ACR/ASTRO Accreditation Program: An Overview of Technical and Clinical Components

ACR-ASTRO Radiation Oncology Practice Accreditation Program

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American College of Radiology

USA Healthcare

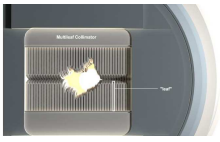
- Commercial entity
- Most hospitals are for profit
- Attempt to provide best care
- Minimize cost
- Innovative
- Competitive

Competition

- Find positive edge over others centers
- Get new technology
- Meet state or federal standards
- Avoid errors
- Get satisfaction survey
- Advertise
  - Newspaper
  - Magazine, Flier
  - Bill board
  - Internet

Medical Errors and Media

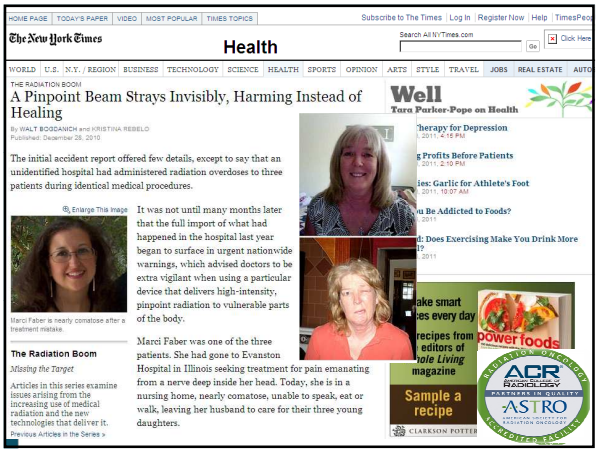
New York Times Jan 26, 2010 Walt Dogdanich



Scott Jerome-Parks

The Fatal Error: March 14

Mr. Jerome-Parks's early treatments had gone well, but multiple computer crashes occurred while the medical physicist tried to save a reformulated treatment plan. The instructions for the multileaf collimator were lost and the collimator leaves were fully open for three doses of radiation.

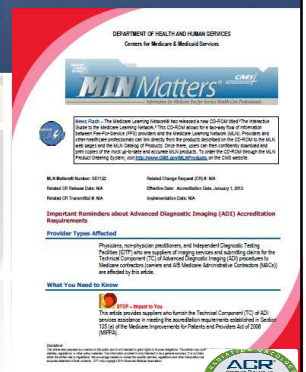


Quality & Safety

ACR/ASTRO Radiation Oncology Practice Accreditation (ROPA) stands for such pillar

Federal guidelines

- Quality & Safety tied to Billing & Reimbursement
- Some states (NJ, NY) have already mandated such law
- All VA hospitals are required to have ACR Accreditation
- Care bill in Congress will mandate Accreditation


DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Medicare & Medicaid Services

MLN Matters

Important Reminders about Advanced Diagnostic Imaging (ADI) Accreditation Requirements

Provider Types Affected

What You Need to Know

How to Provide Quality Care

- Second set of eyes
- Every calculation and procedure should be double checked
- For sites, single staff, follow TG-103
- Focus for root cause
- Good bookkeeping practice
- Periodic update on Technical Standards
- Follow ACR/ASTRO Guidelines and ASTRO White papers

Some statistics about the program

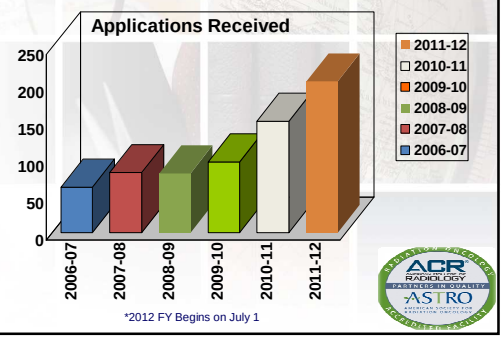
- **Established in 1987**
- ***Originally based on "PATTERNS OF CARE"***
- ***Collaborative with ASTRO 2008***
- **Accreditation is a cooperative effort between the ACR and ASTRO to establish a strong foundation on which the radiation oncology practice accreditation program can continue to grow and develop**

Accredited Facilities 363
Facilities Under Review 114

"Under Review"

- ✓ **Deferred/submitting corrective action**
- ✓ **Site visit has not yet been completed**
- ✓ **Final report has not been written yet**

Radiation Oncology Accreditation Program Growth 2006 – 2012*



*2012 FY Begins on July 1

Accreditation Program Goals

- **Provide impartial, third party peer review**
- **Evaluate and promote quality of care**
- **Recommend practice improvement**
- **Be educational, not punitive**

ACR-ASTRO Surveyor's Requirement

Surveyors must be:

- ✓ABR Certified
- ✓ACR or ASTRO Member
- ✓In Active Practice in Radiation Oncology

Benefits of Accreditation

- Offers specific recommendations for improvement from experienced, practicing radiation oncologists and practicing physicists
- Peer review forms can be used by the facility as part of their continuing quality improvement activities
- Survey report to support requests for increased staffing and equipment improvements/replacements

Why is Accreditation Important?

- Evidence of achievement in the areas of quality and patient safety
- Education and learning process for staff
- Demonstrates commitment on the part of the facility to meeting the highest standards in the field of radiation oncology
- Enhances credibility in the eyes of the public
- Broader recognition by peers in the field

ACR/ASTRO Radiation Oncology Practice Accreditation Program

- Web based program launched in January 2011
- Application, interview and data collection forms, surveyor report and summary are all captured electronically
- No more paper

ACR-ASTRO accreditation outcomes

3 Categories:

- Accreditation
- Defer
- Denial of Accreditation

ACR-ASTRO Accreditation

- Accreditation Cycle is 3 years
- *Even if your facility is accredited, you will receive recommendations for improvement but no response is needed*

Deferral of Accreditation

- 90 days to submit Corrective Action Plan (CAP)
- Following CAP approval by committee, the facility will receive a report and their ACR-ASTRO certificate

Denial of Accreditation

- 90 days to submit CAP
- After committee approval of CAP, facility must participate in a follow up survey (6-9 months after response to CAP is received)
- Re-application fee ($5000) required

Corrective Action Plans (CAP)

- Need to address each of the recommendations in the report
- May involve submission of additional documentation such as physician peer review, physics report, etc.

Consultative Survey

- Does not lead to accreditation
- Includes all of the activities performed during accreditation but with a special emphasis on areas identified by facility as needing a more comprehensive review
- 2 day survey with a 3 or 4 person team

Multi Site Survey Criteria

- Single Medical Director
- Single Physics Group
- Uniform charts, policies & procedures
- Distance between sites < one hour

Survey Fees

- Single Site $9500.00
- Each additional site $3000.00
  Includes surveyor travel

Application Part I and II

- Part I gathers information about your facility; staffing, equipment, physical location
- Part II includes specific questions about the practice such as your P&P, adherence to guidelines/standards

ACR-ASTRO Accreditation

To make the process as objective as possible, recommendations are based on data from ACR/ASTRO Guidelines/Standards, ASTRO White Papers, AAPM reports, ACR Appropriateness Criteria

What happens during the on site survey?

- The site visit is *always* conducted by a radiation oncologist and medical physicist
- First activity will be an interview with key personnel (Chief MD, chief physicist, chief therapist, dosimetrist, RN, etc.) followed by a tour of facility
- After completion of tour, surveyors will begin chart check. The facility must provide one or 2 staff to help with navigating through charts/EMR, etc.
- Facilities must provide Internet access as well login and password

-On Site Survey, cont.

- Physicist interview (time to be determined on site)
- Review of QA manuals, P&P, throughout day
- "Exit Interview" prior to departure with same personnel from AM interview. The team will not give their recommendations but will use this opportunity to clarify any issues, etc.

Accreditation Standards & Guidelines

- Appropriateness Criteria (ACR)
- Practice Guidelines (ACR, ASTRO)
- Technical Standards (ACR)
- AAPM Task Group Reports recommendations such as TG-40, TG-142, TG-51, TG-53, TG-43, TG-103
- White Papers (ASTRO)

What does the Medical Physicist review on site?

- Procedures for instrument calibration/periodic instrument constancy checks
- Procedures for checking integrity of mechanical and electrical patient care devices
- Procedures to verify manufacturer's specifications and establish performance values for RT equipment
- Calculations related to patient dosimetry and/or physics measurements (diodes, TLD, etc.)

Medical Physicist on site

- Radiation protection program
- Quality management program for radiation therapy equipment, simulators, treatment planning systems, and monitor unit calculation algorithms
- This includes protocols and procedures for ensuring a consistent and safe fulfillment of the dose prescription
- Documented program for electrical, mechanical and radiation safety

Practice Guidelines - Radiation Oncology

- 2D & 3D External Beam
- Intensity-Modulated Radiation Therapy (IMRT)
- Image-Guided Radiation Therapy (IGRT)
- Brachytherapy: HDR, LDR, Prostate etc
- SRS, SRT, SBRT, IMRS
- TBI, TSEI
- NO Proton Beam

Medical Physicist on site

- Treatment Plan/MU Calculation Procedures
- Double check of treatment plans/MU calculations for accuracy prior to patient treatment whenever possible but before the third fraction
- For 5 or fewer fractions, the calculation must be checked prior to delivery of the first treatment
- Documentation of weekly physics chart check
- Documentation that physicist checked the chart within 1 week from end of treatment

Medical Physicist on site

IMRT Documentation

- Dose Volume constraints documented
- Inverse planning performed
- Documentation includes: delivered doses to volumes of target and non-target tissues, in the form of dose volume histograms and representative cross sectional isodose treatment
- IMRT QA on phantom performed

ACR Technical Standard for the Performance of for External Beam Therapy

- The medical physicist should engage in a formalized peer review on a regular basis.
- Physicists engaged in solo practice (being the only qualified medical physicist at a facility, or serving as consultant providing the only medical physicist service to the facility) should follow published AAPM recommendations, including peer review recommendations. (TG 103)

Non-compliance with ACR Guidelines and Standards

Since the accreditation program is based on ACR-ASTRO guidelines and standards, final reports will contain recommendations that link to a guideline or standard. We will take a look at some frequently seen clinical and physics recommendations. Not all of these are “deal breakers”, in other words, leading to denial of accreditation

Common Reasons for Deferral (Physics)

- Lack of physics coverage
- Lack of chart check and end of treatment
- Lack of second check of calculations
- No documented IMRT QA
- No documented TPS QA
- No commissioning report
- No annual QA report
- No brachy-source calibration

Clinical Components

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Radiation Oncologist review

Charts reviewed for:

- Completeness of H&P
- Medical Decision Making/Staging
- Simulation/Planning
- On Treatment Visits
- Portal Imaging
- Completion Summary
- Follow Up

Recommendations

We will look at some key elements that are reviewed by the physician during the survey based on ACR/ASTRO Guidelines and Standards

Practice Guideline for Communication

Included in H&P:

- Tobacco use for lung patients
- Family hx/ hormonal status for breast patients
- Potency status for prostate patients

Practice Guideline for Communication

Medical Decision Making:

- Staging
- Plan of care (other tests needed, combined modality (chemotherapy)

Practice Guideline for Radiation Oncology

Simulation

- All set ups should be documented by properly labeled photographs/diagrams and when appropriate, by standard images or DRRs.
- Suitable Immobilization

Practice Guideline for 3-D External Beam Radiation Planning and Conformal Therapy

Radiation Oncologist responsibilities include:

- Contour critical normal structures not clearly discernible on treatment planning images
- Review and approve all critical structures
- Prescribe target dose and limitations on critical normal structures
- Signed and dated

Practice Guideline for Radiation Oncology

On treatment visits:

- Should include Vitals/Current Dose/Any Tumor Response/Side Effects/Non Medical Issues
- If visits are performed by the Nurse Practitioner, the ACR recommends that the physician sign and date the note as evidence of his/her evaluation of the patient

Practice Guideline for Radiation Oncology

Portal Verification Images

- When portal images can be made, they should be taken every 5-10 treatments and for any new fields
- Signed and Dated

Practice Guideline for Communication

Completion Summary Should Include:

- Total dose/ doses delivered to target/tumor volumes and other key organs/elapsed days
- Relevant assessment of tolerance/progress
- Subsequent care plans
- Timely

Practice Guideline for Communication

Follow Up:

If the patient is not followed by the radiation oncologist after the initial follow up visits, we want to see a follow up plan and some notes from referring MDs/clinic to ensure continuity of care

CQI DOCUMENTATION

- MD Peer Review
- Chart Rounds Weekly
- Tumor Boards
- M & M Studies
- Focus Studies
- Outcome Studies

Physician Peer Review

- The recommended frequency is twice yearly. This can be done during locum coverage or through a contract with a local, perhaps, academic facility
- Documentation is the key

Practice Guideline for Radiation Oncology

M&M Conferences

- Review of any chart in which an incident report is filed or in which there is a report of an accident or injury to a patient.
- Review of unplanned interruptions during treatment; unusual or severe, early or late complications of treatment; and unexpected side effects or deaths.

Focus Studies

Focus studies are basically quality improvement projects. For example, 20% of patients are missing their weekly on treatment visit. A focus study would identify this problem, take action to correct it, then measure the effectiveness of the action taken. 6 months later, for example, only 5% have missed their on treatment visit.

Outcome Studies

- Review of outcome studies from the cancer committee, tumor registry, or any other section, department, or committee of an associated hospital that includes radiation oncology patients.
- If not hospital based, the practice can design a study, for example, skin reactions in breast patients following APBI

Common Clinical Reasons for Deferral

- Lack of chart rounds
- Lack of established QA/CQI Committee/process
- Failure to follow ABS, ASTRO, ASTRO, AAPM guidelines for prostate brachytherapy

Common Clinical Reasons for Deferral

- Radiation oncologist coverage is inadequate (not on site when patients simulated or treated)
- No physician peer review
- Lack of adequate prescriptions, such as not signed, site/volume not stated, # of fractions, etc.

Final Report

- The final report is currently issued approximately 8-12 weeks following the survey.
- The final report will contain:
  - Accreditation Decision: PASS, DEFER, DENY
  - Staffing/Resources Table
  - Recommendations for improvement based on Guidelines/Standards and AAPM reports
  - Link to Media Kit for marketing accreditation

R-O PEER™

- R-O PEER is a program that allows radiation oncologists to fulfill Part Four: Assessment of Performance in Practice for the Maintenance of Certification (MOC) program for the American Board of Radiology (ABR) through the Radiation Oncology Practice Accreditation Program

R O PEER™

- Physicians applying for R O PEER ™ can submit their application with the facility's application for accreditation and will receive a separate report after accreditation is granted
- *Satisfies ABR requirement for a society based project for MOC*

ACR/ASTRO Radiation Oncology Practice Accreditation Program

- ACR recommended <u>mandatory</u> accreditation of all facilities to Legislators
- ASTRO <u>strongly recommended</u> accreditation for all facilities

Advantages to becoming a surveyor

- Stay current with treatment practices/guidelines/standards/AAPM reports
- Chance to give back to the profession
- Opportunity to learn from the surveyed institution
- Meet fellow physician and physicist surveyors from practices around the country

How do I apply to become a surveyor?

- Complete the on-line application

http://www.acr.org/~/media/ACR/Documents/Accreditation/RO/SurveyorApplication.pdf

- Once approved, successfully complete the surveyor tutorial
- Participate in a site visit as a "trainee"

How do I start the application process for my facility?

- Visit the ACR web site and complete the on line application:

https://ropa.acr.org/pages/Login.aspx

- Once we have received your application and survey fee, we will look for a survey team for one of the dates you have suggested
- You will be notified by e mail of the survey date (s) and surveyor team members

How long does the survey take?

- A single site is completed in one day (generally 8 a.m. to 4 p.m.) ; multi sites vary depending on number of sites, MD and location

Questions?