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
  - Billboard
  - Internet
Medical Errors and Media

New York Times Jan 26, 2010 Walt Dogdanich

The Fatal Error, March 14th, heroine’s path had grown well, for modern cancer treatment requires the use of medical imaging and treatment technologies, which is a pillar of the ACR/ASTRO Radiation Oncology Practice Accreditation (ROPA).

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

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*

Accreditation Program Goals

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

*2012 FY Begins on July 1
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

ACR Practice Guideline for Radiation Oncology

Included in H&P:
- Tobacco use for lung patients
- Family hx/ Hormonal status for breast patients
- Potency status for prostate patients
- An Appropriate Exam for the Disease/Site

Practice Guideline for Communication: Radiation Oncology

- Medical Decision Making:
  - Staging
  - Plan of care (other tests needed, combined modality (chemotherapy)
  - Appropriate treatment recommendations
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

ACR Practice Guideline for Radiation Oncology

- On treatment visits
  - Done Weekly
  - Evaluation includes treatment chart review, plan of care review, document any changes in plan of care, pertinent examination, review of pertinent lab/imaging studies, tumor response as indicated
  - Physician extenders OTVs staffed with MD
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
ACR Practice Guideline for Radiation Oncology Continuing Quality Improvement

- MD/Physics Peer Review
- Physics Quality Improvement Program
- Chart Rounds Weekly
- Morbidity and Mortality
- Tumor Board Participation
- Focus Studies
- Outcome Studies
- Patient Satisfaction 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

✓ Quality Improvement Projects
  ✓ Participation should be encourage from all staff
  ✓ Examples
    ✓ Port film approval rate
    ✓ Skin care products
    ✓ Referral to palliative care for lung cancer patients
    ✓ Duration of G-tube usage for H and N patients

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, ACR, ASTRO, AAPM guidelines for prostate brachytherapy
- Treatment Issue: Dose, volume, fractionation, etc
**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
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**

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**ACR/ASTRO Radiation Oncology Practice Accreditation Program**

- ACR recommended mandatory accreditation of all facilities to Legislators
- ASTRO strongly recommended accreditation for all facilities

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**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
- 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](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
ACR-ASTRO ROPA Future?

- ACR recommended **mandatory** accreditation of all facilities to Legislators
- ASTRO **strongly recommended** accreditation for all facilities

Accreditation has moved from "Backstage/In the Shadows" status to "Upfront", because of Safety concerns in the "Eyes of the Public"

Mandatory?

ACR/ASTRO

Do the Math! Every 3 years 600 or 200/year. e.g. 17/month

Future?

Future2,500 = 833/year. e.g. 70/month

Questions?