

**Template for Practice Quality Improvement (PQI) in Radiation Oncology  
In partial fulfillment of the American Board of Radiology Maintenance of  
Certification**

**Treatment of Rectal Cancer**

**Overview:**

The following is an example of a potential PQI project, to be used in partial fulfillment of the ABR requirement for Part IV of MOC for Radiation Oncology. This example could be used as is, or could be modified as the diplomate wishes to adapt to their practice. It could also be modified for other sites. If used as is, the diplomate is expected to review 10 charts of patients treated for rectal cancer from his/her practice. After reviewing the charts and completing the scoring, the diplomate must evaluate his/her baseline performance, identify 2-3 areas in which improvements could be made, implement those changes in their practice, and re-measure 10 charts after implementing the change with respect to the deficient areas to document/evaluate for improvement. This would fulfill all of the elements of a PQI project as it is *a) relevant to patient care, b) is relevant to the diplomates practice, c) has clearly defined metrics or measurable endpoints and d) incorporates an action plan for improvement and re-measurement to document improvement in quality.*

A score of 0, 1 or 2 is given for each of the metrics. The goal is a score of 2 in each of the 10 metrics for each of the 10 charts reviewed, resulting in an ideal overall score of 20 for each of the 10 metrics and an overall score of 200 (see score sheet). The diplomate evaluates the scores, identifies metrics for which the scores were less than ideal, or areas to assure continued performance, implements an action plan improvement or continued adequate performance, and repeats evaluation of those metrics in 10 new charts after implementing the action plan to demonstrate improvement or continued adequate performance.

**The following steps should be undertaken to complete this project:**

**STEP 1-CHART SELECTION.** Select 10 charts for review of patients treated with radiation therapy for rectal cancer. Patients treated for palliation or metastatic disease should be excluded. The charts must be sequentially treated over a specified time, or randomly selected. An office staff member should select the charts to minimize selection bias.

**STEP 2-CHART REVIEW AND SCORING.** Each chart must be reviewed and scored in accordance with the metrics outlined below. While the physician involved may participate in reviewing and scoring the charts, review by a staff person or colleague is preferable to minimize bias.

STEP 3-ACTION PLAN. After completing the score sheet, the physician must identify at least 2-3 metrics for improvement. Even if performance was ideal in all metrics, the physician must select 3 for re-measurement to assure stable performance in these metrics.

STEP 4-RE-MEASUREMENT. After a period of time allowing for improvement, which should be at least 3 months, but no longer than 2 years, the physician must select 10 charts and review them with specific reference to at least 3 metrics to document progress and improvement, or stable performance.

STEP 5-REGISTRATION/ATTESTATION. Proceed to the ABR website and attest to completion of the PQI project in your ABR personal data-base, in accordance with the instructions on the ABR website.

STEP 6-DOCUMENTATION. Maintain a record of this project in your personal or office files, as your participation in this project may be subject to a random ABR of your MOC Component IV (PQI) activities. If you are audited, you may be asked to produce source data. The ABR does not maintain data on your project. This is your responsibility.

Chart review of 10 sequential patients treated for rectal carcinoma

Workup and staging:

***Metric 1:***

Documentation in chart of complete history, pertinent diagnostic studies, past medical history, medications, allergies, family history, social history, and complete physical examination documented (Vital signs, Cardiovascular, Respiratory, Abdominal, Lymphatic, Neurological Exams documented).

- Score: 0 - Less than half of the elements in the history or less than 3 Components of physical exam documented  
1 - All but 1 or 2 elements of the history and > 3 components of PE present  
2 - All elements of the history and components of physical exam present

*Competencies addressed: Patient care, practice based learning*

***Metric 2:***

Documentation of preoperative clinical staging or postoperative pathologic staging in history and workup.

- Score:** 0 - Stage not clearly stated in chart and pathology report missing or without staging information.
- 1 - Stage documented but incomplete (T or N stage missing or inaccurate) or Stage stated but pathology report not available in chart or without staging information
- 2 - Stage documented, complete and accurate, with pathology report available for confirmation

*Competencies addressed: Medical knowledge, practice based learning, systems based practice*

**Metric 3:**

Documentation of patient consent signed prior to treatment

- Score:** 0 - No documentation of consent prior to treatment
- 1 - Signed consent form by patient, but no documentation of physician and/or witness signature or date missing
- 2 - Signed consent form by patient and physician, dated prior to simulation and treatment

*Competencies addressed: Professionalism, systems based practice, interpersonal communication*

**Metric 4:**

Evidence of dietary instruction and guidance in treatment

- Score:** 0 - No evidence of dietary instruction, except for intervention with problems
- 1 - Evidence of some dietary instruction by physician and/or nurse
- 2 - Formal dietary consult documented prior to initiation of treatment

*Competencies addressed: Systems based practice, patient care, medical knowledge*

**Metric 5:**

Documentation and adequacy of physics dosimetry and planning.

- Score:** 0 - No contours or simple contour through central axis only
- 1 - Contour and dosimetry through multiple slices documented
- 2 - Contours through multiple slices, with evidence of DVH's documented for critical organs

*Competencies addressed: Patient care, practice based learning, medical knowledge*

**Metric 6:**

Adequacy of physics chart checks and quality assurance

- Score: 0 - Weekly physics chart checks every 5 treatments less than 80%
- 1 - Weekly physics chart checks every 5 treatments 80-99%
- 2 - Weekly physics every 5 treatments 100%

*Competencies addressed: Systems based practice, medical knowledge, practice based learning*

**Metric 7:**

Documentation of weekly physician treatment visit

- Score: 0 - Physician weekly visits documented less than 70%
- 1 - Physician weekly visits documented >70% but less than 100%
- 2 - Physician weekly visit documented 100% throughout treatment

*Competencies addressed: Patient care, professionalism, interpersonal communication*

**Metric 8:**

Documentation and adequacy of combined modality treatment.

- Score: 0 - Documentation of plans and specifics for combined modality treatment not clearly stated in chart
- 1 - Documentation in chart of combined modality plans, but specific chemotherapy regimen and documentation of patient receiving treatment as scheduled not clear
- 2 - Evidence in chart of specific chemo-radiation plans and documentation of compliance with scheduled combined therapy as planned

*Competencies addressed: Systems based practice, medical knowledge, patient care, practice based learning, professionalism, interpersonal communication*

**Metric 9:**

Documentation of adequate quality assurance through chart rounds review.

- Score:** 0 - No documentation of chart rounds check or review throughout treatment
- 1 - Evidence of chart rounds review, but not peer reviewed and/or signed by second practitioner
- 2 - Documentation of chart rounds review by second physician/radiation oncologist

*Competencies addressed: Practice based learning, Systems based practice*

**Metric 10:**

Timely completion of treatment summary and correspondence with referring physicians.

- Score:** 0 - Treatment summary incomplete
- 1 - Treatment summary available in chart, but not completed within one month of treatment and/or copy not sent to referring physician
- 2 - Treatment summary completed within one month and copy sent to referring physicians

*Competencies addressed: Interpersonal communication, Systems based practice, professionalism, patient care, practice based learning*

Score Sheet:

Chart	1	2	3	4	5	Total
Metric 1						
Metric 2						
Metric 3						
Metric 4						
Metric 5						
Metric 6						
Metric 7						
Metric 8						

Metric 9

Metric 10

Score Sheet:

Chart	6	7	8	9	10	Total
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Metric 1

Metric 2

Metric 3

Metric 4

Metric 5

Metric 6

Metric 7

Metric 8

Metric 9

Metric 10