

Annual Report 2017

of the Certified Colorectal Cancer Centres (CRCCs)

Audit year 2016 / Indicator year 2015

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General information

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Quality Indicators of the evidence-based Guidelines (QI):

In the table of contents and in the respective headings are the quality indicators from the guidelines highlighted. These quality indicators are based on the strong recommendations of the respective guidelines and were derived by the guideline group of the German Guideline Program in Oncology (GGPO). Further information can be found under www.leitlinienprogramm-onkologie.de/English-Language

	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%

Basic data indicator:

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

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

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

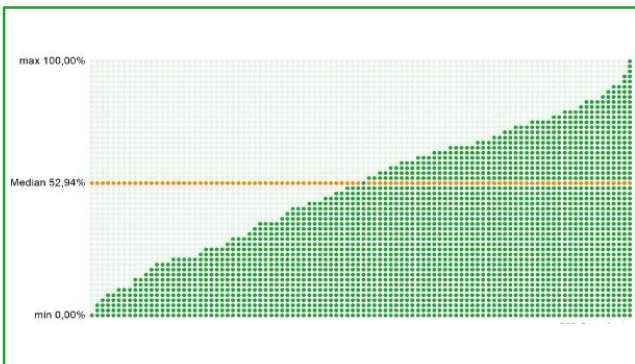


Chart:

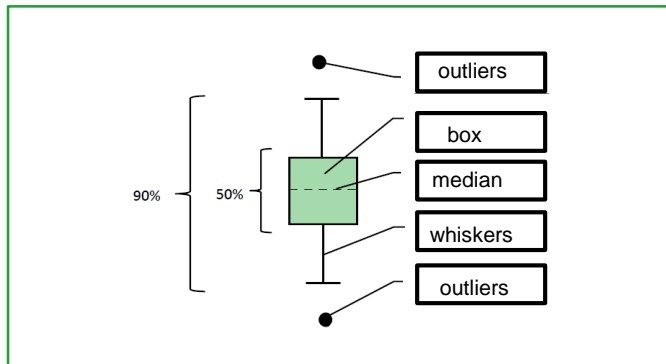
The x-axis indicates the number of centres, the y-axis gives the values in percent or number (e.g. primary cases). The target is depicted as a horizontal orange line. The median, a horizontal orange line, divides the entire group into two equal halves.

General information



Cohort development:

Cohort development in 2011, 2012, 2013, 2014 and 2015 is graphically represented with boxplots.



Boxplot:

A boxplot consists of a **box with median, whiskers** and **outliers**. 50% of the centres are inside 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 Colorectal Cancer Centres 2015

	31.12.2016	31.12.2015	31.12.2014	31.12.2013	31.12.2012
Ongoing procedures	7	13	11	12	11
Certified centres	280	265	267	257	247
Certified clinical sites	288	274	276	266	257
CRCCs with 1 clinical site	275	259	261	251	240
2 clinical sites	3	4	4	4	5
3 clinical sites	1	1	1	1	1
4 clinical sites	1	1	1	1	1

General information

	31.12.2016	31.12.2015	31.12.2014	31.12.2013	31.12.2012
Clinical sites included in the Annual Report	273	261	257	253	230
Percentage	94,8%	95,3%	93,1%	95,1%	89,5%
Total primary cases*	25.214	24.277	23.842	23.182	20.030
Primary cases per centre (mean)*	92	93	93	92	87
Primary cases per centre (median)*	87	87	87	86	79

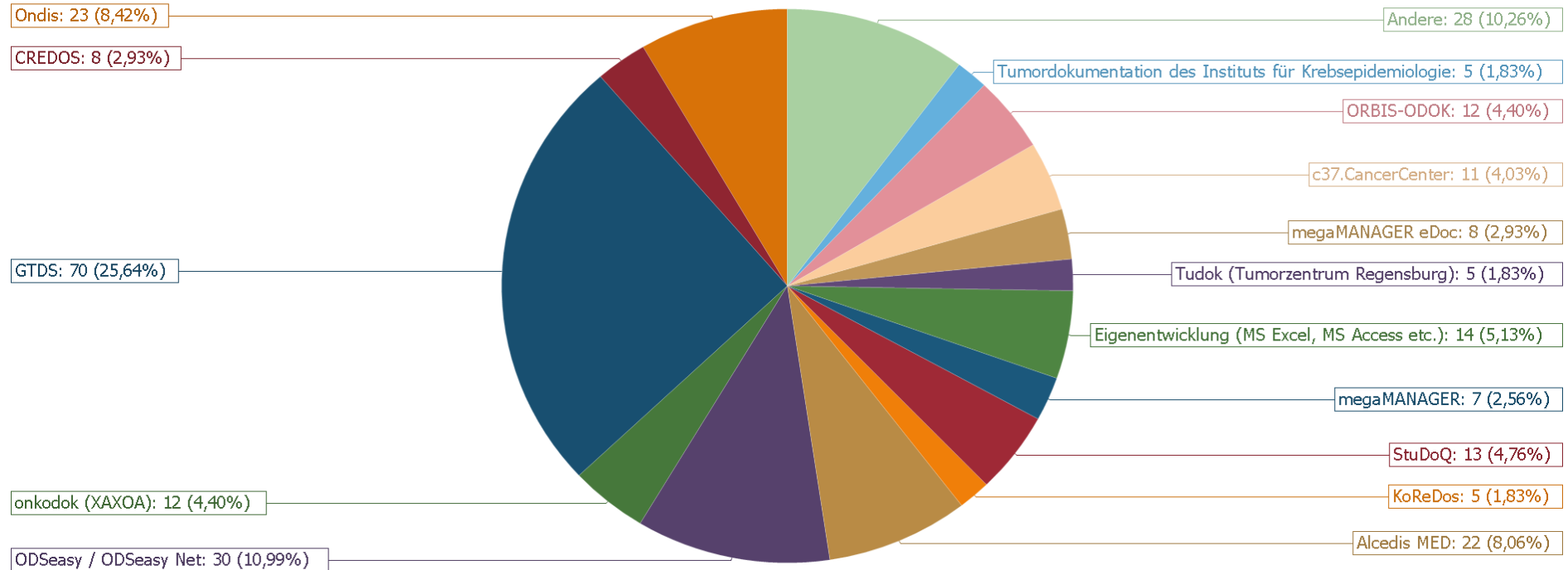
* The figures refer to all certified centres.

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

The Annual Report covers 273 of the 288 clinical sites certified as per 31 December 2016. 15 clinical sites are not included: 11 clinical sites were certified for the first time in 2016 (data depiction of a full calendar year is not mandatory for initial certification), certification had been suspended at 1 clinical sites and for 3 clinical site verification of the data could not be completed in time.

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

Tumour documentation systems used in CRCCs

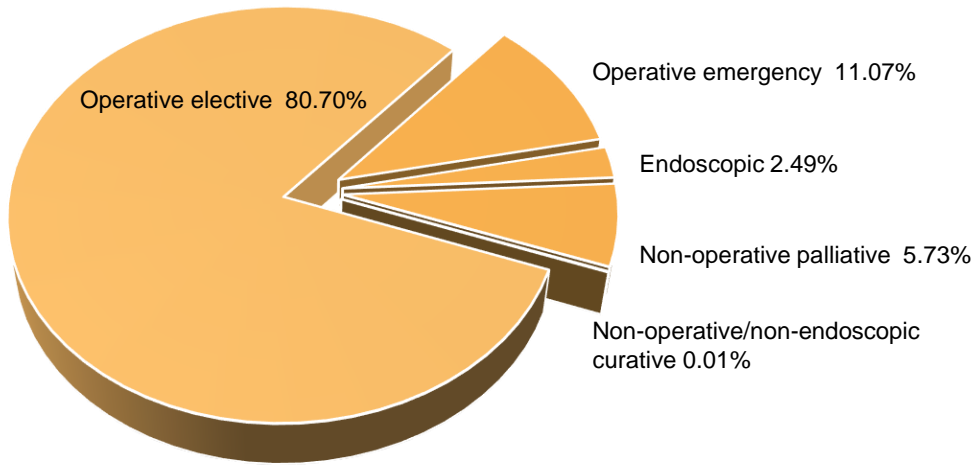


Legend:	
Other	System used in less than 4 clinical sites

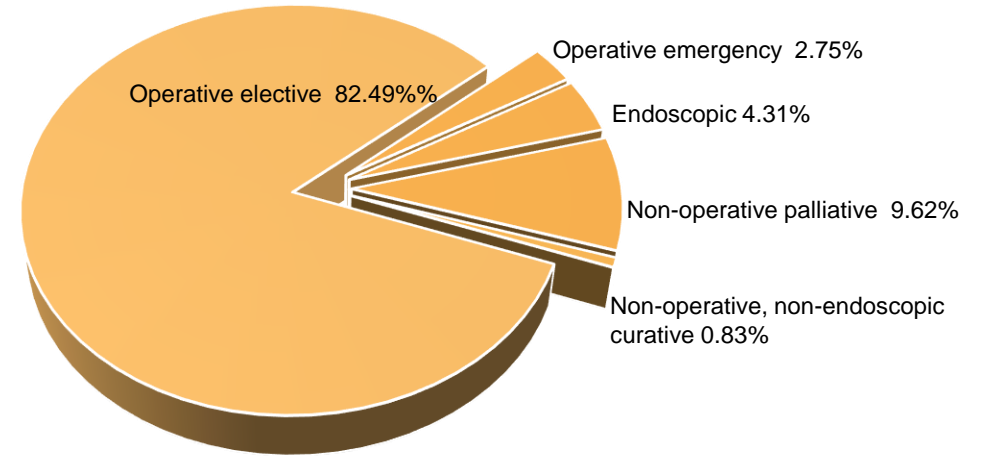
The details regarding the tumour documentation system have been collected from the EXCEL annex "data sheet" of the catalogue of requirements. Only one tumour documentation system can be specified. Often support is provided by the cancer registries or there is a direct link between the tumour documentation system and a cancer registry.

Basic data

Colon



Rectum



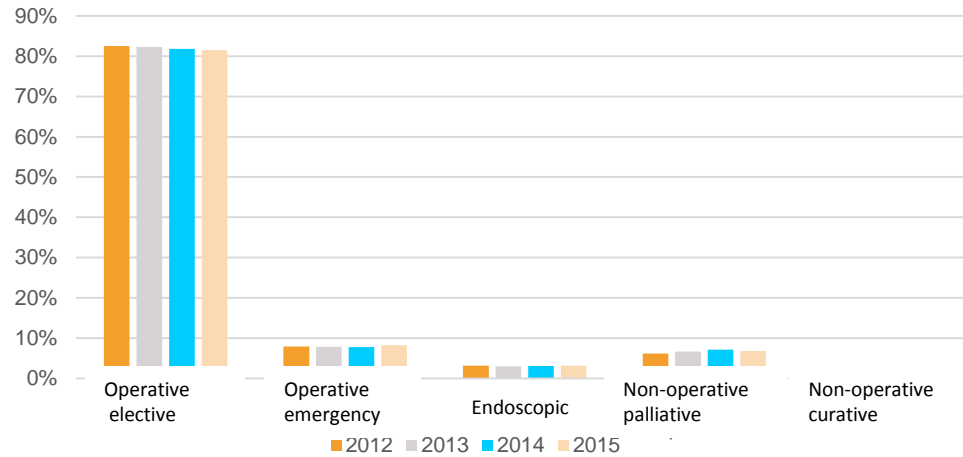
	Operative elective	Operative emergency	Endoscopic	Non-operative palliative *	Non-operative/non-endoscopic curative **	Total
Colon	13.076 (80,70%)	1.794 (11,07%)	404 (2,49%)	928 (5,73%)	2 (0,01%)	16.204 (100%)
Rectum	7.432 (82,49%)	248 (2,75%)	388 (4,31%)	867 (9,62%)	75 (0,83%)	9.010 (100%)
Total primary cases	20.508	2.042	792	1.795	77	25.214

* Non-operative palliative: no tumour resection; palliative radiotherapy/chemotherapy or best supportive care

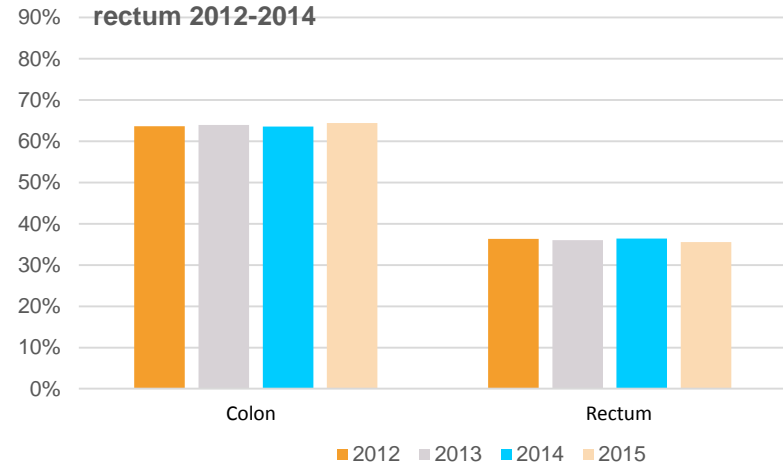
** Non-operative/non-endoscopic curative: complete tumour remission after planned neoadjuvant therapy and patient' foregoing of surgery

Basic data – Development 2012-2014

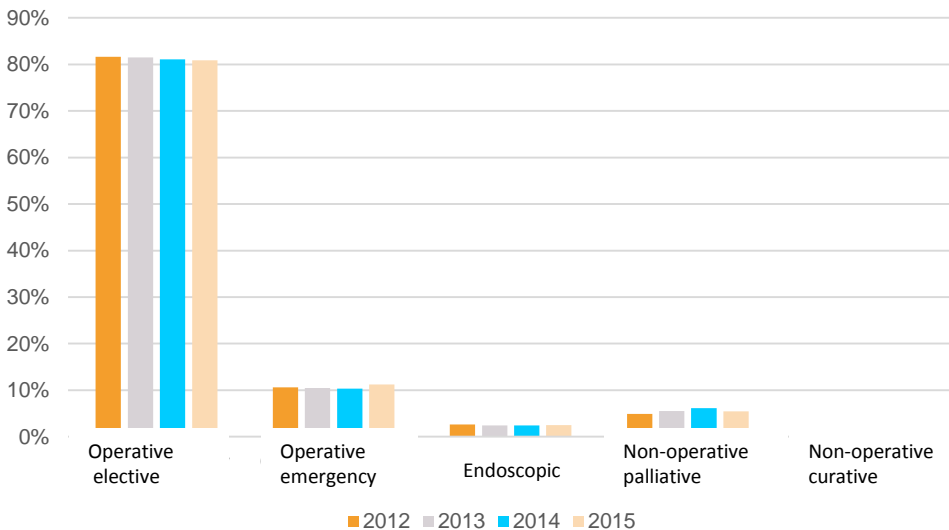
Distribution of primary cases by therapy 2012-2015



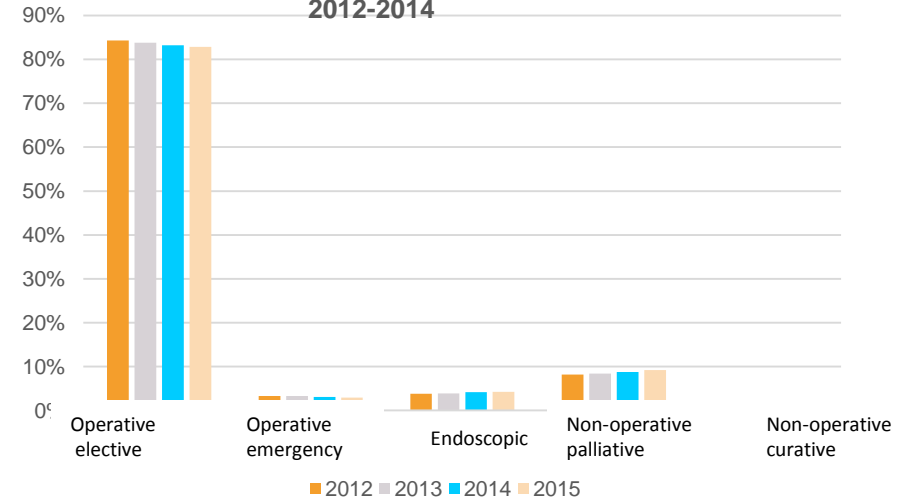
Distribution between primary cases colon and rectum 2012-2014



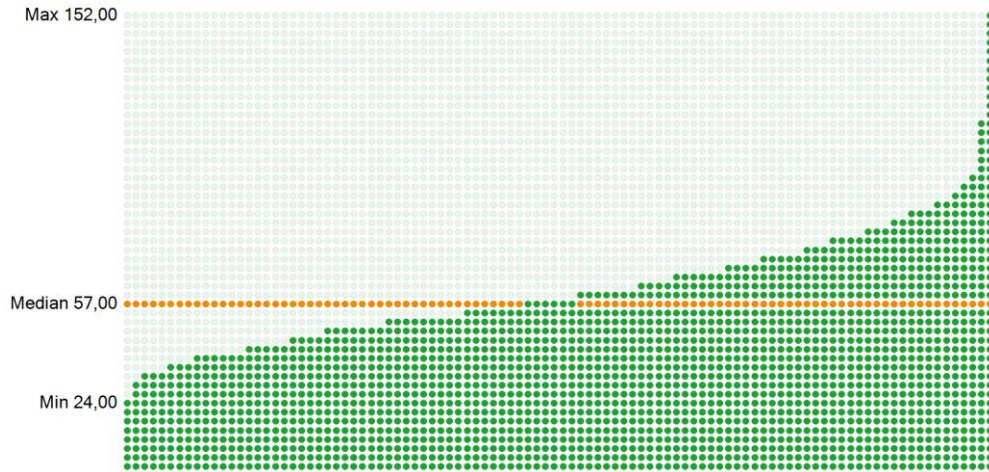
Distribution of primary cases colon by therapy 2012-2014



Distribution of primary cases rectum by therapy 2012-2014

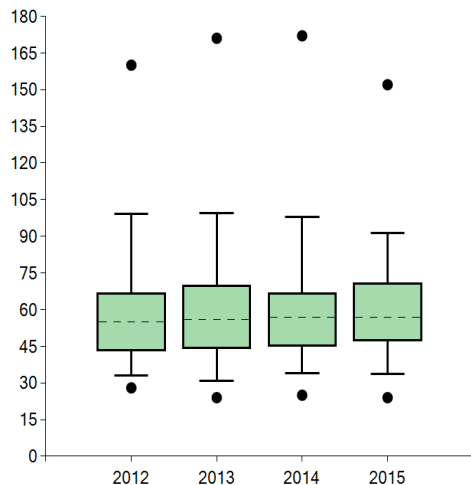


Total primary cases: colon



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Number	Total primary cases: colon (Def. Chart 8)	57	24 - 152



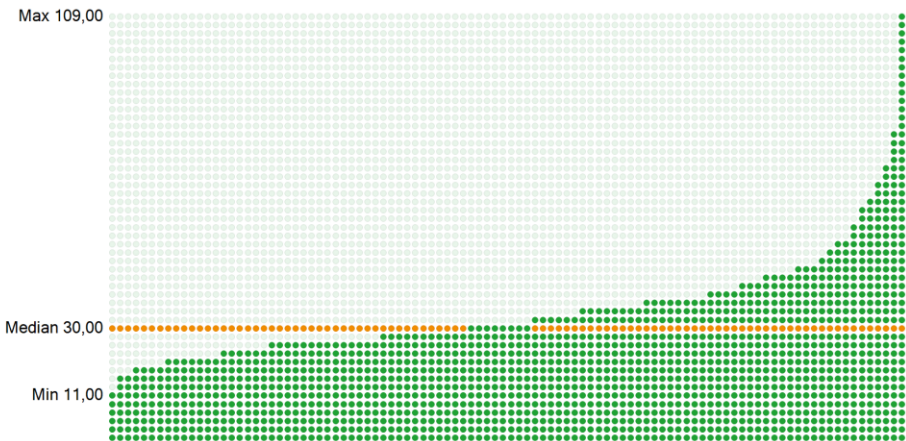
	2011	2012	2013	2014	2015
Maximum	-----	160,00	171,00	172,00	152,00
95 th percentile	-----	99,00	99,00	98,00	91,40
75 th percentile	-----	67,00	70,00	67,00	71,00
Median	-----	55,00	56,00	57,00	57,00
25 th percentile	-----	43,00	44,00	45,00	47,00
5 th percentile	-----	33,00	30,80	34,00	33,60
Minimum	-----	28,00	24,00	25,00	24,00

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	----	----

Comments:

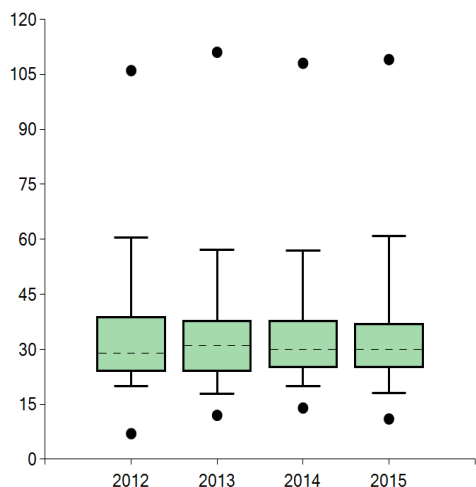
The median of the primary cases of colon carcinomas remains the same as last year. In 2015, 26,463 patients with a primary diagnosis of colorectal carcinoma were treated in a certified centre. This corresponds to 43% of the incident cases in Germany (=61,252; enquiry 5/2017: www.gekid.de)

Total primary cases: rectum



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Number	Total primary cases: rectum (Def. Chart 8)	30	11 - 109

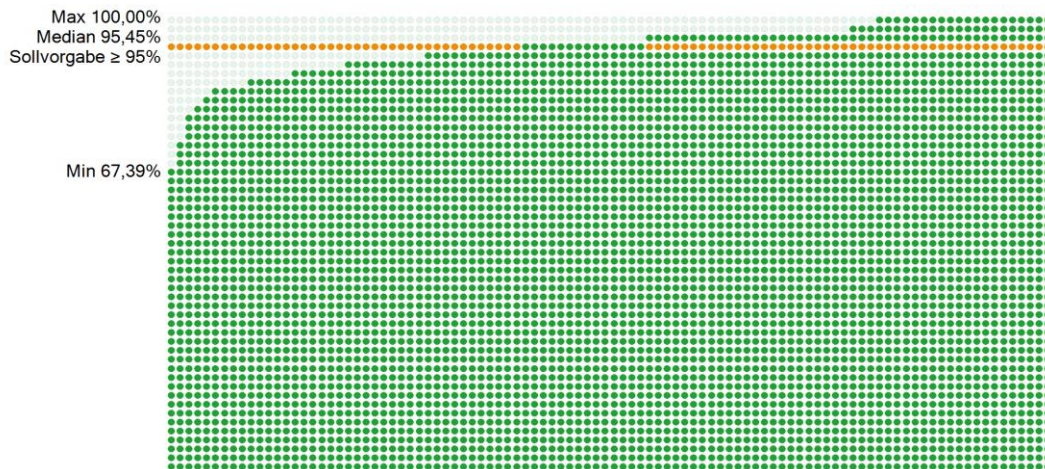


	2011	2012	2013	2014	2015
● Maximum	----	106,00	111,00	108,00	109,00
95 th percentile	----	60,00	57,00	57,00	60,80
75 th percentile	----	39,00	38,00	38,00	37,00
Median	----	29,00	31,00	30,00	30,00
25 th percentile	----	24,00	24,00	25,00	25,00
5 th percentile	----	20,00	17,80	20,00	18,00
● Minimum	----	7,00	12,00	14,00	11,00

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	----	----

Comments:
See explanation on slide 10.
The median of the primary cases of rectum carcinomas also remains the same in comparison to last year.

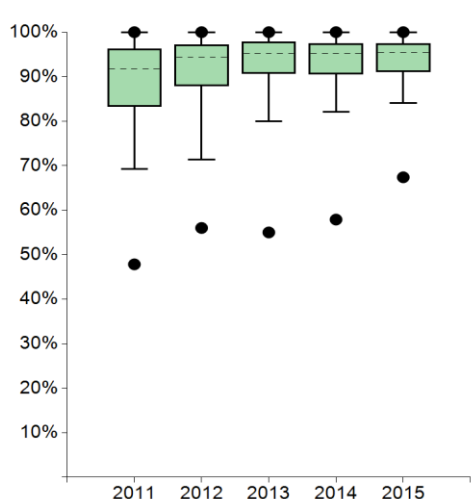
1. Pre-therapeutic case presentation (QI 5 of the Guideline)



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patient presented at an interdisciplinary tumour conference before therapy	36*	14 - 114
Denominator	Patients with RC and all patients with stage IV CC	37*	16 - 118
Rate	Target ≥ 95%	95,45%	67,39% - 100%

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



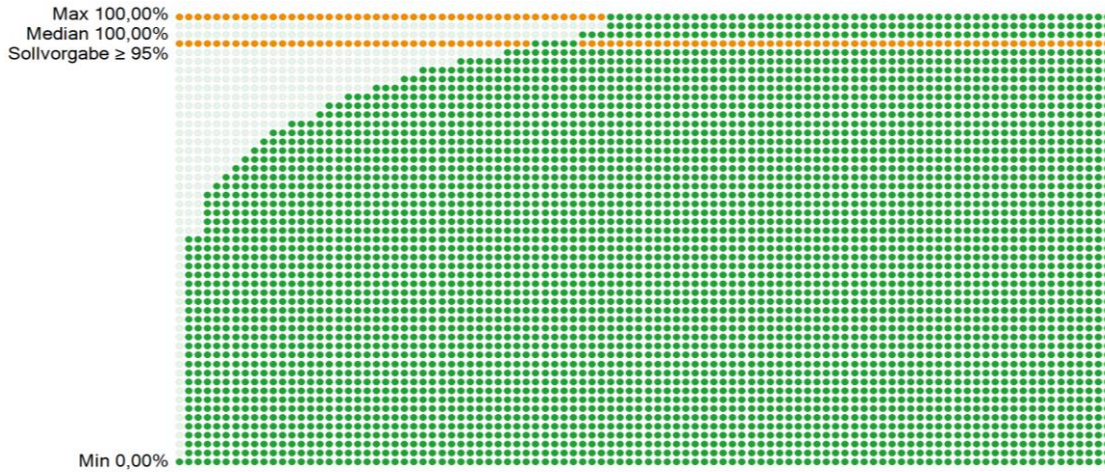
	2011	2012	2013	2014	2015
Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	96,26%	97,14%	97,78%	97,46%	97,44%
Median	91,78%	94,44%	95,12%	95,12%	95,45%
25 th percentile	83,33%	87,87%	90,63%	90,59%	91,11%
5 th percentile	69,23%	71,42%	80,00%	82,03%	84,05%
Minimum	47,83%	56,00%	55,00%	57,89%	67,39%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	152	55,68%

Comments:

Very good implementation of the indicator. More centres than last year (=134 in 2015) have met the target value of 95%. Clearly, even the minimum value has increased over time. The reasons for not meeting the target value include, amongst others, only intraoperative securing of a diagnosis (rectum carcinoma or colon carcinoma stage 4), incidental diagnosis during gynaecological surgeries, external referral with a clear mandate for surgery and quantitative limit of the cases to be discussed at the tumour board. Agreed upon measures to improve the rate include more rigid proctoscopies pre-op, raising awareness in quality circle meetings for the pre-therapeutic presentation of patients and negotiations with the clinic management to increase personnel resources to enable more pre-therapeutic presentations.

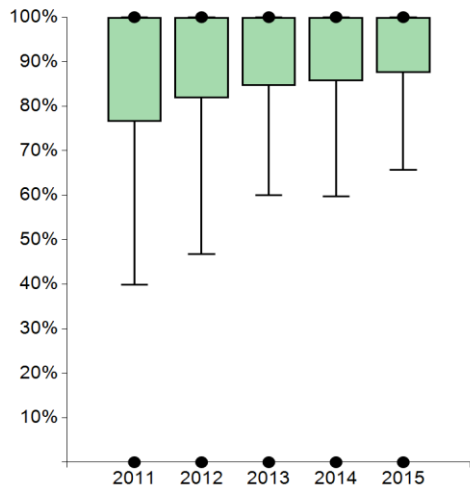
2. Pre-therapeutic case presentation: relapses/metachronous metastases



263 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients with relapse or new metastases presented at the pre-therapeutic conference	10*	0 - 97
Denominator	Patients with relapse or new metastases	11*	1 - 102
Rate	Target ≥ 95%	100%	0,00% - 100%

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



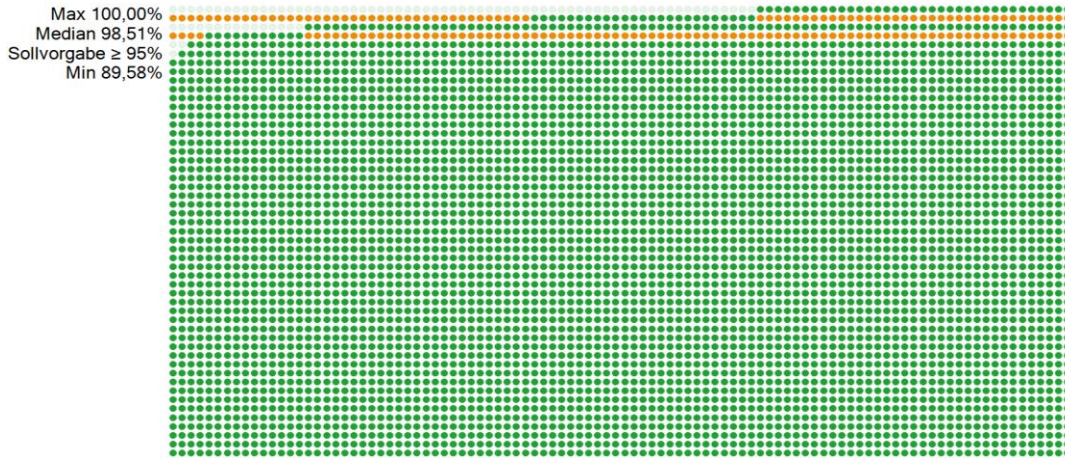
	2011	2012	2013	2014	2015
Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	100%	100%	100%	100%	100%
25 th percentile	76,47%	81,81%	84,62%	85,71%	87,50%
5 th percentile	39,94%	46,80%	60,00%	59,67%	65,65%
Minimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
263	96,34%	161	61,22%

Comments:

The implementation of the indicator improves continuously. In comparison with last year, the case presentation rate improved or remained 100% unchanged in most of the centres (172 centres with an increase/100% unchanged rate). The centres with the lowest case presentation rate (=0%) also had the smallest denominator (=1 patient). The centre explained that this patient was coincidentally diagnosed during an ileus surgery. Other reasons for not meeting the target value included refusal of therapy by the patient, missing information, missing case presentation by the practice-based physician or other departments and/or a clear chemotherapy indication. The auditors have made several remarks regarding the above-mentioned explanations. They identified as an improvement action the continuous information and training of cooperating partners during quality circles.

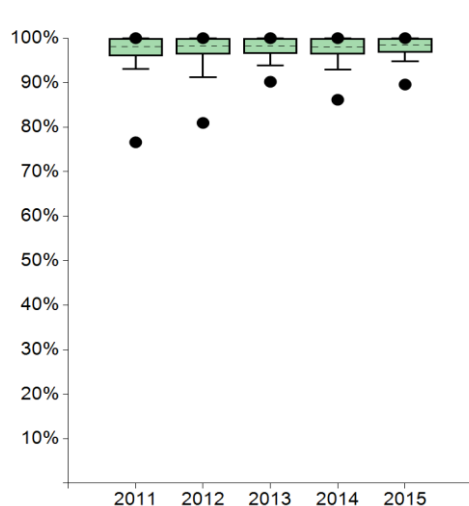
3. Post-operative case presentation



263 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Operative and endoscopic primary cases presented at the post-operative conference	80*	40 - 217
Denominator	Operative and endoscopic primary cases	81*	40 - 222
Rate	Target ≥ 95%	98,51 %	89,58% - 100%

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



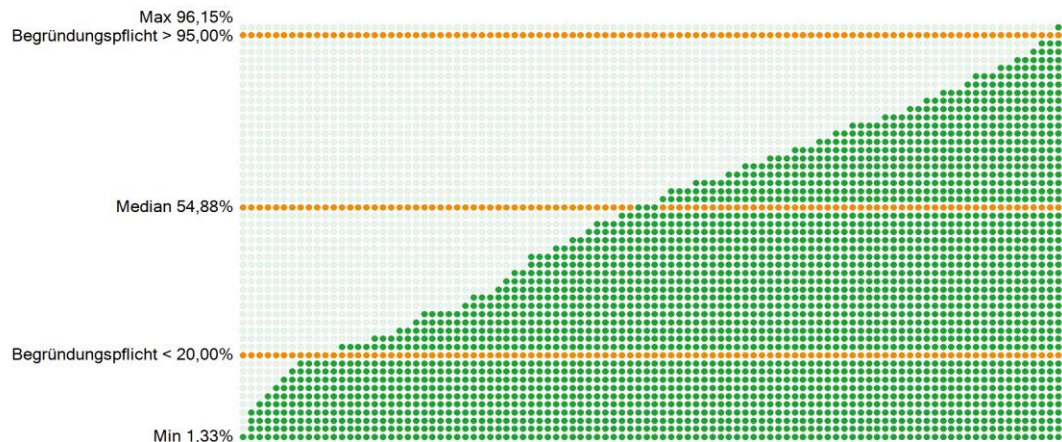
	2011	2012	2013	2014	2015
Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	98,10%	98,19%	98,20%	97,97%	98,51%
25 th percentile	96,01%	96,36%	96,49%	96,36%	96,73%
5 th percentile	93,11%	91,23%	93,81%	92,96%	94,81%
Minimum	76,60%	80,95%	90,20%	86,15%	89,58%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	257	94,14%

Comments:

The indicator for post-operative case presentation of the operative and endoscopic primary cases is very well implemented. An explanation for non-presentation was that the palliative therapy concept was already agreed on in the pretherapeutic TC. Another reason given was that the post-operative deceased patients were not presented. These patients are, according to the catalogue of requirements, discussed during the M&M conferences.

4. Psycho-oncological counselling

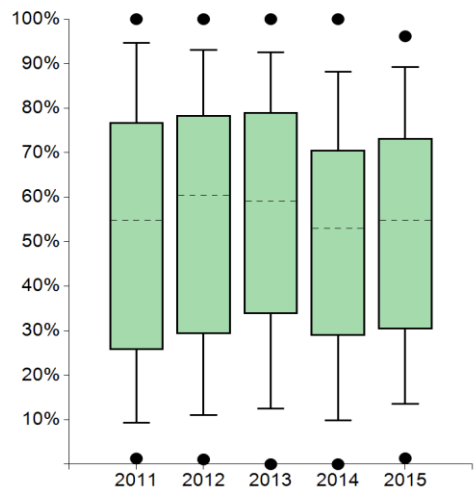


273 clinical sites

	Indicator definition	All clinical 2015	
		Median	Range
Numerator	Patients given inpatient or outpatient psycho-oncological counselling (length of session ≥ 25 min)	52*	1 - 172
Denominator	Total primary cases + patients with relapse/new metastases	100*	42 - 300
Rate	Explanation mandatory** <20% and >95%	54,88 %	1,33% - 96,15%

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

** If value is outside of the plausibility corridor, centres have to give an explanation



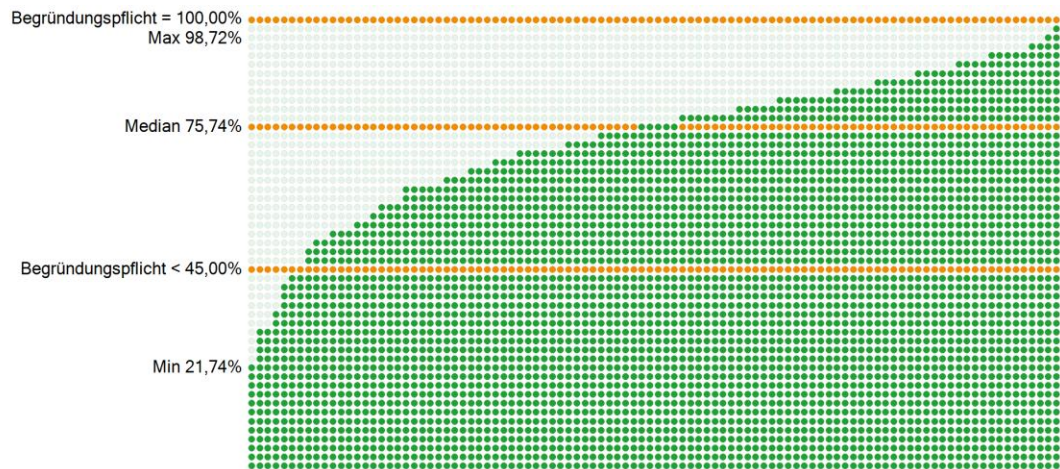
	2011	2012	2013	2014	2015
● Maximum	100%	100%	100%	100%	96,15%
95th percentile	94,61%	93,01%	92,50%	88,17%	89,21%
75th percentile	76,79%	78,40%	79,10%	70,60%	73,28%
Median	54,76%	60,41%	59,09%	52,94%	54,88%
25th percentile	25,77%	29,26%	33,75%	28,83%	30,41%
5th percentile	9,28%	11,09%	12,45%	9,86%	13,57%
● Minimum	1,28%	1,07%	0,00%	0,00%	1,33%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	243	89,01%

Comments:

The median of the psycho-oncological counselling rate has increased, and most centres have increased the rate of psycho-oncological sessions >25 min (154 centres with an increased rate vs. 101 centres with a decreased rate). Centres gave the following reasons for a low counselling rate: sessions were shorter than 25 min, or after the psycho-oncological screening, there was no further need for counselling. Another reason was limited staff resources.

5. Social services counselling

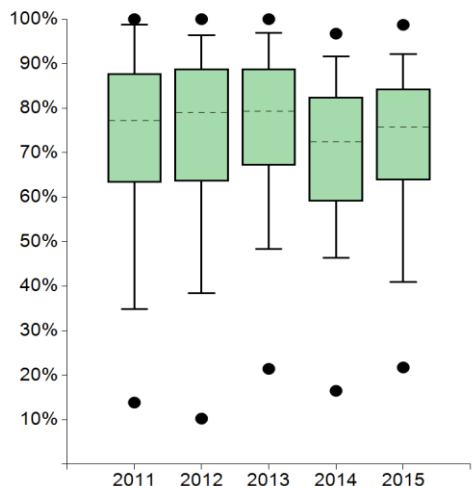


273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Inpatients or outpatients who received counselling from the social services	73*	19 - 233
Denominator	Total primary cases + patients with relapse/new metastases	100*	42 - 300
Rate	Explanation mandatory** <45% and =100%	75,74 %	21,74% - 98,72%

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

** If value is outside of the plausibility corridor, centres have to give an explanation



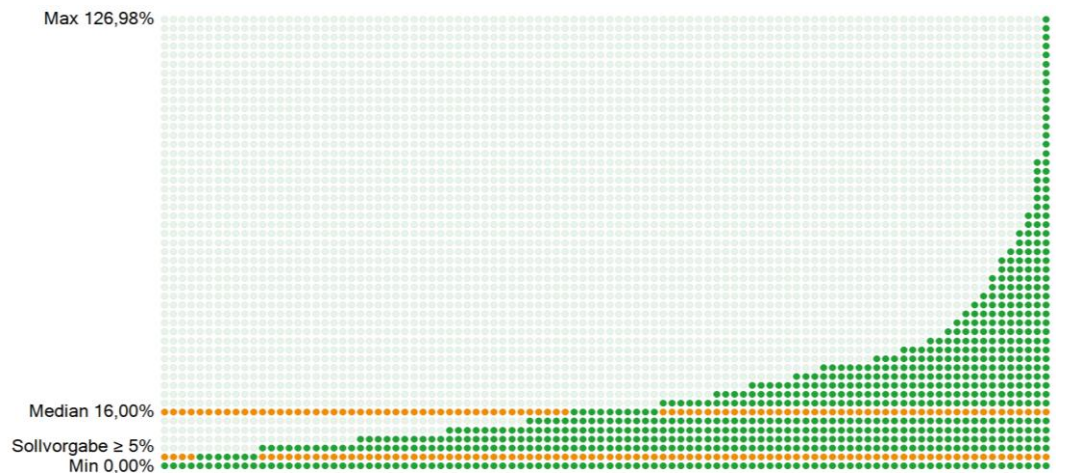
	2011	2012	2013	2014	2015
Maximum	100%	100%	100%	96,74%	98,72%
95th percentile	98,69%	96,32%	96,89%	91,67%	92,09%
75th percentile	87,83%	88,88%	88,89%	82,47%	84,31%
Median	77,13%	79,10%	79,31%	72,37%	75,74%
25th percentile	63,24%	63,55%	67,07%	59,12%	63,86%
5th percentile	34,84%	38,42%	48,34%	46,34%	40,95%
Minimum	13,85%	10,25%	21,43%	16,49%	21,74%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	255	93,41%

Comments:

The rate of the median of patients who received counselling from the social services increased. The majority of the centres increased their rate (157 centres with an increase vs. 99 centres with a decrease). The centres gave the following reasons for a low rate: no utilization despite low-threshold offers. Outside of Germany social service counselling is usually offered in an out-patient setting, therefore counselling rates in the centres are very low.

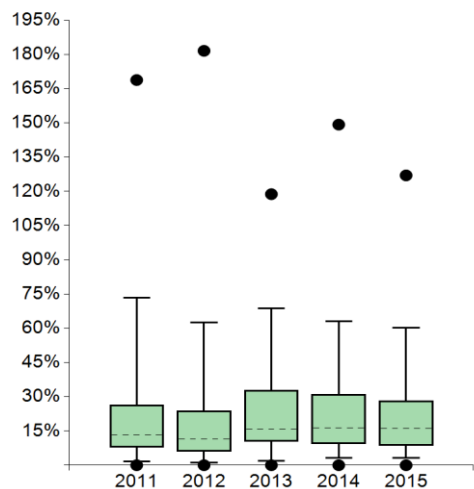
6. Study participation



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients of the CrCC included in a study or colorectal prevention study	13*	0 - 127
Denominator	Total primary cases	87*	42 - 233
Rate	Target $\geq 5\%$	16,00 %	0,00% - 126,98%

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



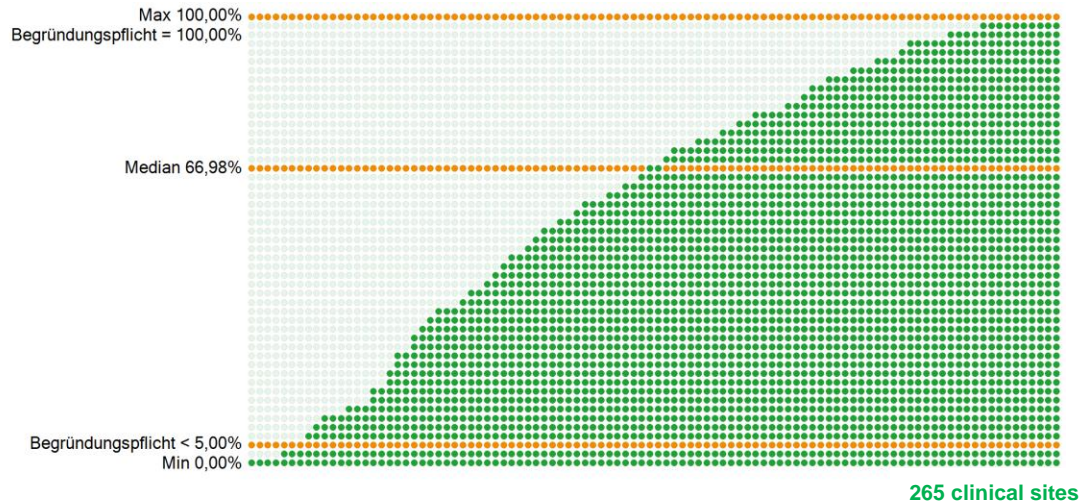
	2011	2012	2013	2014	2015
● Maximum	168,75%	181,56%	118,75%	149,23%	126,98%
95 th percentile	73,47%	62,60%	68,83%	63,10%	60,18%
75 th percentile	26,36%	23,76%	32,89%	31,07%	28,21%
Median	13,15%	11,49%	15,85%	16,22%	16,00%
25 th percentile	7,84%	5,95%	10,47%	9,35%	8,70%
5 th percentile	1,74%	1,02%	1,82%	3,09%	3,18%
● Minimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	245	89,74%

Comments:

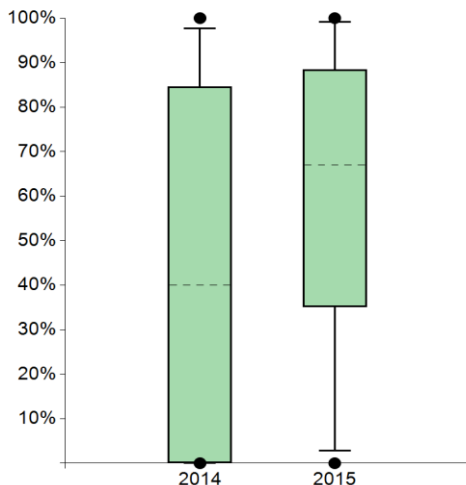
The median of this indicator remained almost unchanged. In comparison to last year, however, fewer patients were included in studies (2015: 5,008 vs. 2014: 5,512) with almost the same population in the certified centres (2015: 23,829 vs. 2014: 23,950). Reasons for not meeting the target value included: not enough studies available. Since 2017 the use of the www.studybox.de is mandatory in order to create better awareness about available studies. Centres with a high study participation quote include one patient in several studies and also have a broad spectrum of studies. The indicator for the study rate is the only indicator for which the numerator is not a subset of population. As the choice of study was not to be restricted solely to studies for patients with a first onset of the disease but there was, at the same time, a need for some indication of the size of the centre (primary case number), therefore the deviation from the rule (numerator is subset of population) was tolerated.

7. CRC patients with a recorded family history



	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Primary-case patients with a CRC and a completed patient questionnaire (http://www.krebsgesellschaft.de/deutsche-krebsgesellschaft-wtrl/deutsche-krebsgesellschaft/zertifizierung/erhebungsboegen/organkrebszentrum.html in the colorectal cancer section)	56*	0 - 161
Denominator	Total primary cases	87*	42 - 233
Rate	Explanation mandatory** <5% and =100%	66,98%	0,00% - 100%

*The medians for numerator and population do not refer to an existing centre but indicate the median for all numerators of the cohort and the median of all populations of the cohort.
** If value is outside of the plausability corridor, centres have to give an explanation



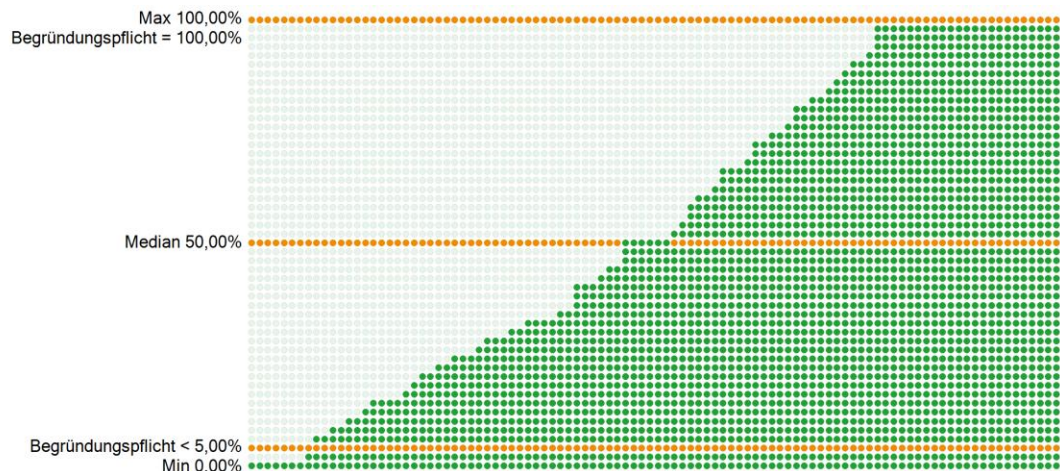
	2011	2012	2013	2014	2015
● Maximum	-----	-----	-----	100%	100%
95 th	-----	-----	-----	97,63%	99,12%
75 th percentile	-----	-----	-----	84,57%	88,46%
Median	-----	-----	-----	40,00%	66,98%
25 th percentile	-----	-----	-----	0,00%	35,14%
5 th percentile	-----	-----	-----	0,00%	2,87%
● Minimum	-----	-----	-----	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
265	97,07%	235	88,68%

Comments:

The process is a lot better implemented in the centres in comparison with last year when the implementation was still optional. The centres with the lowest value are currently still working on the structural process of recording the family history with an (electronic) patient questionnaire and therefore changing from an unsystematic recording to a recording based on the Amsterdam/Bethesda criteria

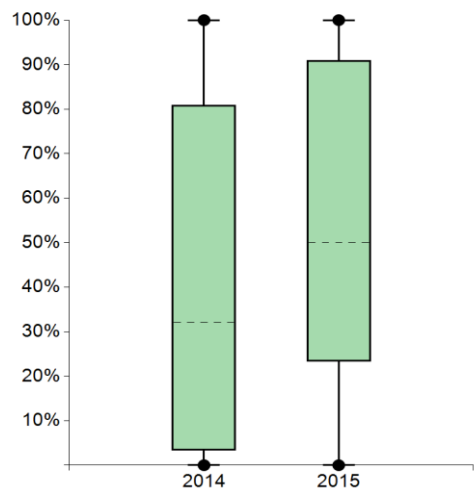
8. Genetic counselling



238 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Primary-case patients with a positive patient questionnaire advised to visit a centre for familial colorectal cancer	4*	0 - 44
Denominator	Primary cases with a positive patient questionnaire	9*	1 - 46
Rate	Explanation mandatory** <5% and =100%	50,00 %	0,00% - 100%

*The medians for numerator and population do not refer to an existing centre but indicate the median for all numerators of the cohort and the median of all populations of the cohort.
 ** If value is outside of the plausibility corridor, centres have to give an explanation



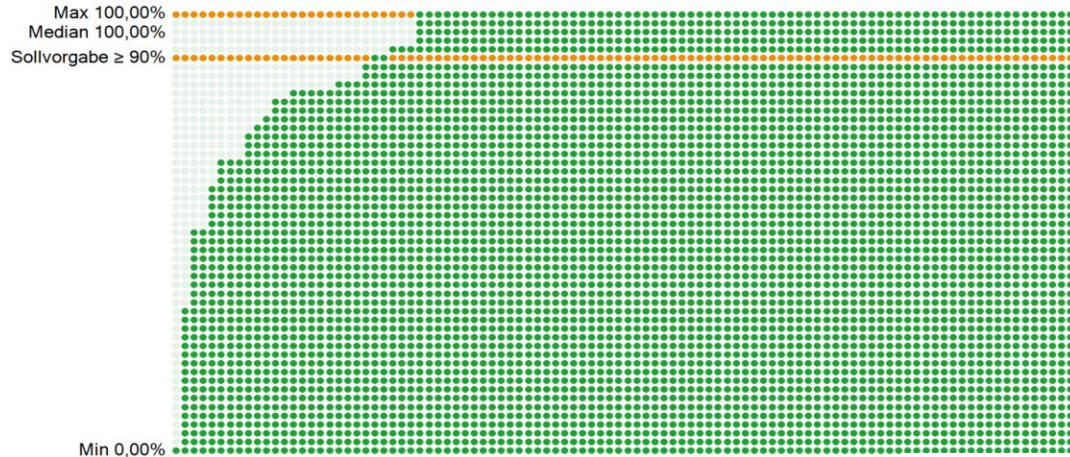
	2011	2012	2013	2014	2015
● Maximum	-----	-----	-----	100%	100%
95 th percentile	-----	-----	-----	100%	100%
75 th percentile	-----	-----	-----	80,83%	90,91%
Median	-----	-----	-----	32,05%	50,00%
25 th percentile	-----	-----	-----	3,41%	23,30%
5 th percentile	-----	-----	-----	0,00%	0,00%
● Minimum	-----	-----	-----	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
238	87,18%	166	69,75%

Comments:

The implementation of this indicator has improved greatly in 2015. Eighteen centres did not recommend presentation at a centre for familial colorectal cancer for patients with a positive patient questionnaire. It is important to note the small denominator (1–20) within the centres. The centres explain this as follows: presentation in a centre was recommended, but not in a centre for familial colorectal cancer. Further, some centres confused the recommendation with the actual presentation at a centre. An explanation will be included in the FAQ section of the OncoBox specification document.

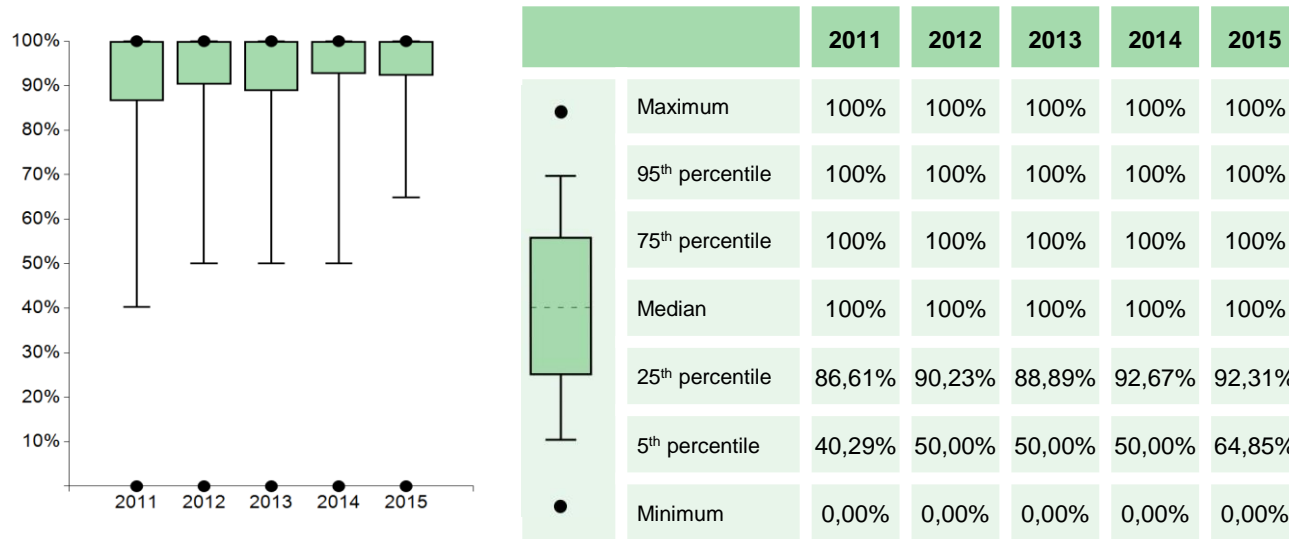
9. MSI examination



269 clinical sites

	Indicator definition	All clinical sites 2014	
		Median	Range
Numerator	Patients with MSI examination	4*	0 - 23
Denominator	Patients with initial CRC diagnosis < 50 years old	5*	1 - 24
Rate	Target ≥ 90%	100%	0,00% - 100%

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

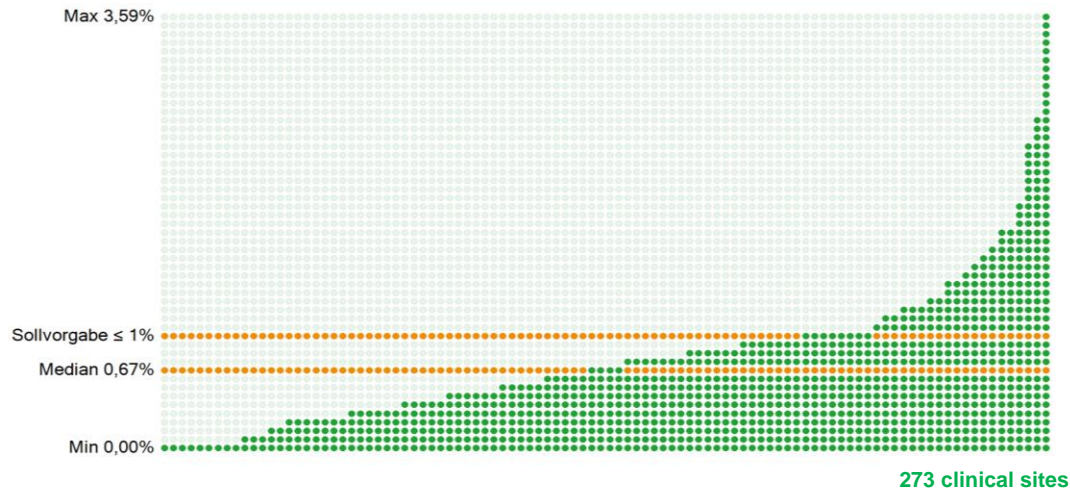


Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
269	98,53%	211	78,44%

Comments:

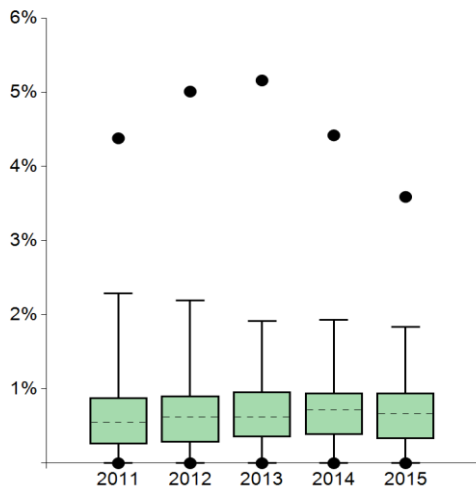
The process of examination of the MSI proteins for patients with a CRC diagnosis <50 years old has improved. Two centres have not done an immune-histochemical examination; however, these centres had only one patient in the denominator. Reasons for non-compliance with the target value included missing material/tissue for the examination, coordination difficulties with other colleagues or pathologists, refusal of the examination by patients and a highly palliative situation without any family members. The auditors made several remarks.

10. Complication rate therapeutic colonoscopies



	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Therapeutic colonoscopies with complications (bleeding requiring re-intervention (recolonoscopy, operation) or a transfusion and/or perforation)	3*	0 - 29
Denominator	Therapeutic colonoscopies per colonoscopy unit (not only CrCC patients)	424*	106 - 2573
Rate	Target ≤ 1%	0,67%	0,00% - 3,59%

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



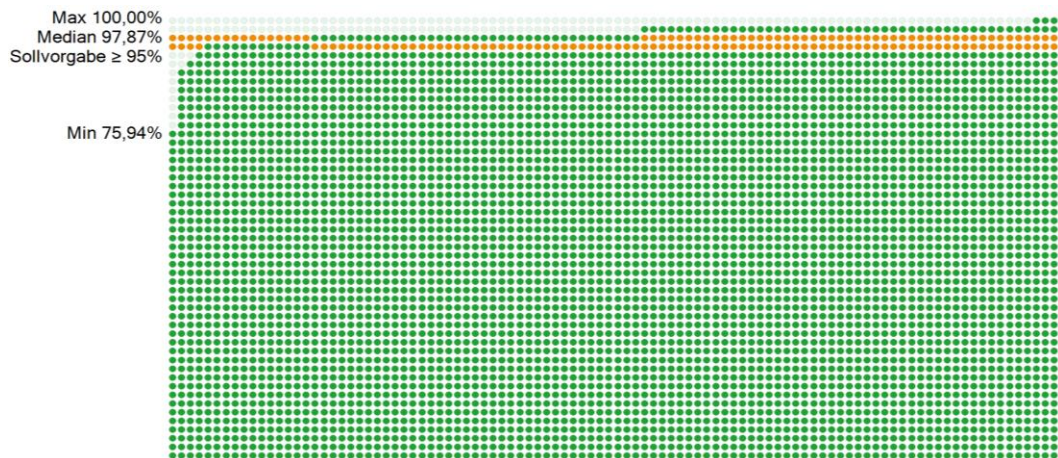
	2011	2012	2013	2014	2015
● Maximum	4,38%	5,01%	5,16%	4,42%	3,59%
95 th percentile	2,29%	2,19%	1,92%	1,93%	1,83%
75 th percentile	0,88%	0,91%	0,96%	0,95%	0,95%
Median	0,55%	0,62%	0,62%	0,72%	0,67%
25 th percentile	0,26%	0,28%	0,35%	0,38%	0,33%
5 th percentile	0,00%	0,00%	0,00%	0,00%	0,00%
● Minimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	218	79,85%

Comments:

The median of the complication rate for therapeutic colonoscopies remained almost unchanged over time. The centres with the highest complication rates last year improved significantly this year. The main complications were bleeding/perforation after endoscopic submucosal dissection. The centres attributed the high complication rates to the following reasons: difficult cases are referred to the centre, for instance, polyps that are too big to be removed in an ambulatory setting, emergency surgeries or changes in staff. The auditors discussed different actions with the centres, for instance, close supervision, insertion of hemoclips or frequent performance of prophylactic haemostasis.

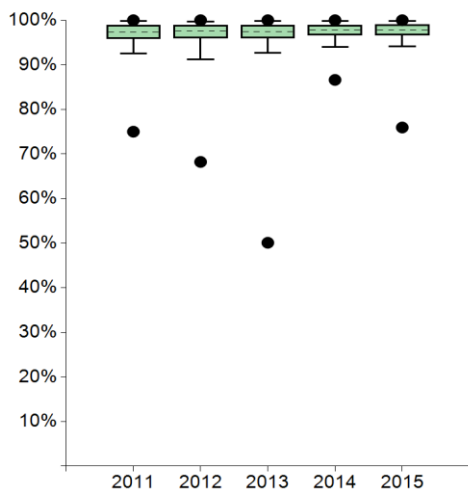
11. Complete elective colonoscopies



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Complete elective colonoscopies	1368*	305 - 11534
Denominator	Elective colonoscopies for each colonoscopy unit of the CrCC (not only CrCC patients) (Are counted: intention: complete colonoscopy)	1399*	313 - 11580
Rate	Target ≥ 95%	97,87 %	75,94% - 100%

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



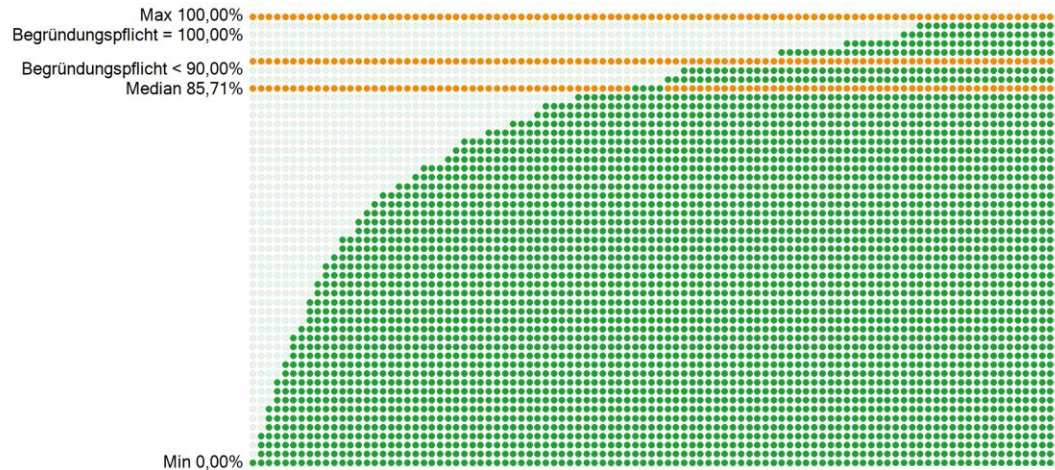
	2011	2012	2013	2014	2015
Maximum	100%	100%	100%	100%	100%
95 th percentile	99,87%	99,73%	99,81%	99,83%	99,81%
75 th percentile	98,88%	98,82%	98,86%	98,92%	99,04%
Median	97,32%	97,55%	97,49%	97,80%	97,87%
25 th percentile	95,87%	95,98%	95,96%	96,64%	96,69%
5 th percentile	92,58%	91,15%	92,60%	93,96%	94,12%
Minimum	75,00%	68,22%	50,09%	86,61%	75,94%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	256	93,77%

Comments:

The indicator continues to be implemented very well over the course of time: almost all planned colonoscopies are complete colonoscopies. 1 centre had a continuous low rate of completed colonoscopies and explained it due to stenosing tumours. The auditor made a remark.

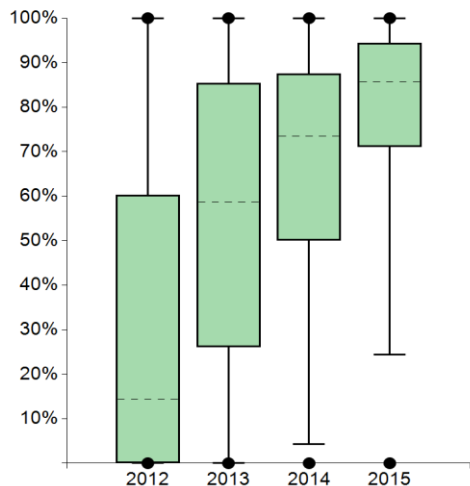
12. Information on distance to mesorectal fascia in the diagnostic report (RC of the lower and middle third) (Q1)



272 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients with information on distance to mesorectal fascia in the diagnostic report	13*	0 - 71
Denominator	Patients with RC of the middle and lower third and MRI or thin-slice CT of the pelvis	16*	1 - 85
Rate	Explanation mandatory** <90% and =100%	85,71 %	0,00% - 100%

*The medians for numerator and population do not refer to an existing centre but indicate the median for all numerators of the cohort and the median of all populations of the cohort.
 ** If value is outside of the plausibility corridor, centres have to give an explanation



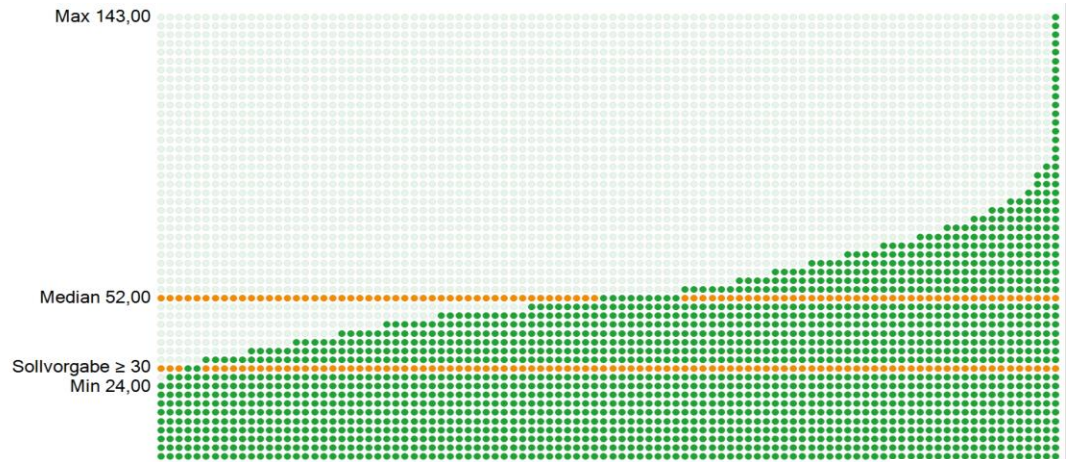
	2011	2012	2013	2014	2015
● Maximum	----	100%	100%	100%	100%
95 th percentile	----	100%	100%	100%	100%
75 th percentile	----	60,28%	85,36%	87,50%	94,33%
Median	----	14,32%	58,62%	73,53%	85,71%
25 th percentile	----	0,00%	26,13%	50,00%	71,07%
5 th percentile	----	0,00%	0,00%	4,28%	24,34%
● Minimum	----	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
272	99,63%	67	24,63%

Comments:

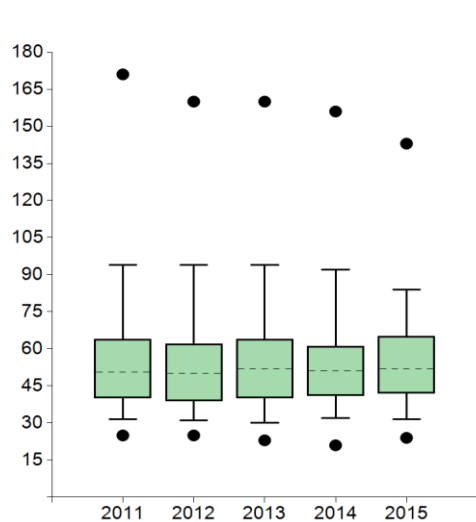
The indicator continues to be implemented better in the centres. While last year, 13 centres did not have any information about the distance to the mesorectal fascia in their radiological report, this year, only two centres had incomplete reports. The auditors made remarks.

13. Operative primary cases: colon



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Number	Operative primary cases: colon	52	24 - 143
	Target ≥ 30		



	2011	2012	2013	2014	2015
● Maximum	171,00	160,00	160,00	156,00	143,00
95 th percentile	93,85	94,00	94,00	92,00	83,80
75 th percentile	64,00	62,00	64,00	61,00	65,00
Median	50,50	50,00	52,00	51,00	52,00
25 th percentile	40,00	39,00	40,00	41,00	42,00
5 th percentile	31,45	31,00	30,00	32,00	31,60
● Minimum	25,00	25,00	23,00	21,00	24,00

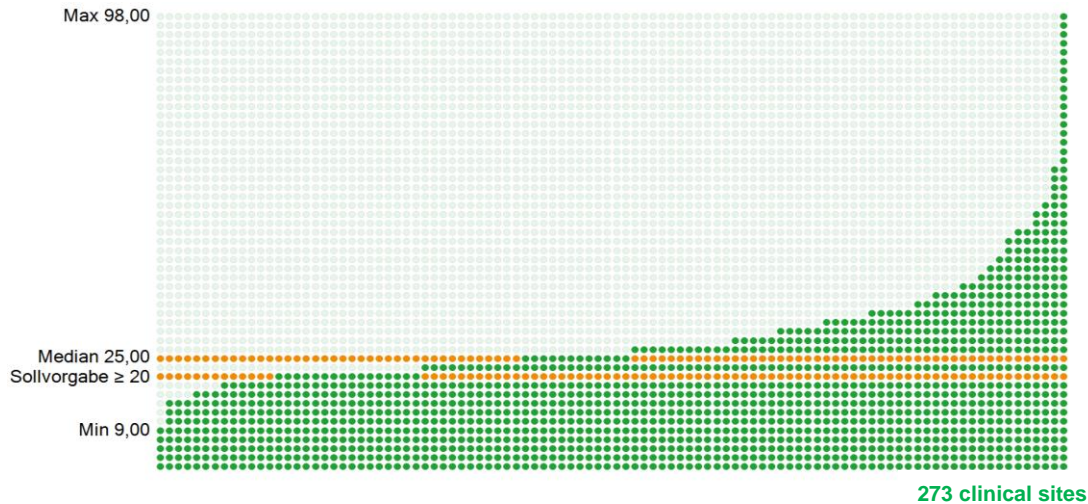
Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	263	96,34%

Comments:

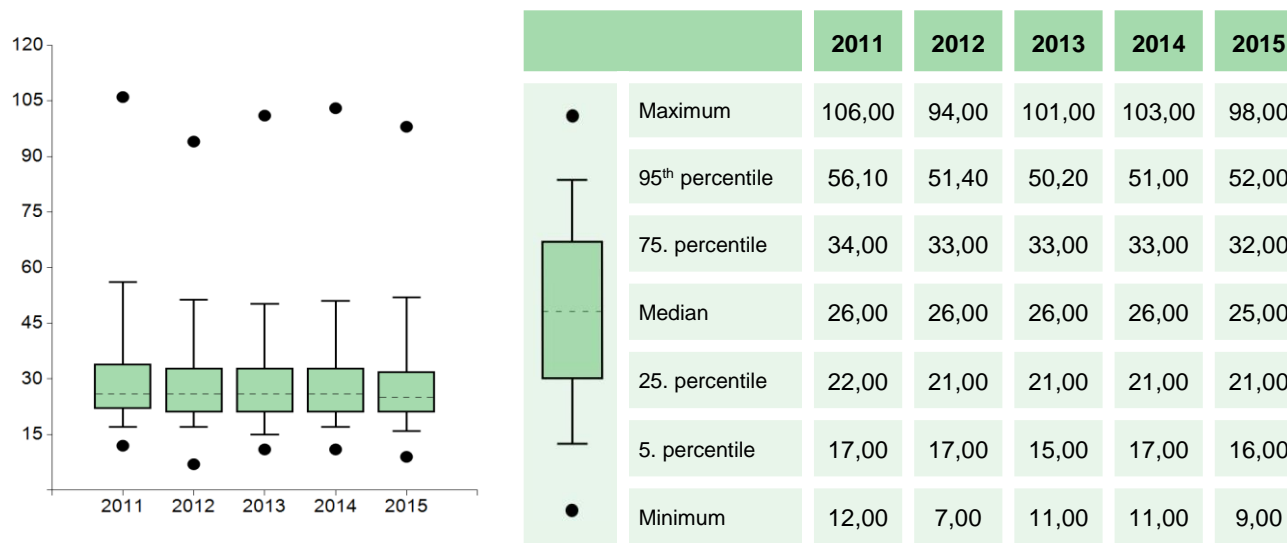
In 2015 15,627 patients with a colon carcinoma underwent surgery in a colorectal cancer centre. This means that 53% of all colon carcinoma surgeries in 2015 (=29,740) were performed in certified colorectal cancer centres (source: Statistisches Bundesamt, DRG Statistik). More centres fell below the target value (10 centres vs. 5 centres in 2014) this year. The fulfilment of the primary case numbers is mandatory for initial and re-certification and not for surveillance audits.

Sollvorgabe = target value
Begründungspflicht = mandatory statement for reason

14. Operative primary cases: rectum



	Indicator definition	All clinical sites 2015	
		Median	Range
Number	Operative primary cases: rectum	25	9 - 98
	Target ≥ 20		

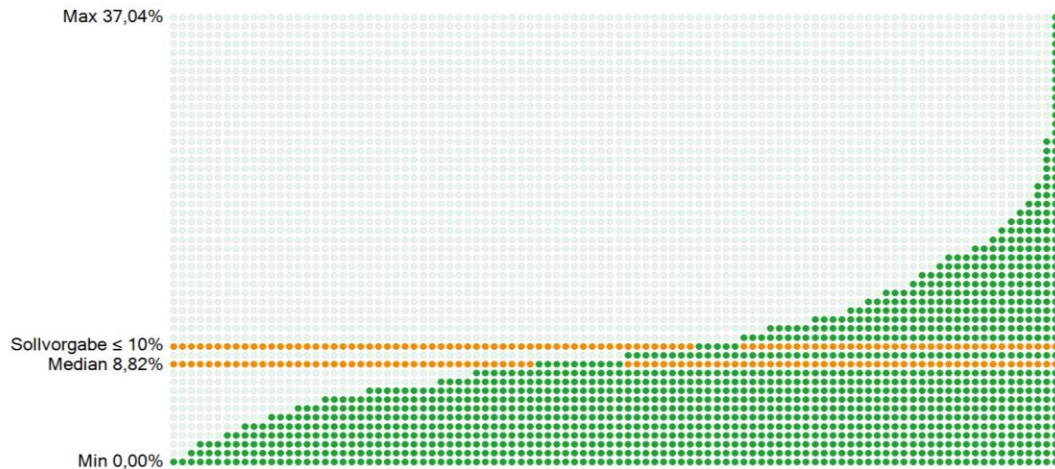


Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	238	87,18%

Comments:

In the indicator year 2015, 8,069 primary cases of rectal carcinoma underwent surgery. This means that 58% of all rectal carcinoma surgeries in 2015 (=13,880) were performed in certified colorectal cancer centres (source: Statistisches Bundesamt, DRG Statistik). Thirty-five centres did not meet the target value. Twenty-nine centres were under a surveillance audit. Reasons for the low primary case numbers were a change in the head physician and cooperation difficulties with referring practice-based physicians.

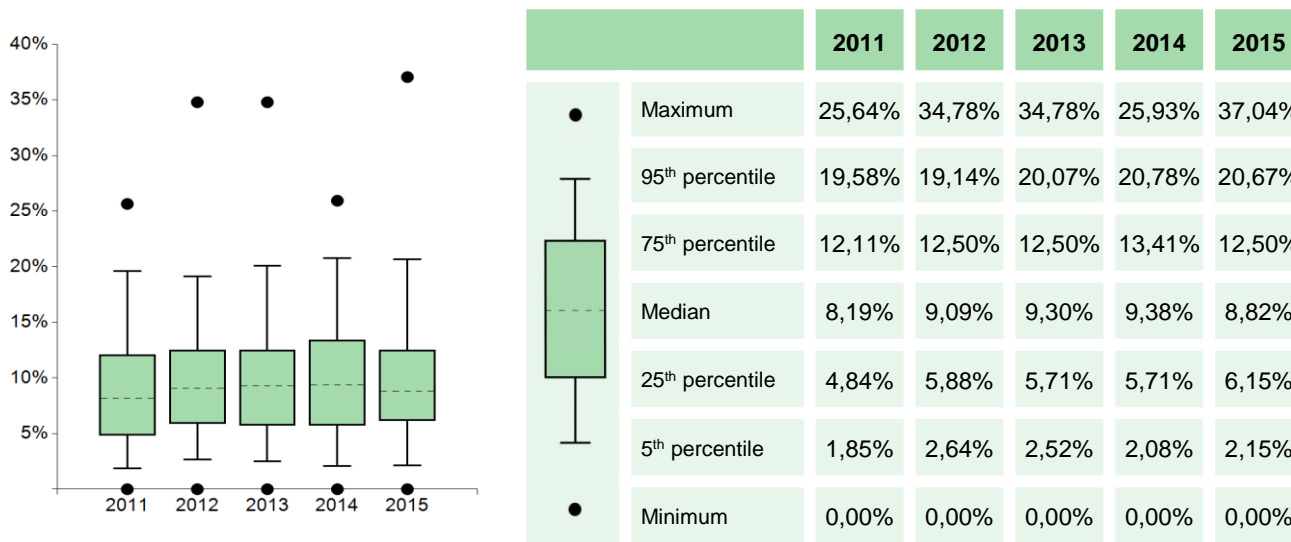
15. Revision surgery: colon



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Revision surgery due to perioperative complications within 30d of elective surgery	4*	0 - 18
Denominator	Elective colon surgery	46*	19 - 121
Rate	Target ≤ 10%	8,82%	0,00% - 37,04%

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

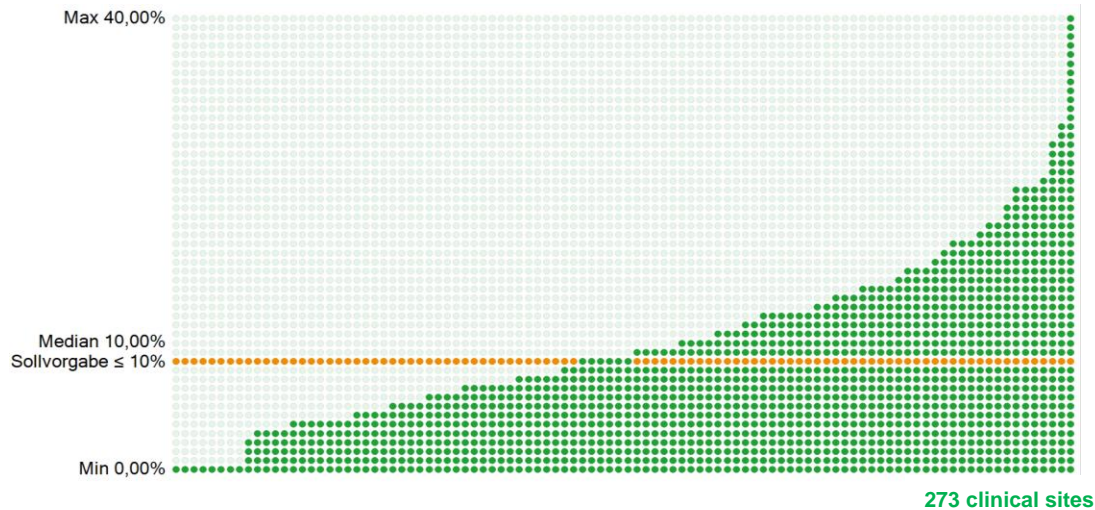


Clinical sites with evaluable data		Clinical sites meeting the target	
Anzahl	%	Anzahl	%
273	100,00%	168	61,54%

Comments:

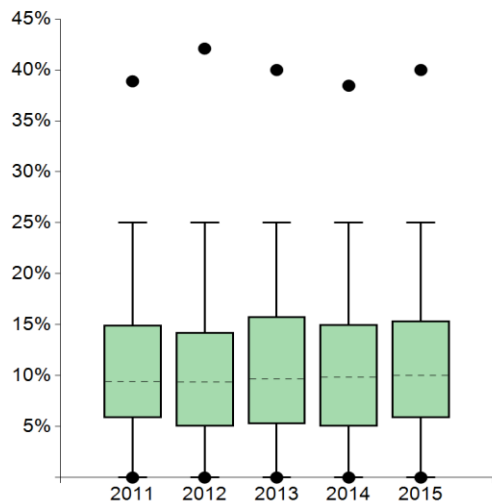
The median of the indicator is decreasing slightly for the first time. Compared with last year, more centres are meeting the target value (62% vs. 57%). The centres with the lowest rate last year have improved. Whereas the centres with the best rate last year (=0%) have worsened slightly. Causes for revision surgeries are, amongst others, impairment of wound healing and anastomotic insufficiencies. The following actions to lower the revision rate were agreed on with the auditors: change in thread material and technique, discussion in M&M conferences and close evaluation of the results. The auditors left many remarks and noted several deviations.

16. Revision surgery: rectum



	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Revision surgery after perioperative complications within 30 d of elective surgery	3*	0 - 10
Denominator	Elective rectum surgery	25*	9 - 97
Rate	Target ≤ 10%	10,00 %	0,00% - 40,00%

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



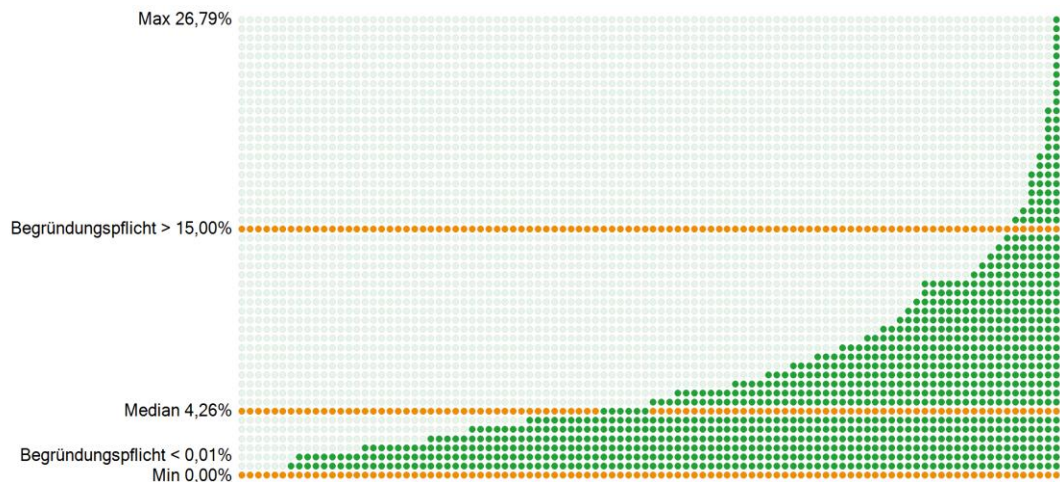
	2011	2012	2013	2014	2015
• aximum	38,89%	42,10%	40,00%	38,46%	40,00%
┌ 5 th percentile	25,00%	25,00%	25,00%	25,00%	25,00%
┌ 5 th percentile	14,95%	14,28%	15,79%	15,00%	15,38%
┌ median	9,45%	9,37%	9,68%	9,86%	10,00%
┌ 5 th percentile	5,88%	5,00%	5,26%	5,00%	5,88%
┌ 1 st percentile	0,00%	0,00%	0,00%	0,00%	0,00%
• ..inimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	137	50,18%

Comments:

The median of the indicator increases slightly over time. The four centres with the worst results of 2015 also had 2014 results that were slightly above the target value. However, the centres with the worst rate in 2014 have improved their revision rate. The auditors examined the indicator in detail and made many remarks, noting deviations. The most frequent cause for revision surgeries were anastomotic insufficiencies, ileostomy complications, impairment in wound healing, existing comorbidities and suture dehiscence. The following actions were agreed upon together with the auditors: screening for malnourishment, discussing in M&M conferences, implementation of a surgery course (suture and anastomotic techniques) and central close monitoring of the complication rates throughout the year..

17. Post-operative wound infection

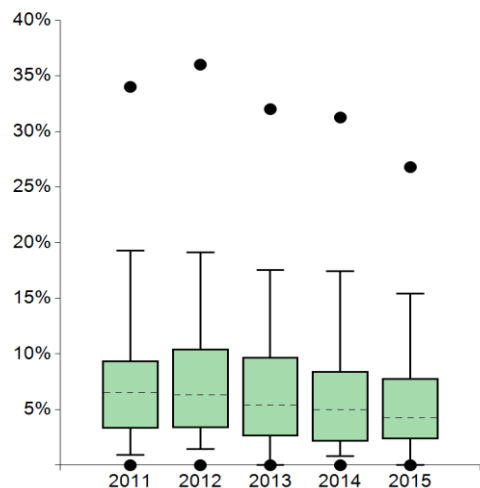


273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Post-operative wound infection within 30 d of elective surgery requiring surgical wound revision (rinsing, spreading, VAC bandage)	3*	0 - 29
Denominator	Operations of the CrCC	71*	33 - 193
Rate	Explanation mandatory** <0.01% and >15%	4,26%	0,00% - 26,79%

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

** If value is outside of the plausibility corridor, centres have to give an explanation



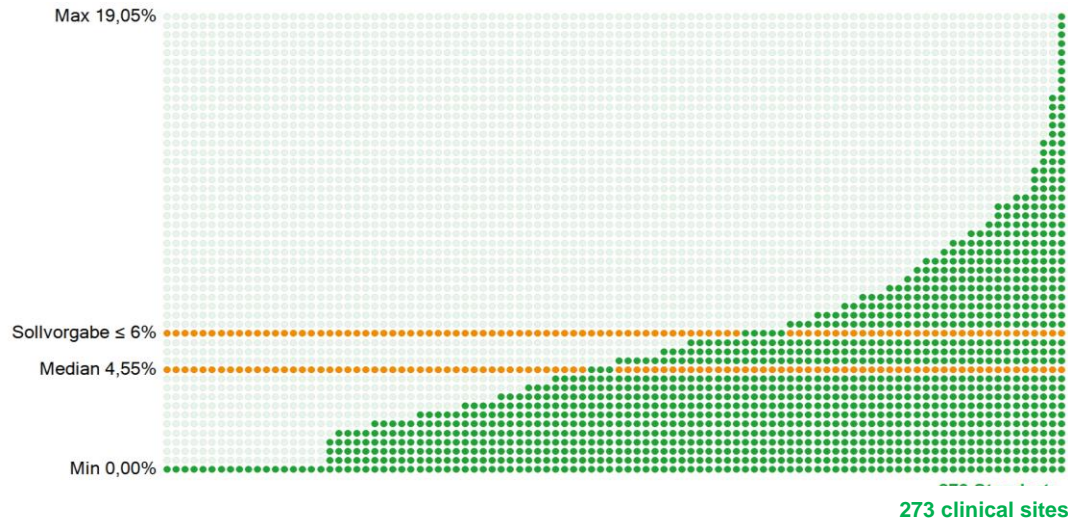
	2011	2012	2013	2014	2015
aximum	34,00%	36,00%	32,00%	31,25%	26,79%
95 th percentile	19,29%	19,13%	17,56%	17,44%	15,41%
5 th percentile	9,40%	10,43%	9,72%	8,45%	7,81%
edian	6,52%	6,34%	5,41%	5,00%	4,26%
5 th percentile	3,30%	3,33%	2,61%	2,13%	2,33%
1 st percentile	0,93%	1,45%	0,00%	0,82%	0,00%
Minimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	240	87,91%

Comments:

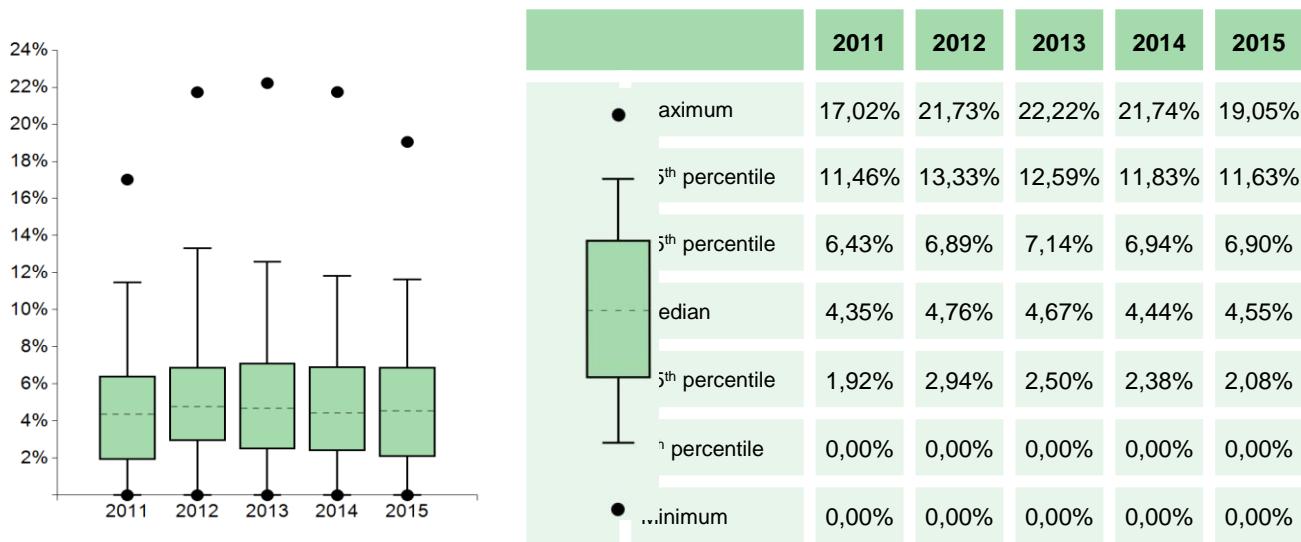
The indicator shows good development over time with decreasing maximum values and a decreasing median. The centres with the highest numbers also had high numbers in the previous year in the 95th percentile. The auditors have assessed the individual cases and excluded systematic errors. The centres with a high post-operative wound infection rate explained the numbers as follows: very differentiated recording, which sometimes goes beyond the definition of the numerator. The following agreed actions were implemented: training in hygiene, use of wound protection foil, application of VAC dressings for abdominoperineal extirpations and intestinal decontamination.

18. Anastomotic insufficiencies: colon (QI 9 of the Guidelines)



	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Colon anastomotic insufficiencies requiring re-intervention after elective surgery	2*	0 - 12
Denominator	Patients with CC in whom anastomosis was performed in an elective tumour resection	43*	17 - 115
Rate	Target ≤ 6%	4,55%	0,00% - 19,05%

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



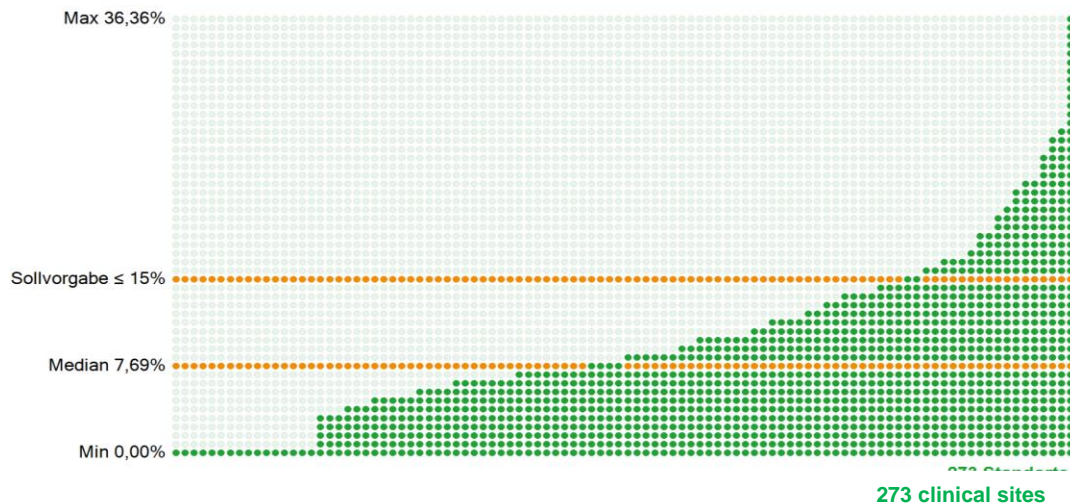
Sollvorgabe = target value
Begründungspflicht = mandatory statement for reason

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	186	68,13%

Comments:

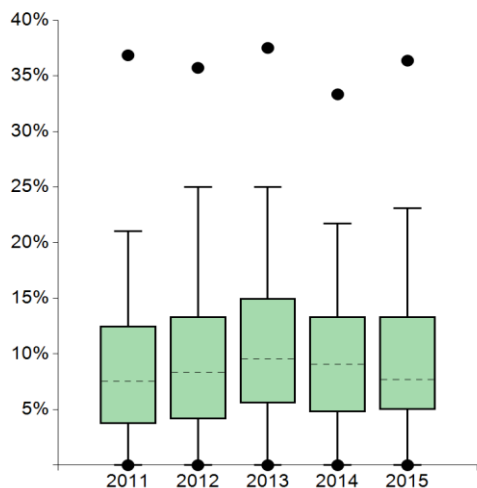
Compared with the following indicators, this median remains unchanged over time. The data evaluation showed that the centres with the highest rates in 2015 were below the target value, whereas the centres with the highest rates in 2014 have improved their results. According to the centres, the causes of insufficiencies are the following: chronic accompanying illnesses, left-sided resections, adiposities and highly complex cases. As actions to improve the rates, the centres in consultation with the auditors have discussed the cases in the M&M conferences, improved pre-operative management and initiated implementation of intestinal decontamination and training courses for the staff. The auditors have left several remarks and noted deviations.

19. Anastomotic insufficiencies: rectum (QI 8 of the Guideline)



	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients with grade B (requiring antibiotic administration but not interventional drainage or transanal lavage/drainage or grade C (re-)laparotomy) anastomotic insufficiency	1*	0 - 9
Denominator	Patients with RC in whom anastomosis was performed in an elective tumour resection	18*	6 - 90
Rate	Target ≤ 15%	7,69%	0,00% - 36,36%

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



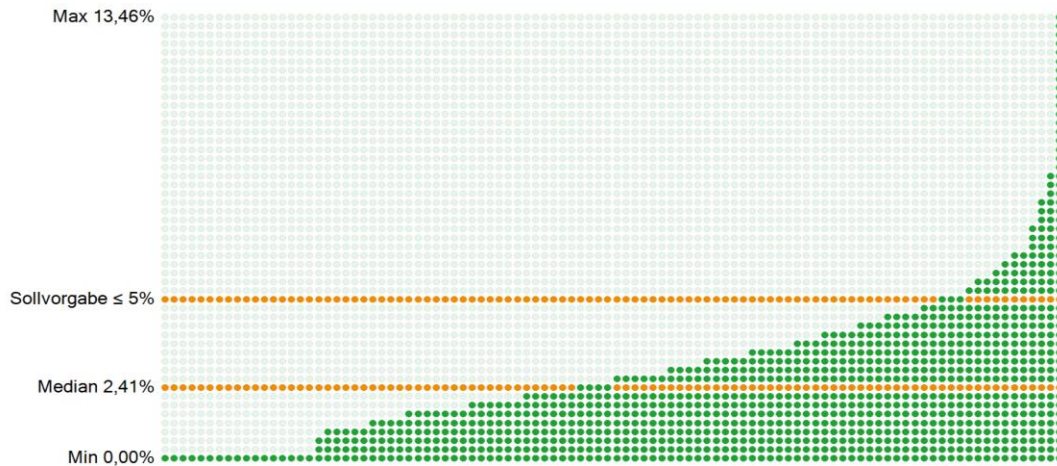
	2011	2012	2013	2014	2015
Maximum	36,84%	35,71%	37,50%	33,33%	36,36%
95 th percentile	21,05%	25,00%	25,00%	21,74%	23,08%
75 th percentile	12,50%	13,33%	15,00%	13,33%	13,33%
Median	7,55%	8,33%	9,52%	9,09%	7,69%
25 th percentile	3,70%	4,16%	5,56%	4,76%	5,00%
5 th percentile	0,00%	0,00%	0,00%	0,00%	0,00%
Minimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	226	82,78%

Comments:

The median of the anastomotic insufficiencies with a rectal carcinoma is constantly decreasing, and more and more centres are reaching the target value of 15% (83% vs. 73%). Reasons given by the centres for high insufficiency rates are: comorbidities, condition after neoadjuvant chemotherapy, and primary perforated tumours. Actions taken by the centres were more frequent use of a protective ileostoma attachment, (temporarily) limiting the number of surgeons and exchange of the Stapler models. For this indicator, an intensive discussion between the centres and the experts took place. Centres with the highest rates were invited to participate in the coaching course offered by DGAV/DKG and ADDZ.

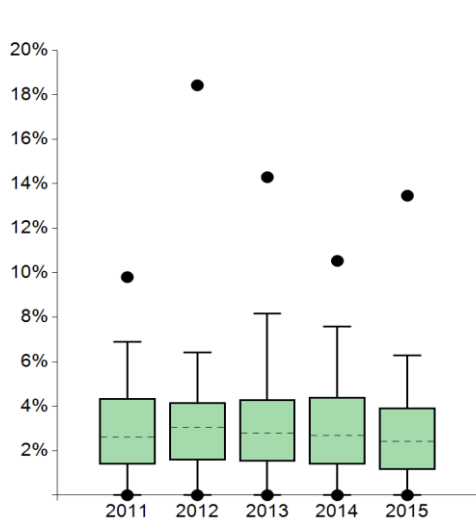
20. Post-operative mortality



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Post-operative patient deaths with 30 d of elective surgery	2*	0 - 8
Denominator	Electively operated patients	71*	33 - 193
Rate	Target ≤ 5%	2,41%	0,00% - 13,46%

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



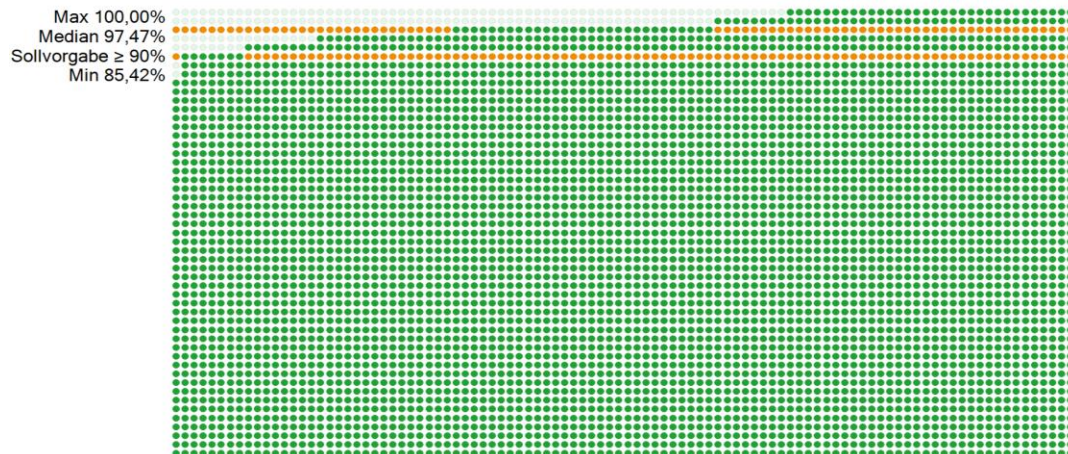
	2011	2012	2013	2014	2015
Maximum	9,80%	18,42%	14,29%	10,53%	13,46%
95 th percentile	6,90%	6,41%	8,15%	7,58%	6,27%
75 th percentile	4,35%	4,16%	4,30%	4,41%	3,92%
Median	2,60%	3,06%	2,78%	2,68%	2,41%
25 th percentile	1,39%	1,58%	1,52%	1,39%	1,15%
5 th percentile	0,00%	0,00%	0,00%	0,00%	0,00%
Minimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	241	88,28%

Comments:

The median of the indicator improved. Compared with the previous year, fewer electively operated patients have died (504 vs. 575 in centres that were certified in both years). Moreover, the number of centres that exceeded the target value declined (32 vs. 47), despite an increased number of certified centres. Reasons for post-operative death include sepsis with multi-organ failure, which was often associated with anastomotic insufficiencies, as well as intraoperative haemorrhage and pulmonary embolism. The auditors have discussed the individual cases, and the centre with the highest rates, whose certificate was only prolonged for 1 year, has already agreed to participate in the coaching programme.

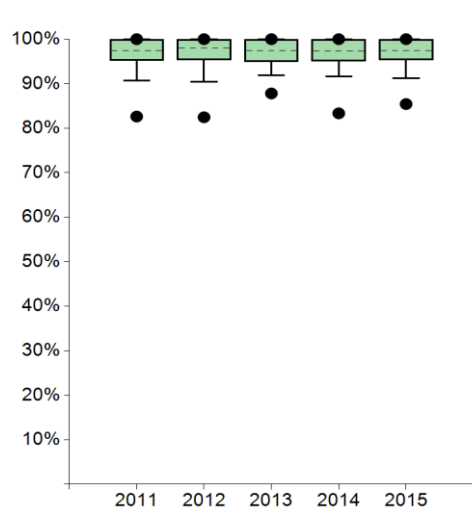
21. Local R0 resections: colon



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Local R0 resections - colon - after completion of surgical treatment	44*	18 - 119
Denominator	Colon operations according to primary case definition (operative)	46*	19 - 121
Rate	Target ≥ 90%	97,47 %	85,42% - 100%

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



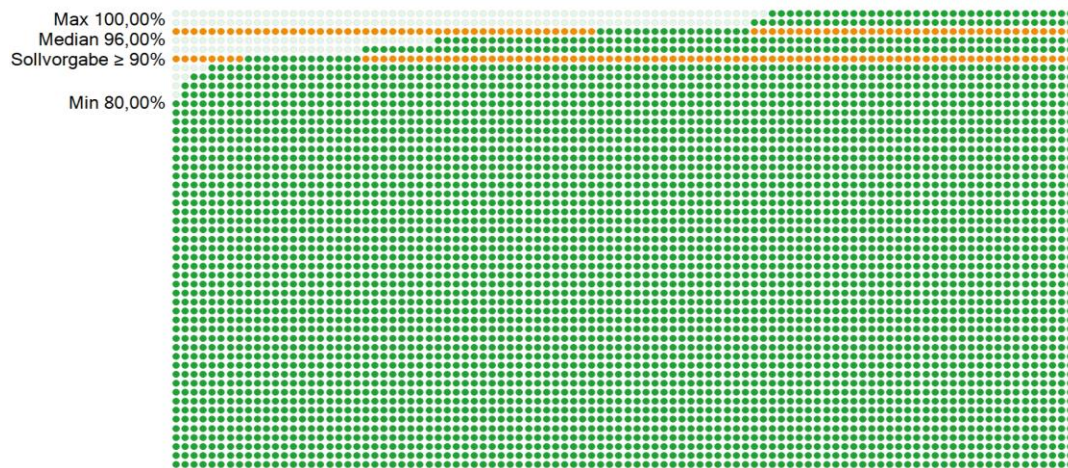
	2011	2012	2013	2014	2015
● Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	97,43%	97,91%	97,37%	97,30%	97,47%
25 th percentile	95,18%	95,34%	94,87%	95,00%	95,35%
5 th percentile	90,62%	90,47%	91,83%	91,67%	91,22%
● Minimum	82,61%	82,45%	87,80%	83,33%	85,42%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	269	98,53%

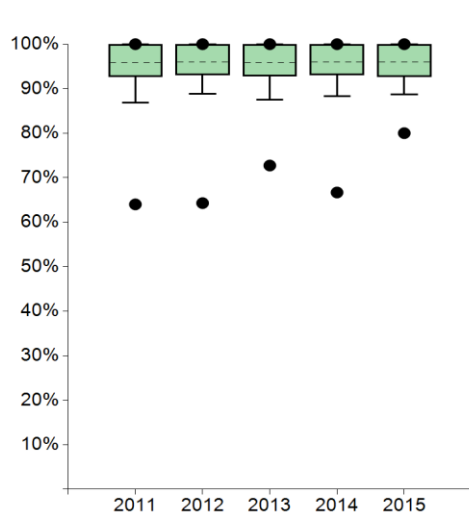
Comments:

Very good implementation of the indicator only 4 centres did not meet the target value. The reason given were very advanced tumours with peritoneal carcinomatosis, tumour perforation and hemangiosis carcinomatosis.

22. Local R0 resections: rectum



273 clinical sites



	2011	2012	2013	2014	2015
● Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	100%	100%	100%	100%	100%
Median	95,83%	95,91%	95,83%	96,00%	96,00%
25 th percentile	92,63%	93,10%	92,86%	93,02%	92,68%
5 th percentile	86,86%	88,88%	87,50%	88,24%	88,72%
● Minimum	64,00%	64,28%	72,73%	66,67%	80,00%

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Local R0 resections – rectum - after completion of surgical treatment	24*	8 - 95
Denominator	Rectum operations according to primary case definition (operative)	25*	9 - 97
Rate	Target ≥ 90%	96,00 %	80,00% - 100%

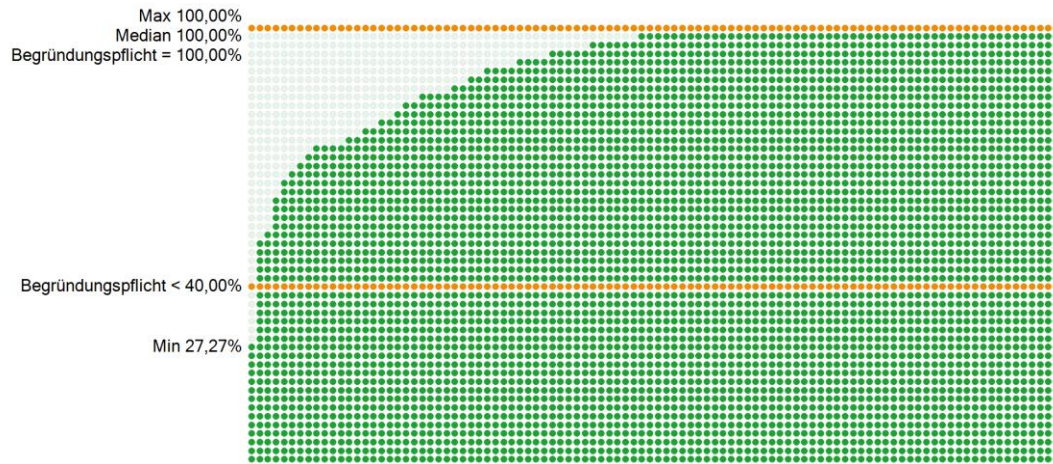
*The medians for numerator and population do not refer to an existing centre but indicate the median for all numerators of the cohort and the median of all populations of the cohort.

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	251	91,94%

Comments:

More than 92% of the centres met the target. The main reasons given for not meeting the target were: infiltration of the neighbouring organs, surgery was performed with a palliative intention and therefore a limited resection extension and proof of tumour cells in the final diagnoses report with a tumour free rapid histological diagnosis. The auditors have looked into the individual cases and were able to exclude systematic errors.

23. Marking of stoma position (QI 10 of the Guidelines)

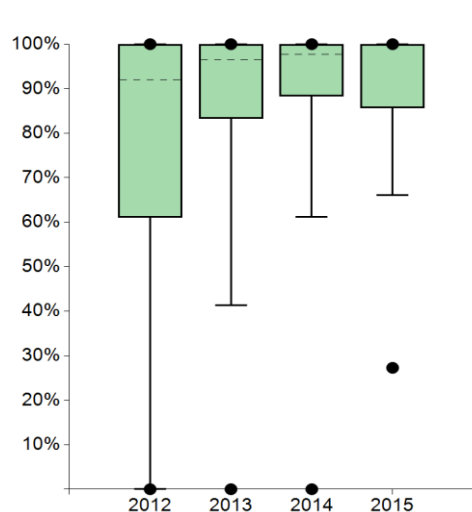


273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients with preoperative marking of stoma position	17*	3 - 94
Denominator	Patients with RC who had surgery to install a stoma	18*	4 - 96
Rate	Explanation mandatory** <40% and >100%	100%	27,27% - 100%

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

** If value is outside of the plausibility corridor, centres have to give an explanation



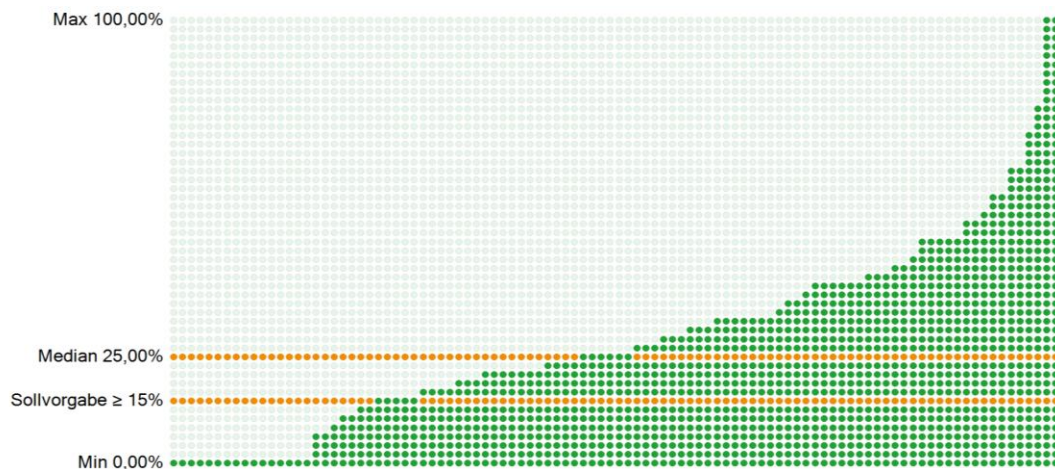
	2011	2012	2013	2014	2015
● Maximum	----	100%	100%	100%	100%
95 th percentile	----	100%	100%	100%	100%
75 th percentile	----	100%	100%	100%	100%
Median	----	92,00%	96,55%	97,73%	100%
25 th percentile	----	60,99%	83,33%	88,24%	85,71%
5 th percentile	----	0,00%	41,34%	61,11%	66,02%
● Minimum	----	0,00%	0,00%	0,00%	27,27%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
272	99,63%	132	48,53%

Comments:

Very good development of the indicator over the course of time. Especially in the lower percentiles a clear improvement of the results is visible. The procedure is becoming increasingly established in the centres. Centres with a low rate last year have significantly improved their rate.

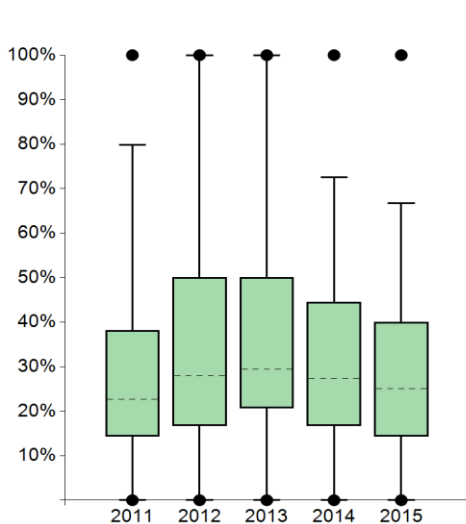
24. Primary resection of liver metastases (UICC stage IV CRC)



272 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Primary-case patients with UICC stage IV CRC who underwent resection of liver metastases	2*	0 - 12
Denominator	Primary-case patients with UICC stage IV CRC who only have metastases	8*	1 - 37
Rate	Target ≥ 15%	25,00 %	0,00% - 100%

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



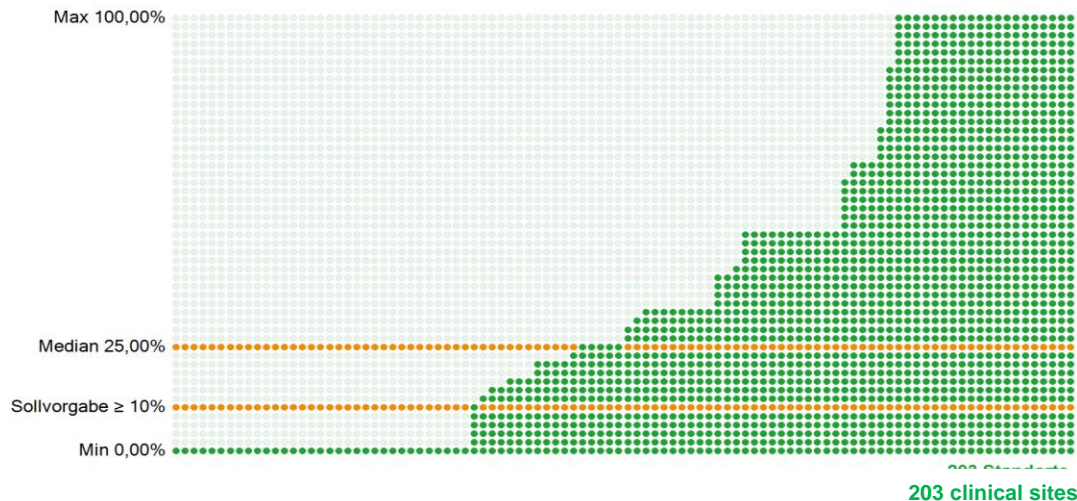
	2011	2012	2013	2014	2015
● Maximum	100%	100%	100%	100%	100%
95 th percentile	79,86%	100%	100%	72,50%	66,67%
75 th percentile	38,20%	50,00%	50,00%	44,44%	40,00%
Median	22,73%	27,92%	29,41%	27,27%	25,00%
25 th percentile	14,29%	16,66%	20,72%	16,67%	14,29%
5 th percentile	0,00%	0,00%	0,00%	0,00%	0,00%
● Minimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
272	99,63%	198	72,79%

Comments:

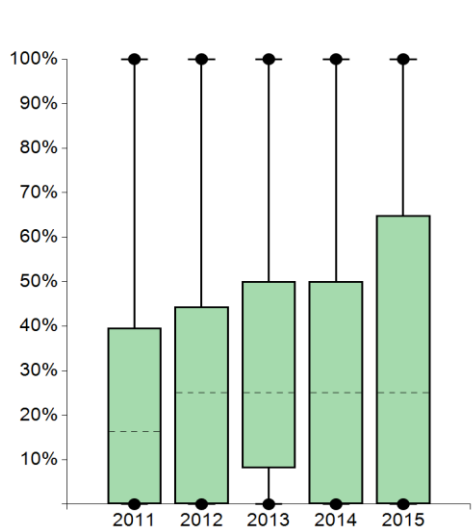
In 2015 671 patients received a primary resection of liver metastases this means fewer patients than in the previous year (=712). The resections were done in 228 colorectal cancer centres which are also less centres than in 2014 (= 236). Hence, 44 centres did not perform primary resection of liver metastases. Reasons for not achieving the indicator: diffuse liver metastasis, stenosing primary tumours which need to be surgically removed, cooperation agreements with other centres who perform the surgery (however the last explanation is not applicable as the patient could be counted). The auditors discussed and evaluated the indicator critically.

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



	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Primary-case patients with UICC stage IV CRC who underwent secondary resection of liver metastases after chemotherapy	1*	0 - 12
Denominator	Primary-case patients with UICC stage IV CRC with primarily non-resectable only liver metastases who received chemotherapy	3*	1 - 25
Rate	Target ≥ 10%	25,00 %	0,00% - 100%

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



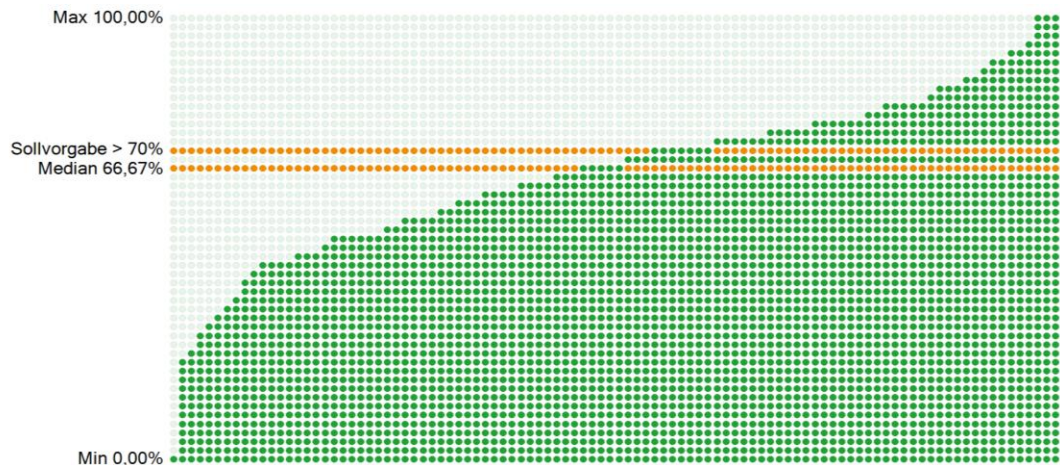
	2011	2012	2013	2014	2015
● Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	39,62%	44,36%	50,00%	50,00%	64,92%
Median	16,34%	25,00%	25,00%	25,00%	25,00%
25 th percentile	0,00%	0,00%	8,11%	0,00%	0,00%
5 th percentile	0,00%	0,00%	0,00%	0,00%	0,00%
● Minimum	0,00%	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
203	74,36%	136	67,00%

Comments:

In 2015 282 patients received a secondary resection of liver metastases (2014: 293). The resections were done in 136 centres (2014: 147). 70 colorectal cancer centres had no patients who had exclusively liver metastases and received chemotherapy. 67 colorectal cancer centres had no patients with a secondary resection. Reason for not following the indicator included progress during chemotherapy, death of patient, refusal due to comorbidities of the patient and difficulties in documentation.

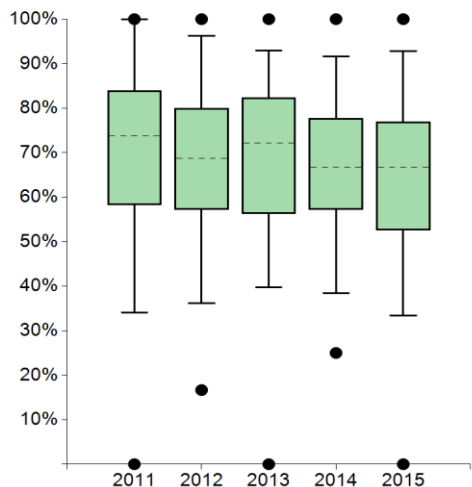
26. Adjuvant chemotherapies: colon (UICC stage III) (QI 6 of the Guidelines)



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients with a UICC stage III colon carcinoma who received adjuvant chemotherapy	9*	0 - 23
Denominator	Patients with a UICC stage III colon carcinoma who had a R0 resection of the primary tumour	13*	4 - 34
Rate	Target $\geq 70\%$	66,67 %	0,00% - 100%

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



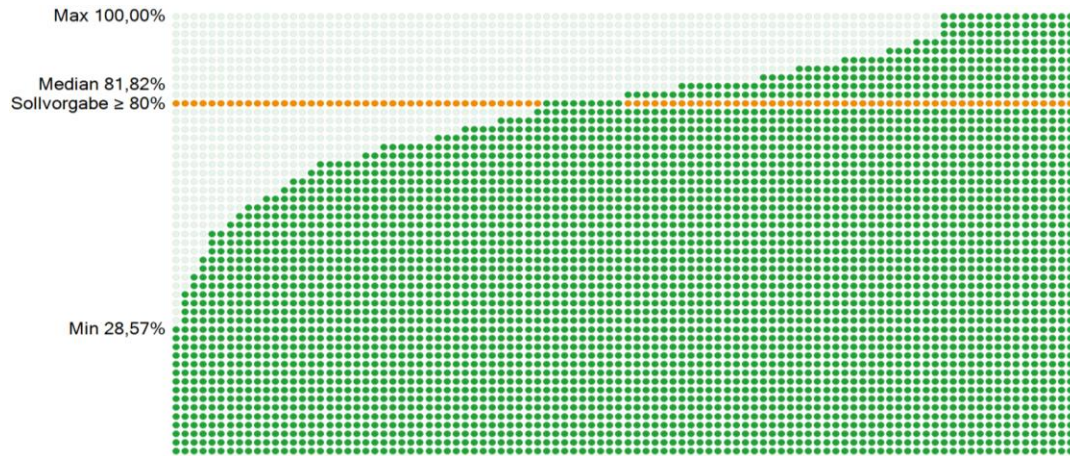
	2011	2012	2013	2014	2015
● Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	96,25%	92,95%	91,67%	92,86%
75 th percentile	83,98%	80,00%	82,35%	77,78%	76,92%
Median	73,68%	68,75%	72,22%	66,67%	66,67%
25 th percentile	58,33%	57,14%	56,25%	57,14%	52,63%
5 th percentile	34,04%	36,11%	39,69%	38,46%	33,33%
● Minimum	0,00%	16,66%	0,00%	25,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	126	46,15%

Comments:

The total number of adjuvant chemotherapies for patients with an R0 resection colon carcinoma UICC stage III has decreased (2,365 vs. 2,390 patients) with a concurrent small increase in the population (3,648 vs. 3,607). The centres give the following reasons for not administering chemotherapy: advanced patient age, reduced overall health and existing comorbidities. The centres with the lowest rates gave as an explanation missing information from the practice-based physician as the main reason. The auditors discussed the indicator in detail during the audits and made several remarks.

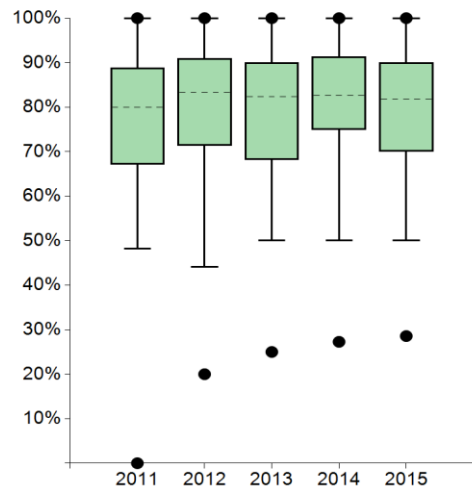
27. Neoadjuvant radiotherapies or radiochemotherapies (clinical UICC stages II-III) (QI 7)



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients who received neoadjuvant radiotherapy or radiochemotherapy.	9*	1 - 38
Denominator	Patients with RC of the middle and lower third (= up to 12 cm from anus) and the TNM categories cT3, 4/cM0 and/or cN1, 2/cM0, who received surgery (= clinical UICC stages II and III)	11*	2 - 60
Rate	Target ≥ 80%	81,82 %	28,57% - 100%

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



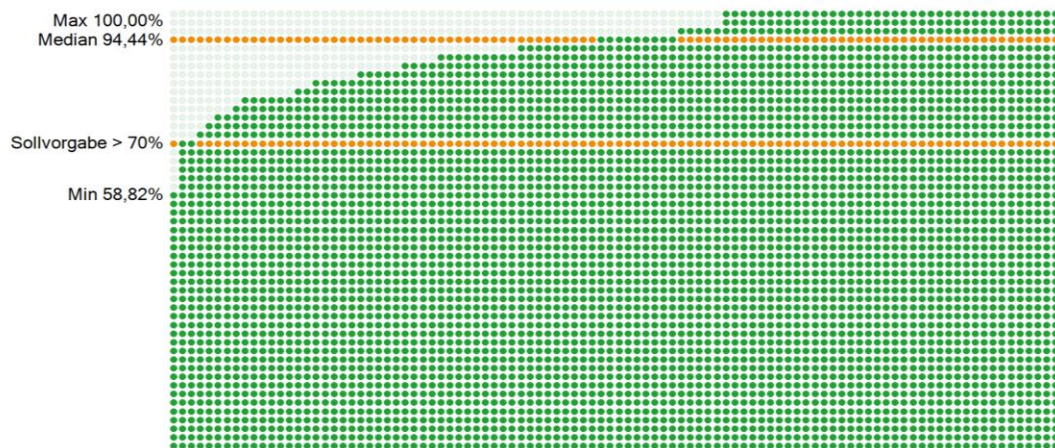
	2011	2012	2013	2014	2015
● Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	88,89%	90,90%	90,00%	91,30%	90,00%
Median	80,00%	83,33%	82,35%	82,61%	81,82%
25 th percentile	67,11%	71,42%	68,18%	75,00%	70,00%
5 th percentile	48,17%	44,16%	50,00%	50,00%	50,00%
● Minimum	0,00%	20,00%	25,00%	27,27%	28,57%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	160	58,61%

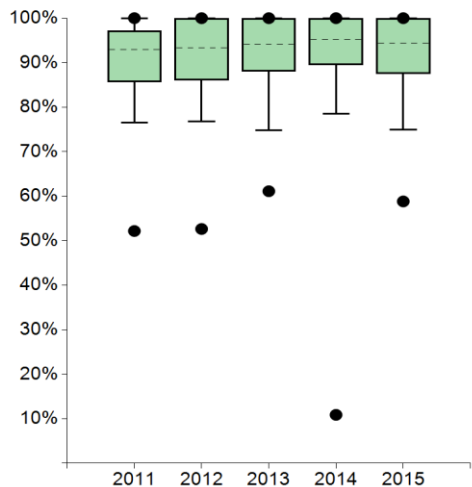
Comments:

The implementation of the indicator is almost unchanged over the course of time. The reasons given by the centres for low rates are: stenosing tumours and therefore need for surgery, refusal by patients, age, multi-morbidity, secondary cancer, and participation in OCUM study. The auditors discussed the indicator and given reasons in detail with the centres.

28. Quality of the TME rectum specimen (information from pathology) (QI 3 of the Guidelines)



273 clinical sites



Sollvorgabe = target value
Begründungspflicht = mandatory statement for reason

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients with good-to-moderate quality (grade 1: mesorectal fascia or grade 2: intramesorectal excisions) TME	15*	2 - 83
Denominator	Patients with radically operated RC	17*	3 - 87
Rate	Target $\geq 70\%$	94,44 %	58,82% - 100%

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

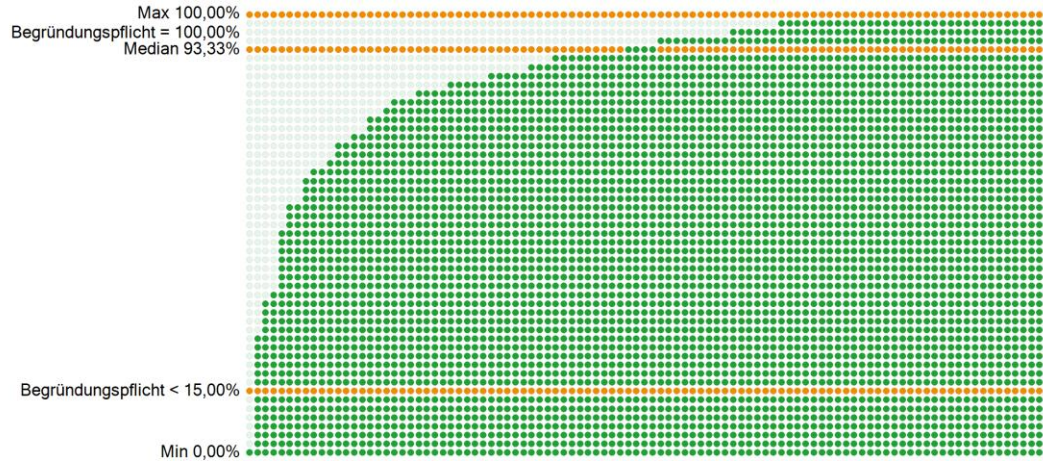
	2011	2012	2013	2014	2015
Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	97,16%	100%	100%	100%	100%
Median	92,98%	93,33%	94,12%	95,24%	94,44%
25 th percentile	85,71%	86,04%	88,00%	89,47%	87,50%
5 th percentile	76,56%	76,74%	74,84%	78,57%	75,00%
Minimum	52,17%	52,63%	61,11%	10,87%	58,82%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	270	98,90%

Comments:

The quality of the TME samples was very good. Only three centres did not meet the target value of 70%. One centre had the smallest population (3). Another centre changed cooperative partners for pathology and could already demonstrate an improved rate this year. The third centre attributed the low rate to several locally advanced tumours that had already infiltrated the bladder.

29. Information on resection edge (QI 4 of the Guidelines)

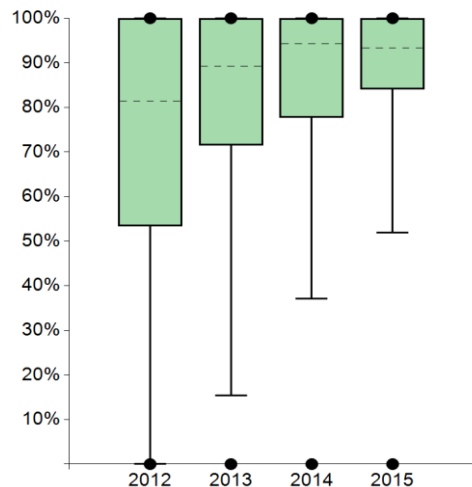


273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
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.	21*	0 - 87
Denominator	Patients with RC in whom the primary tumor was resected in the form of a TME or PME.	23*	8 - 97
Rate	Explanation mandatory** <15% and =100%	93,33 %	0,00% - 100%

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

** If value is outside of the plausibility corridor, centres have to give an explanation



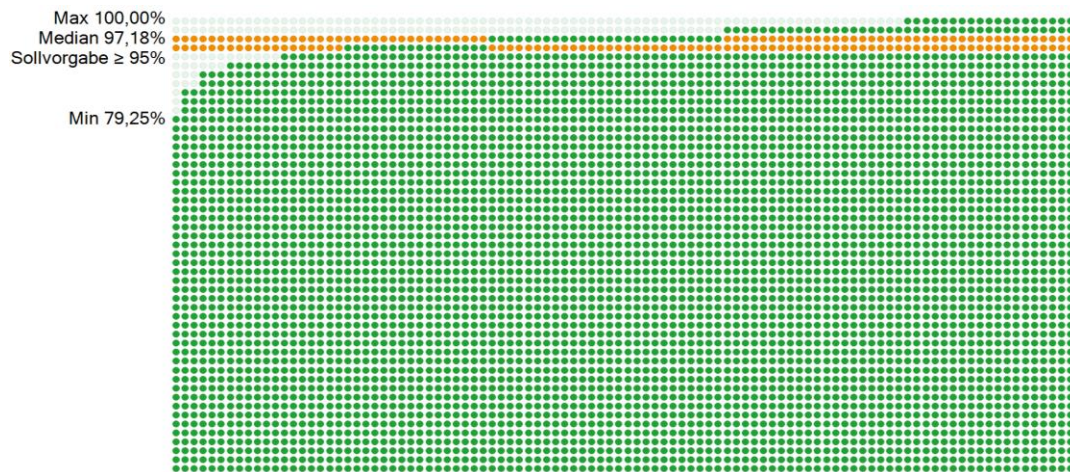
	2011	2012	2013	2014	2015
Maximum	----	100%	100%	100%	100%
95 th percentile	----	100%	100%	100%	100%
75 th percentile	----	100%	100%	100%	100%
Median	----	81,45%	89,29%	94,29%	93,33%
25 th percentile	----	53,39%	71,43%	77,78%	84,00%
5 th percentile	----	0,00%	15,39%	37,14%	51,95%
Minimum	----	0,00%	0,00%	0,00%	0,00%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	179	65,57%

Comments:

The indicator was well implemented in the centres. The boxplots show how the results in the centres have aligned. The centres with the lowest values last year have improved their results. Reasons for low rates were, for example, the process was not yet firmly established as the centre was certified for the first time, or documentation was only available from one of the two resection levels (circumferential mesorectal resection level or aboral resection edge).

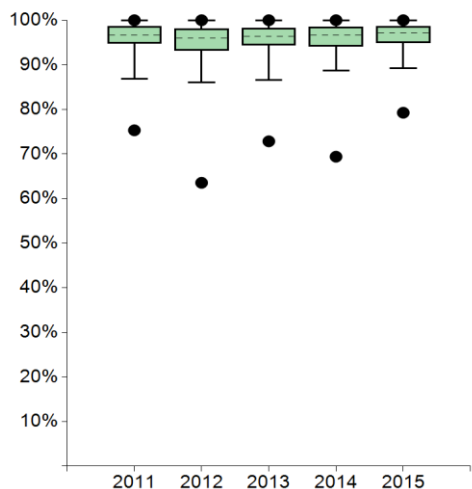
30. Lymph node examination (QI 2 of the Guidelines)



273 clinical sites

	Indicator definition	All clinical sites 2015	
		Median	Range
Numerator	Patients with pathological examination of lymph nodes ≥ 12	69*	30 - 186
Denominator	Patients with CRC who underwent a lymphadenectomy	71*	32 - 193
Rate	Target ≥ 95%	97,18 %	79,25% - 100%

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



	2011	2012	2013	2014	2015
● Maximum	100%	100%	100%	100%	100%
95 th percentile	100%	100%	100%	100%	100%
75 th percentile	98,65%	98,03%	98,25%	98,48%	98,61%
Median	96,61%	96,00%	96,34%	96,61%	97,18%
25 th percentile	94,75%	93,15%	94,44%	94,12%	94,92%
5 th percentile	86,81%	86,10%	86,53%	88,64%	89,18%
● Minimum	75,31%	63,54%	72,84%	69,39%	79,25%

Clinical sites with evaluable data		Clinical sites meeting the target	
Number	%	Number	%
273	100,00%	202	73,99%

Comments:

Overall very good implementation of the quality indicator. More centres than last year have met the target value of 95%. The centre with the lowest rate also had the lowest rate in the previous year. After a change in the pathology department, the centre could prove more lymph node resections with >12 lymph nodes. Other reasons for not meeting the target value included a neoadjuvant therapy concept and limited surgeries where a palliative concept was in place. The auditors discussed the indicator in detail with the centres.

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