 th percentile	78.18%	97.55%	97.64%	97.71%
Median	57.00%	96.59%	96.48%	96.02%
25 th percentile	48.23%	86.88%	91.83%	86.46%
5 th percentile	36.43%	63.17%	36.73%	39.84%
Min	35.05%	53.33%	16.23%	24.65%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
24	100.00%	14	58.33%

Comments:
The indicator covers the primary cases presented pre-intervention and post-intervention in the tumour conference. 10 centres did not meet the target value.
From the reasons given by the Centres with the low presentation rates it is clear that it is above all the timing of the presentation, i.e. the pre-intervention presentation, that is a challenge and the Centres must first adapt their existing processes to be able to comply with it.
The Centre with the lowest presentation rate had the lowest rate the previous year, too. In 2016, however, as a consequence of the reorganisation of workflows a rate of 72% is already reached.

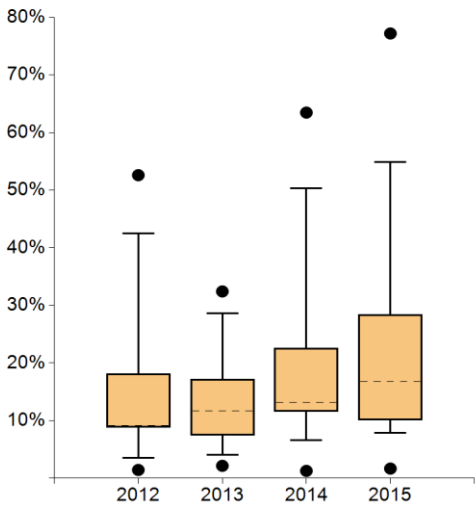
3. Psycho-oncological care



	Indicator definition	All clinical sites 2015	
		Median	Range
Numer ator	Primary cases who received psycho-oncological care in an inpatient or outpatient setting (consultation ≥ 25 min)	33*	4 - 159
Denom inator	Primary cases (= Indicator 1)	202.5*	104 - 503
Rate	Mandatory statement of reasons** < 10% and >50%	16.75%	1.68% - 77.18%

*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.



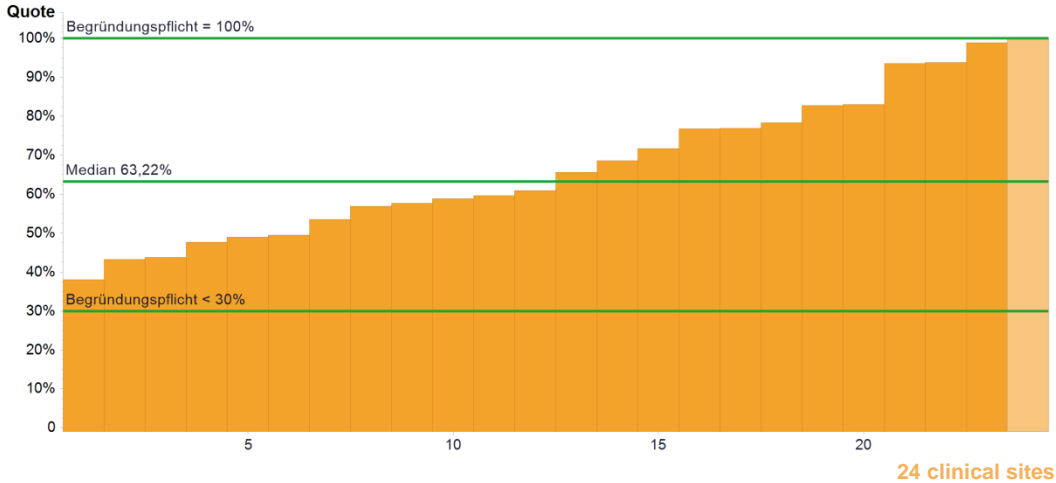
	2012	2013	2014	2015
Max	52.59%	32.42%	63.45%	77.18%
95 th percentile	42.47%	28.58%	50.31%	54.83%
75 th percentile	18.12%	17.21%	22.60%	28.36%
Median	9.19%	11.72%	13.19%	16.75%
25 th percentile	8.82%	7.48%	11.60%	10.11%
5 th percentile	3.57%	4.11%	6.58%	7.89%
Min	1.44%	2.16%	1.28%	1.68%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
24	100.00%	15	62.50%

Comments:

Over the course of time the median continues to rise. Compared to the previous year 14 Centres were able to further increase their psycho-oncological counselling rate. The reasons given by the Centre for the low care rates include non-taking up of the services, the lack of demand in the case of normal screening results, rapid post-intervention transfer of patients and the, as yet, non-systematic presentation of non-surgical or outpatient cases. The auditors repeatedly made remarks about improvement measures. The remarks from the previous year were implemented effectively in the Centres.

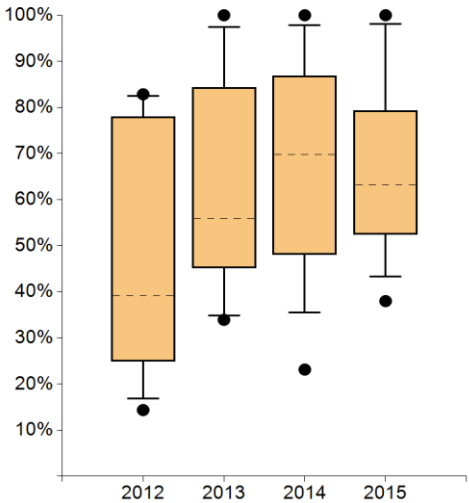
4. Counselling social services



	Indicator definition	All clinical sites 2015	
		Median	Range
Numer ator	Primary cases who received counselling by social services in an inpatient or outpatient setting	133.5*	61 - 472
Denom inator	Primary cases (= Indicator 1)	202.5*	104 - 503
Rate	Mandatory statement of reasons** < 30% and =100%	63.22%	37.99% - 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.



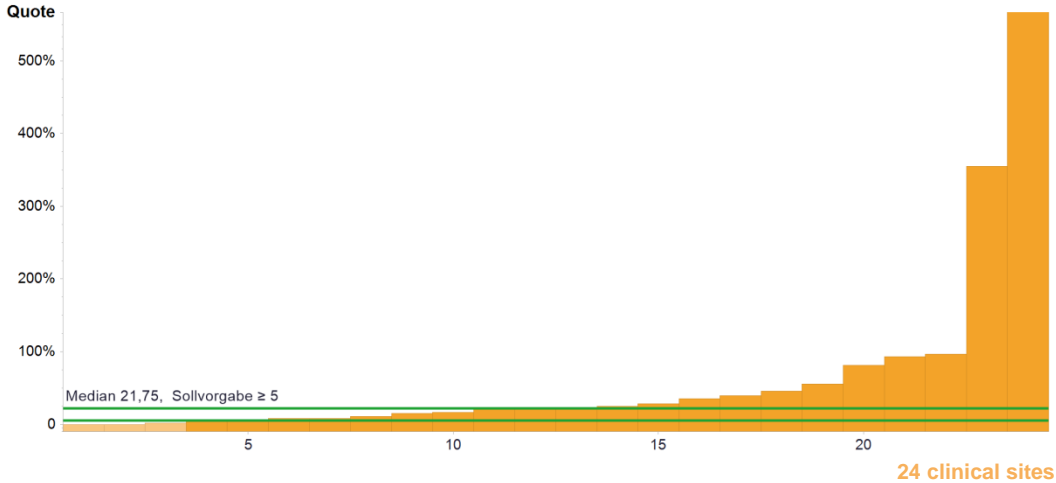
	2012	2013	2014	2015
Max	82.85%	100%	100%	100%
95 th percentile	82.54%	97.44%	97.89%	98.06%
75 th percentile	78.02%	84.32%	86.91%	79.37%
Median	39.19%	55.87%	69.77%	63.22%
25 th percentile	24.99%	45.18%	48.03%	52.49%
5 th percentile	16.86%	34.91%	35.54%	43.33%
Min	14.36%	33.93%	23.14%	37.99%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
24	100.00%	23	95.83%

Comments:

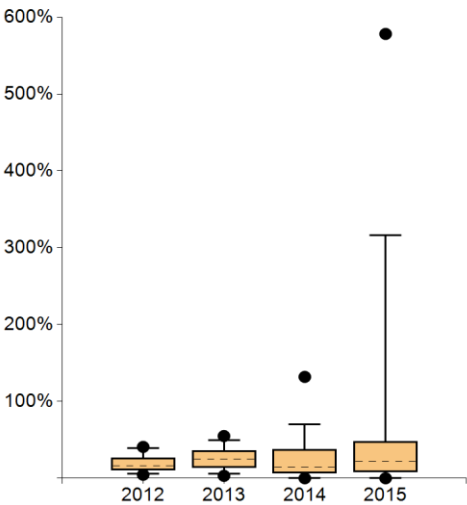
The indicator continues to be well implemented in the Centres. 11 Centres were able to increase or maintain their counselling rate compared with the previous year. The auditors pointed out that the social services offering should also be made available to outpatients and patients receiving conservative treatment. Furthermore, the patients who came into contact with social services through cooperation partners are to be included in the rate.

5. Proportion study patients



	Indicator definition	All clinical sites 2015	
		Median	Range
Numer ator	All patients (malignant and benign) included in a study with an ethic vote	21.5*	0 - 532
Denom inator	Malignant primary cases	82.5*	31 - 175
Rate	Target value $\geq 5\%$	21.75%	0.00% - 578.26%

*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.

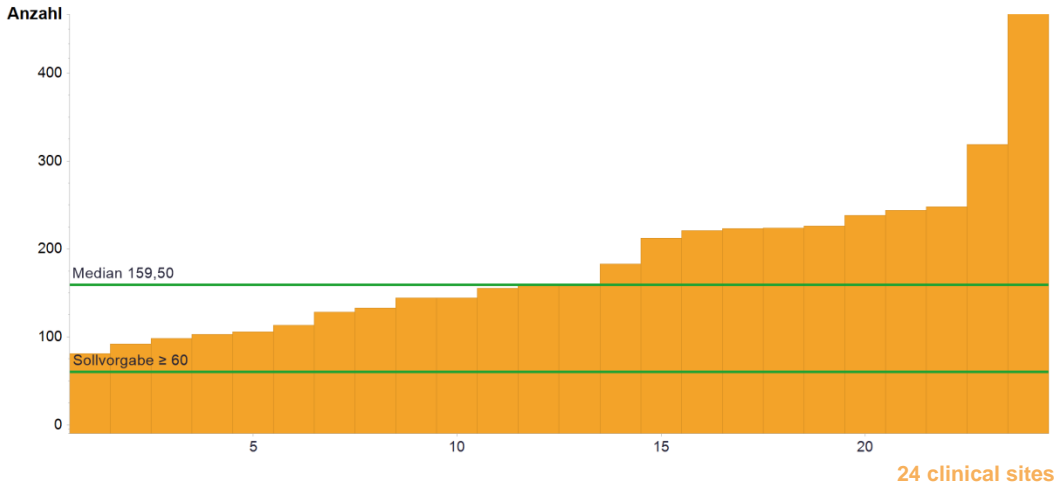


	2012	2013	2014	2015
Max	40.81%	54.95%	131.94%	578.26%
95 th percentile	39.00%	49.17%	70.11%	316.37%
75 th percentile	26.69%	35.97%	37.51%	47.95%
Median	15.90%	25.01%	14.89%	21.75%
25 th percentile	10.66%	14.16%	6.51%	8.14%
5 th percentile	5.79%	5.79%	0.00%	0.33%
Min	4.57%	3.17%	0.00%	0.00%

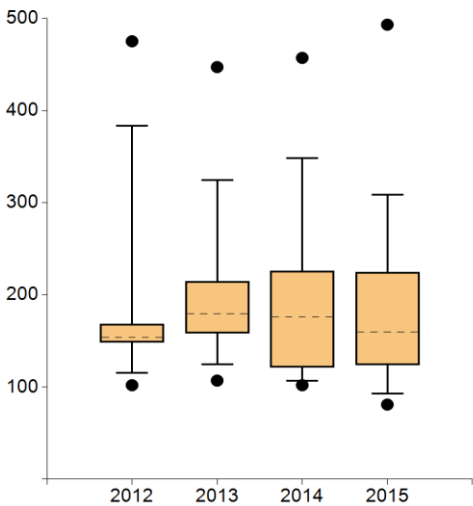
Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
24	100.00%	21	87.50%

Comments:
The median clearly increases again in comparison to the previous year. 3 Centres did not meet the target value; these Centres also had the worst rates the previous year. They gave as the reasons for this the lack of a study offering and recruitment difficulties. The auditors made remarks or formulated deviations and increased and already successful steps were taken in all 3 Centres. The study rate could, thus, be increased in 2016. Centres with particularly high study rates included the patients in several studies (e.g. mainly biosampling and NIS on quality of life and psychosocial needs).

6a. Surgical primary cases



	Indicator definition	All clinical sites 2015	
		Median	Range
Number	Surgical primary cases def. in line with 5.2.3.a	159.5	81 - 493
	Target value ≥ 60		

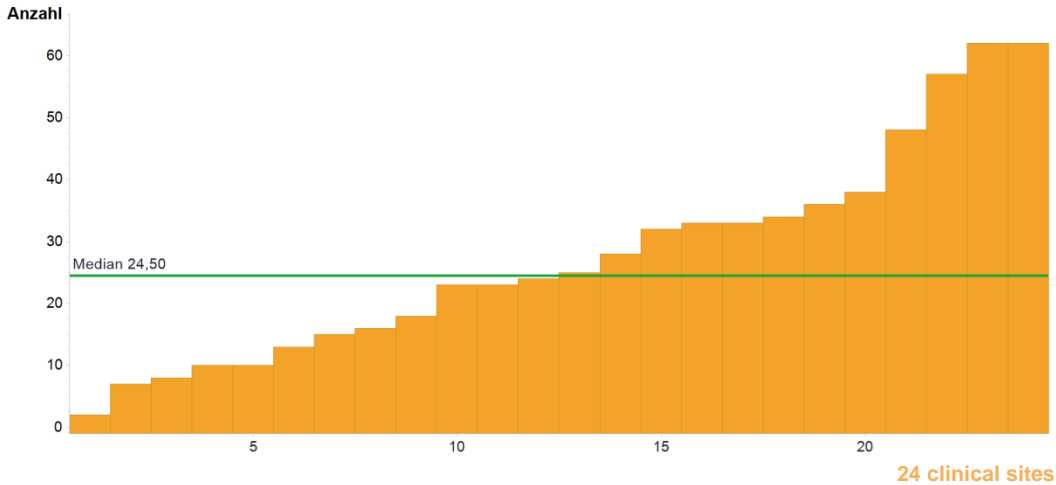


	2012	2013	2014	2015
Max	475.00	447.00	457.00	493.00
95 th percentile	383.20	324.35	348.10	308.35
75 th percentile	168.00	214.25	226.00	224.50
Median	154.00	179.50	176.00	159.50
25 th percentile	148.50	158.25	121.50	124.25
5 th percentile	115.20	124.60	106.50	92.90
Min	102.00	107.00	102.00	81.00

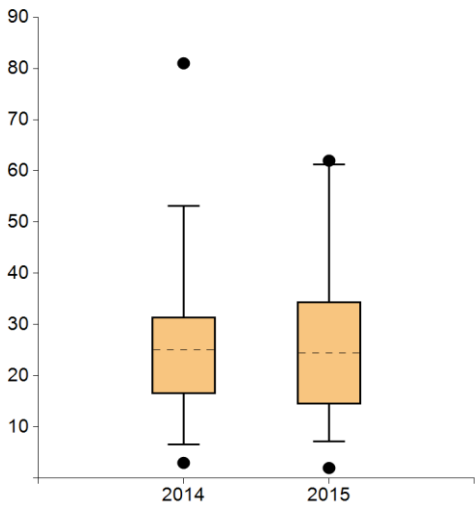
Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
24	100.00%	24	100.00%

Comments:
The median fell over the course of time. Compared to the previous year, however, more patients underwent surgery in the Centres that were certified in both years (3,631 vs. 3,563 in 2015). All Centres reached the required minimum case number of 60 surgical primary cases.

6b. Biopsy



	Indicator definition	All clinical sites 2015	
		Median	Range
Number	Biopsies def. in line with 5.2.3b	24.5	2 - 62
	No target value		

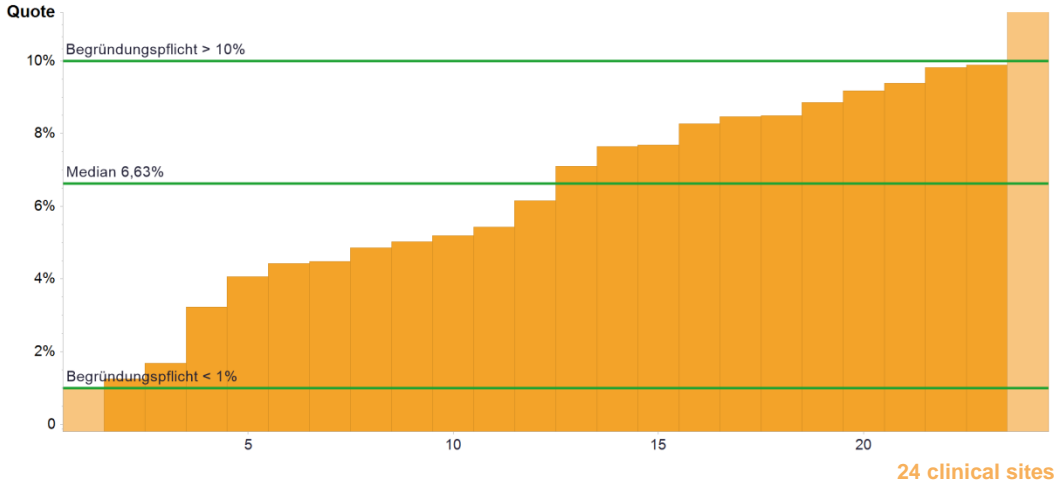


		2012	2013	2014	2015
●	Max	----	----	81.00	62.00
	95 th percentile	----	----	53.10	61.25
	75 th percentile	----	----	31.50	34.50
	Median	----	----	25.00	24.50
	25 th percentile	----	----	16.50	14.50
	5 th percentile	----	----	6.60	7.15
●	Min	----	----	3.00	2.00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
24	100.00%	----	----

Comments:
The indicator was introduced for the first time in audit year 2015 in order to be able to consider surgical expertise separately from the biopsies.
An approximately constant implementation in the Centres has been observed. In 12 Centres the number of biopsies conducted was, however, steady or on the rise. The total number of biopsies conducted in the Centres, that were certified in both years, likewise increased from 516 to 573. As no target value or plausibility limits have been set for this indicator, there are no explanations from the Centres about these results.

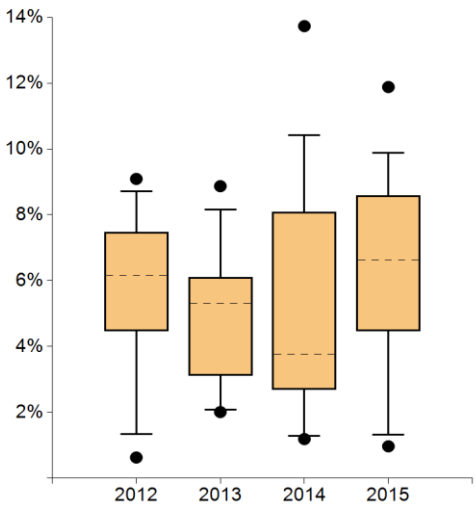
7. Revision surgeries



	Indicator definition	All clinical sites 2015	
		Median	Range
Numer ator	Revision surgeries as a consequence of post-surgical complications within 30d after surgery (for surgical primary cases)	10.5*	1 - 22
Denom inator	Surgical primary cases (= Indicator 6a)	159.5*	81 - 493
Rate	Mandatory statement of reasons** < 1% and >10%	6.63%	0.97% - 11.88%

*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.

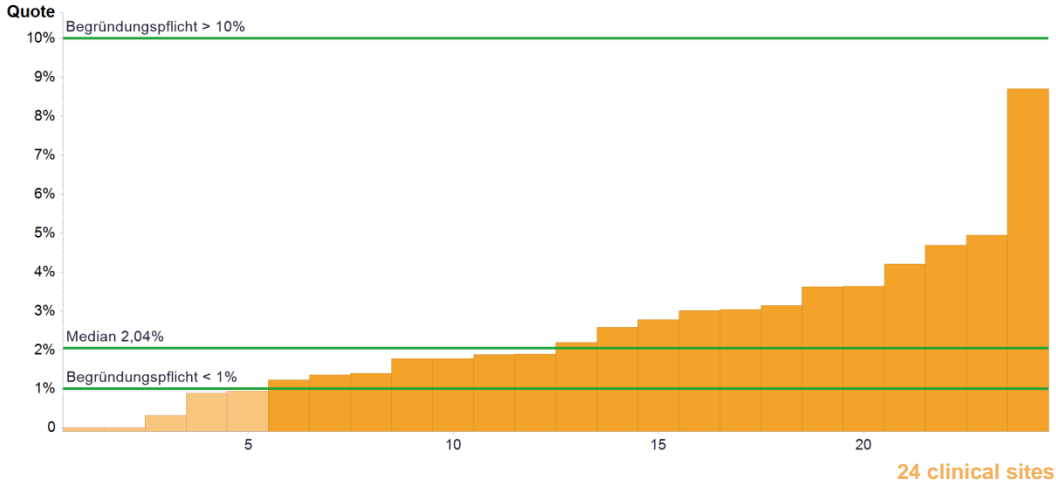


	2012	2013	2014	2015
Max	9.09%	8.87%	13.73%	11.88%
95 th percentile	8.72%	8.17%	10.42%	9.87%
75 th percentile	7.47%	6.10%	8.08%	8.58%
Median	6.16%	5.31%	3.76%	6.63%
25 th percentile	4.48%	3.13%	2.70%	4.47%
5 th percentile	1.34%	2.09%	1.28%	1.31%
Min	0.63%	2.01%	1.19%	0.97%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
24	100.00%	22	91.67%

Comments:
Over the course of time the rate of revision surgeries for surgical primary cases increases. The 2 Centres with the highest revision rates (>10%) the previous year were able to improve their rate. In audit year 2016 one Centre had a revision rate of >10%. The Centre discussed the results in the quality circle and drew up a plan of action.

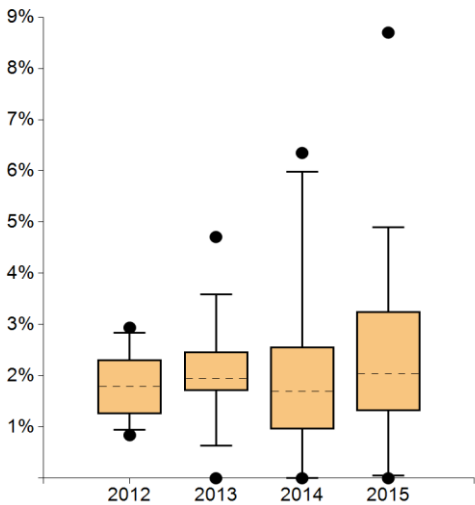
8. Post-surgical wound infections



	Indicator definition	All clinical sites 2015	
		Median	Range
Numer ator	Post-surgical wound infections within 30d of surgery (surgical primary cases)	4*	0 - 15
Denom inator	Surgical primary cases (= Indicator 6a)	159.5*	81 - 493
Rate	Mandatory statement of reasons** < 1% and >10%	2.04%	0.00% - 8.70%

*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
Max	2.94%	4.71%	6.35%	8.70%
95 th percentile	2.84%	3.59%	5.98%	4.90%
75 th percentile	2.32%	2.47%	2.57%	3.26%
Median	1.79%	1.95%	1.70%	2.04%
25 th percentile	1.25%	1.71%	0.96%	1.32%
5 th percentile	0.94%	0.64%	0.00%	0.05%
Min	0.84%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
24	100.00%	19	79.17%

Comments:
Both the median and the maximum value for this indicator increase over the course of time.
The Centre with the highest rate had normal values the previous year.
As in the case of Indicator 7, the auditors in the Centres recommended the more systematic recording of post-surgical complications.

WISSEN AUS ERSTER HAND (FIRST-HAND KNOWLEDGE)



Find out more on www.krebsgesellschaft.de

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