



1. Stages & Actors

1.1. Stages

| Stage | Actors involved |
|---------------------------------|---|
| A. CCCN entry | |
| B. Diagnosis | Anatomo-pathologist, Biologist, Case manager, Dietitian, Emergency caregiver, Emergency physician, Foundations, Gastroenterologist, General practitioner, Medical oncologist, Molecular geneticist/ oncology genetic counselling, Nurse specialized in oncology, Onco-geriatrician, Pathologist, Patient support groups, Psychologist, Radiologist/ Nuclear Medicine, Social worker, Stoma therapist, Surgeon |
| C. Treatment planning | Aesthetician, Anatomo-pathologist, Anesthetist, Case manager, Dietitian, Gastroenterologist, Medical oncologist, Nurse specialized in oncology, Onco-geriatrician, Pain specialist, Psychologist, Social worker, Stoma therapist, Surgeon |
| D. Treatment end-of-life care | Anesthetist, Case manager, Dietitian, Foundations, Gastroenterologist, General practitioner, Hospital pharmacist, Medical oncologist, Nurse specialized in oncology, Onco-geriatrician, Oncology care team, Organ specialist doctor, Pain specialist, Palliative care nurse, Palliative care team, Patient support groups, Physiotherapist, Psychologist, Radiotherapist, Social worker, Socio-aesthetician, Specialist in palliative care, Specialist in post-oncology rehabilitation, Spiritual guidance, Stoma therapist, Surgeon, Volunteers, Work medicine |
| E. Supportive care | Dietitian, Pain specialist, Physiotherapist, Psychologist, Social worker, Socio-aesthetician, Spiritual guidance |
| F. Rehabilitation | Case manager, Dietitian, Foundations, Gastroenterologist, General practitioner, Medical oncologist, Nurse specialized in oncology, Onco-geriatrician, Patient support groups, Psychologist, Radiologist/ Nuclear Medicine, Social worker, Socio-aesthetician, Specialist in post-oncology rehabilitation, Stoma therapist, Surgeon, Work medicine |
| G. Follow-up | Anesthetist, Case manager, Dietitian, Foundations, Gastroenterologist, General practitioner, Medical oncologist, Nurse specialized in oncology, Onco-geriatrician, Organ specialist doctor, Patient support groups, Psychologist, Radiologist/ Nuclear Medicine, Social worker, Socio-aesthetician, Specialist in palliative care, Specialist in post-oncology rehabilitation, Stoma therapist, Surgeon, Work medicine |
| H. End of CCCN care | |

1.2. Actors

| Actor | Stages involved |
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| Aesthetician | C. Treatment planning |
| Anatomo-pathologist | B. Diagnosis, C. Treatment planning |
| Anesthetist | C. Treatment planning, D. Treatment end-of-life care, G. Follow-up |
| Biologist | B. Diagnosis |
| Case manager | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Dietitian | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, E. Supportive care, F. Rehabilitation, G. Follow-up |
| Emergency caregiver | B. Diagnosis |
| Emergency physician | B. Diagnosis |
| Foundations | B. Diagnosis, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Gastroenterologist | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| General practitioner | B. Diagnosis, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Hospital pharmacist | D. Treatment end-of-life care |
| Medical oncologist | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Molecular geneticist/ oncology genetic counselling | B. Diagnosis |
| Nurse specialized in oncology | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Onco-geriatrician | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Oncology care team | D. Treatment end-of-life care |
| Organ specialist doctor | D. Treatment end-of-life care, G. Follow-up |
| Pain specialist | C. Treatment planning, D. Treatment end-of-life care, E. Supportive care |
| Palliative care nurse | D. Treatment end-of-life care |
| Palliative care team | D. Treatment end-of-life care |
| Pathologist | B. Diagnosis |
| Patient support groups | B. Diagnosis, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Physiotherapist | D. Treatment end-of-life care, E. Supportive care |
| Psychologist | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, E. Supportive care, F. Rehabilitation, G. Follow-up |
| Radiologist/ Nuclear Medicine | B. Diagnosis, F. Rehabilitation, G. Follow-up |
| Radiotherapist | D. Treatment end-of-life care |

| Actor | Stages involved |
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| Social worker | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, E. Supportive care, F. Rehabilitation, G. Follow-up |
| Socio-aesthetician | D. Treatment end-of-life care, E. Supportive care, F. Rehabilitation, G. Follow-up |
| Specialist in palliative care | D. Treatment end-of-life care, G. Follow-up |
| Specialist in post-oncology rehabilitation | D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Spiritual guidance | D. Treatment end-of-life care, E. Supportive care |
| Stoma therapist | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Surgeon | B. Diagnosis, C. Treatment planning, D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |
| Volunteers | D. Treatment end-of-life care |
| Work medicine | D. Treatment end-of-life care, F. Rehabilitation, G. Follow-up |

2. Quality Indicators

2.1 Pre-therapeutic tumour board (#2a)

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|---------------|---|
| Name | Pre-therapeutic tumour board (#2a) |
| Documentation | iPAAC Indicator No. 6 |
| Numerator | Patients of the denominator presented at an interdisciplinary tumour board before therapy |
| Denominator | "Elective" patients with rectal carcinoma and "elective" all patients with stage IV colon carcinoma |

2.2 Additional iPAAC QIs No. 2, 4

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|---------------|---|
| Name | Additional iPAAC QIs No. 2, 4 |
| Documentation | iPAAC QI No. 2: Preoperative abdominal and pelvic CT - colorectal cancer iPAAC QI No. 4: CEA blood test - colon cancer |

2.3 Adjuvant chemotherapies: colon (UICC stage III) (#24)

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|---------------|---|
| Name | Adjuvant chemotherapies: colon (UICC stage III) (#24) |
| Documentation | iPAAC Indicator No. 25 |
| Numerator | Patients of the denominator who received adjuvant chemotherapy |
| Denominator | Patients <= 75 years with a UICC stage III colon carcinoma who had a R0 resection of the primary tumour |

2.4 #9, #16-21, #26-28

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|---------------|---|
| Name | #9, #16-21, #26-28 |
| Documentation | #9: MMR assessment (iPAAC QI No. 5) #16: Revision surgery: colon (iPAAC QI No. 9) #17: Revision Surgery: rectum (iPAAC QI No. 10) #18: Anastomotic insufficiency: colon (iPAAC QI No. 14) #19: Anastomotic insufficiency: rectum (iPAAC QI No. 15) #20: Post-operative mortality (iPAAC QI No. 16) #21: Local R0 resections: rectum (iPAAC QI No. 12) #26: Quality of the TME rectum specimen (information from pathology) (iPAAC QI No. 19) #27: Diagnostic report after surgical resection of colorectal carcinoma (iPAAC QI No. 21) #28: Lymph node examination (iPAAC QI No. 18) |

2.5 Additional iPAAC QIs No. 22, 23

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| Name | Additional iPAAC QIs No. 22, 23 |
| Documentation | iPAAC QI No. 22: Neoadjuvant radiotherapy/radiochemotherapy stage II–III - rectal cancer iPAAC QI No. 23: Neoadjuvant radio-chemotherapy because of a threatened/involved CRM on preoperative MRI - rectal cancer |

2.6 Surgical primary cases: colon (#14), rectum (#15)

Name Surgical primary cases: colon (#14), rectum (#15)

2.7 Additional iPAAC QIs No. 11, 13, 20

Name Additional iPAAC QIs No. 11, 13, 20

Documentation iPAAC QI No. 11: Local R0 resections - colon cancer
iPAAC QI No. 13: Post-operative wound infection - colorectal cancer
iPAAC QI No. 20: Distal tumor-free margin - colorectal cancer

2.8 Start of adjuvant chemotherapy (#29)

Name Start of adjuvant chemotherapy (#29)

Documentation iPAAC Indicator No. 24

Numerator As often as possible start of adjuvant chemotherapy within the stipulated period

Denominator Patients with UICC stage III colon carcinoma who had received adjuvant chemotherapy
(= numerator of indicator 24)

2.9 Combination chemotherapy for metastasised CRC with systemic first-line treatment (#25)

Name Combination chemotherapy for metastasised CRC with systemic first-line treatment (#25)

Numerator Patients of the denominator with combination chemotherapy

Denominator Patients with metastasised colorectal carcinoma, ECOG 0-1 and systemic first-line chemotherapy

2.10 RAS and BRAF and MSI status determination at start of first-line treatment for metastasised CRC (#10)

Name RAS and BRAF and MSI status determination at start of first-line treatment for metastasised CRC (#10)

Numerator Patients of the denominator with determination RAS (= KRAS and NRAS mutations) and BRAF mutation at the start of first-line treatment

Denominator Patients with metastasised colorectal carcinoma and first-line treatment

2.11 Additional iPAAC QI No. 17

Name Additional iPAAC QI No. 17

Documentation iPAAC QI No. 17: Primary resection of liver metastases - colorectal cancer

2.12 Marking of stoma position (#22)

Name Marking of stoma position (#22)

2.13 MMR assessment (#9)

Name MMR assessment (#9)

Documentation iPAAC Indicator No. 5

Numerator Patients of the denominator with immunohisto-chemical assessment of mismatch repair (MMR) proteins.

Denominator Patients with initial colorectal carcinoma diagnosis < 50 years old

2.14 Complete elective colonoscopies (#12)

Name Complete elective colonoscopies (#12)

Documentation iPAAC Indicator No. 3

Numerator Elective colonoscopies of the denominator which were completed

Denominator Elective colonoscopies for each colonoscopy unit of the CrCC (not only CrCC patients) (are counted: intention: complete colonoscopy)

2.15 Complication rate therapeutic colonoscopies (#11)

Name Complication rate therapeutic colonoscopies (#11)

Numerator Colonoscopies of the denominator with complications (bleeding requiring re-intervention (recolonoscopy, operation) or a transfusion and/or perforation)

Denominator Therapeutic colonoscopies with loop polypectomy per colonoscopy unit (not only CrCC patients)

2.16 Information on distance to mesorectal fascia in the diagnostic report (#13)

Name Information on distance to mesorectal fascia in the diagnostic report (#13)

Documentation iPAAC Indicator No. 1

Numerator Patients of the denominator with information on distance to mesorectal fascia in the diagnostic report

Denominator Patients with rectal carcinoma of the middle and lower third and MRI or thin slice CT of the pelvis

2.17 Recorded family history (#7)

Name Recorded family history (#7)

Numerator Primary-case patients in the denominator with a completed patient questionnaire

Denominator Total primary cases

2.18 Genetic counselling (#8)

Name Genetic counselling (#8)

Numerator Primary-case patients of the denominator advised to seek genetic counselling

Denominator Primary cases with a positive patient questionnaire

2.19 Genetic counselling (#8)

| | |
|-------------|--|
| Name | Genetic counselling (#8) |
| Numerator | Primary-case patients of the denominator advised to seek genetic counselling |
| Denominator | Primary cases with a positive patient questionnaire |

2.20 Pre-therapeutic tumour board: recurrences/meta-chronous metastases (#2b)

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|---------------|--|
| Name | Pre-therapeutic tumour board: recurrences/meta-chronous metastases (#2b) |
| Documentation | iPAAC Indicator No. 7 |
| Numerator | Patients of the denominator presented at the pre-therapeutic tumour board |
| Denominator | Patients with new recurrence and/or distant metastases (= Indicator #1) |

2.21 Recorded family history (#7)

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|-------------|---|
| Name | Recorded family history (#7) |
| Numerator | Primary-case patients in the denominator with a completed patient questionnaire |
| Denominator | Total primary cases |

2.22 Share of study patients (#6)

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|-------------|---|
| Name | Share of study patients (#6) |
| Numerator | Patients of the CrCC included in a study or colorectal prevention study |
| Denominator | Total primary cases |

**2.23 Psycho-oncological care
(Consultation >= 25 min.) (#4)**

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|-------------|---|
| Name | Psycho-oncological care (Consultation >= 25 min.) (#4) |
| Numerator | Patients of the denominator who received psycho-oncological care in an inpatient or outpatient setting (duration of consultation >= 25 min) |
| Denominator | Total primary cases + patients with new recurrence and/or metastases (= Indicator 1) |

2.24 Social services counselling (#5)

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|-------------|---|
| Name | Social services counselling (#5) |
| Numerator | Patients of the denominator who received counselling by social services in an inpatient or outpatient setting |
| Denominator | Total primary cases + patients with new recurrence and/or metastases (= Indicator 1) |

2.25 Additional iPAAC QI No. 26

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|---------------|---|
| Name | Additional iPAAC QI No. 26 |
| Documentation | iPAAC QI No. 26: Liver CT or US evaluation within 12 months - colorectal cancer |

2.26 Patients with new recurrence and/or distant metastases (#1)

Name Patients with new recurrence and/or distant metastases (#1)

Text Patients with new recurrence and/or distant metastases

2.27 Post-operative presentation of all primary-case patients (#3)

Name Post-operative presentation of all primary-case patients (#3)

Documentation iPAAC Indicator No. 8

Numerator Primary cases of the denominator presented at the post-operative tumour board

Denominator Surgical and endoscopic primary cases

3. References

- [1] Certification criteria of the Deutsche Krebsgesellschaft (DKG)
(<https://www.onkozert.de/en/organ/colorectal/>)
- [2] The national concept of Multidisciplinary Tumour Boards (MDT)
(<https://plancancer.files.wordpress.com/2016/05/concept-rcp-signc3a9-ministre-2016-05-13.pdf>)
- [3] The recommendations of the INC on the composition and organization of MTB.
- [4] To be precised further in line with the national recommendations to be put in place
- [5] National guideline for colorectal cancer
- [6] iPAAC Standard for Colorectal and Pancreatic Cancer Care Networks
(<https://www.ipaac.eu/res/file/outputs/wp10/cccn-standard-colorectal-pancreatic-cancer.pdf>)

