



Indicator Analysis 2023

Annual Report of the Certified Neuro-oncology Cancer Centres

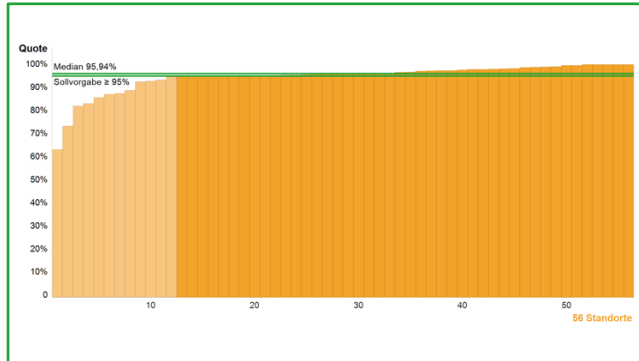
Audit year 2022/ Indicator year 2021

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General information

	Indicator definition	All clinical sites 2020		
		Median	Range	Patients total
Numerator	Primary cases (elective patients; pre-intervention, emergency patients; post-intervention) who were presented in the tumour board	164*	61 - 604	10032
Denominator	Primary cases (= Indicator 1a)	178*	106 - 618	10810
Rate	Target value $\geq 95\%$	96,86%	34,46% - 100%	92,80%**



Basic data indicator:

The definition of the **numerator**, **denominator** and the **target value** are taken from the data sheet.

The **median** for numerator and denominator does not refer to an existing centre but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

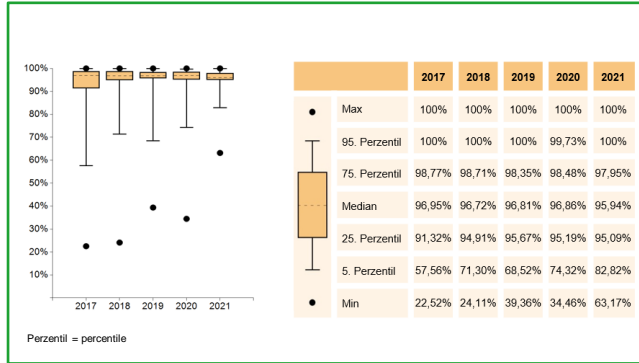
Range specifies the value range for the numerator, denominator and ratio of all centres.

The column **Patients Total** displays the total of all patients treated according to the indicator and the corresponding quota.

Diagram:

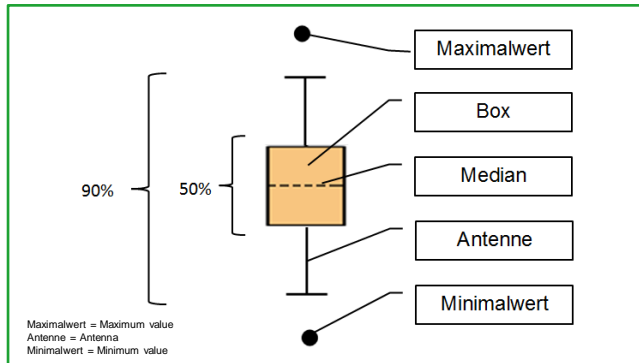
The x-axis indicates the number of centres and the y-axis represents the values in percent or number (e.g. primary cases). The target value is depicted as a green horizontal line. The median, which is also depicted as a green horizontal line, divides the entire group into two equal halves.

General information



Cohort development:

The **cohort development** in the years **2017**, **2018**, **2019**, **2020** and **2021** is presented in a boxplot 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 for Neuro-oncology Cancer Centres 2022

	31.12.2022	31.12.2021	31.12.2020	31.12.2019	31.12.2018	31.12.2017
Ongoing certification procedures	4	3	5	2	2	5
Certified Centres	56	53	46	42	38	32
Certified clinical sites	57	54	47	43	39	33
Neuro-oncology Centres with 1 clinical site	55	52	45	41	37	31
2 clinical sites	1	1	1	1	1	1
3 clinical sites	0	0	0	0	0	0
4 clinical sites	0	0	0	0	0	0

Clinical sites taken into account

	31.12.2022	31.12.2021	31.12.2020	31.12.2019	31.12.2018	31.12.2017
Clinical sites included in the Annual Report	56	51	44	40	38	30
equivalent to	98.2%	94.4%	93.6%	93.0%	97.4%	90.9%
Primary cases total*	11,750	10,810	9,914	9,254	8,820	7,219
Primary cases per clinical site (mean)*	209,8	211,9	225,3	231,4	232,1	240,6
Primary cases per clinical site (median)*	183,5	178	184,5	201,5	192,5	214

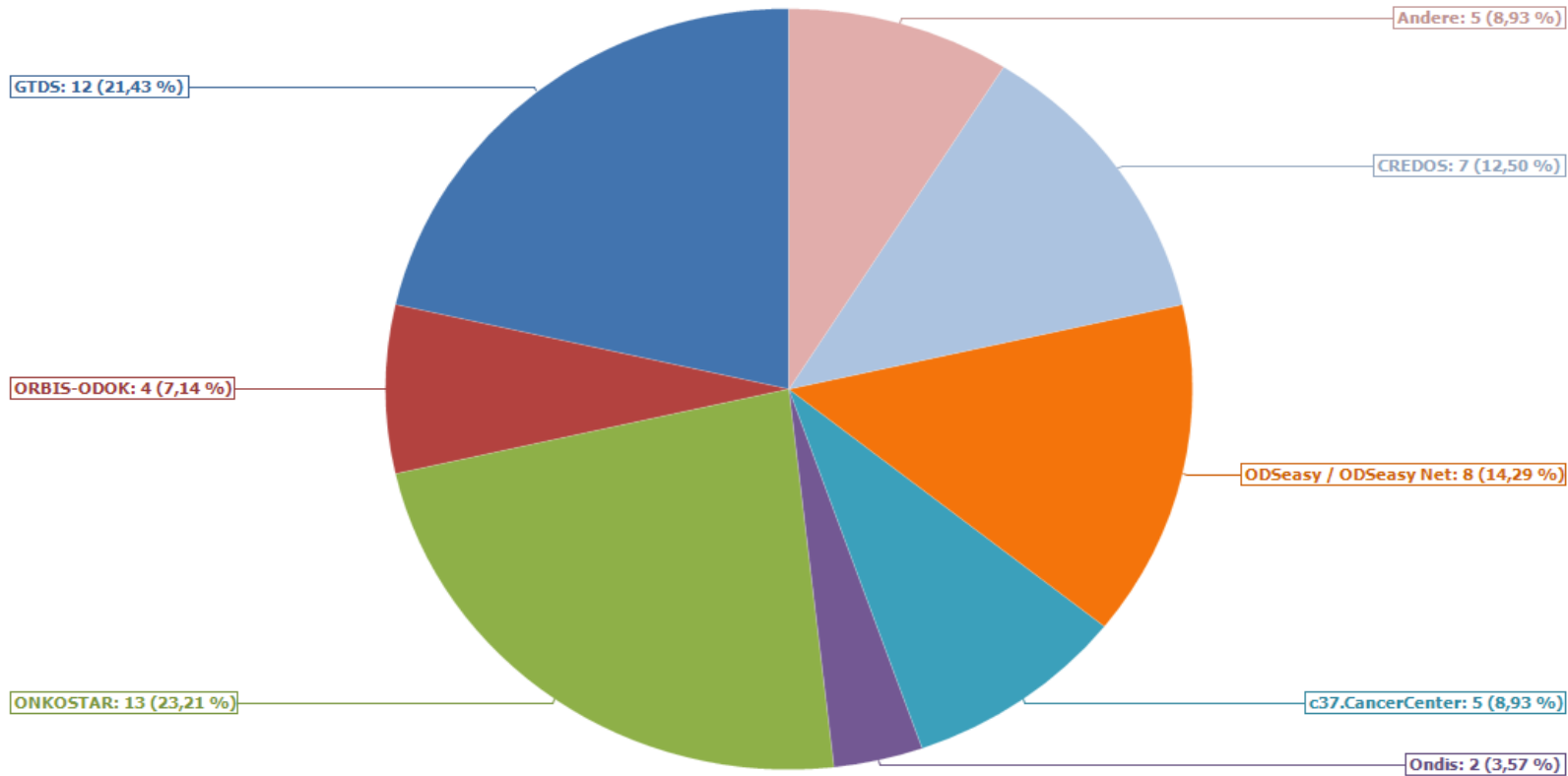
*The figures are based on the clinical sites listed in the Annual Report.

This annual report looks at the neuro-oncological centres certified in the certification system of the German Cancer Society. The basis for the diagrams in the annual report is the data sheet.

The annual report includes 56 of the 57 certified centre locations. 1 clinical site was not included as no approved data sheet was available by the data deadline of 31.01.2023. All 57 sites treated 12,076 primary Neuro-oncologica cases. A current overview of all certified sites is available at www.oncomap.de

The indicators published here relate to the indicator year 2021 and provide the basis for the audits conducted in 2022.

Tumour documentation systems in the Centre's clinical sites

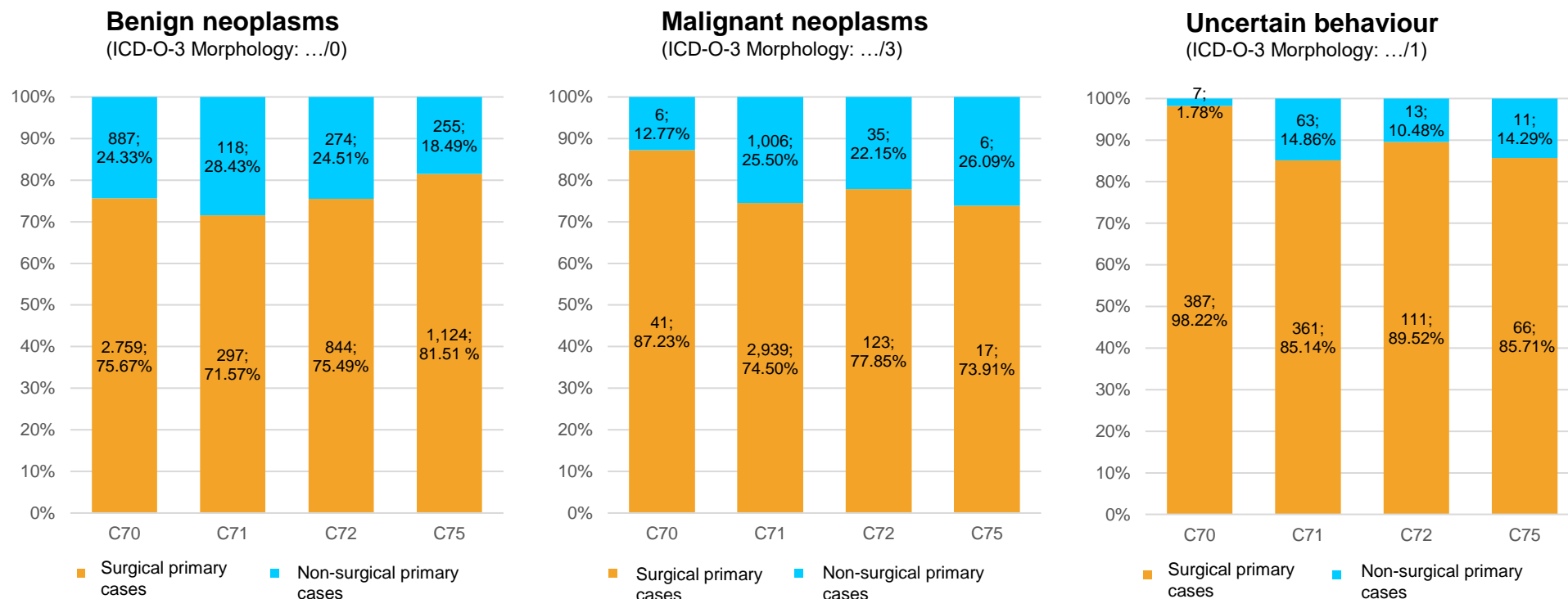


Andere = Other

Legend:	
Other	Systems that are only used at one location at a time

The details on the tumour documentation system was taken from the Data Sheet (Basic Data Sheet). It is not possible to use more than one system. In many cases, support is provided by the cancer registries or there may be a direct link to the cancer registry via a specific tumor documentation system.

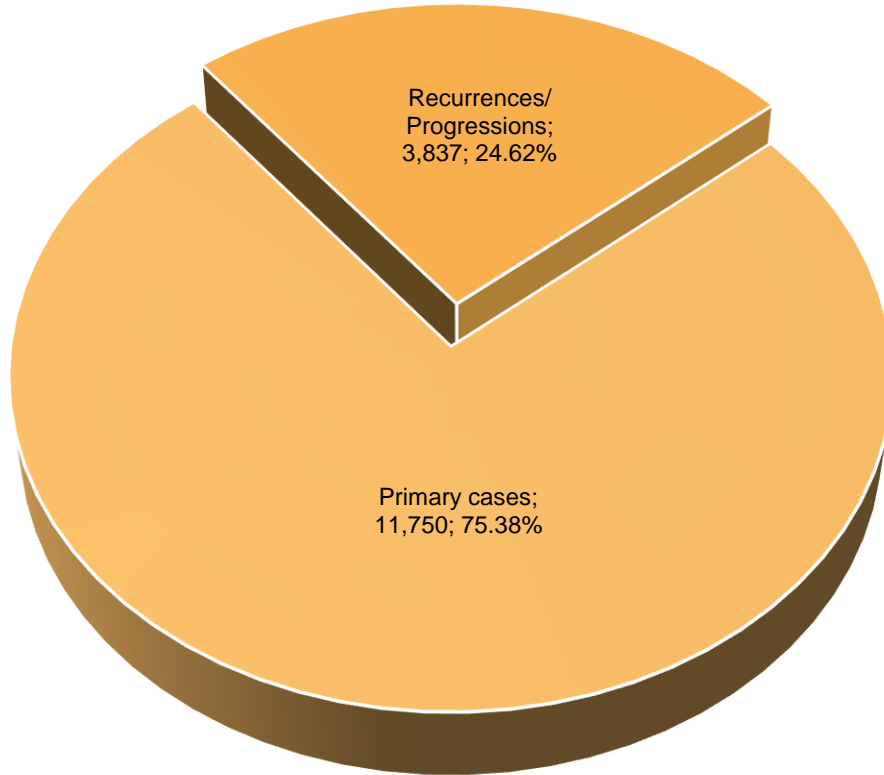
Basic data – Stage distribution primary cases of neuro-oncological tumors



	Benign neoplasms (ICD-O-3 Morphology: .../0)				Malignant neoplasms (ICD-O-3 Morphology: .../3)				Uncertain behaviour (ICD-O-3 Morphology: .../1)				Total
	C70	C71	C72	C75	C70	C71	C72	C75	C70	C71	C72	C75	
Non-surgical	887 (24.33%)	118 (28.43%)	274 (24.51%)	255 (18.49%)	6 (12.77%)	1,006 (25.50%)	35 (22.15%)	6 (26.09%)	7 (1.78%)	63 (14.86%)	13 (10.48%)	11 (14.29%)	2,681
Surgical	2,759 (75.67%)	297 (71.57%)	844 (75.49%)	1,124 (81.51%)	41 (87.23%)	2,939 (74.50%)	123 (77.85%)	17 (73.91%)	387 (98.22%)	361 (85.14%)	111 (89.52%)	66 (85.71%)	9,069
Primary cases total	3,646 (100%)	415 (100%)	1,118 (100%)	1,379 (100%)	47 (100%)	3,945 (100%)	158 (100%)	23 (100%)	394 (100%)	424 (100%)	124 (100%)	77 (100%)	11,750

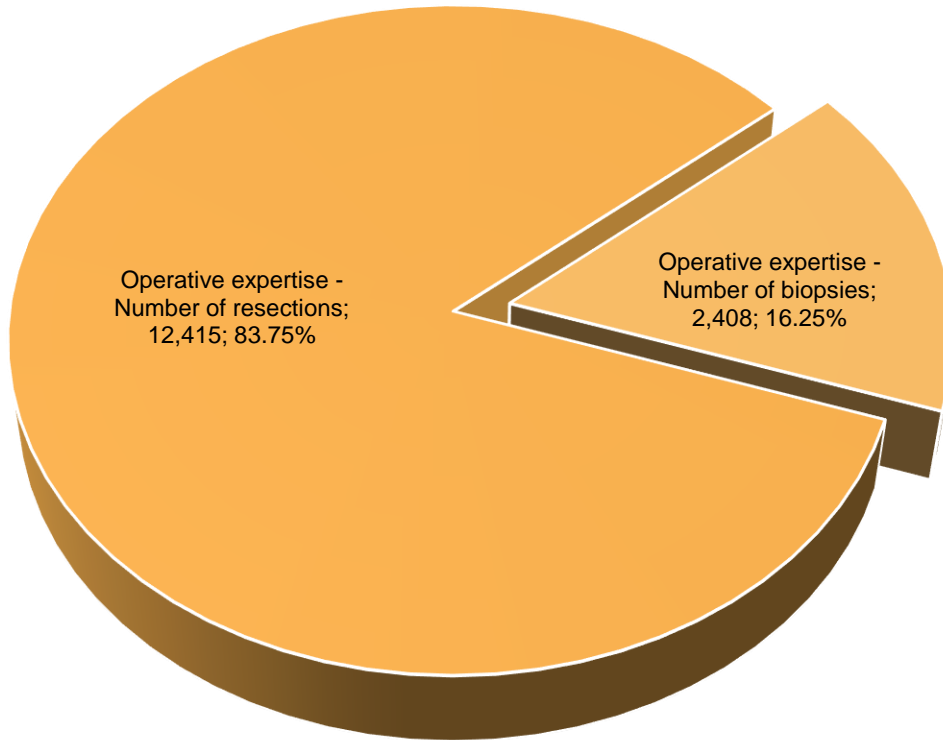
C70: neoplasm of meninges; **C71:** neoplasm of brain; **C72:** neoplasm of medulla and cerebral nerves; **C75:** Other endocrine glands and related structures in line with [ICD-O-3 topography](#)

Basic data - centre cases neuro-oncological tumors



Primary cases	Recurrences/ Progressions	Centre cases
11,750 (75.38%)	3,837 (24.62%)	15,587 (100%)

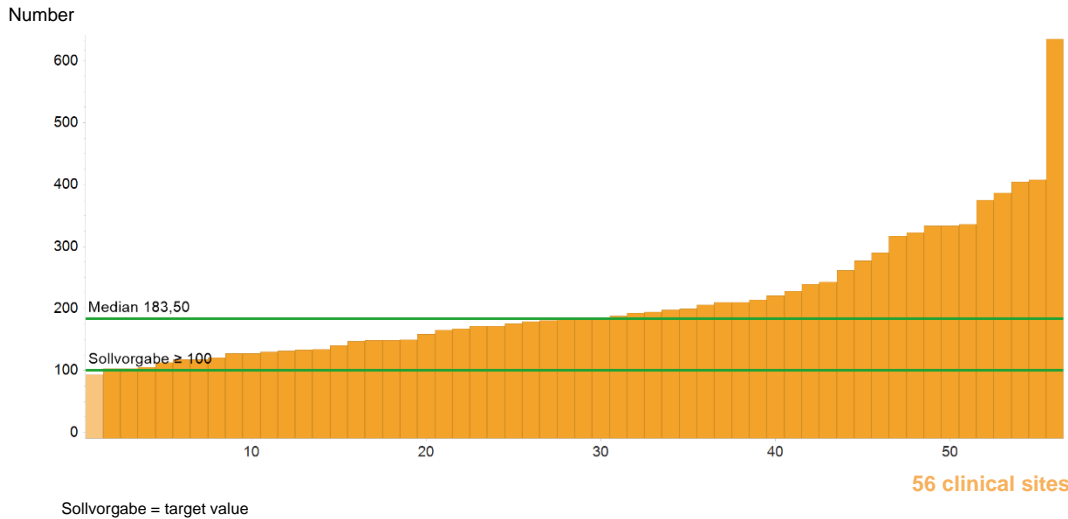
Basic data - Surgical expertise (number of resections - number of biopsies)



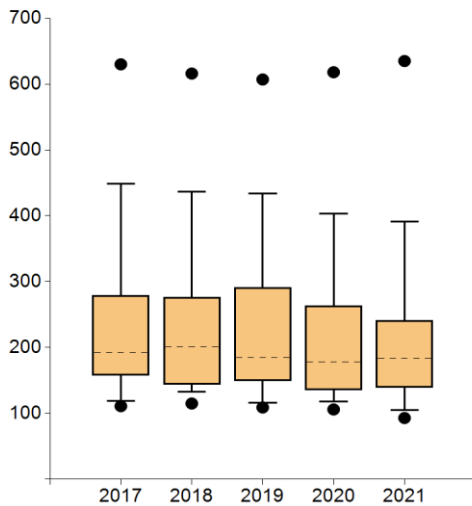
Operative expertise - Number of resections	Operative expertise - Number of biopsies
12,415 (83.75%)	2,408 (16.25%)

*Operative expertise: Resections or biopsies in primary cases, patients with recurrences/progressions and metastases in the calendar year are counted, regardless of primary case status.

1a. Number of primary cases



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Number	Primary cases Definition in line with 1.2.1	183,5	93 - 635	11750
	Target value ≥ 100			



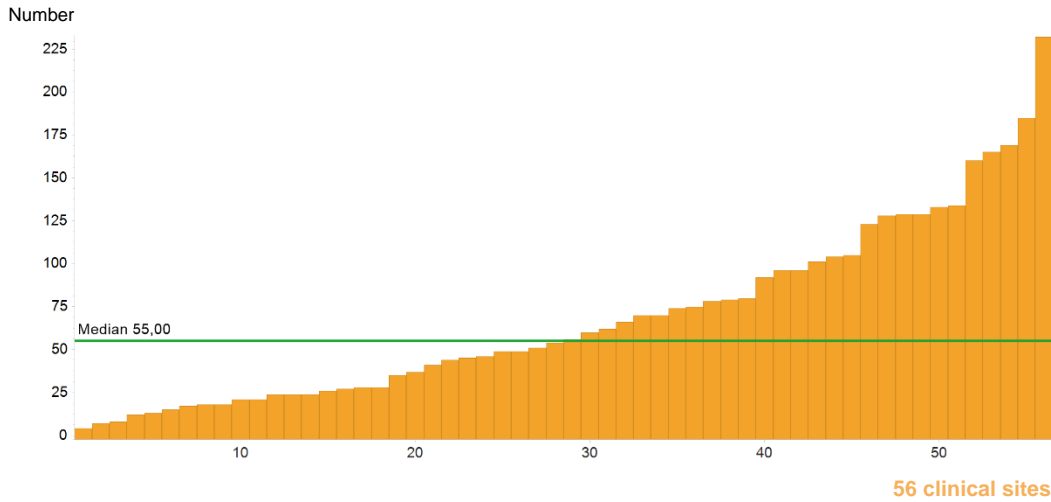
	2017	2018	2019	2020	2021
● Max	630,00	616,00	607,00	618,00	635,00
95 th percentile	448,35	436,70	434,00	403,50	391,50
75 th percentile	279,50	276,25	291,50	263,00	240,75
Median	192,50	201,50	184,50	178,00	183,50
25 th percentile	158,00	143,75	149,00	136,00	139,25
5 th percentile	118,65	132,85	115,75	117,50	105,25
● Min	111,00	115,00	109,00	106,00	93,00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
56	100.00%	55	98.21%

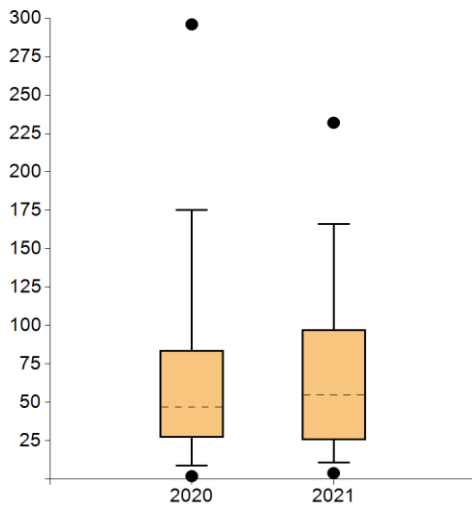
Comments:

With 5 additional centres included in the evaluation, the number of primary cases has increased by 940 or 8.70%. The median has risen again after the probably Covid-related decline in 2020 and is back at the level before the start of the pandemic. While all centres met the target in the pre-indicator year, one centre fell short of the target in 2021. This centre also referred to the Covid pandemic. Since it was undergoing a surveillance audit, it was possible to fall short of the target.

1b. Patients with recurrence/progression



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Number	Patients with recurrence / progression	55	4 - 232	3837
	No target value			



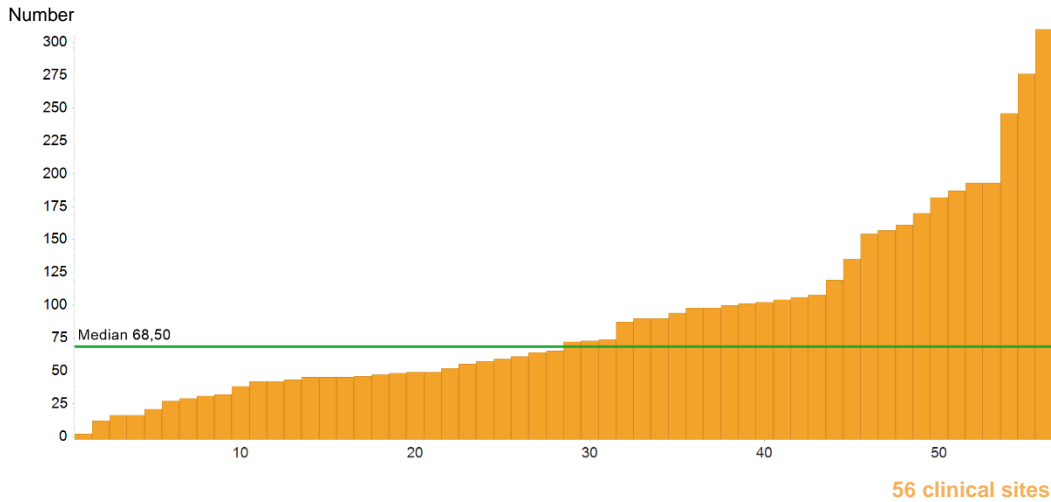
	2017	2018	2019	2020	2021
Max	----	----	----	296,00	232,00
95 th percentile	----	----	----	175,00	166,00
75 th percentile	----	----	----	84,00	97,25
Median	----	----	----	47,00	55,00
25 th percentile	----	----	----	27,00	25,50
5 th percentile	----	----	----	9,00	11,00
Min	----	----	----	2,00	4,00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
56	100.00%	----	----

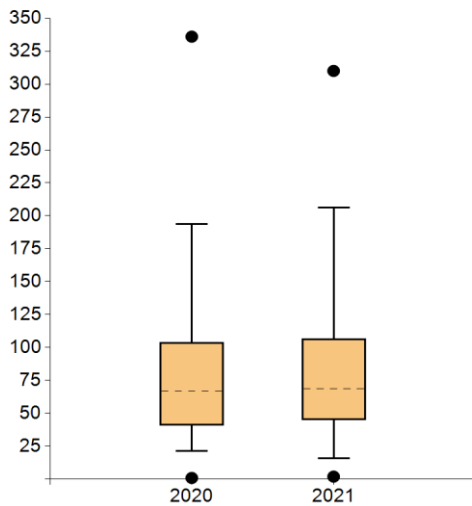
Comments:

The number of recurrences or progressions is recorded without a minimum requirement. The median has increased - comparable to the development of the primary case numbers (see Indicator 1a) - to 55 cases.

1c. Cerebral metastasis



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Number	Patients with cerebral metastasis who were treated in the NOC	68,5	2 - 310	5018
	No target value			



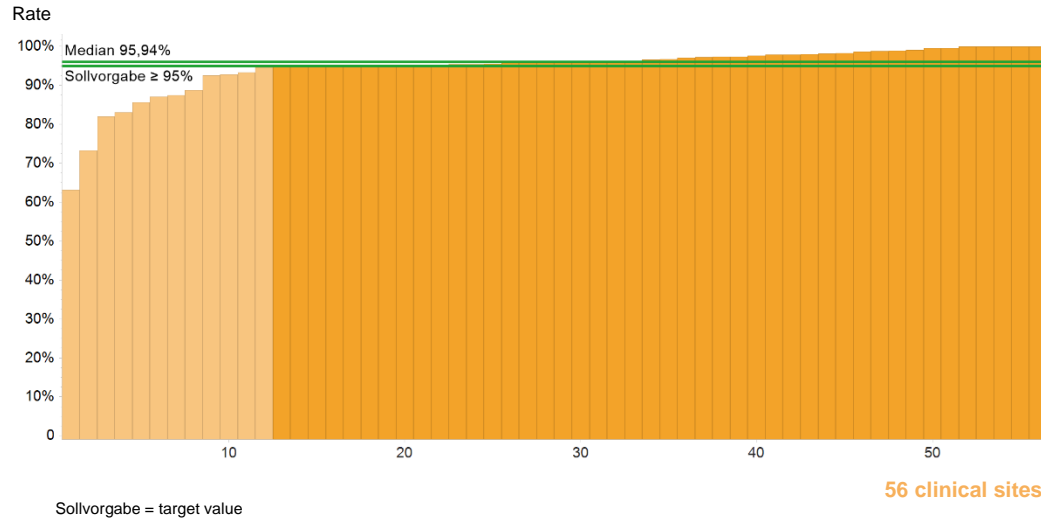
	2017	2018	2019	2020	2021
Max	----	----	----	336,00	310,00
95 th percentile	----	----	----	193,60	206,25
75 th percentile	----	----	----	104,00	106,50
Median	----	----	----	67,00	68,50
25 th percentile	----	----	----	41,00	45,00
5 th percentile	----	----	----	21,60	16,00
Min	----	----	----	1,00	2,00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
56	100.00%	----	----

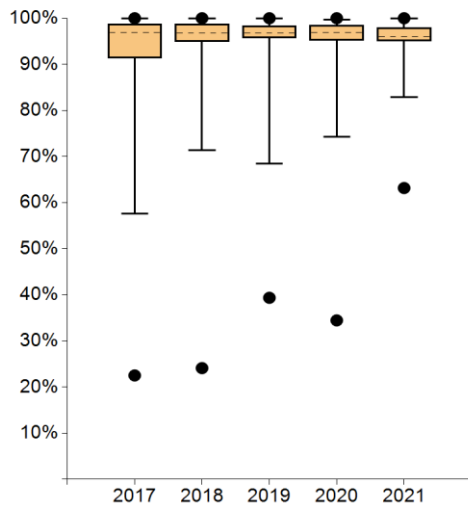
Comments:

The median number of cases with cerebral metastasis treated in the centres is largely constant compared to the previous year. A total of 5,018 cases were recorded that were treated in the neuro-oncology centres.

2a. Interdisciplinary case discussions



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients total
Numerator	Primary cases of the denominator (elective patients: pre-intervention, emergency patients: post-intervention) who were presented in the tumour board	178*	81 - 604	11108
Denominator	Primary cases (= Indicator 1a)	183,5*	93 - 635	11750
Rate	Target value ≥ 95%	95.94%	63.17% - 100%	94.54%**



	2017	2018	2019	2020	2021
● Max	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	99.73%	100%
75 th percentile	98.77%	98.71%	98.35%	98.48%	97.95%
Median	96.95%	96.72%	96.81%	96.86%	95.94%
25 th percentile	91.32%	94.91%	95.67%	95.19%	95.09%
5 th percentile	57.56%	71.30%	68.52%	74.32%	82.82%
● Min	22.52%	24.11%	39.36%	34.46%	63.17%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
56	100.00%	44	78.57%

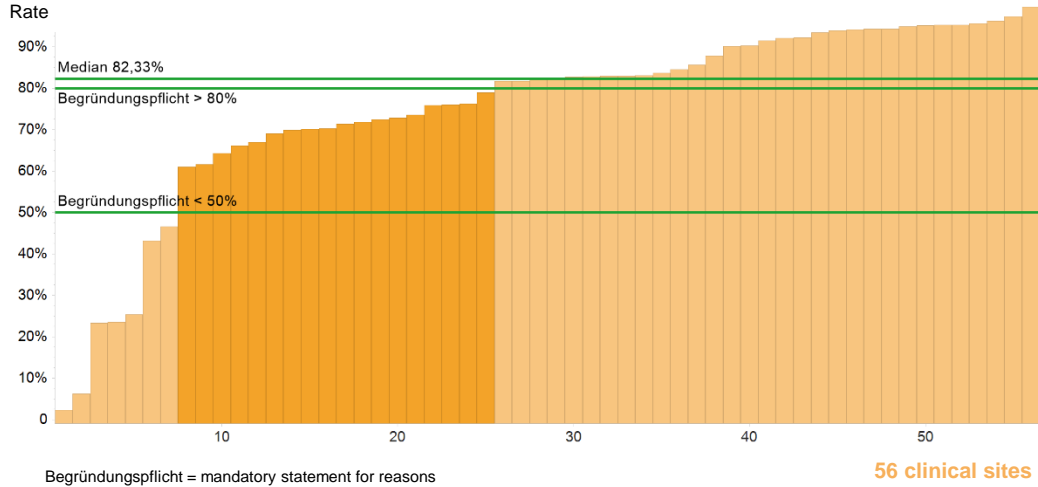
Comments:

The rate of interdisciplinary case discussions continues the positive trend: the overall rate and the values of the lower percentiles improve compared to the previous year. Once again, 12 centres missed the target, 6 of which did so already in the previous year. 4 centres reported failures, 3 reported problems with the presentation of patients from the outpatient clinic or the ambulatory care centre. The centres responded with training, quality circles or the hiring of a case manager. One centre received a deviation.

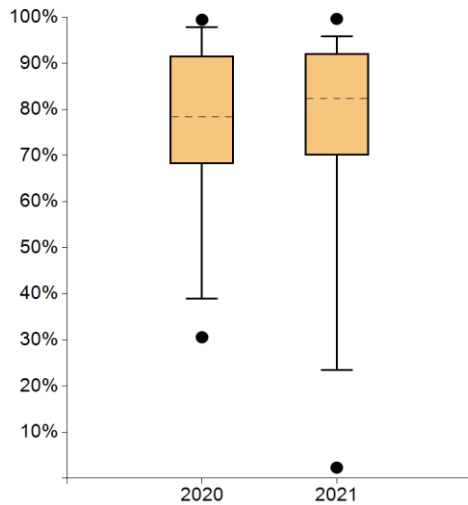
*The median for numerator and denominator does not refer to an existing centre but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

** Percentage of total patients treated in centres according to the numerator.

2b. Pretherapeutic interdisciplinary case discussions



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients total
Numerator	Primary cases of the denominator that were pre-interventionally presented in tumor board	153,5*	3 - 527	8992
Denominator	Primary cases (= Indicator 1a)	183,5*	93 - 635	11750
Rate	Mandatory statement for reasons*** <50% and >80%	82.33%	2.31% - 99.64%	76.53%**



	2017	2018	2019	2020	2021
Max	----	----	----	99.46%	99.64%
95 th percentile	----	----	----	97.86%	95.78%
75 th percentile	----	----	----	91.62%	92.19%
Median	----	----	----	78.32%	82.33%
25 th percentile	----	----	----	68.19%	70.08%
5 th percentile	----	----	----	39.00%	23.48%
Min	----	----	----	30.59%	2.31%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
56	100.00%	18	32.14%

Comments:

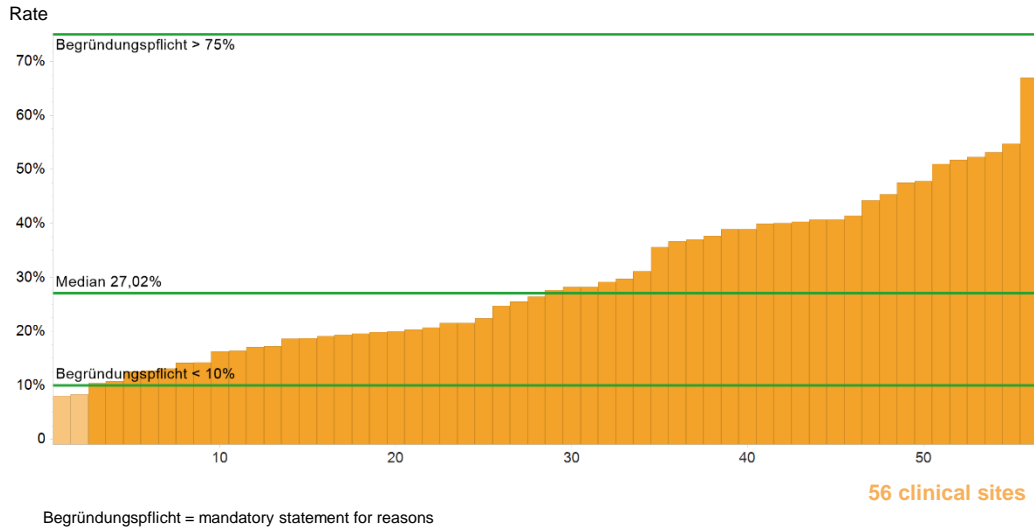
This key figure was compulsorily surveyed in the centres for the first time. The median rose significantly compared to the previous year. Of the 38 centres outside the plausibility limits, 31 even exceeded a rate of 80%. 7 centres had to justify a value <50%. At 4 of these centres, the processes were still being implemented, 2 centres referred to comparatively many emergencies or urgent cases. Efforts to increase the rate were demanded in the audits. In some cases, the centres hired case managers for better monitoring.

*The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

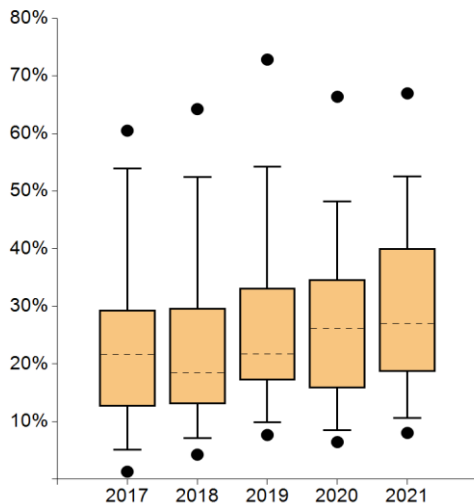
** Percentage of total patients treated in centres according to the numerator.

*** In the case of values outside the plausibility limit(s), the centres are required to provide justification.

3. Psycho-oncological counselling



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Numerator	Patients of the denominator who received psycho-oncological counselling in an inpatient or outpatient setting (Consultation ≥ 25 min.)	65,5*	16 - 240	4334
Denominator	Primary cases (= Indicator 1a) and patients with recurrence / progress (= Indicator 1b)	224,5*	107 - 714	15587
Rate	Mandatory statement for reasons*** < 10% and >75%	27.02%	8.04% - 66.96%	27.81%**



	2017	2018	2019	2020	2021
● Max	60.49%	64.23%	72.82%	66.37%	66.96%
95 th percentile	53.87%	52.44%	54.19%	48.21%	52.55%
75 th percentile	29.37%	29.70%	33.14%	34.68%	40.08%
Median	21.63%	18.46%	21.76%	26.21%	27.02%
25 th percentile	12.68%	13.06%	17.18%	15.84%	18.72%
5 th percentile	5.16%	7.09%	9.89%	8.51%	10.65%
● Min	1.31%	4.27%	7.68%	6.45%	8.04%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
56	100.00%	54	96.43%

Comments:

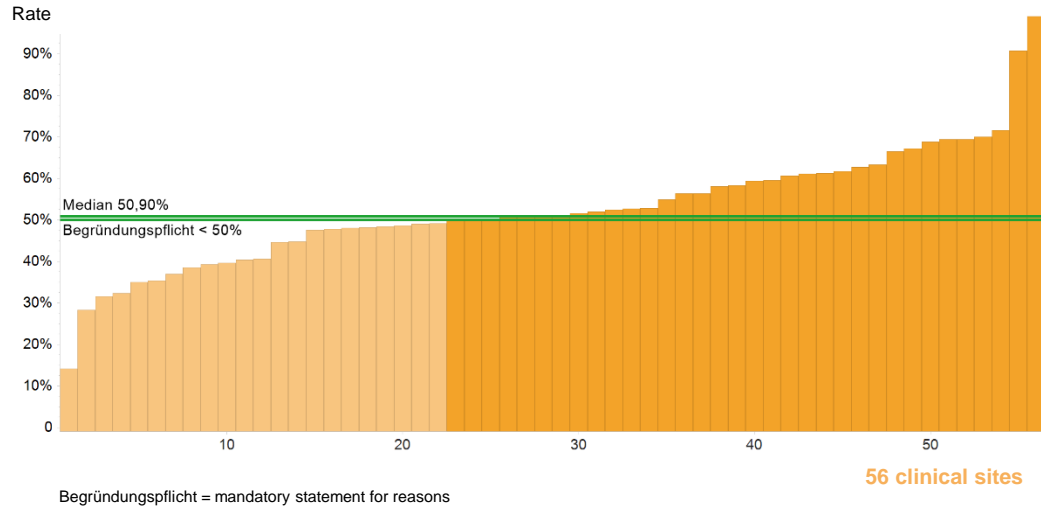
The psycho-oncological care rate has risen to the highest level in recent years. Accordingly, only 2 centres were below a rate of 5% (previous year: 5). The two centres referred to the Covid pandemic and staff shortages. They had to explain in the audits how they intend to increase the care rate in the future (action plan, quality circles, new recruitment).

*The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

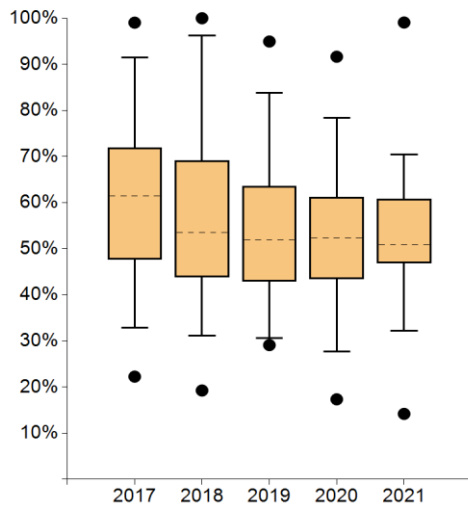
** Percentage of total patients treated in centres according to the numerator.

*** For values outside the plausibility limit(s), the centres are required to provide a justification.

4. Social services counselling



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Numerator	Patients of the denominator who received counselling by social services in an inpatient or outpatient setting	124*	40 - 648	8274
Denominator	Primary cases (= Indicator 1a) and patients with recurrence / progress (= Indicator 1b)	224,5*	107 - 714	15587
Rate	Mandatory statement for reasons*** < 50%	50.90%	14.18% - 99.07%	53.08%**



	2017	2018	2019	2020	2021
Max	99.04%	100%	94.95%	91.65%	99.07%
95 th percentile	91.51%	96.18%	83.80%	78.37%	70.49%
75 th percentile	71.95%	69.13%	63.62%	61.20%	60.82%
Median	61.47%	53.51%	51.96%	52.34%	50.90%
25 th percentile	47.74%	43.81%	42.93%	43.50%	46.88%
5 th percentile	32.92%	31.11%	30.65%	27.65%	32.22%
Min	22.26%	19.25%	29.10%	17.34%	14.18%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
56	100.00%	34	60.71%

Comments:

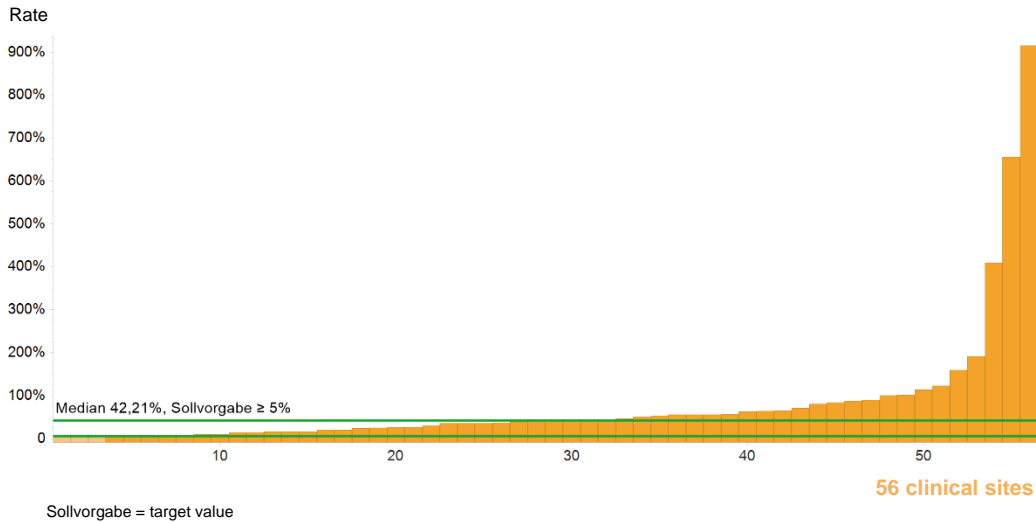
The median has dropped again and at the same time, with 22 centres, 3 more are below the 50% mark than in the previous year. Only 4 of these centres were located abroad, where other entitlements and responsibilities regarding social work apply. 7 centres referred to the effects of the Covid pandemic (short length of stay, few patient contacts), 3 to a low need for counselling. The centres were encouraged to strive for higher rates in the future, if necessary through training, quality circles and SOPs.

*The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

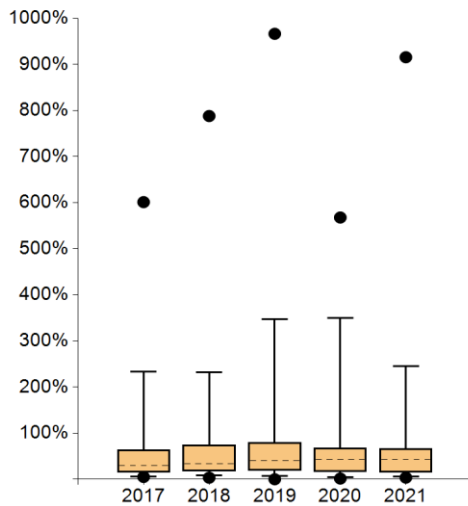
** Percentage of total patients treated in centres according to the numerator.

*** For values outside the plausibility limit(s), the centres are required to provide a justification.

5. Patients enrolled in a study



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Numerator	All patients (malignant and benign) who were included in a study with an ethical vote	28*	2 - 1373	4311
Denominator	Malignant primary cases	62*	23 - 150	4173
Rate	Target value ≥ 5%	42.21%	3.57% - 915.33%	103.31%**



	2017	2018	2019	2020	2021
● Max	601.09%	787.88%	966.22%	567.74%	915.33%
95 th percentile	233.18%	232.51%	346.81%	350.23%	245.36%
75 th percentile	63.76%	74.11%	79.34%	67.31%	66.22%
Median	29.22%	34.13%	40.67%	42.52%	42.21%
25 th percentile	14.95%	17.39%	19.55%	15.78%	15.61%
5 th percentile	6.19%	8.51%	6.46%	4.67%	5.44%
● Min	5.04%	3.39%	0.00%	1.56%	3.57%

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
56	100.00%	53	94.64%

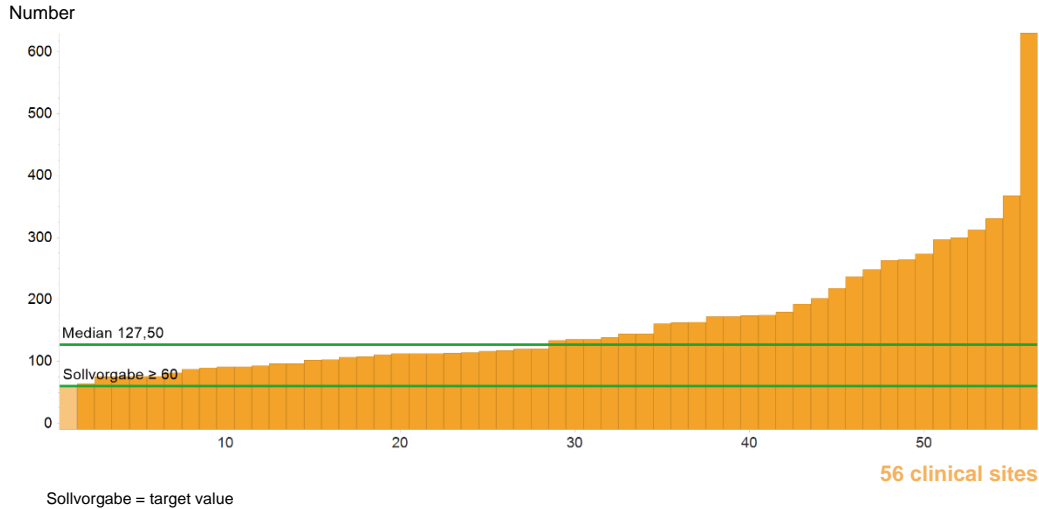
Comments:

With a slightly lower median, the overall study rate remains at a stable high level. However, 3 centres (previous year: 4) remained below the target of 5%. These had already initiated participation in further studies, so that a higher rate seems achievable in the future. In view of this, the auditors refrained from deviations, but announced an intensified examination of the indicator in the follow-up audit.

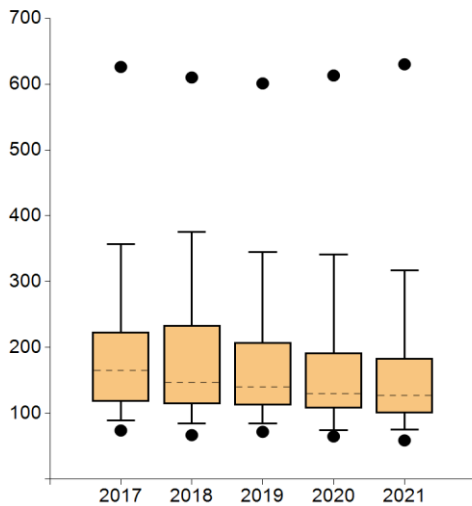
*The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

** Percentage of total patients treated in centres according to the numerator.

6a. Surgical primary cases



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Number	Surgical primary cases Definition in line with 5.2.3a	127,5	59 - 630	9069
	Target value ≥ 60			



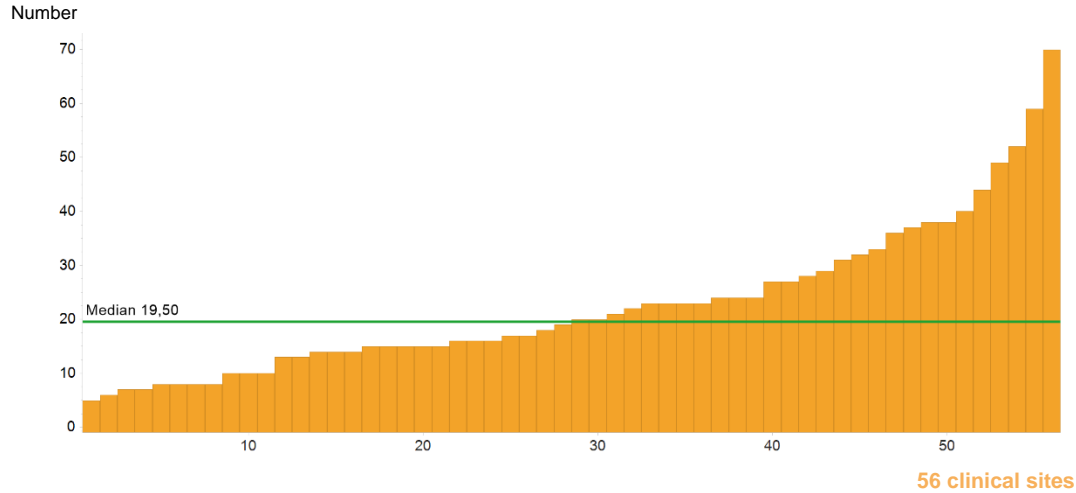
	2017	2018	2019	2020	2021
● Max	626,00	610,00	601,00	613,00	630,00
95 th percentile	356,75	375,70	344,85	341,50	316,75
75 th percentile	223,50	233,75	208,25	192,50	183,25
Median	165,00	147,00	140,00	130,00	127,50
25 th percentile	118,00	114,25	112,00	108,00	100,75
5 th percentile	89,00	85,00	84,30	74,50	75,00
● Min	74,00	67,00	72,00	65,00	59,00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
56	100.00%	55	98.21%

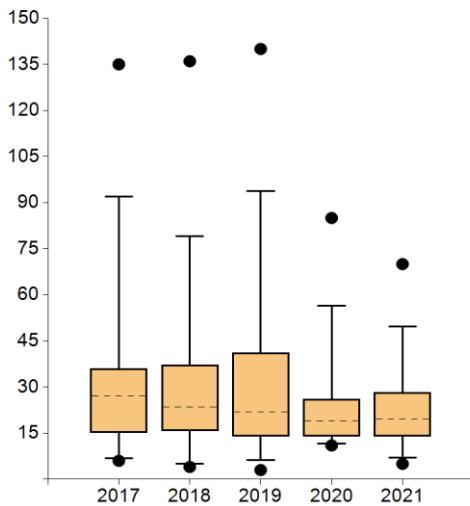
Comments:

The median number of operative primary cases decreased further. With 5 additional sites, the total number of operative primary cases increased by 529 or 6.19%. In comparison to the previous year, one centre fell just short of the target with 59 cases and attributed this to the effects of the Covid pandemic. As this centre was undergoing a surveillance audit, it was possible to fall short of the target without affecting the certificate. For the re-audit, the average case numbers of the last 3 years must be proven.

6b. Biopsy



	Indicator definition	All clinical sites 2020		
		Median	Range	Patients Total
Number	Biopsies Definition in line with 5.2.3b	19,5	5 - 70	1266
	No target value			



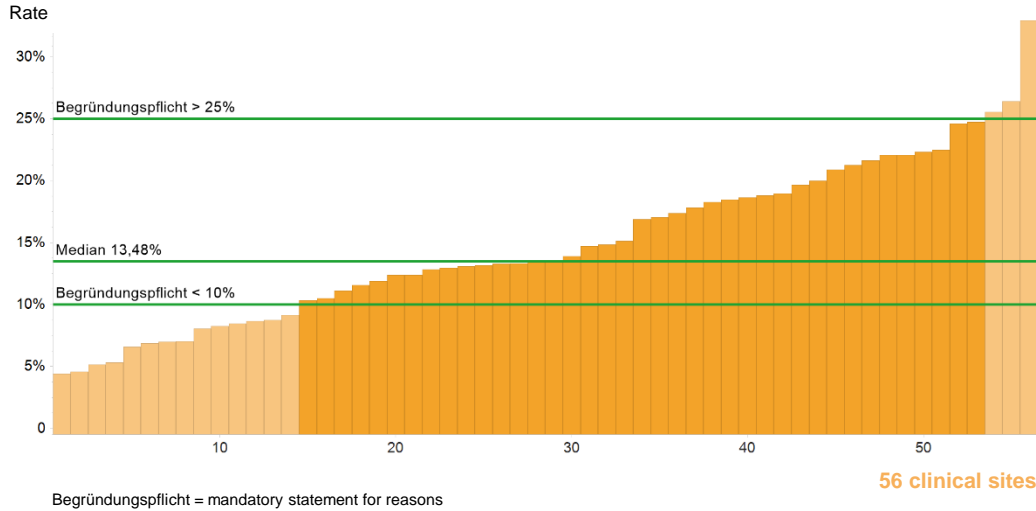
	2017	2018	2019	2020	2021
Max	135,00	136,00	140,00	85,00	70,00
95 th percentile	91,90	79,00	93,80	56,50	49,75
75 th percentile	36,00	37,25	41,25	26,00	28,25
Median	27,00	23,50	22,00	19,00	19,50
25 th percentile	15,25	15,75	14,00	14,00	14,00
5 th percentile	6,85	5,00	6,30	11,50	7,00
Min	6,00	4,00	3,00	11,00	5,00

Clinical sites with evaluable data		Clinical sites meeting the target value	
Number	%	Number	%
56	100.00%	-----	-----

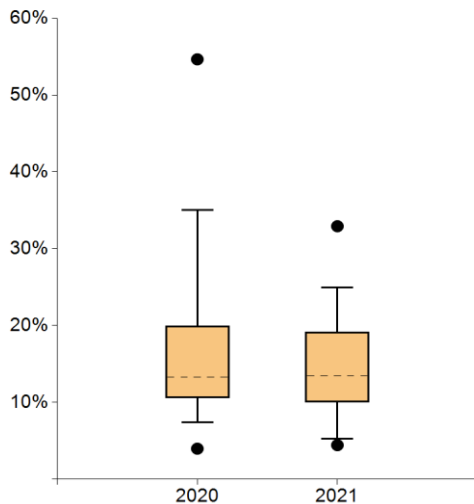
Comments:

Despite 5 additional clinical sites, the number of biopsies remained almost constant. It increased by 15 biopsies, which corresponds to 1.20%. The centres with comparatively high biopsy numbers in recent years have in part recorded significant declines here. Since the indicator is not backed by a target value, the reasons for this development remain unclear.

6c. Ratio biopsies/resections



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Numerator	Biopsies (= Indicator 6b)	19,5*	5 - 70	1266
Denominator	Surgical primary cases (= Indicator 6a)	127,5*	59 - 630	9069
Rate	Mandatory statement for reasons*** <10% and >25%	13.48%	4.44% - 32.93%	13.96%**



	2017	2018	2019	2020	2021
● Max	----	----	----	54.65%	32.93%
95 th percentile	----	----	----	35.07%	24.95%
75 th percentile	----	----	----	19.95%	19.15%
Median	----	----	----	13.25%	13.48%
25 th percentile	----	----	----	10.63%	10.04%
5 th percentile	----	----	----	7.41%	5.27%
● Min	----	----	----	3.98%	4.44%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
56	100.00%	39	69.64%

Comments:

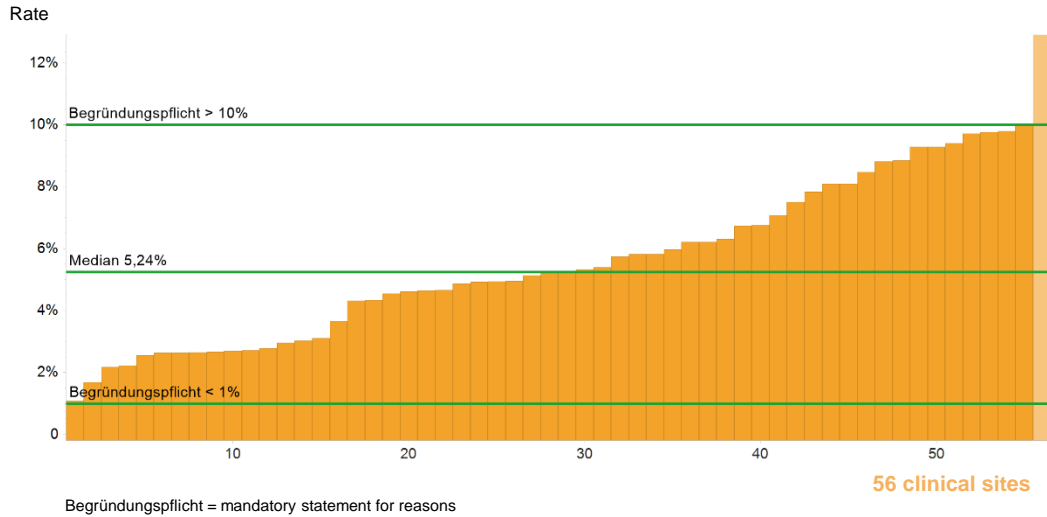
The ratio of biopsies and resections was documented for the second time. 14 of the 17 centres outside the Plausi limits had a value <10%, i.e. performed a comparatively large number of operations. 3 and 2 of these centres referred to a high proportion of benign or resectable tumours. 2 centres claimed biopsies (not countable here) for cerebral metastases. 3 centres stated that they generally favoured open surgery. The 3 centres with a rate of >25% referred mainly to unfavourably located tumours that were initially confirmed by biopsy.

* The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

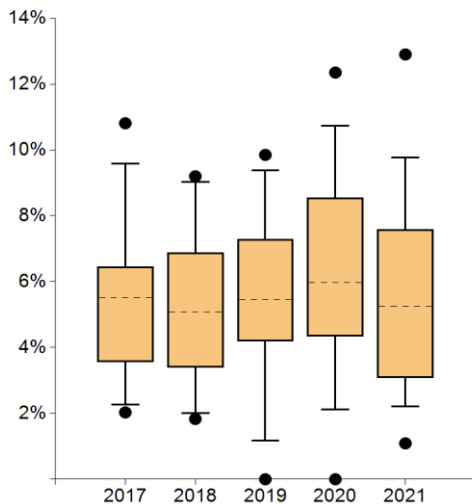
** Percentage of total patients treated in centres according to the numerator.

*** For values outside the plausibility limit(s), the centres are required to provide a justification.

7a. Revision surgeries



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Numerator	Primary cases of the denominator with revision surgery due to post-operative complications within 30d after surgery	8,5*	1 - 31	486
Denominator	Surgical primary cases (= Indicator 6a)	127,5*	59 - 630	9069
Rate	Mandatory statement for reasons*** < 1% and >10%	5.24%	1.09% - 12.90%	5.36%**



	2017	2018	2019	2020	2021
Max	10.81%	9.20%	9.85%	12.35%	12.90%
95 th percentile	9.59%	9.03%	9.38%	10.74%	9.77%
75 th percentile	6.45%	6.88%	7.29%	8.55%	7.59%
Median	5.51%	5.09%	5.45%	5.98%	5.24%
25 th percentile	3.57%	3.39%	4.19%	4.34%	3.09%
5 th percentile	2.28%	2.01%	1.18%	2.13%	2.21%
Min	2.03%	1.83%	0.00%	0.00%	1.09%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
56	100.00%	55	98.21%

Comments:

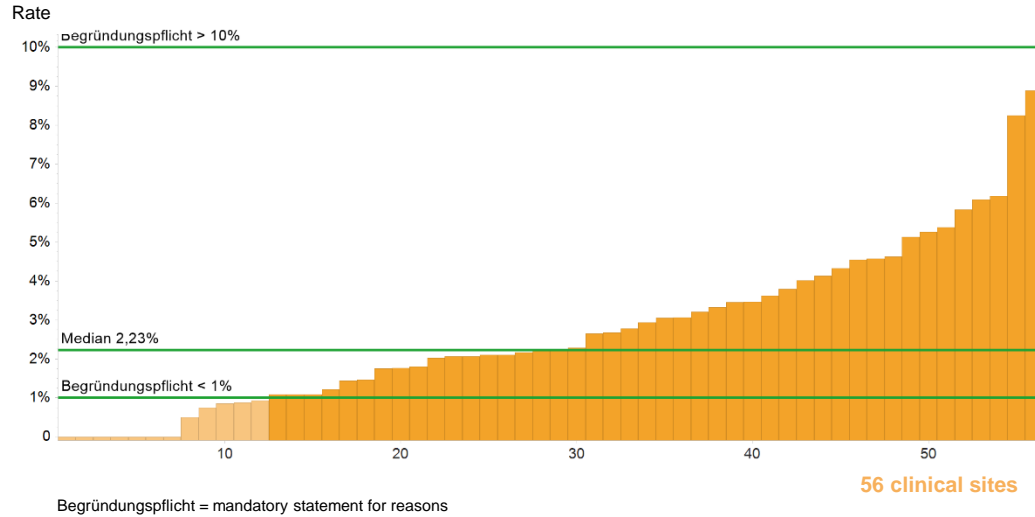
The revision rate decreased significantly both overall and in the median. Only 1 centre (previous year: 6) required a statement of reasons with a rate of 12.90%. Here, a rather broad spectrum of revision causes was present (hematoma/post-bleeding or Cerebrospinal Fluid (CSF) congestion/shunt dysfunction, fistula, etc.), so that an intensive examination of the key figure has already been announced for the follow-up audit.

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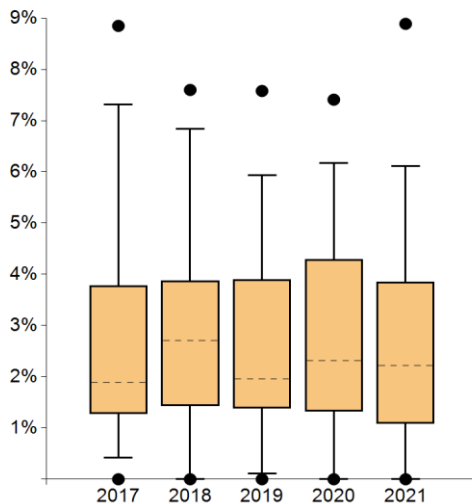
** Percentage of total patients treated in centres according to the numerator.

*** For values outside the plausibility limit(s), the centres are required to provide a justification.

7b. Clinically symptomatic secondary bleeding



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Numerator	Primary cases of the denominator with clinically symptomatic secondary bleeding (= new onset or worsening of an existing neurological disorder)	3,5*	0 - 13	239
Denominator	Surgical primary cases (= Indicator 6a)	127,5*	59 - 630	9069
Rate	Mandatory statement for reasons*** < 1% and >10%	2.23%	0.00% - 8.89%	2.64%**



	2017	2018	2019	2020	2021
Max	8.85%	7.60%	7.58%	7.41%	8.89%
95 th percentile	7.32%	6.84%	5.93%	6.18%	6.12%
75 th percentile	3.78%	3.87%	3.90%	4.29%	3.86%
Median	1.88%	2.71%	1.96%	2.31%	2.23%
25 th percentile	1.28%	1.43%	1.38%	1.33%	1.09%
5 th percentile	0.43%	0.00%	0.11%	0.00%	0.00%
Min	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
56	100.00%	44	78.57%

Comments:

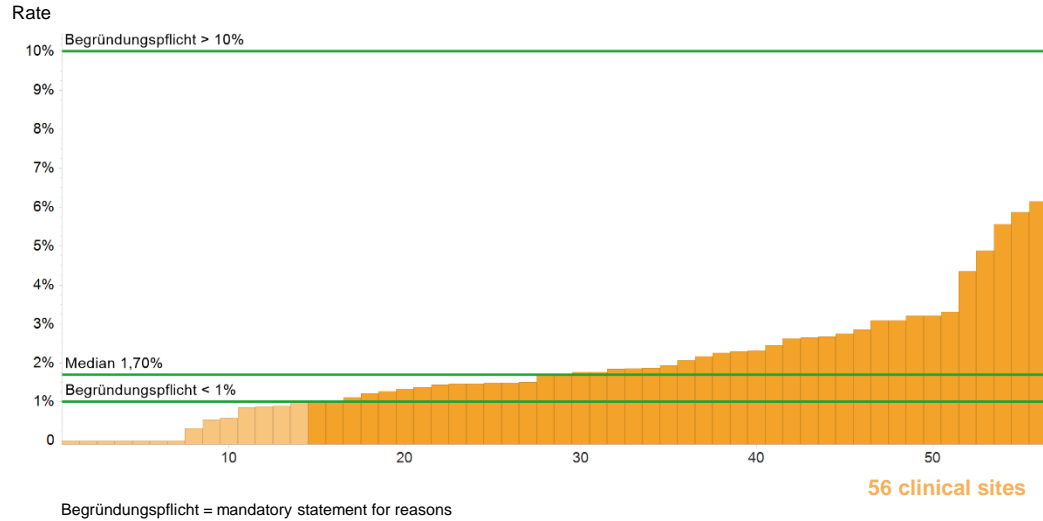
The rate of clinically symptomatic secondary bleeding decreased slightly. Of the 12 centres outside the plausibility corridor, all were below 1%. These values could partly be confirmed after double checking. 3 centres even achieved a rate of 0%.

*The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

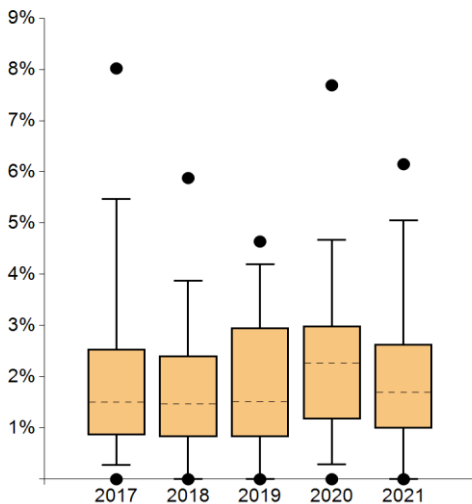
** Percentage of total patients treated in centres according to the numerator.

*** For values outside the plausibility limit(s), the centres are required to provide a justification.

8. Post-surgical wound infections



	Indicator definition	All clinical sites 2021		
		Median	Range	Patients Total
Numerator	Primary cases of the denominator with post-operative, laboratory-confirmed meningitis and/or wound infections requiring surgical revision within 30d after surgery.	2*	0 - 18	163
Denominator	Surgical primary cases (= Indicator 6a)	127,5*	59 - 630	9069
Rate	Mandatory statement for reasons*** < 1% and >10%	1.70%	0.00% - 6.15%	1.80%**



	2017	2018	2019	2020	2021
Max	8.02%	5.88%	4.64%	7.69%	6.15%
95 th percentile	5.47%	3.88%	4.19%	4.68%	5.05%
75 th percentile	2.54%	2.41%	2.96%	3.00%	2.64%
Median	1.51%	1.47%	1.52%	2.27%	1.70%
25 th percentile	0.86%	0.82%	0.82%	1.18%	1.00%
5 th percentile	0.28%	0.00%	0.00%	0.29%	0.00%
Min	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
56	100.00%	42	75.00%

Comments:

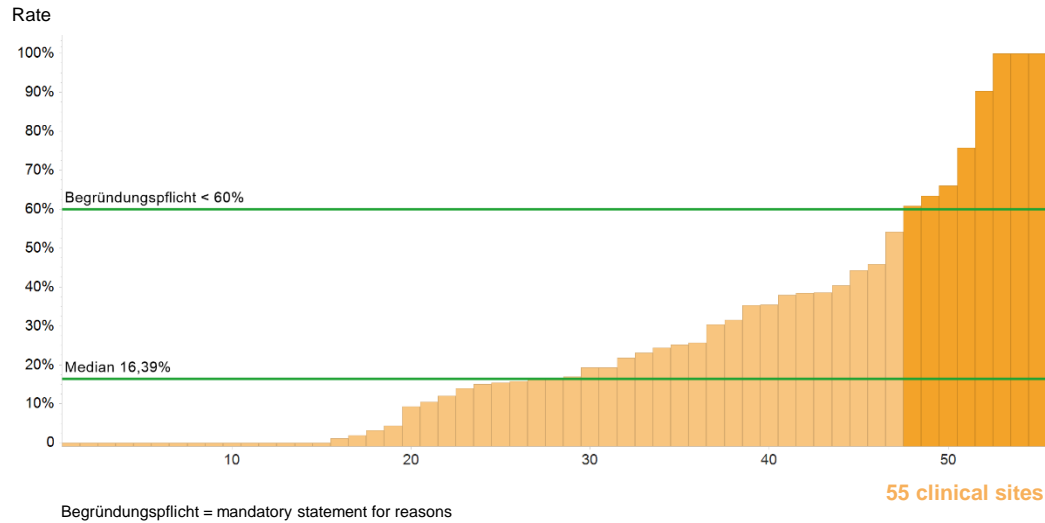
Similar to post-operative bleeding (see. indicator 7), the centres also show excellent results for post-operative wound infections. Here, too, all 12 centres outside the plausibility limits are below the 1% mark, i.e. record an extraordinarily low rate.

*The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

** Percentage of total patients treated in centres according to the numerator.

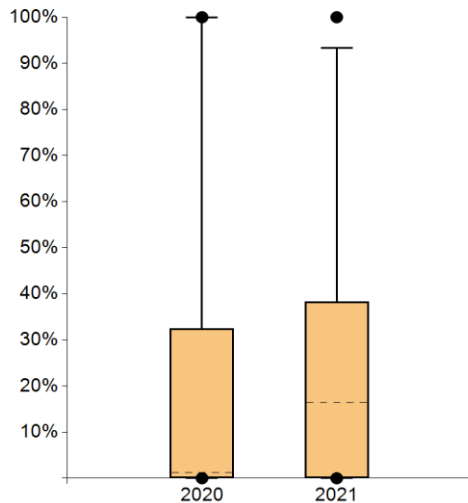
*** For values outside the plausibility limit(s), the centres are required to provide a justification.

9. Assessment palliative symptoms



	Indicator definition	All clinical sites 2021		
		Median	Range	Patienten Total
Numerator	Patients with symptom recording via MIDOS or IPOS	11*	0 - 81	954
Denominator	Patients with ICD-O topography C71 and ICD-O morphology /03	63*	8 - 227	4349
Rate	Mandatory statement for reasons*** <60%	16.39%	0,00% - 100%	21.94%**

IPOS = Integrated Palliative care Outcome Scale



	2017	2018	2019	2020	2021
● Max	----	----	----	100%	100%
95 th percentile	----	----	----	100%	93.27%
75 th percentile	----	----	----	32.46%	38.23%
Median	----	----	----	1.30%	16.39%
25 th percentile	----	----	----	0.00%	0.00%
5 th percentile	----	----	----	0.00%	0.00%
● Min	----	----	----	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites within the plausibility limits	
Number	%	Number	%
55	98.21%	8	14.55%

Comments:

This indicator was collected for the first time on a mandatory basis in the centres. The large majority of the centres recorded palliative symptoms in less than 60% of the patients in the denominator. 28 of the 47 centres who required a statement of reasons announced that the recording was still under development. 8 centres stated that they only had a consultation system. In some cases, only patients with obvious severe symptoms were recorded or alternative instruments were used. In the audits, efforts were made to consistently establish symptom recording using MIDOS or IPOS.

*The median for numerator and denominator does not refer to an existing centre, but reflects the median of all numerators of the cohort and the median of all denominators of the cohort.

** Percentage of total patients treated in centres according to the numerator.

*** For values outside the plausibility limit(s), the centres are required to provide a justification.

WISSEN AUS ERSTER HAND (FIRST-HAND KNOWLEDGE)



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Authors

German Cancer Society (DKG)
Certification Committee for Neuro-oncology Cancer Centres
Uwe Schlegel, Spokesman Certification Committee
Walter Stummer, Spokesman Certification Committee
Simone Wesselmann, German Cancer Society (DKG)
Johannes Rückher, German Cancer Society (DKG)
Martin Utzig, German Cancer Society (DKG)
Ellen Griesshammer, German Cancer Society (DKG)
Nele Grapentin, German Cancer Society (DKG)
Viktoria Sonnentag, OnkoZert GmbH
Florina Dudu, OnkoZert GmbH

Imprint

Publisher and responsible for content:
Deutsche Krebsgesellschaft (DKG)
Kuno-Fischer-Straße 8
14057 Berlin
Tel.: +49 (030) 322 93 29 0
Vereinsregister Amtsgericht Charlottenburg,
Vereinsregister-Nr.: VR 27661 B
V.i.S.d.P.: Dr. Johannes Bruns

in cooperation with:
OnkoZert, Neu-Ulm
www.onkozert.de

Version e-A1-de; 21.06.2023

ISBN: 978-3-910336-34-6

