The RO-ILS System from AAPM and ASTRO

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1. Provide robust, consistent, and financially-stable education, training and clinical experience for the Qualified Medical Physicist in clinical practice.

2. Strive for nationally consistent recognition of the Qualified Medical Physicist and equivalent competency for all medical radiation team members.

3. Provide national practice guidance in radiation oncology and medical imaging based on consensus and consistent minimum quality standards.

4. Establish a rigorous minimum standard for accrediting clinical practices that specifically includes the oversight of dose and quality assurance for medical imaging and radiation therapy technology.

5. Link Centers for Medicare & Medicaid (CMS) reimbursement to rigorous practice accreditation for all medical imaging and radiation therapy practices to insure steps one through four above are followed.

6. Create a national data collection system to learn from actual and potential adverse events in the medical use of radiation.

7. Improve the effectiveness of product clinical quality, application and integration review in the regulatory equipment clearance process by partnering with the U.S. Food and Drug Administration (FDA), the International Electrotechnical Commission, (IEC) and manufacturers.
RO-ILS: Radiation Oncology Incident Learning System™ Congressional Briefing
Thursday, June 19, 2014, 12:30 p.m. ET
Rayburn Building
Room B339
What is it?

• A web-based system for collecting, analyzing, and sharing information about errors, near misses, and solutions
• A “Patient Safety Organization” (PSO) so data are protected by federal law
• Specifically designed for Radiation Oncology
• Can serve as your local reporting system
How to start?

• Download the participation guide from the ASTRO website:
RO-ILS: Radiation Learning System

The mission of RO-ILS™ is to facilitate safer and higher quality care in radiation oncology by providing a mechanism for shared learning in a secure and non-punitive environment.

View the RO-ILS Congressional Briefing
Slides from the RO-ILS Congressional Briefing

ASTRO membership is not required for RO-ILS participation; however, you do need a Web User ID to log in and download the Participation Guide. If you do not have a Web User ID, you can create one here.

Access the Participation Guide
How to start?

• Sign contract with Clarity PSO
  – Samples are in the Participation Guide
  – Needed to establish the legal protections
• Set up your link to the web portal
  – No IT infrastructure needed
  – All data is entered via a web portal
  – Stored securely at Clarity
• No financial cost to participate
Basic data flow

• Each facility will enter local events
  – Can analyze and report locally
  – Decide which events to upload to national

• National group will analyze and report to community
Basic flow – Local

• First report is brief, could be done by “anyone”
• Follow-up information will then be added by facility’s designees
3 types of events to be reported

- Incident that reached the patient with or without harm
- Near-miss event that did not reach the patient
- Unsafe condition that increases the probability of an event
What to report to the national ILS?

*Events of possible general interest*

- Events for which there was no safety barrier
  - i.e. “Here is a failure mode we never thought of”
- Events which passed through at least one barrier – indicating need for better systems
  - i.e. “This got through the plan check and made it to the machine”
- Events involving equipment performance or communication between equipment
Who sees our reports?

- Your own information, with any identifiers you choose to record, is seen only by you.
- Information sent up to the national system is anonymized.
- Anonymized data is reviewed a committee of peers for condensation into reports for the community.
How does it work? Be specific

• Let’s walk through an example of a report
• Retreatment situation: partial geometric miss caused by the new plan being done on an old scan
Initial report
Initial entry can be very short.
At save, email goes out to designated people
Follow up by supervisor
More complete description

Classification
In what workflow step was the event first discovered?
Treatment Delivery

In what workflow step(s) did the event occur? Select all that apply.

- Patient Assessment
- Treatment Delivery
- Imaging for RT Planning
- On-Treatment Quality Management
- Treatment Planning
- Post-Treatment Completion
- Pre-Treatment Review and Verification
- Equipment and Software Quality Management

*Patient’s Age:
18-64 years

*Patient’s Gender:
- Female
- Male
- Unknown
- Report not patient related

Supplemental Information/Additional Follow-up to Event:

What changes, if any, has the facility made in response to the report? If applicable, please include comments on your experience with the changes made.

This has happened before, and so we had started putting the date of the scan into the name of the scan set. That did not prevent this occurrence, but it did help identify the reason on further review.

*Do you want to report this event to the PSO?
- Yes
- No

Changes made
Key information requested

- Description of event and response
- Workflow step where it occurred
- Workflow step where it was discovered
- Likelihood of harm
- Treatment technique; Imaging technique
- Equipment used
- Other contributing factors (follows AAPM report)
What will happen to the data in the national system?

• Protected from legal discovery

• Analyzed by...
  – Patient Safety Organization (PSO) staff
  – Subject matter experts: Radiation Oncology Healthcare Advisory Council (Physicians, Physicists, Dosimetrists, Therapists)

• Summarized for reports back to participants and community at large
  – Commonalities
  – Solutions
Who is in so far? What is the status?

- As of Sept 14, there were 19 facilities that have signed contracts with 29 more that have started the contracting process
  - 4 freestanding clinics
  - 3 community-based hospitals
  - 12 academic centers
- There have been 120 reports submitted
- The first summary report has been sent to participants
Benefits

• Improve your own practice
• Qualified for ABR PQI project
  – See guide on ASTRO website
• Share best practices

• Next: practical information on making an incident learning system work