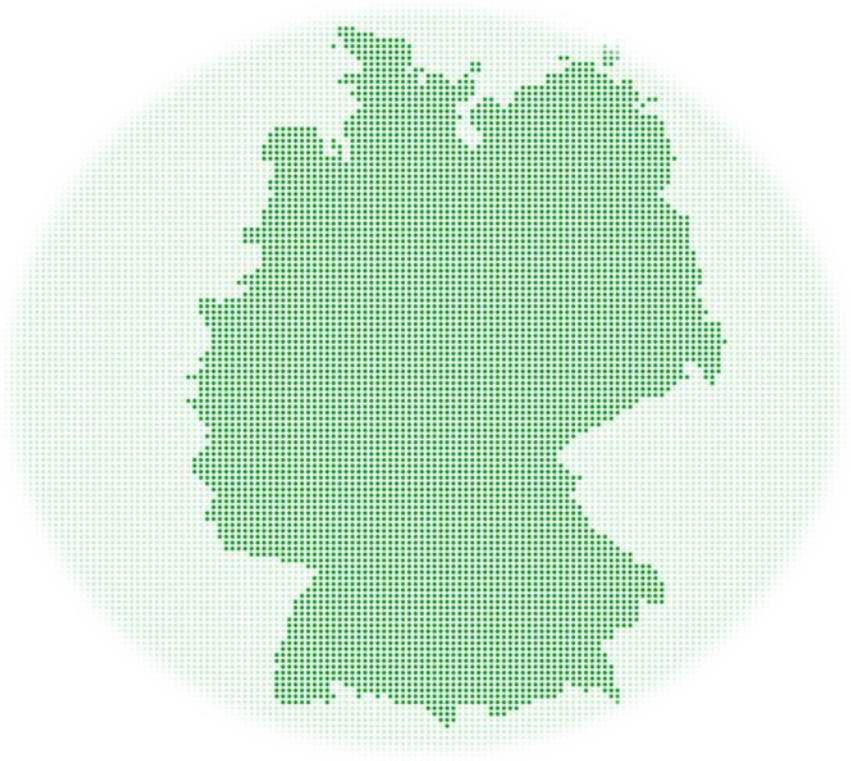


Annual Report 2019

of the Certified Colorectal Cancer Centres (CRCCs)

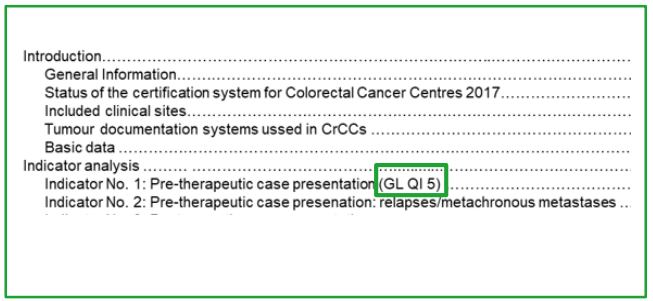
Audit year 2018 / Indicator year 2017

DKG
GERMAN CANCER SOCIETY
Certification

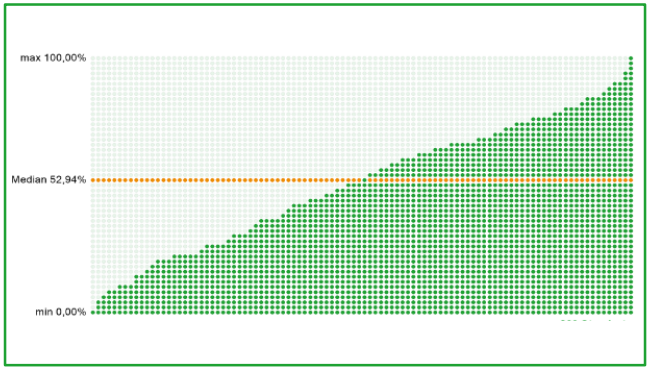
DKG GERMAN CANCER SOCIETY Certification

Table of Contents

General information



	Indicator definition	All clinical sites 2014	
		Median	Range
Numerator	Operative and endoscopic primary cases presented at the post-operative conference	79*	42 - 246
Population	Operative and endoscopic primary cases	80.5*	43 - 254
Rate	Target ≥ 95%	97.97%	86.15% - 100%



Quality indicators of the guidelines (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 *

The Quality Indicators (QI's) refer to the version 2.1 of the S3 GGPO Guideline Colorectal Cancer.

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.

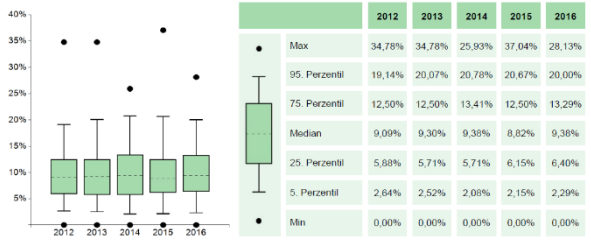
Diagram:

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 organe line. The median, which is also depicted as a orange horizontal line, divides the entire group into two equal halves.

*For further information on the methodological approach see „Development of guideline-based quality indicators" (https://www.leitlinienprogramm-onkologie.de/fileadmin/user_upload/Downloads/Methodik/QIEP_OL_Version2_english.pdf)

Back to Table of Contents

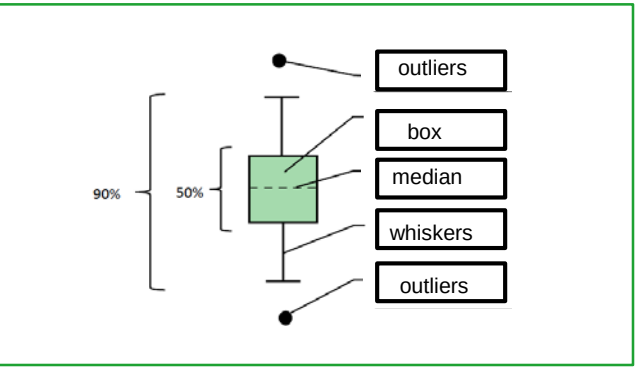
General information



	2012	2013	2014	2015	2016
Max	34,78%	34,78%	25,93%	37,04%	28,13%
95. Perzentil	19,14%	20,07%	20,78%	20,67%	20,00%
75. Perzentil	12,50%	12,50%	13,41%	12,50%	13,29%
Median	9,09%	9,30%	9,38%	8,82%	9,38%
25. Perzentil	5,88%	5,71%	5,71%	6,15%	6,40%
5. Perzentil	2,64%	2,52%	2,08%	2,15%	2,29%
Min	0,00%	0,00%	0,00%	0,00%	0,00%

Cohort development:

Cohort development in **2013**, **2014, 2015, 2015, 2016 and 2017** is graphically represented with box plots.



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.

Back to Table of Contents

DKG GERMAN CANCER SOCIETY Certification

Status of the certification system for Colorectal Cancer Centres 2018

		31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014
Ongoing procedures		4	6	7	13	11
Certified centres		283	281	280	265	267
Certified clinical sites		291	290	288	274	276
CRCCs with	1 clinical site	278	275	275	259	261
	2 clinical sites	3	4	3	4	4
	3 clinical sites	1	1	1	1	1
	4 clinical sites	1	1	1	1	1

Back to Table of Contents

General information

	31.12.2018	31.12.2017	31.12.2016	31.12.2015	31.12.2014
Clinical sites included in the Annual Report	284	283	273	261	257
Equivalent to	97.6%	97.6%	94.8%	95.3%	93.1%
Primary cases total*	26.804	26.285	25.214	24.277	23.842
Primary cases per centre (mean)*	94	93	92	93	93
Primary cases per centre (median)*	88	87	87	87	87

* The figures refer to all certified centres

This Annual Report looks at the Colorectal Cancer Centres certified in the Certification System of the German Cancer Society. The Data sheet, which is part of the Catalogue of Requirements, is the basis for the diagrams.

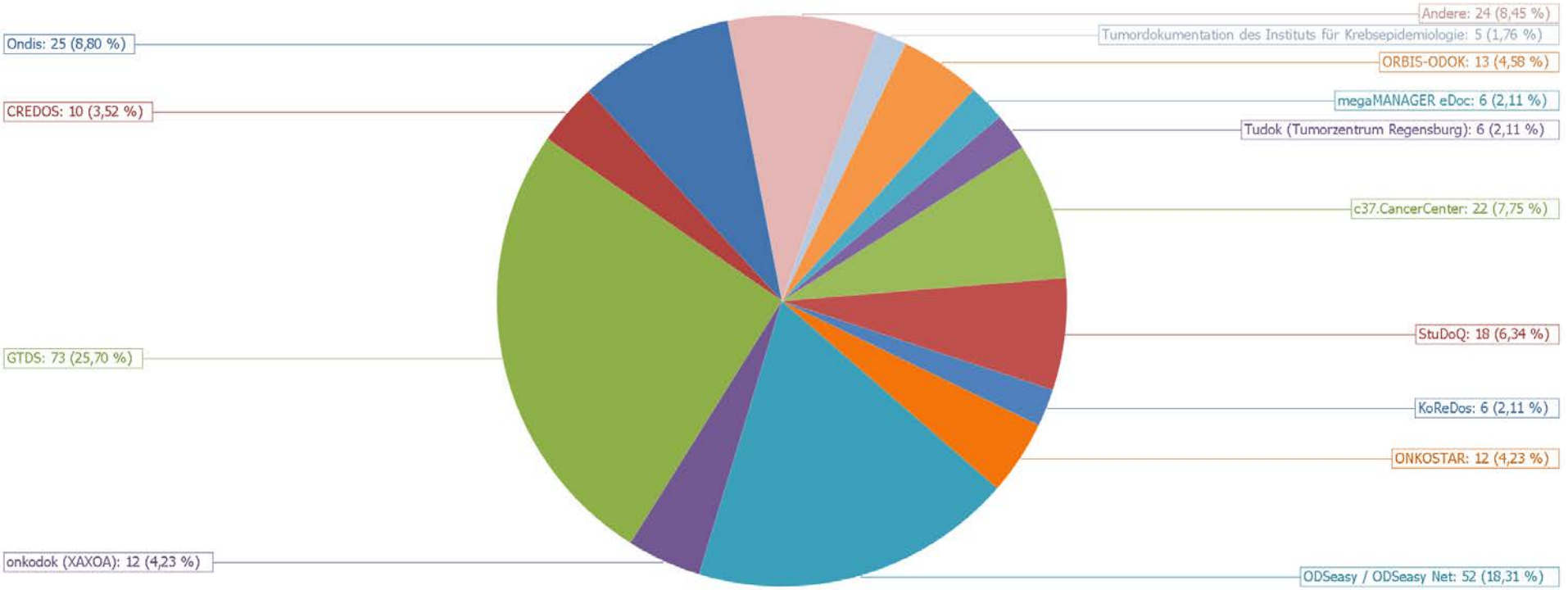
The Annual Report covers 284 of the 291 clinical sites certified, 4 clinical sites are not included: 4 clinical sites were certified for the first time in 2018 (data depiction of a full calendar year is not mandatory for initial certification), and certification had been suspended at 3 clinical site.

In 289 clinical sites that submitted a complete Data Sheet a total of 28,252 primary cases were treated. An up-to-date overview of all certified clinical sites can be found under www.oncomap.de/en

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

Back to Table of Contents

Tumour documentation systems used in CRCCs



Legend:	
Other	System used in less than 4 clinical sites

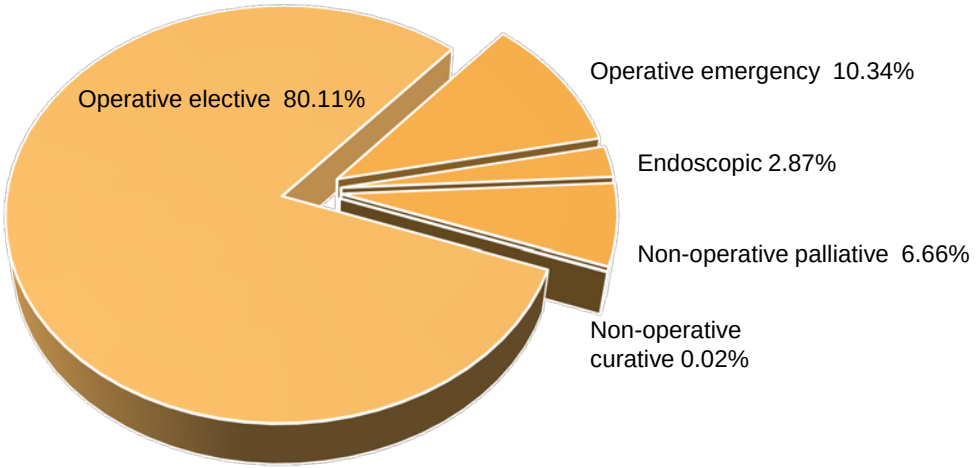
The details on the tumour documentation system were taken from the EXCEL annex to the Data Sheet (spreadsheet basic data). It is not possible to depict several systems. In many cases support is provided by the cancer registries or there may be a direct connection to the cancer registry via a specific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

Eigenentwicklung = in-house development

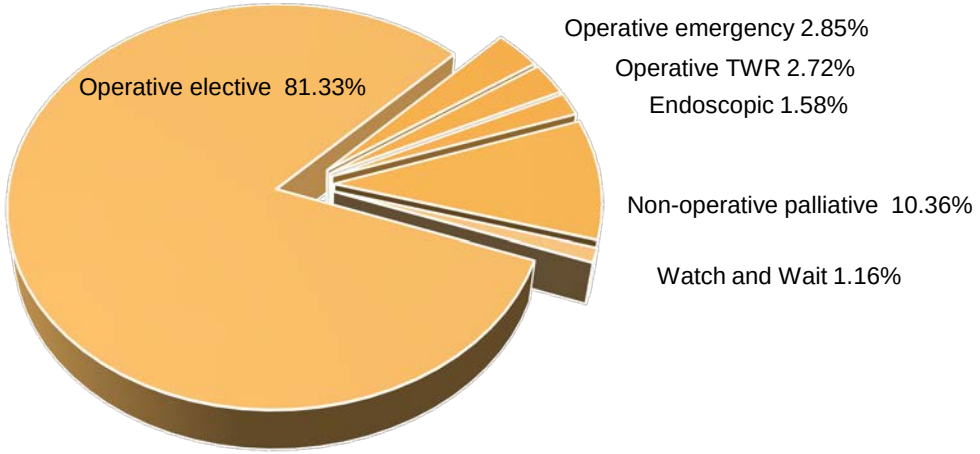
Back to Table of Contents

Basic data

Colon



Rectum



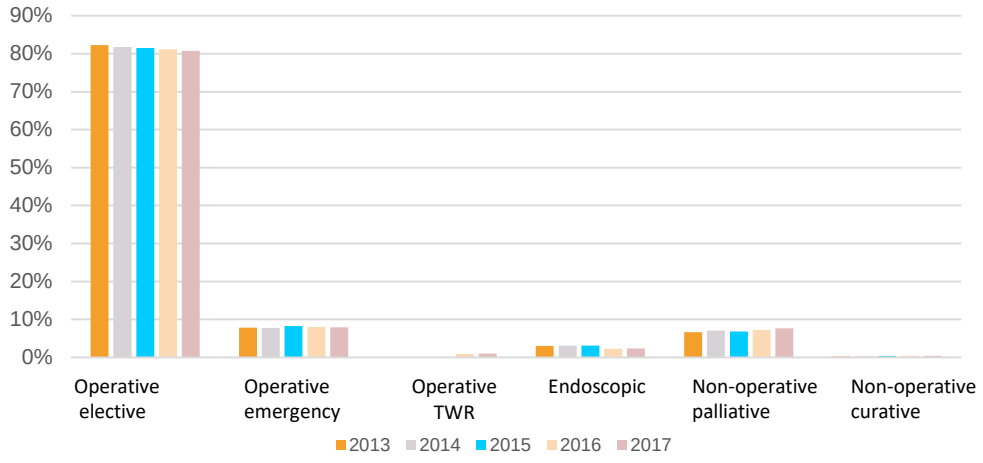
	Operative elective	Operative emergency	Operative TWR*	Endoscopic	Non-operative palliative **	Watch and Wait (Non-operative/ non-endoscopic curative) ***	Total
Colon	13,942 (80.11%)	1,799 (10.34%)	---	500 (2.87%)	1,159 (6.66%)	3 (0.02%)	17,403
Rectum	7,646 (81.33%)	268 (2.85%)	256 (2.72%)	148 (1.58%)	974 (10.36%)	109 (1.16%)	9,401
Primary Cases Total	21,588	2,067	256	648	2,133	112	26,804

* Operative transanal wall resection (TWR)
** Non-operative palliative: no tumour resection; palliative radiotherapy/chemotherapy or best supportive care
*** Watch and Wait (non-operative/non-endoscopic curative): complete tumour remission after planned neoadjuvant therapy and patient‘s foregoing of surgery

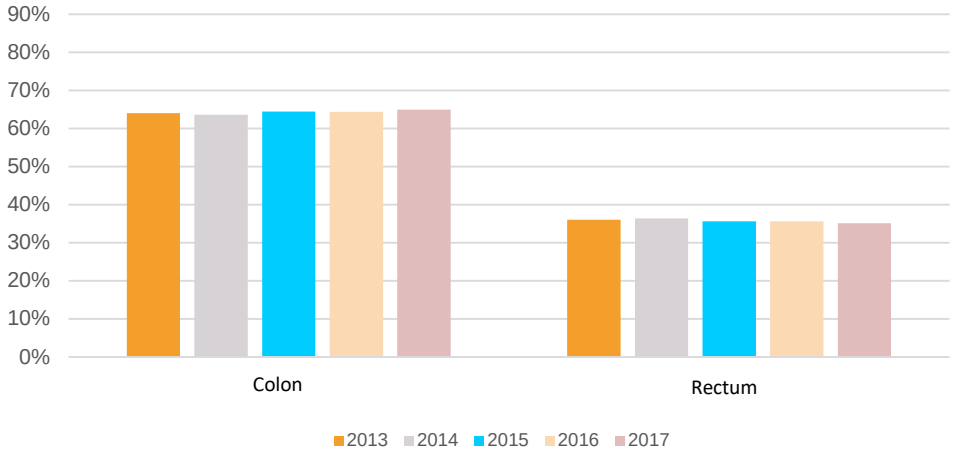
Back to Table of Contents

Basic data – Development 2013-2017

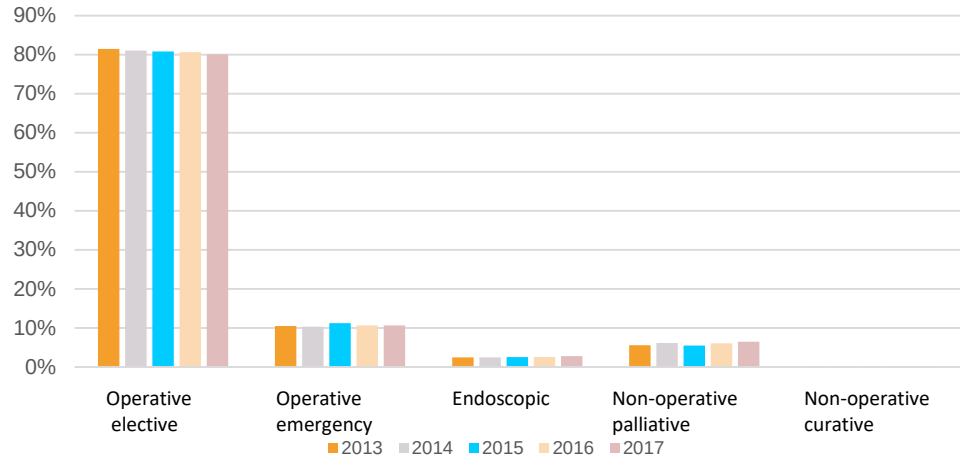
Distribution of primary cases by therapy 2013-2017



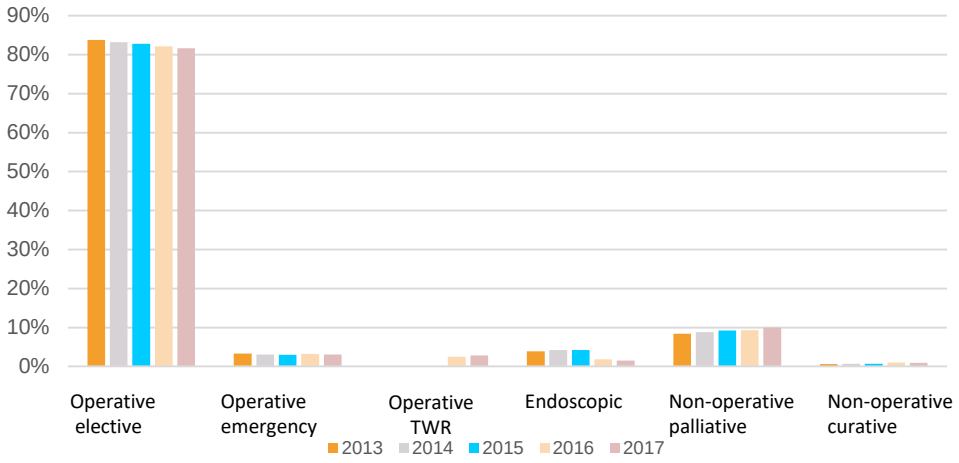
Distribution between primary cases colon and rectum 2013-2017



Distribution primary cases colon by therapy 2013-2017

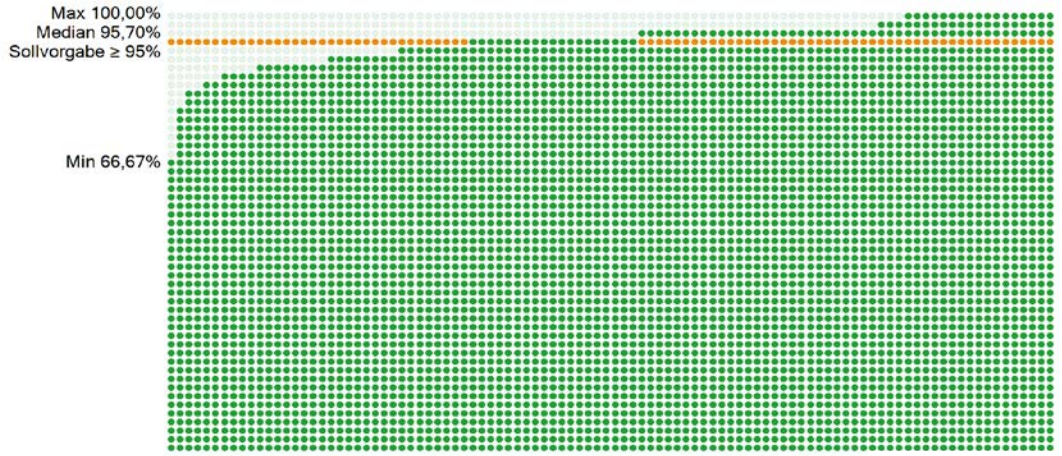


Distribution primary cases rectum by therapy 2013-2017



Back to Table of Contents

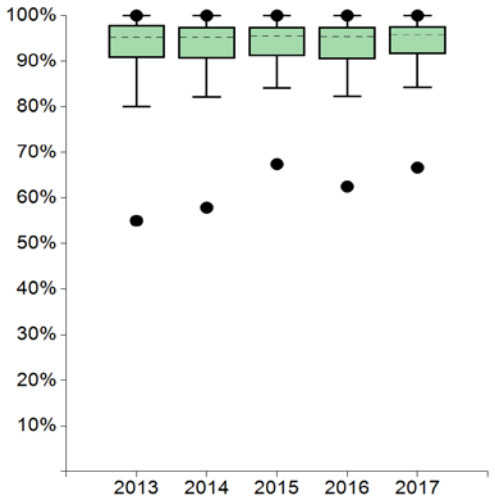
1. Pre-therapeutic case presentation (GL QI 7)



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patient presented at an interdisciplinary tumour conference before therapy	37*	12 - 101	11,440
Denomi-nator	All elective patients with RC and all patients with stage IV CC	39*	18 - 106	12,118
Rate	Target value ≥ 95%	95.70%	66.67% - 100%	94.41%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	97.78%	97.46%	97.44%	97.47%	97.50%
Median	95.12%	95.12%	95.45%	95.35%	95.70%
25th percentile	90.63%	90.59%	91.11%	90.48%	91.67%
5th percentile	80.00%	82.03%	84.05%	82.15%	84.17%
Minimum	55.00%	57.89%	67.39%	62.50%	66.67%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	166	58.45%

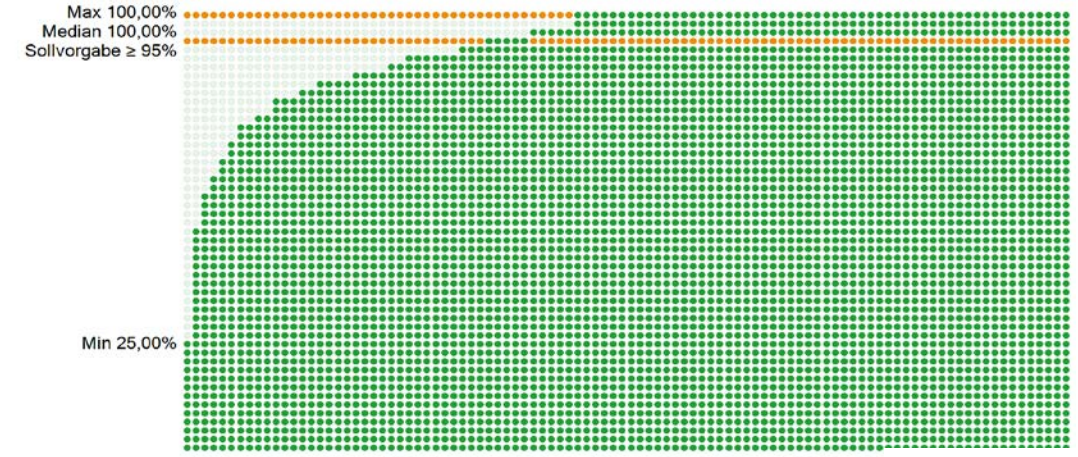
Comments:

Overall, the quality indicator from the Guidelines has been well implemented in the Colorectal Cancer Centres and more Centres met the target value than the previous year (53%). The Centre with the lowest presentation rate did not meet the target value the previous year either. The auditor formulated a deviation. The main reason given by the Centres for failing to meet the target value was that the diagnosis of the rectal carcinoma or metastasis had only been made intra-operatively. The agreed measures are the carrying out of rigid rectoscopies and more extensive interdisciplinary communication.

*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.

Back to Table of Contents

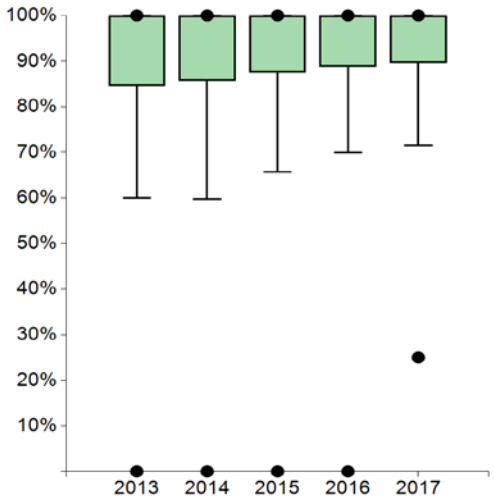
2. Pre-therapeutic case presentation: relapses/metachronous metastases



Sollvorgabe = target value

281 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patients with relapse or new metastases presented at the pre-therapeutic conference	10*	1 - 90	4,012
Denomi-nator	Patients with relapse or new metastases	11*	1 - 105	4,297
Rate	Target value ≥ 95%	100%	25.00% - 100%	93.37%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25th percentile	84.62%	85.71%	87.50%	88.89%	89.66%
5th percentile	60.00%	59.67%	65.65%	69.85%	71.43%
Minimum	0.00%	0.00%	0.00%	0.00%	25.00%

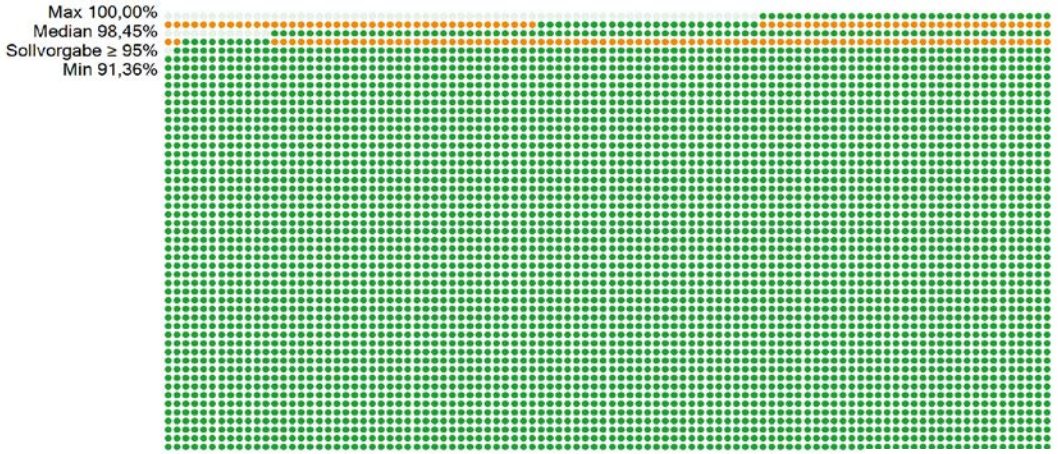
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
281	98.94%	178	63.35%

Comments:
The indicator improved over the last few years. With a constant median, the minimum value increased. Most Centres were able to maintain or increase the rate compared with the previous year. The main reasons given by the Centres for failing to meet the target value were the non-presentation of recurrent patients by outpatient cooperation partners and intraoperative incidental diagnoses. Training sessions and quality circles were conducted to improve the presentation rate. The 3 Centres with the lowest rates had very low denominators (n<7).

*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.

Back to Table of Contents

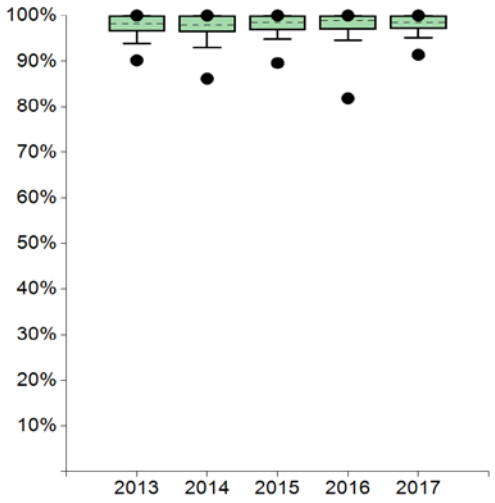
3. Post-operative case presentation



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Operative and endoscopic primary cases presented at the post-operative conference	80*	33 - 190	24,090
Denomi-nator	Operative and endoscopic primary cases	81*	34 - 203	24,559
Rate	Target value ≥ 95%	98.45%	91.36% - 100%	98.09%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	100%	100%	100%	100%	100%
Median	98.20%	97.97%	98.51%	98.84%	98.45%
25th percentile	96.49%	96.36%	96.73%	96.86%	97.01%
5th percentile	93.81%	92.96%	94.81%	94.50%	95.01%
Minimum	90.20%	86.15%	89.58%	81.82%	91.36%

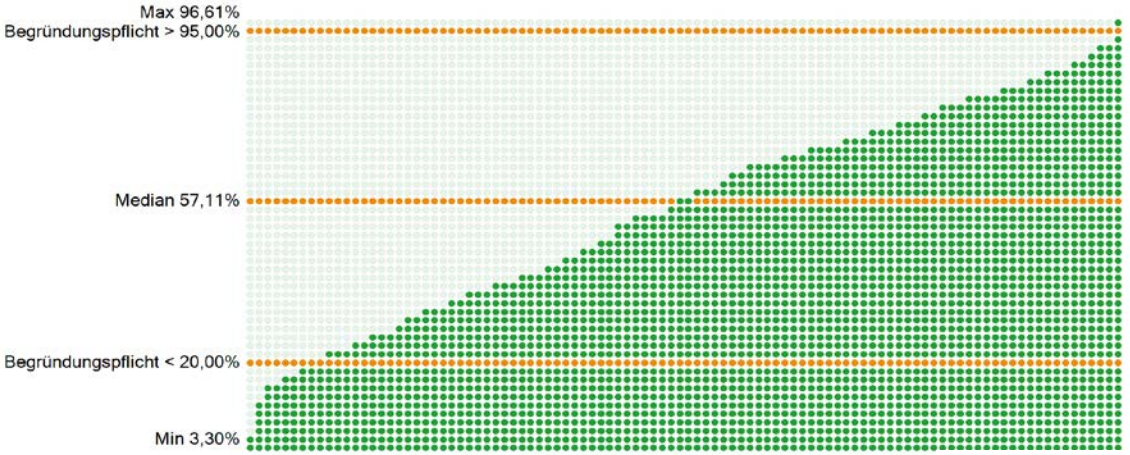
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	270	95.07%

Comments:
Just like the previous year, this indicator was very well implemented. Overall, in indicator year (IY) 2017 98.09% of the surgical and endoscopic primary cases were discussed in the post-operative tumour conferences in the Centres. The share of Centres that met the target value increased slightly compared to IY 2016 (94.7%). The main reason given by the 14 Centres that failed to meet the target value in IY 2017 was the post-operative death of 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.
** Percentage of centre patients who were treated according to the indicator.

Back to Table of Contents

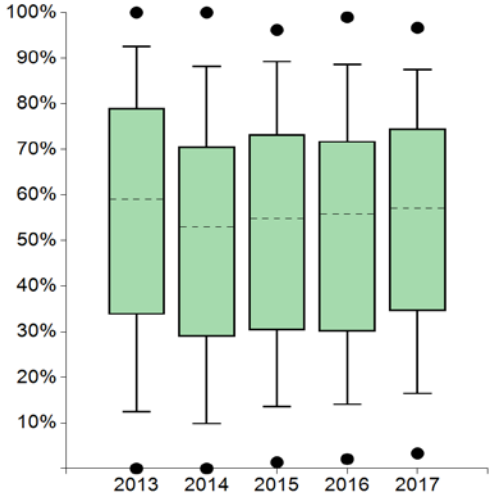
4. Psycho-oncological counselling



Begründungspflicht = mandatory statement of reasons

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patients given inpatient or outpatient psycho-oncological counselling (length of session ≥ 25 min)	54.5*	3 - 163	16,504
Denomi-nator	Total primary cases + patients with relapse/new metastases	100*	40 - 255	31,101
Rate	Explanation mandatory*** <20% and >95%	57.11%	3.30% - 96.61%	53.07%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	96.15%	98.94%	96.61%
95th percentile	92.50%	88.17%	89.21%	88.58%	87.50%
75th percentile	79.10%	70.60%	73.28%	71.73%	74.49%
Median	59.09%	52.94%	54.88%	55.71%	57.11%
25th percentile	33.75%	28.83%	30.41%	30.13%	34.58%
5th percentile	12.45%	9.86%	13.57%	14.03%	16.51%
Minimum	0.00%	0.00%	1.33%	2.06%	3.30%

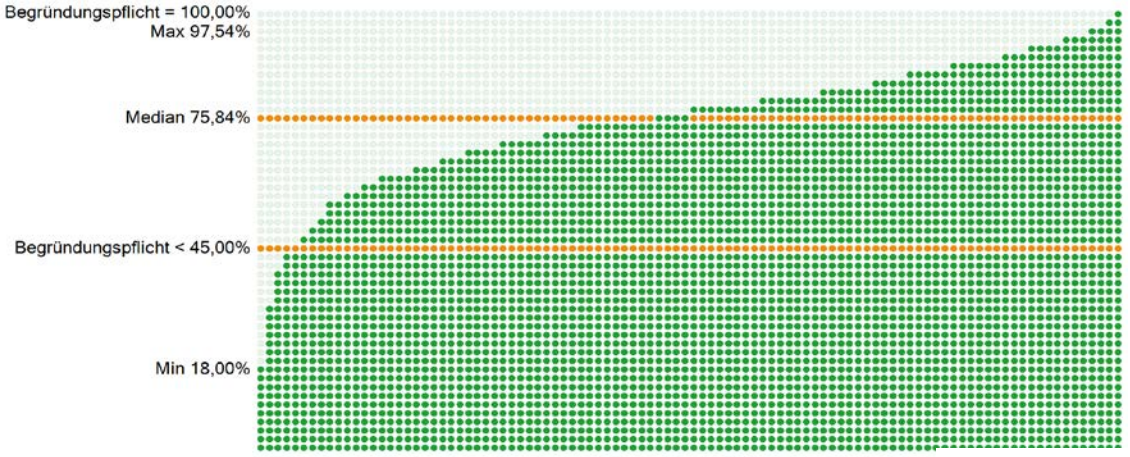
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	257	90.49%

Comments:
The median of the psycho-oncological counselling rate in the Centres was higher than in indicator year (IY) 2016. The rate of the total number of patients who received psycho-oncological counselling also increased (IY: 2017: 53.07%, IY 2016: 50.37%). 8 out of the 10 Centres with the lowest rate in IY 2016, were able to improve their rate in IY 2017. The reason frequently given by the Centres with the low rates in IY 2017 was the limited demand despite a low-threshold offering. Staff training sessions were conducted in these Centres to improve the rate and new standards of psycho-oncological care were developed.

*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.
*** If value is outside the plausablilty corridor, centres have to give an explanation.

Back to Table of Contents

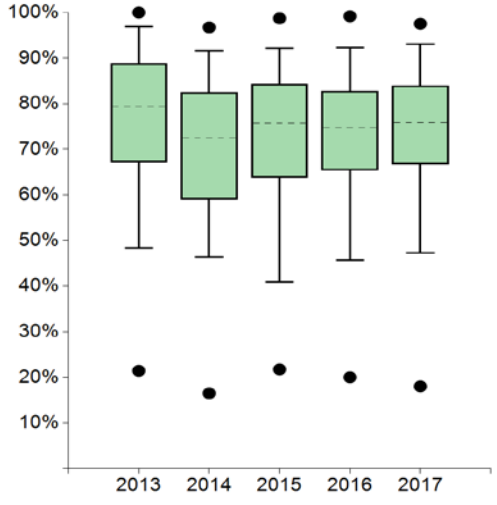
5. Social services counselling



Begründungspflicht = mandatory statement of reasons

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Inpatients or outpatients who received counselling from the social services	75*	18 - 211	22,809
Denomi-nator	Total primary cases + patients with relapse/new metastases	100*	40 - 255	31,101
Rate	Explanation mandatory*** <45% and =100%	75.84%	18.00% - 97.54%	73.34%**



	2013	2014	2015	2016	2017
Maximum	100%	96.74%	98.72%	99.18%	97.54%
95th percentile	96.89%	91.67%	92.09%	92.25%	93.12%
75th percentile	88.89%	82.47%	84.31%	82.76%	83.90%
Median	79.31%	72.37%	75.74%	74.77%	75.84%
25th percentile	67.07%	59.12%	63.86%	65.46%	66.78%
5th percentile	48.34%	46.34%	40.95%	45.67%	47.29%
Minimum	21.43%	16.49%	21.74%	20.00%	18.00%

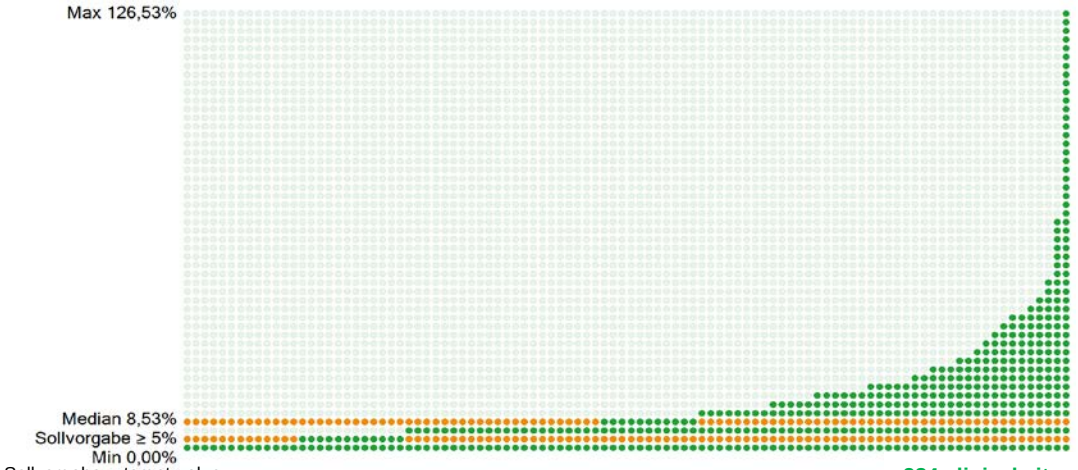
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	273	96.13%

Comments:
The indicator for social services counselling has remained steady over the last few years. 138 Centres had a lower rate in indicator year (IY) 2017 than in 2016, 134 Centres a higher rate. 6 out of the 11 Centres with low rates requiring substantiation are located in German-speaking countries abroad (Austria and Switzerland) where social work is organised in a different way (outpatient counselling facilities).

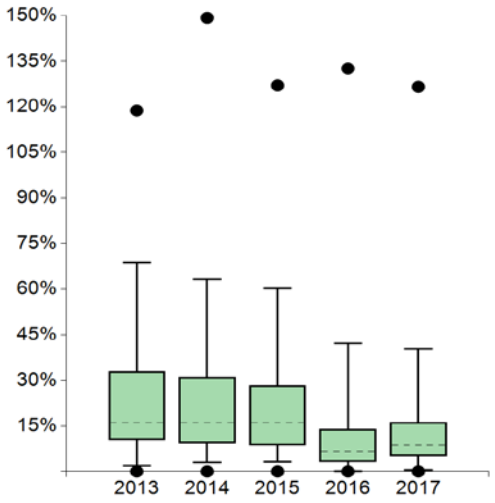
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.
** Percentage of centre patients who were treated according to the indicator.
*** If value is outside the plausablilty corridor, centres have to give an explanation.

Back to Table of Contents

6. Study participation



	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patients of the CrCC included in a study or colorectal prevention study	8*	0 - 124	3,534
Denomi-nator	Total primary cases	88*	35 - 228	26,804
Rate	Target value ≥ 5%	8.53%	0.00% - 126.53%	13.18%**



	2013	2014	2015	2016	2017
Maximum	118.75%	149.23%	126.98%	132.58%	126.53%
95th percentile	68.83%	63.10%	60.18%	42.24%	40.33%
75th percentile	32.89%	31.07%	28.21%	14.00%	16.18%
Median	15.85%	16.22%	16.00%	6.58%	8.53%
25th percentile	10.47%	9.35%	8.70%	3.23%	5.10%
5th percentile	1.82%	3.09%	3.18%	0.00%	0.48%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

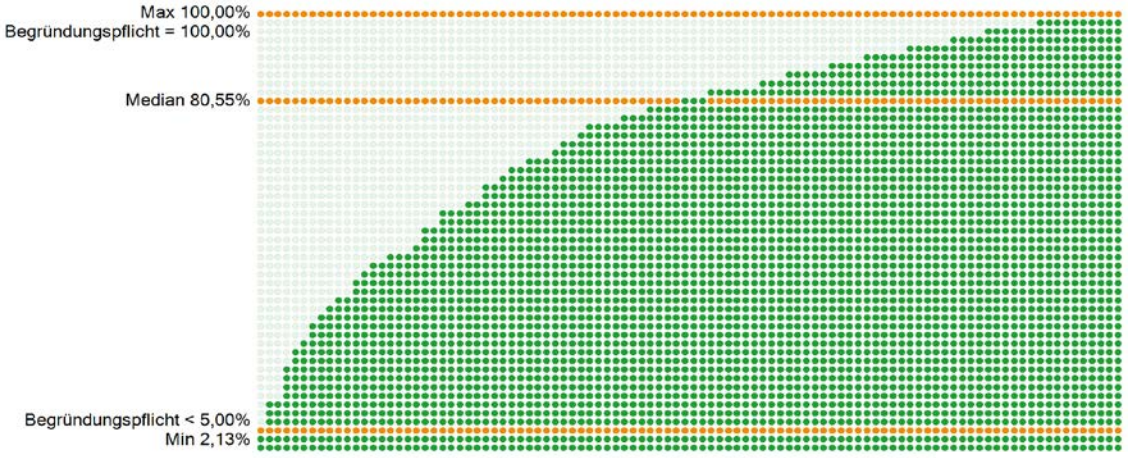
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	216	76.06%

Comments:
The mandatory introduction of the StudyBox led to a clear worsening of the study rate from indicator year (IY) 2015 to 2016. Fortunately, in IY 2017 there was once again an increase in the median of the study rate. The establishment of the StudyBox and the start of the EDIUM study (Outcome study for colorectal cancer: Identification of differences and measures for nationwide quality development) offer the prospects of a further improvement in the indicator. Centres that failed to meet the target value had often recruited patients for studies that were not accredited in the StudyBox or they were unable to identify suitable patients for studies. These Centres are preparing the accreditation of studies through the StudyBox in order to improve the indicator.

*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.

Back to Table of Contents

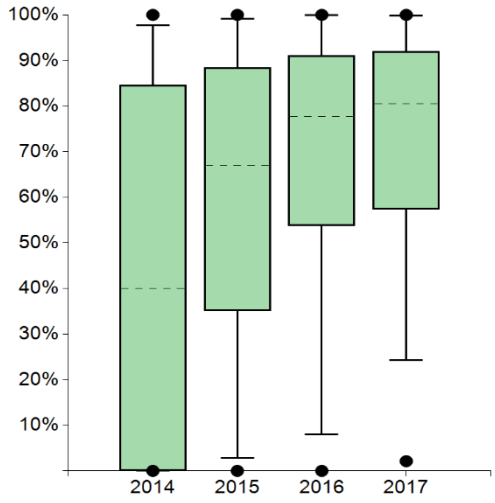
7. CRC patients with a recorded family history (GL QI 1)



Begründungspflicht = mandatory statement of reasons

284 clinical sites

	Indicator definition	All clinical sites 2017 Median	Range	Patients Total
Numerator	Primary-case patients with a CRC and a completed patient questionnaire (http://www.krebsgesellschaft.de/deutsche-krebsgesellschaft-wtrl/deutsche-krebsgesellschaft/zertifizierung/erhebungsboegen/organkrebszentren.html in the colorectal cancer section)	65.5*	2 - 202	19,429
Denominator	Total primary cases	88*	35 - 228	26,804
Rate	Explanation mandatory*** <5% and =100%	80.55%	2.13% - 100%	72.49%**



	2013	2014	2015	2016	2017
Maximum	-----	100%	100%	100%	100%
95th percentile	-----	97.63%	99.12%	100%	99.87%
75th percentile	-----	84.57%	88.46%	91.07%	91.99%
Median	-----	40.00%	66.98%	77.78%	80.55%
25th percentile	-----	0.00%	35.14%	53.82%	57.35%
5th percentile	-----	0.00%	2.87%	7.96%	24.22%
Minimum	-----	0.00%	0.00%	0.00%	2.13%

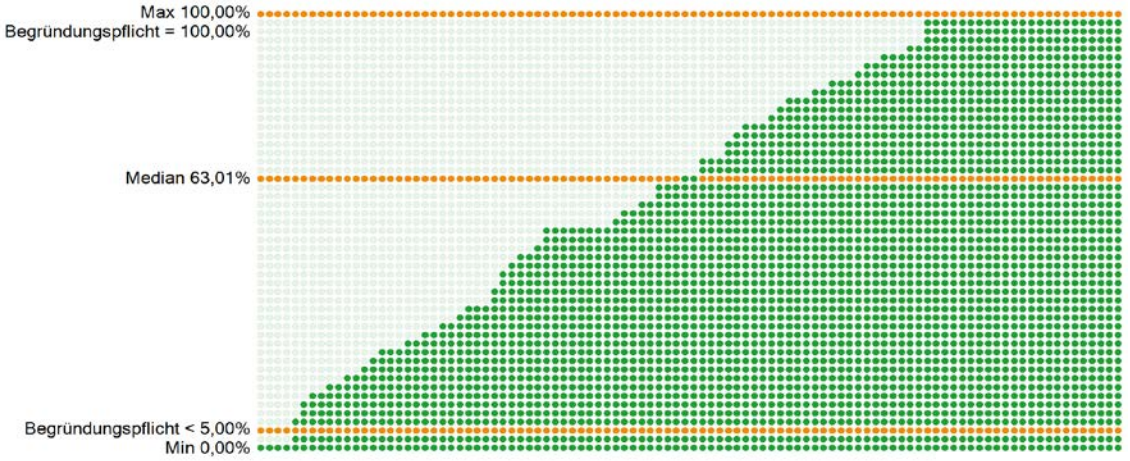
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	267	94.01%

Comments:
The implementation of the quality indicator of the Guideline on recording family medical history in a patient questionnaire has steadily improved over the last few years (increasing median and 25th and 5th percentiles). Consequently, the majority of Centres were able to increase their rate compared with the previous year. The experts touched on the problem during the audits of the Centres with the low rates. These Centres stated they wanted to develop standards for structured recording of family medical history.

*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.
*** If value is outside the plausablilty corridor, centres have to give an explanation.

Back to Table of Contents

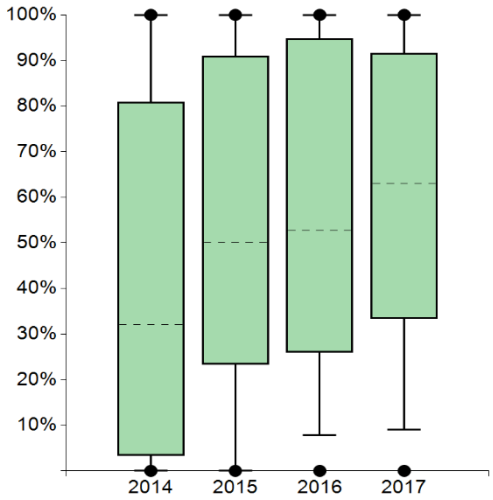
8. Genetic counselling



Begründungspflicht = mandatory statement of reasons

274 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Primary-case patients with a positive patient questionnaire advised to visit a centre for familial colorectal cancer	5*	0 - 62	1,721
Denomi-nator	Primary cases with a positive patient questionnaire	9*	1 - 65	3,007
Rate	Explanation mandatory*** <5% and =100%	63.01%	0.00% - 100%	57.23%**



	2013	2014	2015	2016	2017
Maximum	-----	100%	100%	100%	100%
95th percentile	-----	100%	100%	100%	100%
75th percentile	-----	80.83%	90.91%	94.78%	91.58%
Median	-----	32.05%	50.00%	52.66%	63.01%
25th percentile	-----	3.41%	23.30%	25.95%	33.33%
5th percentile	-----	0.00%	0.00%	7.85%	9.10%
Minimum	-----	0.00%	0.00%	0.00%	0.00%

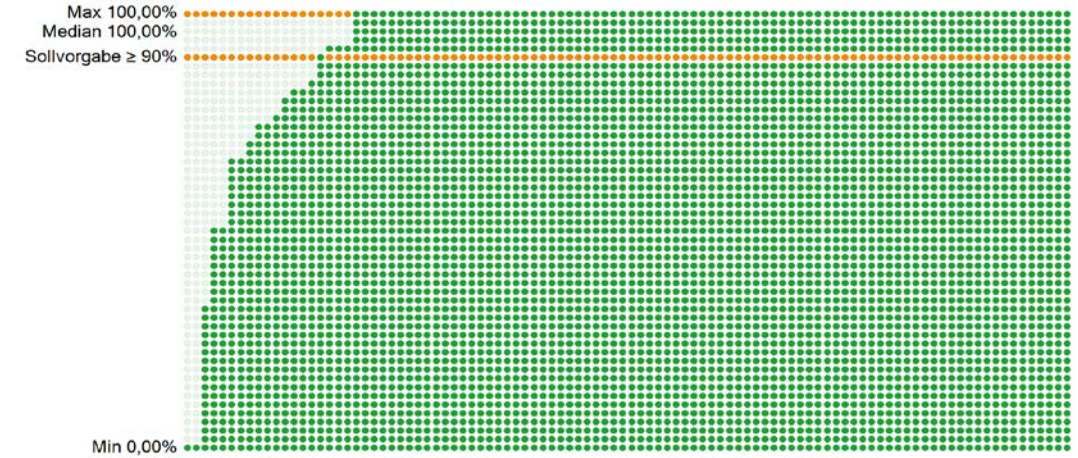
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
274	96.48%	201	73.36%

Comments:
This indicator likewise improved compared with the previous year: the median and the 25th percentile increased. Overall, 57.23% of all patients with a positive family medical history had been advised to undergo genetic counselling in indicator year 2017 (IY 2016: 52.03%). The reasons given by the Centres with a low rate were documentation errors that had since been corrected or that, after further diagnosis (MSI analysis and MMR proteins), genetic counselling was not deemed to be necessary.

*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.
*** If value is outside the plausablilty corridor, centres have to give an explanation.

Back to Table of Contents

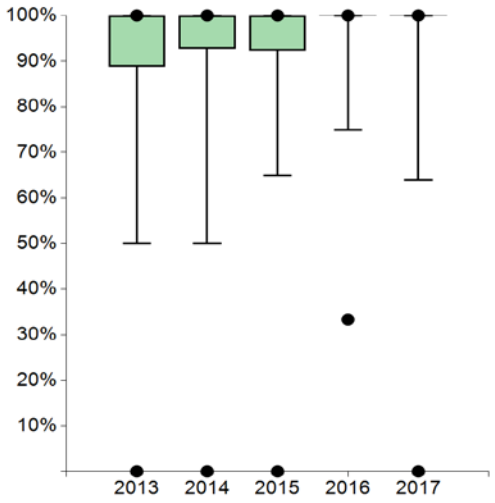
9. MMR-assessment



Sollvorgabe = target value

273 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patients with immunohisto-chemical assessment of mismatch repair (MMR) proteins	4*	0 - 19	1366
Denomi-nator	Patients with initial CRC diagnosis < 50 years old	4*	1 - 21	1438
Rate	Target value ≥ 90%	100%	0.00% - 100%	94.99%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25th percentile	88.89%	92.67%	92.31%	100%	100%
5th percentile	50.00%	50.00%	64.85%	75.00%	64.00%
Minimum	0.00%	0.00%	0.00%	33.33%	0.00%

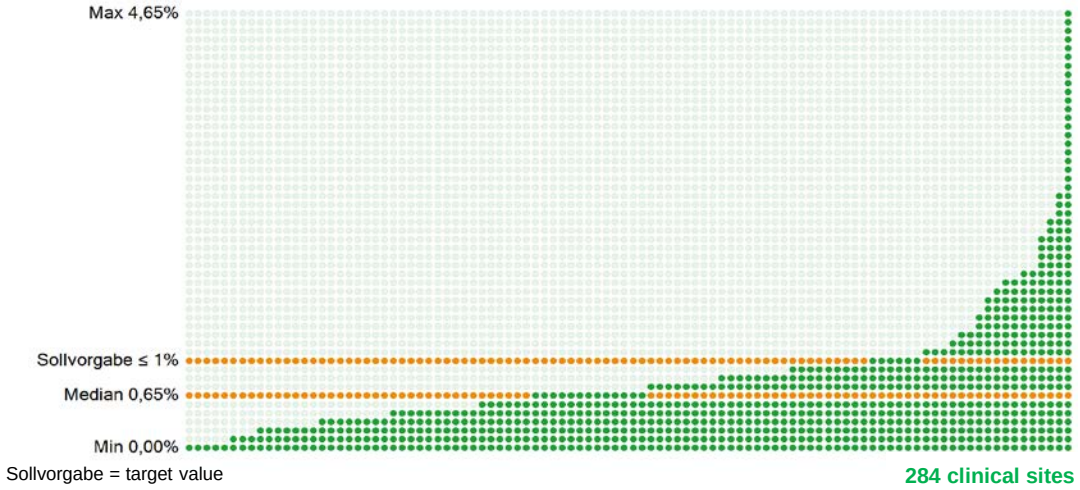
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	96.13%	231	84.62%

Comments:
Similar to the previous year, this indicator was very well implemented. The median was constant at 100%. The reasons given by the Centres that failed to meet the target value are refusals by patients, patients who died post-operatively or no carcinoma detection after neoadjuvant pretreatment. The Centres often had small denominators which meant that individual cases were weighted more.

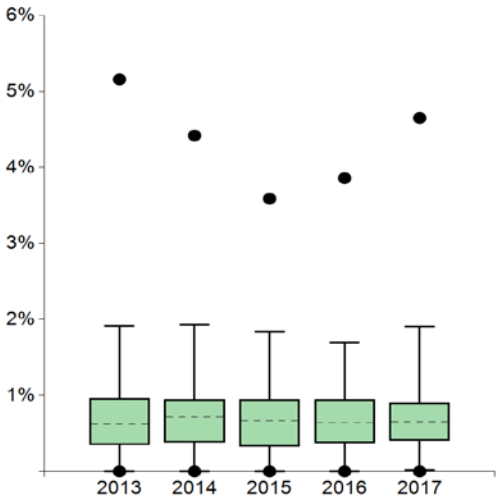
*The medians for numerator and population do not refer to an existing Centre but indicate the median of all cohort numerators and the median of all cohort denominators.
** Percentage of centre patients who were treated according to the indicator.

Back to Table of Contents

10. Complication rate therapeutic colonoscopies



	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Therapeutic colonoscopies with complications (bleeding requiring re-intervention (recolonoscopy. operation) or a transfusion and/or perforation)	3*	0 - 25	1117
Denomi-nator	Therapeutic colonoscopies per colonoscopy unit (not only CrCC patients)	461*	117 - 2589	160637
Rate	Target value ≤ 1%	0.65%	0.00% - 4.65%	0.70%**



	2013	2014	2015	2016	2017
Maximum	5.16%	4.42%	3.59%	3.86%	4.65%
95th percentile	1.92%	1.93%	1.83%	1.69%	1.91%
75th percentile	0.96%	0.95%	0.95%	0.95%	0.90%
Median	0.62%	0.72%	0.67%	0.64%	0.65%
25th percentile	0.35%	0.38%	0.33%	0.38%	0.41%
5th percentile	0.00%	0.00%	0.00%	0.00%	0.02%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

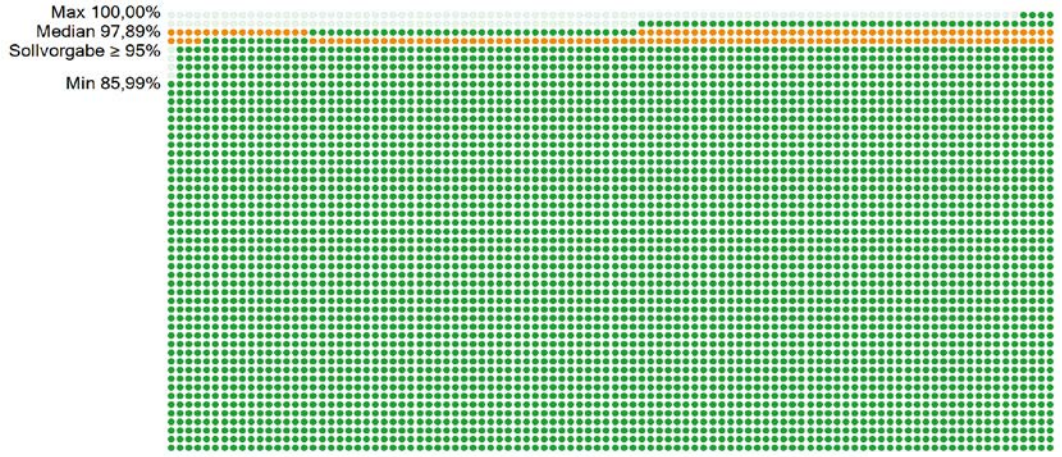
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	236	83.10%

Comments:
The complication rate after therapeutic coloscopy was unchanged over the course of the years. 8 out of the 10 Centres with the highest complication rates in indicator year (IY) 2016 were able to lower their rate in IY 2017. The share of Centres that met the target value increased compared to the previous year (IY 2016: 80.57%). The reason given for the high rates by the Centres were the complicated cases from the outpatient setting (comorbid patients, large polyps). In most cases these were repeat colonoscopies in conjunction with bleeding. Surgical interventions were rare.

*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.

Back to Table of Contents

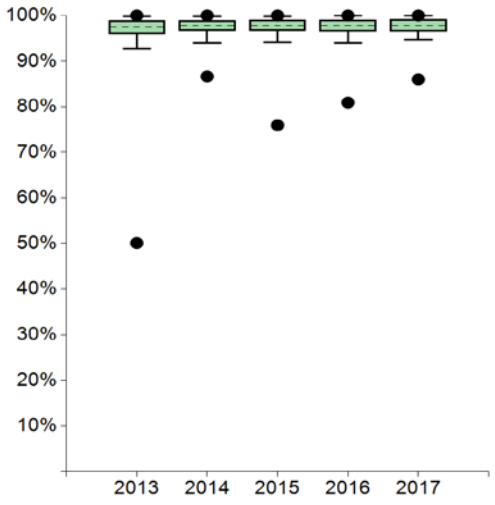
11. Complete elective colonoscopies

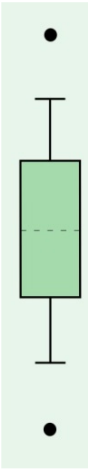


Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Complete elective colonoscopies	1386.5*	486 - 11467	473922
Denomi-nator	Elective colonoscopies for each colonoscopy unit of the CrCC (not only CrCC patients) (Are counted: intention: complete colonoscopy)	1422.5*	492 - 11517	484969
Rate	Target value ≥ 95%	97.89%	85.99% - 100%	97.72%**





	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	99.81%	99.83%	99.81%	99.89%	99.88%
75th percentile	98.86%	98.92%	99.04%	99.07%	99.17%
Median	97.49%	97.80%	97.87%	97.86%	97.89%
25th percentile	95.96%	96.64%	96.69%	96.53%	96.48%
5th percentile	92.60%	93.96%	94.12%	94.02%	94.71%
Minimum	50.09%	86.61%	75.94%	80.91%	85.99%

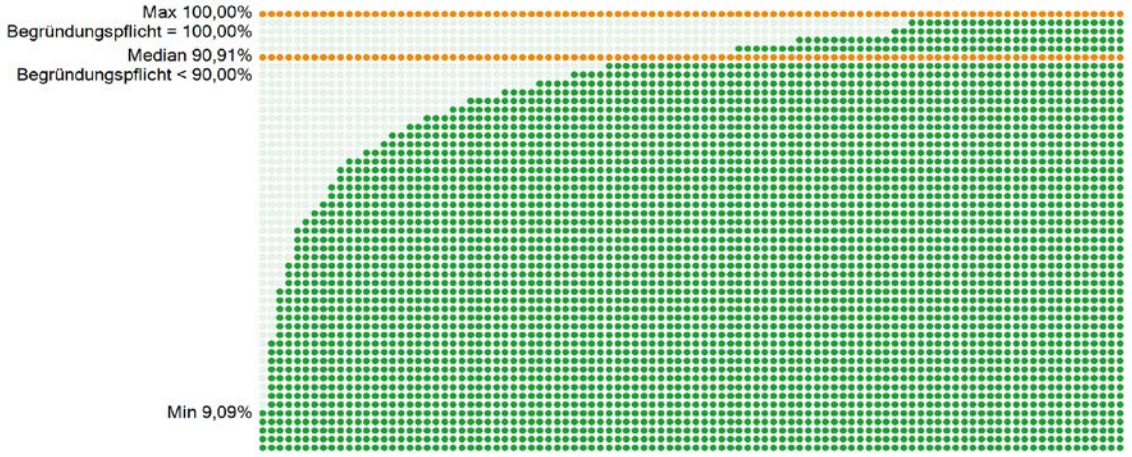
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	265	93.31%

Comments:
The indicator was implemented exceedingly well in the Centres. The median and the 25th percentile remained steady at >95%. The reasons given by the Centres for failing to meet the target value were the low rates of complete elective colonoscopies, a high proportion of complicated cases with tumour-related stenoses or incomplete rectal cleansing. After a renewed rectal cleansing the patients were frequently given a complete colonoscopy the next day.

*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.

Back to Table of Contents

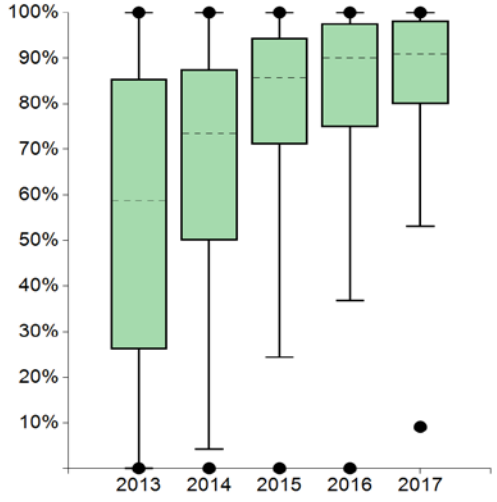
12. Information on distance to mesorectal fascia in the diagnostic report (GL QI 5)



Begründungspflicht = mandatory statement of reasons

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patients with information on distance to mesorectal fascia in the diagnostic report	15*	1 - 52	4505
Denomi-nator	Patients with RC of the middle and lower third and MRI or thin-slice CT of the pelvis	16.5*	3 - 66	5251
Rate	Explanation mandatory*** <90% and =100%	90.91%	9.09% - 100%	85.79%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	85.36%	87.50%	94.33%	97.56%	98.25%
Median	58.62%	73.53%	85.71%	90.00%	90.91%
25th percentile	26.13%	50.00%	71.07%	75.00%	80.00%
5th percentile	0.00%	4.28%	24.34%	36.84%	53.08%
Minimum	0.00%	0.00%	0.00%	0.00%	9.09%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	89	31.34%

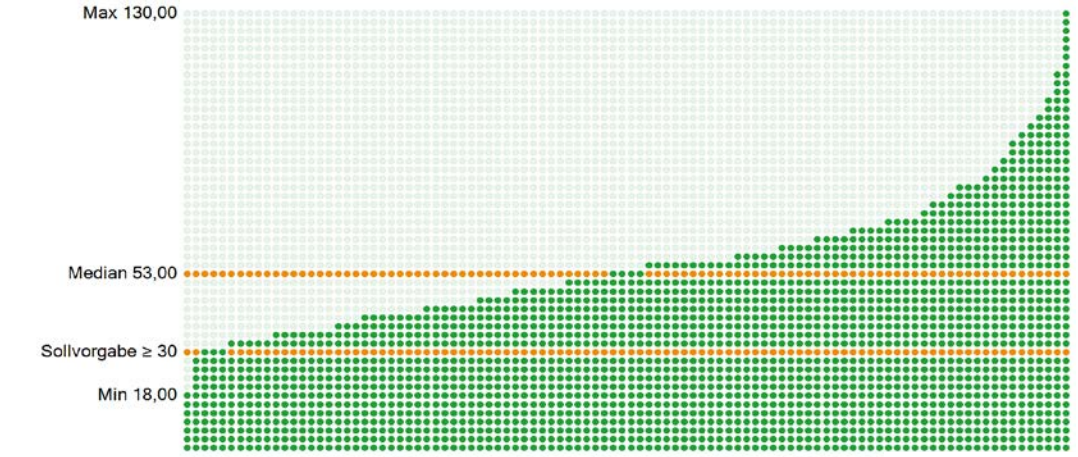
Comments:

The quality indicator in the Guideline again improved compared to the previous years with increasing median, and 25th and 5th percentiles. The majority of the Centres were able to increase their rate compared with the previous year. The share of Centres with a low rate requiring substantiation fell compared to indicator year (IY) 2016 (2016: 47.0%, 2017: 43.3%). The reasons given by the Centres with low rates were external diagnoses or a lack of standardised reports. The Centres mentioned, as an improvement measure, the development of standards to complete the reports, the training of radiological staff and the follow-up diagnosis of external medical imaging.

*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.
*** If value is outside the plausablilty corridor. centres have to give an explanation.

Back to Table of Contents

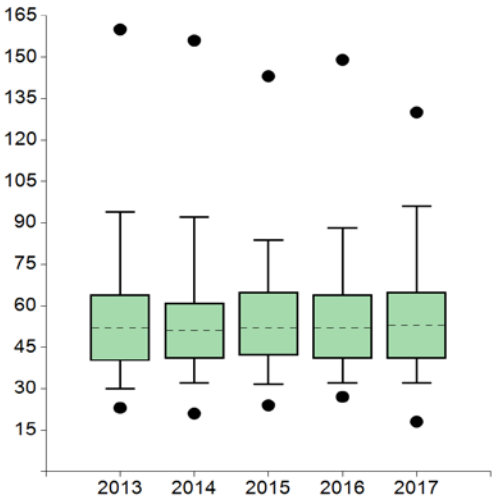
13. Operative primary cases: colon



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Number	Operative primary cases: colon	53	18 - 130	15741
	Target value ≥ 30			



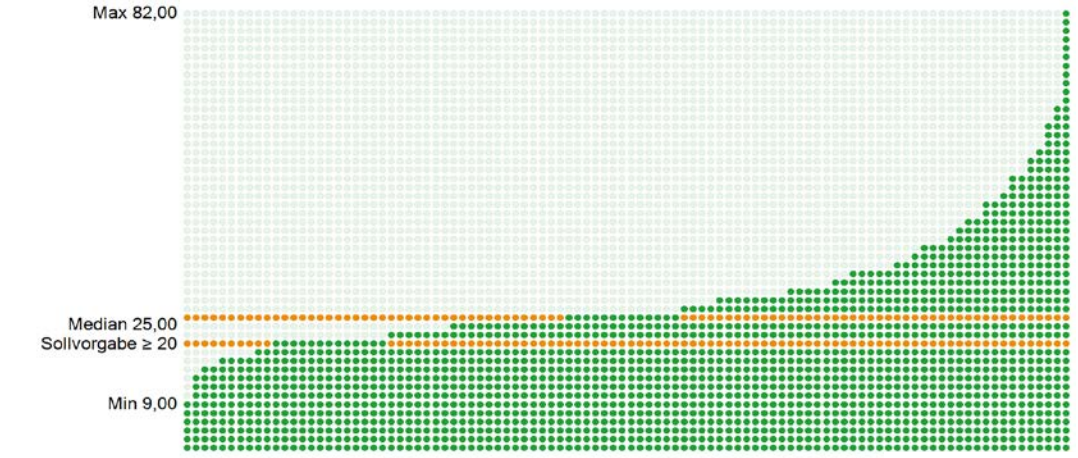
	2013	2014	2015	2016	2017
Maximum	160.00	156.00	143.00	149.00	130.00
95th percentile	94.00	92.00	83.80	88.00	95.85
75th percentile	64.00	61.00	65.00	64.00	65.00
Median	52.00	51.00	52.00	52.00	53.00
25th percentile	40.00	41.00	42.00	41.00	41.00
5th percentile	30.00	32.00	31.60	32.00	32.00
Minimum	23.00	21.00	24.00	27.00	18.00

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	277	97.54%

Comments:
The median of the operated primary cases with colon cancer remained constant in the Centres over the years. The majority of Centres were able to maintain or increase their case number from indicator year (IY) 2016 to 2017. 7 Centres failed to meet the target value in IY 2017. A surveillance audit was carried out in 2 of these Centres in 2018 (required to meet the case number in the re-audit [every 3 years]). 4 out of 5 Centres with a re-audit were able to document that they had met the case number requirement on average over the past 3 years. In 1 Centre the certificate was suspended because of the low case number.

Back to Table of Contents

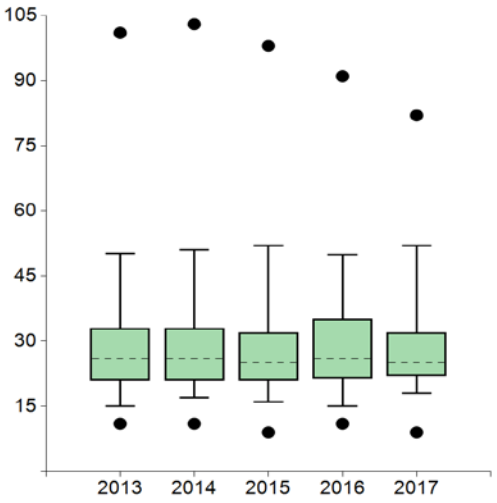
14. Operative primary cases: rectum



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Number	Operative primary cases: rectum (incl. trans anal wall resection)	25	9 – 82	8170
	Target value ≥ 20			



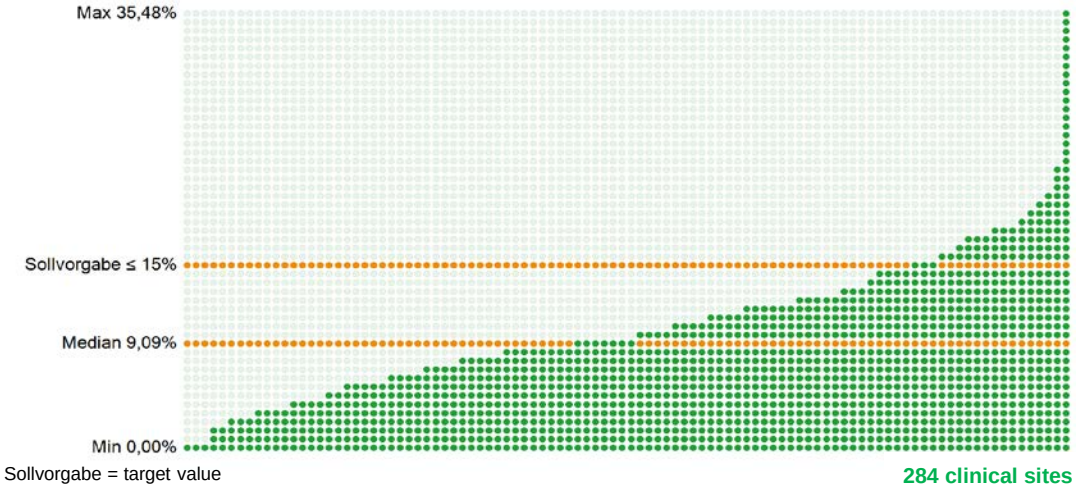
	2013	2014	2015	2016	2017
Maximum	101.00	103.00	98.00	91.00	82.00
95th percentile	50.20	51.00	52.00	49.90	52.00
75th percentile	33.00	33.00	32.00	35.00	32.00
Median	26.00	26.00	25.00	26.00	25.00
25th percentile	21.00	21.00	21.00	21.50	22.00
5th percentile	15.00	17.00	16.00	15.10	18.00
Minimum	11.00	11.00	9.00	11.00	9.00

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	255	89.79%

Comments:
The indicator for the surgical primary cases with rectal cancer also remained steady over the course of the years.
29 Centres failed to meet the target value in IY 2017. A surveillance audit was carried out in 17 of these Centres in 2018 (required to meet the case number in the re-audit [every 3 years]). 11 out of 12 Centres with a re-audit were able to document that they had met the case number requirement on average over the past 3 years. In 1 Centre the certificate was suspended because of the low case number.

Back to Table of Contents

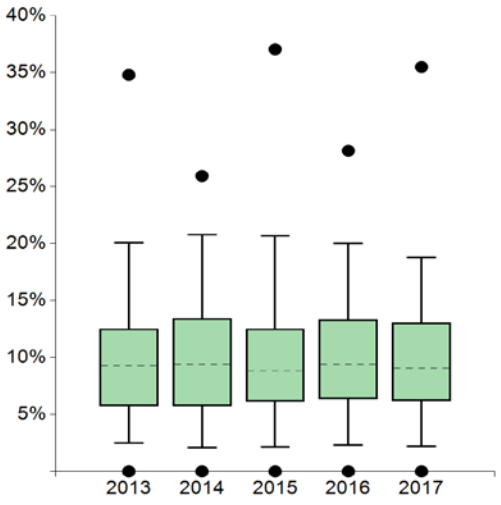
15. Revision surgery: colon



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Revision surgery due to perioperative complications within 30d of elective surgery	4*	0 - 16	1359
Denominator	Elective colon surgery	46*	14 - 119	13942
Rate	Target value ≤ 15%	9.09%	0.00% - 35.48%	9.75%**



	2013	2014	2015	2016	2017
Maximum	34.78%	25.93%	37.04%	28.13%	35.48%
95th percentile	20.07%	20.78%	20.67%	20.00%	18.75%
75th percentile	12.50%	13.41%	12.50%	13.29%	13.04%
Median	9.30%	9.38%	8.82%	9.38%	9.09%
25th percentile	5.71%	5.71%	6.15%	6.40%	6.22%
5th percentile	2.52%	2.08%	2.15%	2.29%	2.18%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

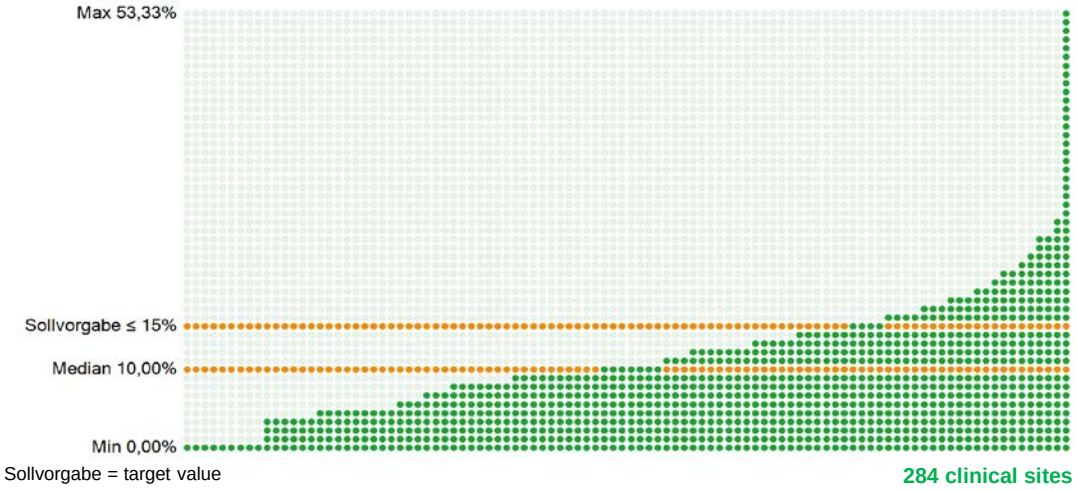
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	238	83.80%

Comments:
Same median of the rate of revision surgeries to treat colon cancer in the Centres. The majority of the Centres who failed to meet the target value in indicator year (IY) 2016. were able to lower their revision rate in 2017 (38/44). The most frequent reasons given for revision surgeries in the Centres that failed to meet the target value in IY 2017 were anastomosis insufficiencies and wound infections. Some of the improvement measures agreed were: change in surgical techniques or surgery performed by 2 specialists. A deviation had been formulated for the Centre with the highest rate and it was able to demonstrate an improvement in the rate for 2018.

*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.

Back to Table of Contents

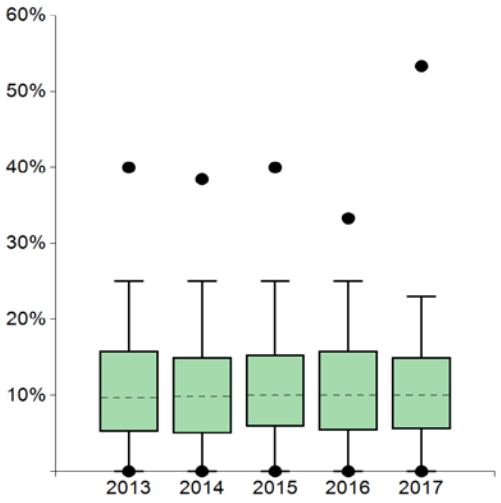
16. Revision surgery: rectum



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Revision surgery after perioperative complications within 30d of elective surgery	3*	0 - 12	831
Denominator	Elective rectum surgery (without transanal wall resection)	24*	9 - 80	7646
Rate	Target value ≤ 15%	10.00%	0.00% - 53.33%	10.87%**



	2013	2014	2015	2016	2017
Maximum	40.00%	38.46%	40.00%	33.33%	53.33%
95th percentile	25.00%	25.00%	25.00%	25.00%	23.03%
75th percentile	15.79%	15.00%	15.38%	15.79%	15.00%
Median	9.68%	9.86%	10.00%	10.00%	10.00%
25th percentile	5.26%	5.00%	5.88%	5.43%	5.56%
5th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

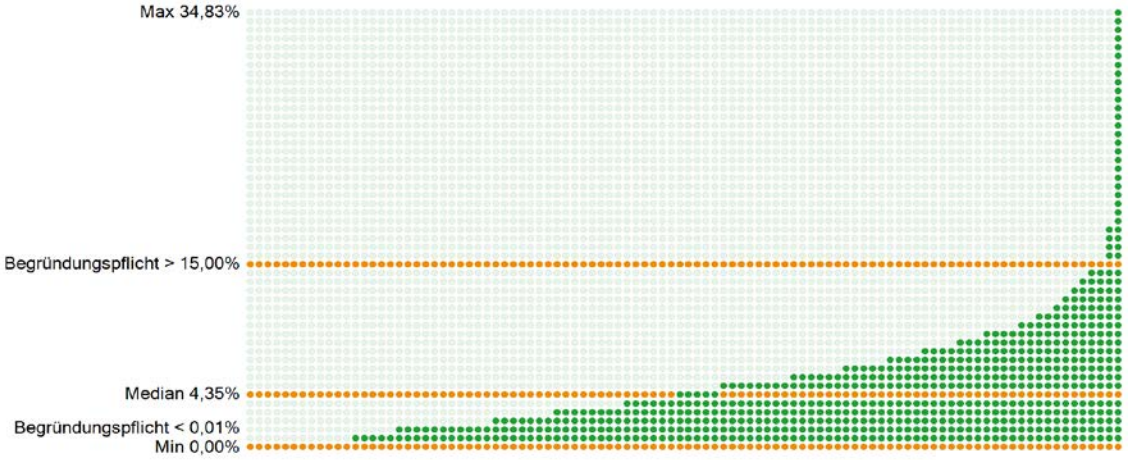
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	219	77.11%

Comments:
As for indicator 15, the median of the revision rate for rectal cancer was unchanged over the course of time. The proportion of Centres who met the target value was higher than in indicator year (IY) 2016: 72.44%). The reasons given for failing to meet the target value are comparable to those given for indicator 15. The Centre with the highest rate also had the highest rate of revisions for colorectal cancer (indicator 15). The auditor formulated a deviation that was remedied by documenting a major improvement in the indicators for 2018.

*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.

Back to Table of Contents

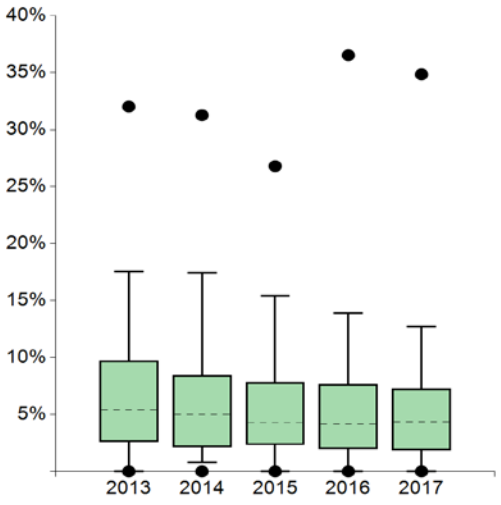
17. Post-operative wound infection



Begründungspflicht = mandatory statement of reasons

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Post-operative wound infection within 30 d of elective surgery requiring surgical wound revision (rinsing. spreading. VAC bandage)	3*	0 - 31	1104
Denomi-nator	Operations of the CrCC (without transanal wall resection)	70*	32 - 178	21588
Rate	Explanation mandatory*** <0.01% and >15%	4.35%	0.00% - 34.83%	5.11%**



	2013	2014	2015	2016	2017
Maximum	32.00%	31.25%	26.79%	36.51%	34.83%
95th percentile	17.56%	17.44%	15.41%	13.89%	12.75%
75th percentile	9.72%	8.45%	7.81%	7.64%	7.27%
Median	5.41%	5.00%	4.26%	4.17%	4.35%
25th percentile	2.61%	2.13%	2.33%	1.97%	1.88%
5th percentile	0.00%	0.82%	0.00%	0.00%	0.00%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

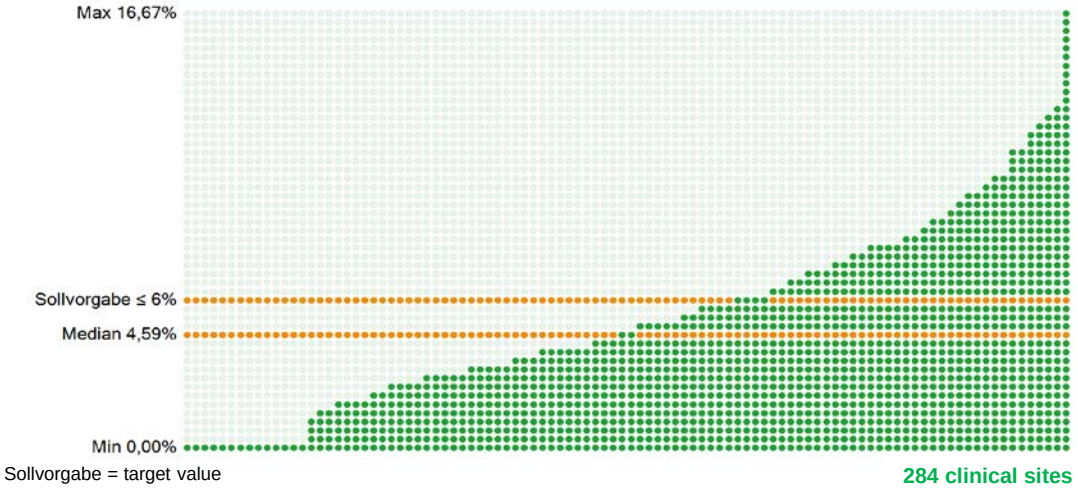
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	244	85.92%

Comments:
The indicator for post-operative wound infections steadily improved over the past 5 years with a falling median, 75th and 95th percentiles. Consequently, the majority of Centres were able to lower the rate compared with the previous year. The reasons given by the Centres with high infection rates were a comorbid patient cohort or a broadly defined indication for surgical wound revision. The auditors examined the individual cases. The following improvement measures were agreed: change in pre-operative antibiosis and in wound care (e.g. dressings).

*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.
*** If value is outside the plausablilty corridor, centres have to give an explanation.

Back to Table of Contents

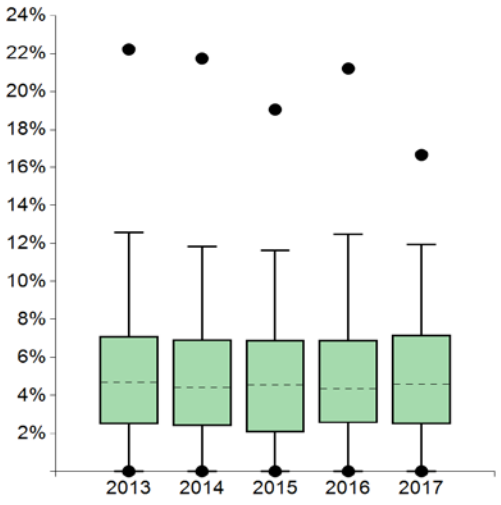
18. Anastomotic insufficiencies: colon (GL QI 10)



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Colon anastomotic insufficiencies requiring re-intervention after elective surgery	2*	0 - 7	656
Denominator	Patients with CC in whom anastomosis was performed in an elective tumour resection	44*	13 - 119	13406
Rate	Target value ≤ 6%	4.59%	0.00% - 16.67%	4.89%**



	2013	2014	2015	2016	2017
Maximum	22.22%	21.74%	19.05%	21.21%	16.67%
95th percentile	12.59%	11.83%	11.63%	12.50%	11.94%
75th percentile	7.14%	6.94%	6.90%	6.90%	7.19%
Median	4.67%	4.44%	4.55%	4.35%	4.59%
25th percentile	2.50%	2.38%	2.08%	2.56%	2.50%
5th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

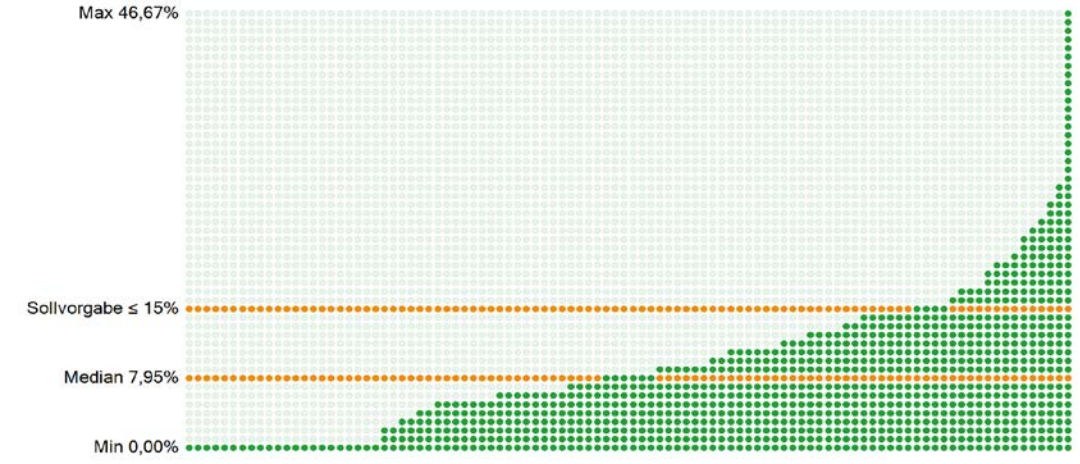
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	188	66.20%

Comments:
Overall, the indicator for anastomosis insufficiencies for colorectal cancer was unchanged. 18 out of the 20 Centres with the highest insufficiency rates in indicator year (IY) 2016 were able to improve their rate. More than 30% of the Centres still failed to meet the target value. One of the reasons given for the high complication rate was a high number of comorbid patients. The following improvement measures were agreed with the auditors: change in anastomosis technique, pre-operative colonic irrigation or prophylactic antibiotic therapy.

*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.

Back to Table of Contents

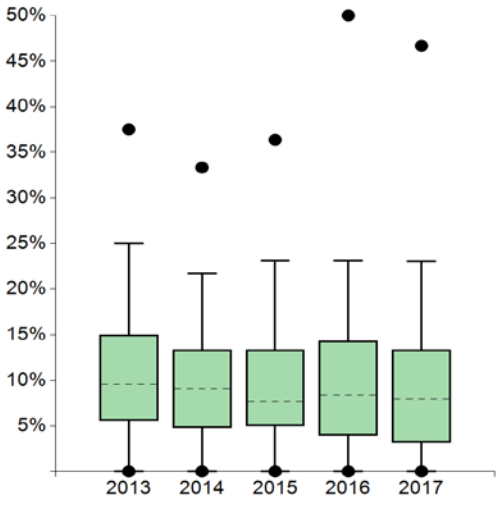
19. Anastomotic insufficiencies: rectum (GL QI 9)



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Patients with grade B (requiring antibiotic administration or interventional drainage or transanal lavage/drainage) or grade C ((re-)laparotomy) anastomotic insufficiency	1*	0 - 9	481
Denominator	Patients with RC in whom anastomosis was performed in an elective tumour resection (without transanal wall resection)	17*	5 - 73	5699
Rate	Target value ≤ 15%	7.95%	0.00% - 46.67%	8.44%**



	2013	2014	2015	2016	2017
Maximum	37.50%	33.33%	36.36%	50.00%	46.67%
95th percentile	25.00%	21.74%	23.08%	23.08%	23.03%
75th percentile	15.00%	13.33%	13.33%	14.29%	13.33%
Median	9.52%	9.09%	7.69%	8.33%	7.95%
25th percentile	5.56%	4.76%	5.00%	3.94%	3.21%
5th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

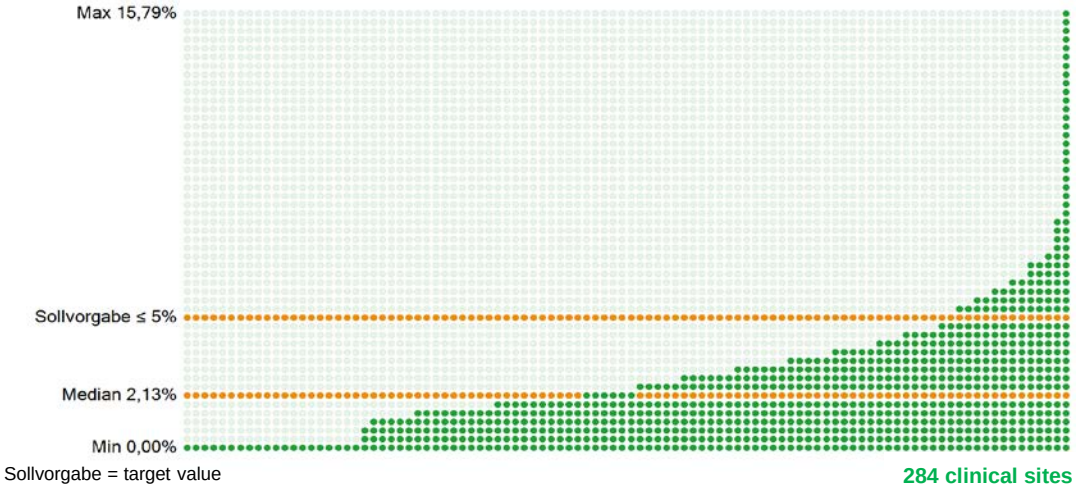
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	237	83.45%

Comments:
A similar development to that of indicator 18 was observed. The median has fallen slightly. The total rate of anastomosis insufficiencies in conjunction with rectal cancer in the Centres also fell (indicator year [IY] 2017: 8.44%, IY 2016: 9.26%). The Centre with the highest rate in IY 2017 was able to demonstrate an improvement in the rate for IY 2018. In the other Centres, too, that had exceeded the target value, the individual cases were examined and their plausibility checked during the audits. Similar improvement measures to those for indicator 18 were agreed.

*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.

Back to Table of Contents

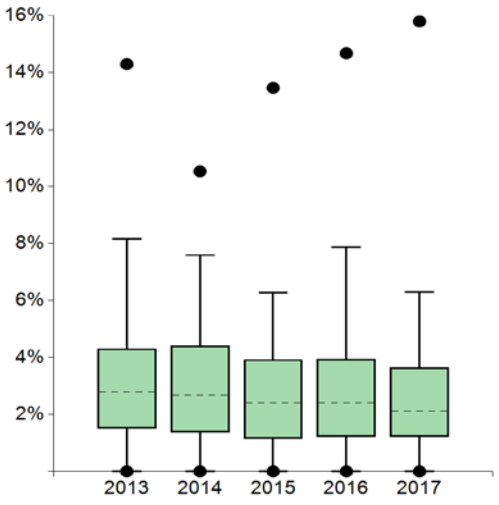
20. Post-operative mortality



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numerator	Post-operative patient deaths within 30d of elective surgery	2*	0 - 8	534
Denomi-nator	Electively operated patients (without transanal wall resection)	70*	32 - 178	21588
Rate	Target value ≤ 5%	2.13%	0.00% - 15.79%	2.47%**



	2013	2014	2015	2016	2017
Maximum	14.29%	10.53%	13.46%	14.67%	15.79%
95th percentile	8.15%	7.58%	6.27%	7.87%	6.30%
75th percentile	4.30%	4.41%	3.92%	3.94%	3.64%
Median	2.78%	2.68%	2.41%	2.41%	2.13%
25th percentile	1.52%	1.39%	1.15%	1.21%	1.22%
5th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	247	86.97%

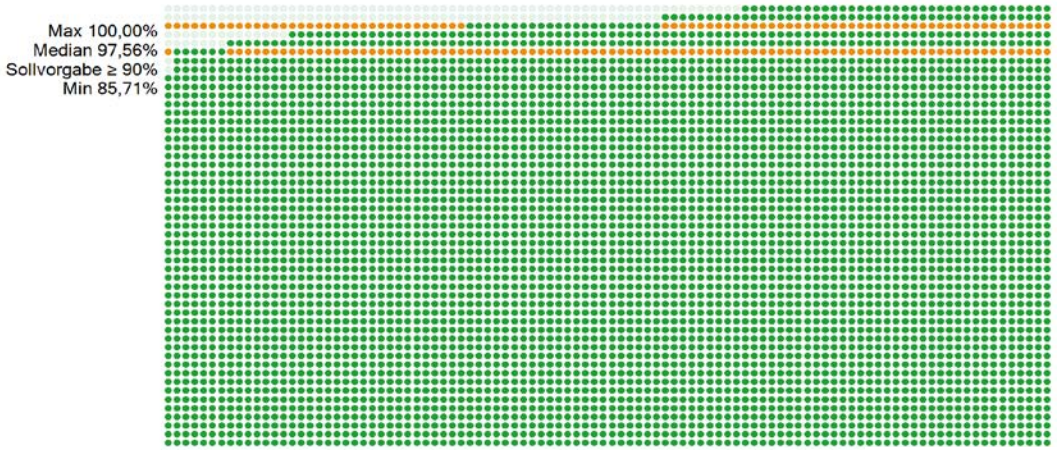
Comments:

Fortunately, there was a fall in the median and in the 75th and 95th percentiles of the indicator. Post-operative mortality was also lower overall than the previous year (indicator year [IY] 2017: 2.47%, IY 2016: 2.61%). 17 out of the20 Centres with the highest rates in IY 2016, were able to improve their rate in IY 2017. The reasons frequently given by the Centres that failed to meet the target value in IY 2017, were cardiac deaths or post-operative complications. The individual cases were discussed at the M+M conferences. The improvement measures included new algorithms for indication for reoperations. The Centre with the highest value had much better results (5.8%) in IY 2018.

*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.

Back to Table of Contents

21. Local R0 resections: colon



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numer-ator	Local R0 resections - colon - after completion of surgical treatment	44.5*	14 - 117	13531
Denom i-nator	Colon operations according to primary case definition (operative)	46*	14 - 119	13942
Rate	Target value ≥ 90%	97.56%	85.71% - 100%	97.05%**

	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	100%	100%	100%	100%	100%
Median	97.37%	97.30%	97.47%	97.70%	97.56%
25th percentile	94.87%	95.00%	95.35%	95.24%	95.29%
5th percentile	91.83%	91.67%	91.22%	91.95%	91.69%
Minimum	87.80%	83.33%	85.42%	82.26%	85.71%

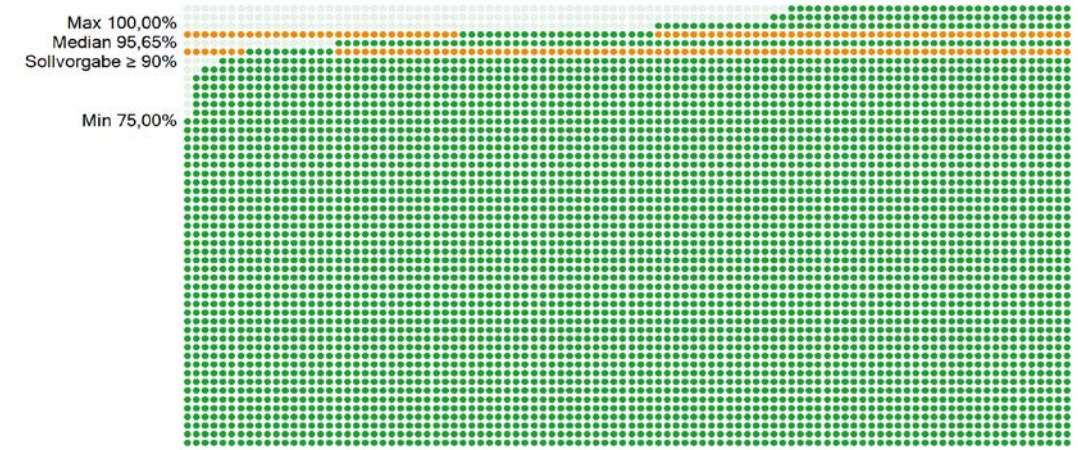
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	280	98.59%

Comments:
The indicator was very well implemented in the Centres and was unchanged compared to the previous years. The reasons given by the Centres that failed to meet the target value were palliative treatment situations or locally advanced tumours.

*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.

Back to Table of Contents

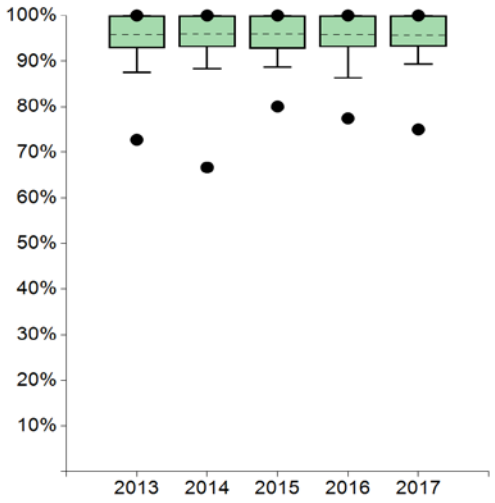
22. Local R0 resections: rectum



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numer-ator	Local R0 resections – rectum - after completion of surgical treatment	23*	9 - 78	7319
Denom i-nator	Rectum operations according to primary case definition (operative) (without TWR)	24*	9 - 80	7646
Rate	Target value ≥ 90%	95.65%	75.00% - 100%	95.72%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	100%	100%	100%	100%	100%
Median	95.83%	96.00%	96.00%	95.83%	95.65%
25th percentile	92.86%	93.02%	92.68%	93.02%	93.16%
5th percentile	87.50%	88.24%	88.72%	86.26%	89.32%
Minimum	72.73%	66.67%	80.00%	77.42%	75.00%

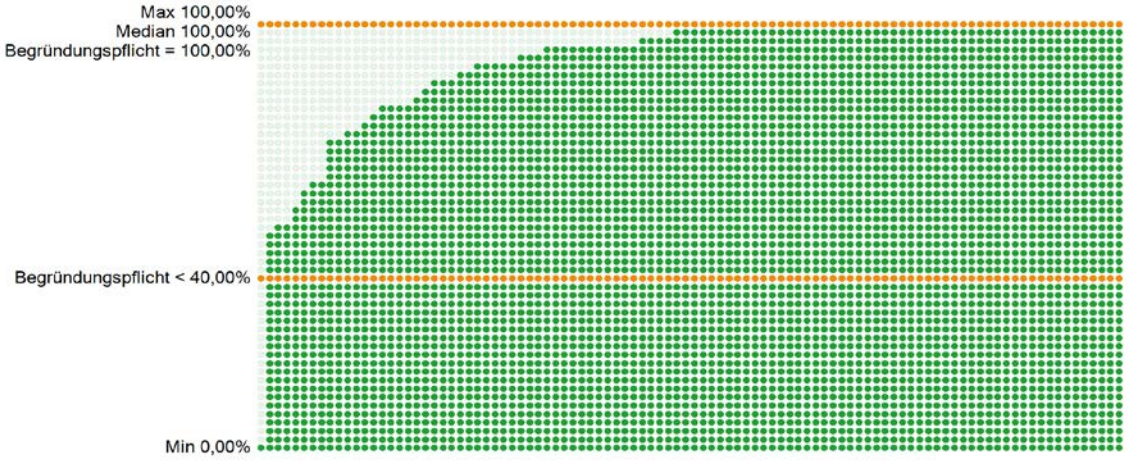
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	264	92.96%

Comments:
This indicator was also very well implemented in the Centres; the median in the last 5 years was >95%. The proportion of Centres who met the target value has increased (indicator year 2016: 89.75%). Some of the reasons given by the Centres who failed to meet the target value were locally advanced tumours and surgical cases with tumour-free margins in the frozen section..

*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.

Back to Table of Contents

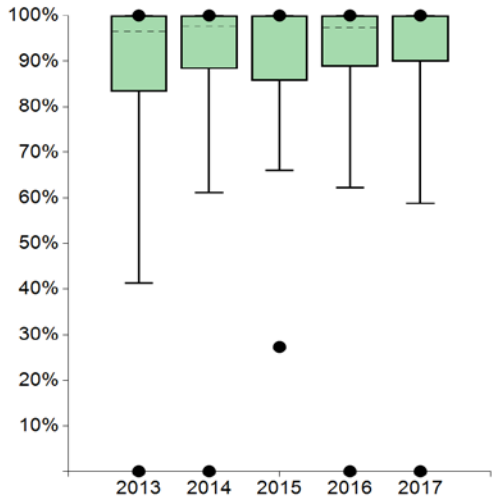
23. Marking of stoma position (GL QI 11)



Begründungspflicht = mandatory statement of reasons

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numer-ator	Patients with preoperative marking of stoma position	17*	0 - 80	5353
Denom i-nator	Patients with RC who had elective surgery to install a stoma (without TWR)	18*	4 - 80	5836
Rate	Explanation mandatory*** <40% and =100%	100%	0.00% - 100%	91.72%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	100%	100%	100%	100%	100%
Median	96.55%	97.73%	100%	97.30%	100%
25th percentile	83.33%	88.24%	85.71%	88.89%	89.87%
5th percentile	41.34%	61.11%	66.02%	62.23%	58.81%
Minimum	0.00%	0.00%	27.27%	0.00%	0.00%

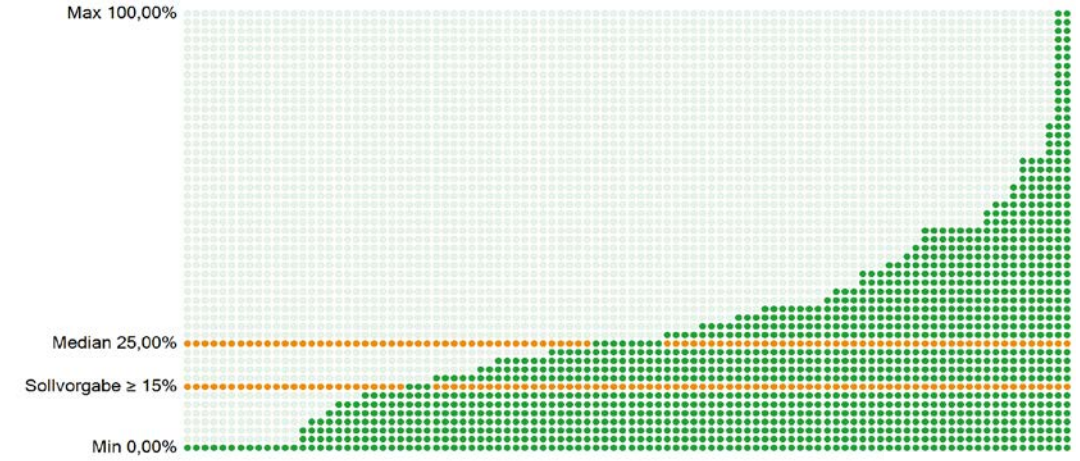
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	134	47.18%

Comments:
Compared to the previous year, the quality indicator from the Guideline improved, the median increased. Consequently, the majority of Centres were able to increase or maintain the rate. The Centre with no documented stoma site marking had a rate of 0% the previous year, too. In this Centre the site marking was carried out in line with the rules but was not, however, recorded in the tumour documentation system. The auditor once again pointed out the need to correctly document the pre-operative stoma site markings.

*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.
*** If value is outside the plausablilty corridor. centres have to give an explanation.

Back to Table of Contents

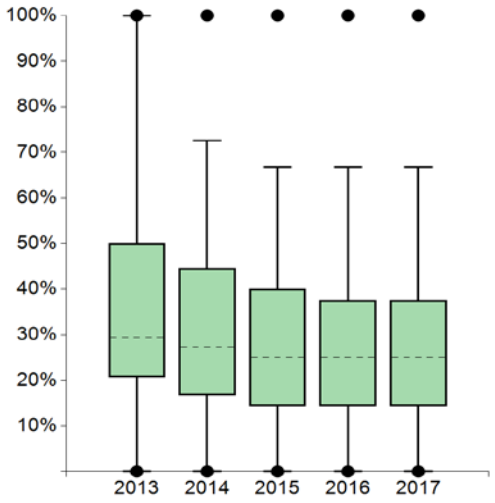
24. Primary resection of liver metastases (UICC stage IV CRC)



Sollvorgabe = target value

283 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numer-ator	Primary-case patients with UICC stage IV CRC who underwent resection of liver metastases	2*	0 - 13	640
Denom i-nator	Primary-case patients with UICC stage IV CRC who only have liver metastases (without TWR)	8*	1 - 42	2481
Rate	Target value ≥ 15%	25.00%	0.00% - 100%	25.80%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	72.50%	66.67%	66.67%	66.67%
75th percentile	50.00%	44.44%	40.00%	37.50%	37.50%
Median	29.41%	27.27%	25.00%	25.00%	25.00%
25th percentile	20.72%	16.67%	14.29%	14.29%	14.29%
5th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

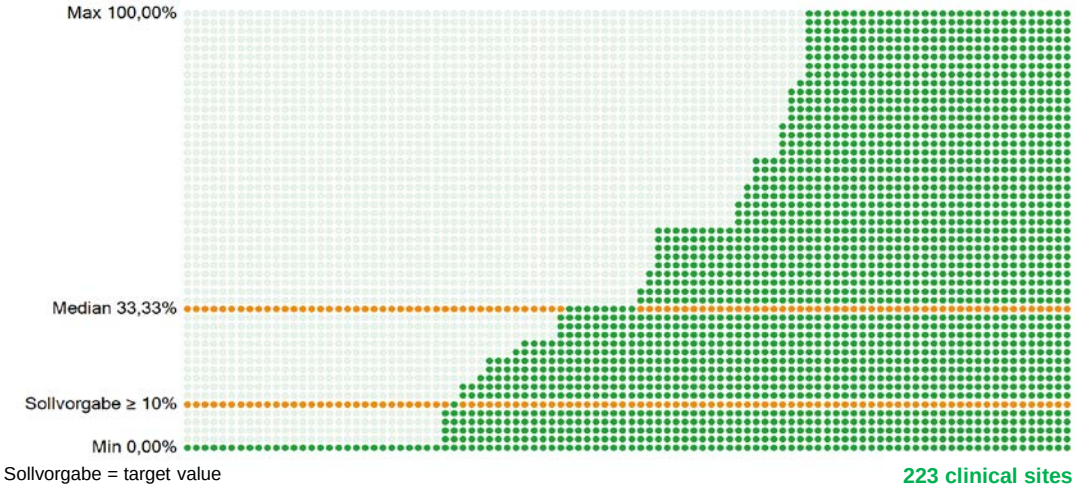
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
283	99.65%	207	73.14%

Comments:
Same implementation of the indicator in the Centres over the course of time. The total number of primary liver metastasis resections has fallen compared with the previous year (640 versus 689 in indicator year [IY] 2016). 38 Centres did not perform any primary resections for liver metastases in IY 2017 (= 0%) (2016: 43 Centres). The reasons given were renunciation of resection for diffuse hepatic or multi-visceral metastasis, non-resectable liver filiae or multimorbidity of patients. The Centres with a 100% resection rate had small denominators (= 1-2). The plausibility of the information provided by the Centres was checked for plausibility in the audits..

*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.

Back to Table of Contents

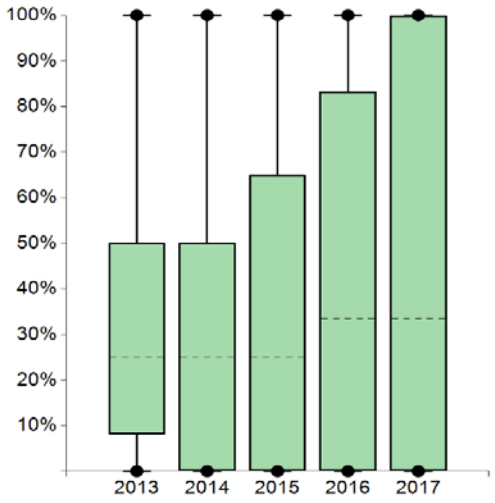
25. Secondary resection of liver metastases (UICC stage IV CRC)



Sollvorgabe = target value

223 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numer-ator	Primary-case patients with UICC stage IV CRC who underwent secondary resection of liver metastases after chemotherapy	1*	0 - 9	303
Denom i-nator	Primary-case patients with UICC stage IV CRC with primarily non-resectable only liver metastases who received chemotherapy (without TWR)	3*	1 - 16	819
Rate	Target value ≥ 10%	33.33%	0.00% - 100%	37.00%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	50.00%	50.00%	64.92%	83.33%	100%
Median	25.00%	25.00%	25.00%	33.33%	33.33%
25th percentile	8.11%	0.00%	0.00%	0.00%	0.00%
5th percentile	0.00%	0.00%	0.00%	0.00%	0.00%
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%

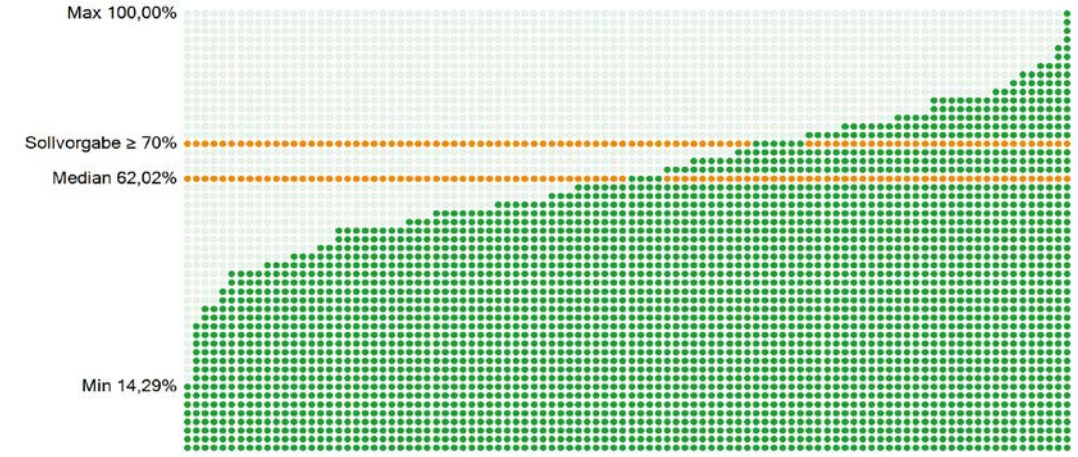
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
223	78.52%	156	69.96%

Comments:
Compared to the previous year both the total number of patients with colorectal cancer who underwent secondary liver metastasis resection (303 versus 307 in IY 2016), and the median for the indicator were the same. 65 Centres did not perform any secondary resections of liver metastasis in 2017 (2016: 72 Centres).The reasons given by the Centres for the non-performed resections were: palliative chemotherapy for multi-visceral metastasis, death of the patients during chemotherapy, no resection indication for bilobar or diffuse liver metastasis or renunciation of liver metastasis resection as metastases responded to chemotherapy.

*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.

Back to Table of Contents

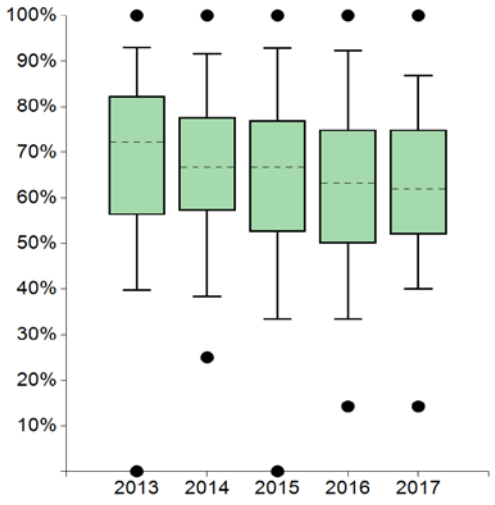
26. Adjuvant chemotherapies: colon (UICC stage III) (GL QI 8)



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numer-ator	Patients with a UICC stage III colon carcinoma who received adjuvant chemotherapy	8*	1 - 27	2506
Denom i-nator	Patients with a UICC stage III colon carcinoma who had a R0 resection of the primary tumour	13*	2 - 42	4012
Rate	Target value ≥ 70%	62.02%	14.29% - 100%	62.46%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	92.95%	91.67%	92.86%	92.25%	86.87%
75th percentile	82.35%	77.78%	76.92%	75.00%	75.00%
Median	72.22%	66.67%	66.67%	63.16%	62.02%
25th percentile	56.25%	57.14%	52.63%	50.00%	52.03%
5th percentile	39.69%	38.46%	33.33%	33.33%	40.00%
Minimum	0.00%	25.00%	0.00%	14.29%	14.29%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	103	36.27%

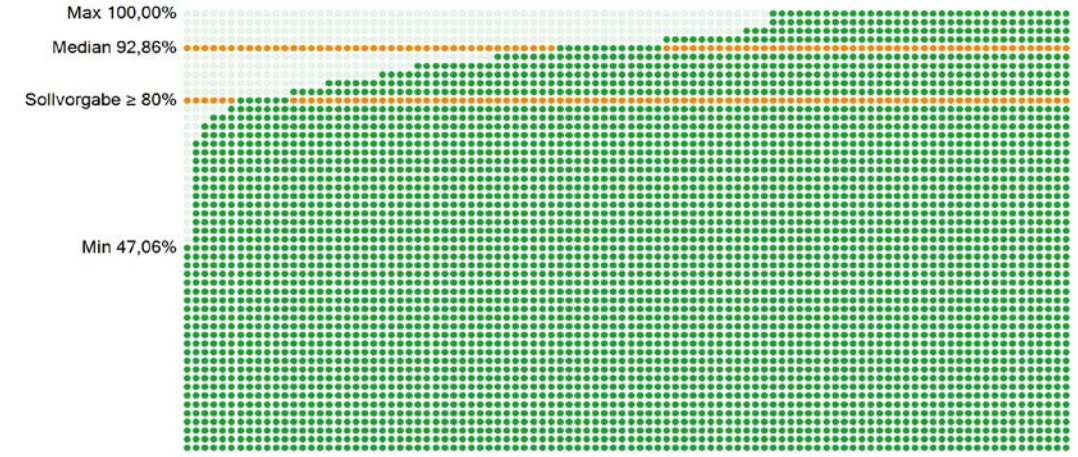
Comments:

Ongoing slight downward median of the indicator compared to the previous year. The proportion of Centres that met the target value remained steady compared with the previous year (IY 2016: 36.4%). The total number of adjuvant chemotherapies increased in indicator year 2017 (2,506 versus 2,340 in IY 2016) with a relatively similar population (4,012 versus 3,943 in IY 2016). Compared to the previous year a larger proportion of patients with UICC stage III colon cancer and R0 resections received adjuvant treatment in line with the Guideline (62.46% versus 59.34% in 2016).The reasons given for the non-performed chemotherapy were age and multimorbidity of patients, rejection of therapy by the patients, death of patients prior to commencement of therapy, other therapy concepts because of a second carcinoma that determined the prognosis, and planned adjuvant therapy that was still to be performed at the time of the audit. The auditors checked the plausability of the information on the basis of individual cases.

*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.

Back to Table of Contents

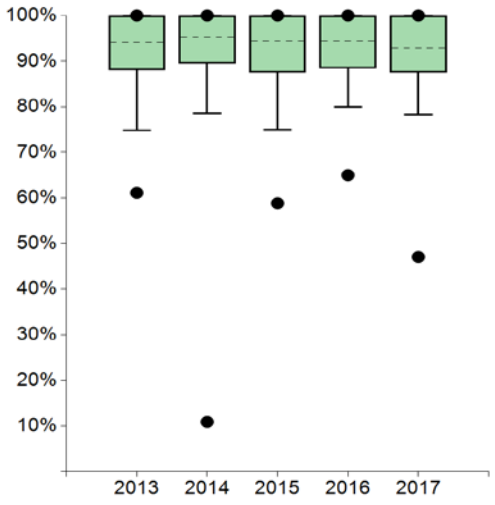
28. Quality of the TME rectum specimen (information from pathology) (GL QI 6)



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clinical sites 2017		
		Median	Range	Patients Total
Numer-ator	Patients with good-to-moderate quality (grade 1: mesorectal fascia or grade 2: intramesorectal excisions) TME	14.5*	5 - 63	4705
Denom i-nator	Patients with elective radically operated RC (without TWR)	16*	5 - 65	5092
Rate	Target value ≥ 80%	92.86%	47.06% - 100%	92.40%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	100%	100%	100%	100%	100%
Median	94.12%	95.24%	94.44%	94.44%	92.86%
25th percentile	88.00%	89.47%	87.50%	88.46%	87.50%
5th percentile	74.84%	78.57%	75.00%	80.00%	78.31%
Minimum	61.11%	10.87%	58.82%	65.00%	47.06%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	267	94.01%

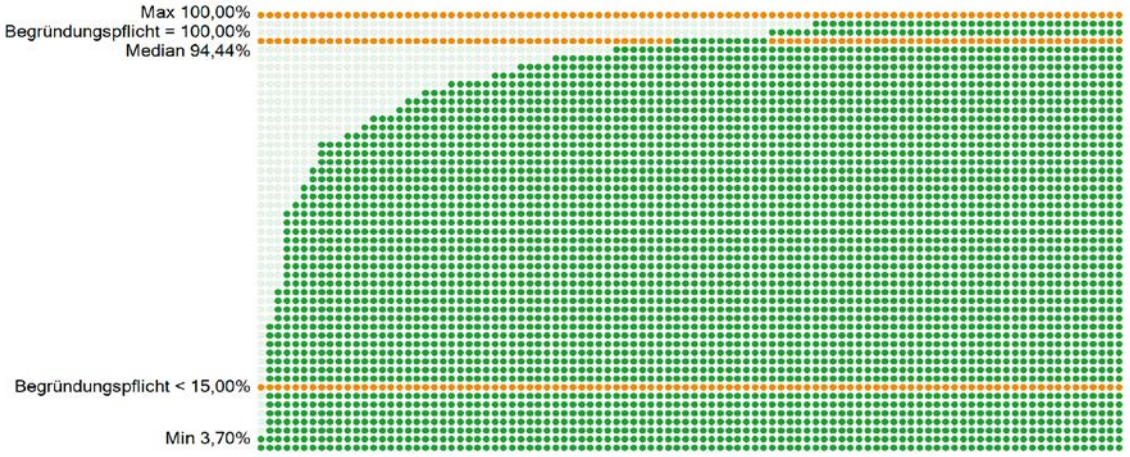
Comments:

Ongoing very good implementation of the quality indicator in the Centres with a slight fall in the median and minimum values. 17 Centres failed to meet the target value of at least 80% in indicator year 2017 (previous year: 11 Centres). Good or moderate quality of the TME was achieved in all cases (=100% rate) of elective radical surgery for rectal cancer in 96 Centres. The reasons given by the Centres with the lowest values were difficult extirpations, intra-operative complications that led to a tissue-specimen tear and extensive tumour (including parallel resected second malignomas). The auditors looked at the individual cases and ruled out systematic errors. The Centres implemented a series of improvement measures, inter alia, interdisciplinary discussions and training between pathologists and surgeons, standardisation of specimen techniques and discussion in tumour boards.

*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.

Back to Table of Contents

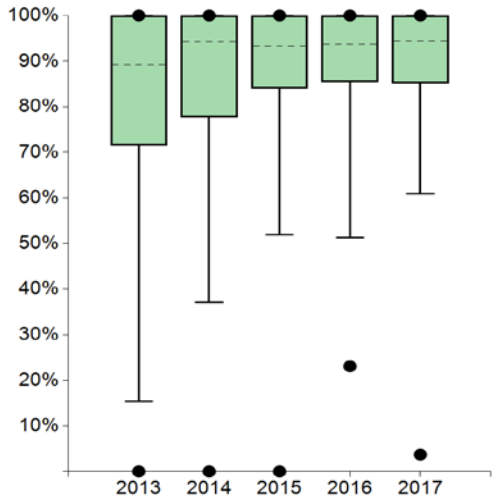
29. Information on resection edge



Begründungspflicht = mandatory statement of reasons

284 clinical sites

	Indicator definition	All clincal sites 2017		
		Median	Range	Patients Total
Numerator	Patients in whom the distance from the aboral edge of the tumour to the aboral resection margin and the distance from the tumour to the circumferential mesorectal resection level was documented in mm.	20*	1 - 78	6441
Denomi-nator	Patients with RC in whom the primary tumor was resected in the form of a TME or PME. (without TWR)	22*	6 - 79	7189
Rate	Explanation mandatory*** <15% and =100%	94.44%	3.70% - 100%	89.60%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	100%	100%	100%	100%	100%
Median	89.29%	94.29%	93.33%	93.75%	94.44%
25th percentile	71.43%	77.78%	84.00%	85.45%	85.19%
5th percentile	15.39%	37.14%	51.95%	51.31%	60.91%
Minimum	0.00%	0.00%	0.00%	23.08%	3.70%

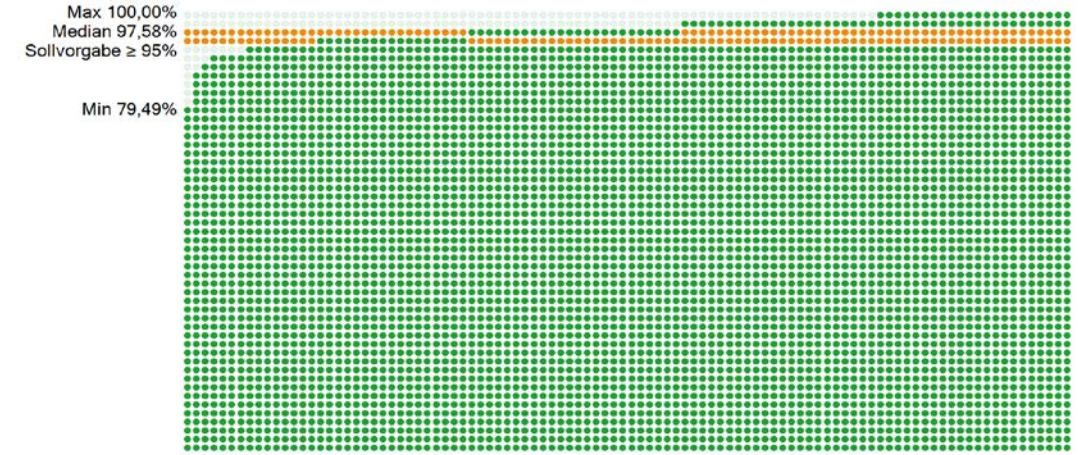
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	185	65.14%

Comments:
The quality indicator in the Guideline was again implemented well, similar to the previous year. In the updated Guideline the quality indicator was integrated into a new quality indicator. This means that the quality indicator in this form will only be documented up to 2018.
The Centre with the lowest value had a result that did not require substantiation the previous year and promptly introduced improvement measures (consultation between surgeons and pathologists and standardised specification of circumferential resection margins on the pathology request form).

*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.
*** If value is outside the plausablilty corridor. centres have to give an explanation.

Back to Table of Contents

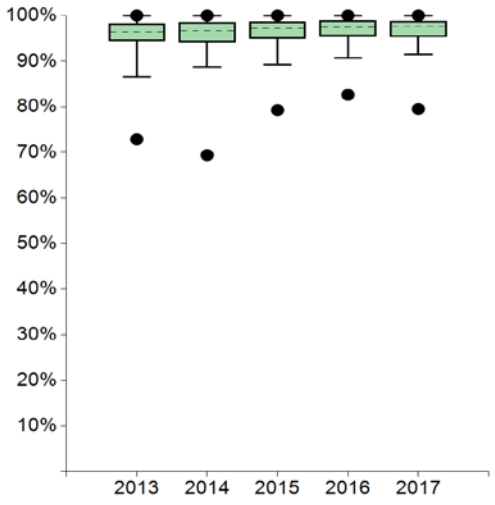
30. Lymph node examination (GL QI 2)



Sollvorgabe = target value

284 clinical sites

	Indicator definition	All clincal sites 2017		
		Median	Range	Patients Total
Numerator	Patients with pathological examination of lymph nodes ≥ 12	67.5*	30 - 176	20698
Denomi-nator	Patients with CRC who underwent an lymphadenectomy (without TWR)	70*	31 - 178	21405
Rate	Target value ≥ 95%	97.58%	79.49% - 100%	96.70%**



	2013	2014	2015	2016	2017
Maximum	100%	100%	100%	100%	100%
95th percentile	100%	100%	100%	100%	100%
75th percentile	98.25%	98.48%	98.61%	98.91%	98.78%
Median	96.34%	96.61%	97.18%	97.47%	97.58%
25th percentile	94.44%	94.12%	94.92%	95.45%	95.34%
5th percentile	86.53%	88.64%	89.18%	90.66%	91.44%
Minimum	72.84%	69.39%	79.25%	82.61%	79.49%

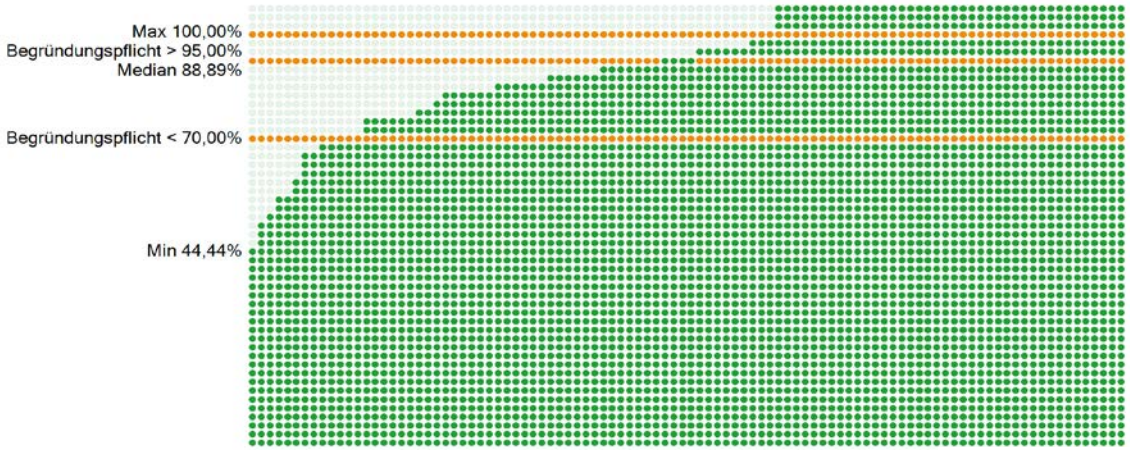
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	223	78.52%

Comments:
Ongoing good implementation of the quality indicator in the Centres over the course of time. 61 Centres failed to meet the target value in indicator year 2017. However, 52 of them still achieved a compliance rate of ≥90%. The Centre with the lowest rate did not meet the target value the previous year either. In audit year 2018 the Centre underwent a surveillance audit (need to document achievement of the target value in the re-audit) as did all other 8 Centres with a rate of <90%. The main reasons given by the Centres for failing to meet the target value were neoadjuvant pretreatments and lower surgical radicality in conjunction with a second carcinoma that determined the prognosis or palliative surgical indication. The Centres implemented quality circles with pathologists and surgeons, and defined internal standards to improve their 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.

Back to Table of Contents

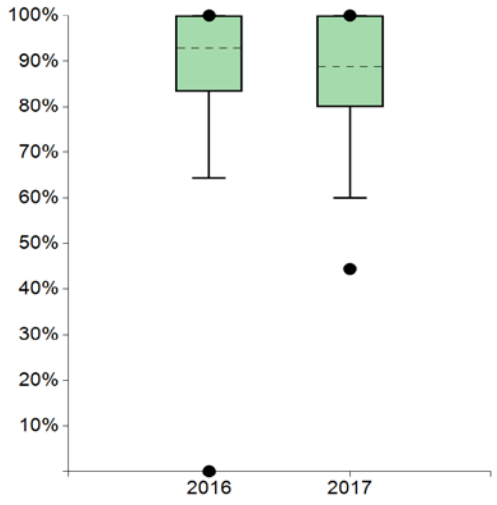
31. Beginning of the adjuvant chemotherapy



Begründungspflicht = mandatory statement of reasons

284 clinical sites

	Indicator definition	All clincal sites 2017 Median	Range	Patients Total
Numerator	Patients with beginning of chemotherapy within 8 weeks after surgery	7*	1 - 25	2197
Denomi-nator	Patients with UICC stage III colon carcinoma who had received adjuvant chemotherapy	8*	1 - 27	2506
Rate	Explanation mandatory*** <70% and >95%	88.89%	44.44% - 100%	87.67%**



	2013	2014	2015	2016	2017
Maximum	-----	-----	-----	100%	100%
95th percentile	-----	-----	-----	100%	100%
75th percentile	-----	-----	-----	100%	100%
Median	-----	-----	-----	92.86%	88.89%
25th percentile	-----	-----	-----	83.33%	80.00%
5th percentile	-----	-----	-----	64.38%	60.00%
Minimum	-----	-----	-----	0.00%	44.44%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
284	100.00%	147	51.76%

Comments:
Since indicator year 2017 the depiction of this indicator has been mandatory. In 114 Centres 100% of patients with UICC stage III colon cancer began chemotherapy within 8 weeks of surgery in indicator year 2017. 23 Centres had a low rate (<70%) requiring substantiation in indicator year 2017. If chemotherapy did not begin within 8 weeks of surgery, the main reasons given by the Centres were post-operative complications, protracted post-operative reconvalescence coupled with a poor general condition or the advanced age of patients, a lack of compliance and second carcinoma or metastases that determined treatment. The plausibility of the information provided by the Centres was verified in the audits on the basis of 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.
*** If value is outside the plausablilty corridor. centres have to give an explanation.

Back to Table of Contents

DKG
GERMAN CANCER SOCIETY
Certification

WISSEN AUS ERSTER HAND
(FIRST-HAND KNOWLEDGE)

Find out more on www.krebsgesellschaft.de

Authors
German Cancer Society (DKG)
Certification Committee Visceral Oncology Centres / Colorectal Cancer Centres)
Thomas Seufferlein, Spokesman Certification Committee
Stefan Post, Deputy Spokesman Certification Committee
Simone Wesselmann, German Cancer Society (DKG)
Christoph Kowalski, German Cancer Society (DKG)
Ellen Griesshammer, German Cancer Society (DKG)
Julia Ferencz, OnkoZert GmbH

Imprint
Publisher and responsibility for content:
German Cancer Society (DKG)
Kuno-Fischer-Straße 8
DE-14057 Berlin
Tel.: +49 (030) 322 93 29 0
Fax: +49 (030) 322 93 29 66
Association Register District Court Charlottenburg.
Association Register No.: VR 27661 B
Responsible in accordance with press law:
Dr Johannes Bruns

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

Version A1; status 14.06.2019

ISBN: 978-3-948226-02-2