Radiation Oncology- Incident Learning System (RO-ILS): Operational Evolution within the Radiation Medicine Department

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Roswell Park Cancer Institute
ROC Niagara Conference 2019
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Outline

• RO-ILS Mission and Introduction
• Training and Kick-off
• Results
• Discussion
RO-ILS Patient Safety Organization – Clarity PSO and Clarity Group, Inc.

Founded in 2002
Healthcare resource specializing in the management of professional liability risk exposure, enhanced patient care quality, patient safety and quality initiatives
Created a National Incident Learning System for Radiation Oncology
Radiation Oncology Incident Learning System (RO-ILS)

- Web based secure program that provides a global mechanism for collaborative learning within Radiation Medicine.
- Why does this benefit us?
Radiation Oncology Incident Learning System (RO-ILS)

• Mission encourages all members to report events as they happen in the department in a non-punitive environment.

• Why is this important?
Risks of Event Reporting

• Fear Factor
• Blame Game
• Limits potential for shared learning
Benefits of Event Reporting

- Increased reporting improves:
  - Patient safety
  - Staff safety
  - Identifies risks that can be mitigated before they cause patient harm
Not Who or What but Why and How may we prevent it?
Safety Culture Components

• Culture of Safety
• Culture of Learning
• Culture of Justice

• Does our current culture align with these components?
Culture of Safety

• It is ok to talk about when things go wrong.
Culture of Learning

• What happened?
• How can it be prevented in the future?
• A systems approach, not a persons approach.

“Well, now we know what not to do.”
Culture of Justice

• Everyone in the department needs to hold themselves and each other accountable for making and sustaining safety and quality improvement efforts.
WILL IT BE EASY?
NOPE. WORTH IT?
ABSOLUTELY.
RO-ILS Training and Kickoff
2017 RO-ILS Training and Kickoff

- RO-ILS launched September 2017 in our Multi-site Radiation Oncology Department following a decade of usage of an in-house system.
Access for all staff at any site
Please select a form to continue.

Select Form

Event Form

For safety information not specific to an individual event that is for PSO reporting. Examples may include committee meeting minutes, analytical reports, investigation/conversation notes

Back To Home
• Therapeutic Radiation Incident
• Other Safety Incident
• Near-miss
• Unsafe Condition
• Operational/Process Improvement
RO-ILS committee

MD

Radiation Therapist
ROILS Leader

Physicist

Dosimetrist

Nursing Director
Overview: A national medical error reporting system and patient safety database for radiation oncology.

Announcements:
- New - RO-ILS User Meeting at ASTRO Annual Meeting: Tuesday, 9/17, 7:30-9am in Chicago, IL. Register to attend.
- New - Data Element for Replanning: Learn more about Dosimeter Change (#232).

RO-ILS Program Information:
- PSO Introduction and On-boarding Presentations (Part I and Part II)
- Facility Request Form
- NEW - Reviewer Request Form
- Analysis Wizard Training Video

RO-ILS Reports and Education:
- NEW - Case Study 03: Incorrect Density Factor
- NEW - Q3, Q4 2018 RO-ILS Report
- NEW - Q3, Q4 2018 RO-ILS Report – Teaching Slides
### My Review

<table>
<thead>
<tr>
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<th>Event No:</th>
<th>Location: Northwell Health</th>
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**Local Identifier:**

**Event Type:**

**Sub Event Type:** Please select a Sub Event Type

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<td>Long Island Jewish Medical Center (LJ)</td>
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January to December 2018 RO-ILS Categories

5 CATEGORIES

NEAR-MISS
OPERATIONAL/PROCESS IMPROVEMENT
OTHER SAFETY INCIDENT
THERAPEUTIC RADIATION INCIDENT
UNSAFE CONDITION

Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
(Blank)
ENTRY INTO ROILS

Categorizing Events

- Therapeutic Radiation Incident
- Other Safety Incident
- Near-miss
- Unsafe Condition
- Operational/Process Improvement

Initial Screening by ROILS Leader

Submit to PSO

Bi-Weekly Analysis with ROILS committee

Root Cause Analysis

MONTHLY QA COMMITTEE

Directives Committee

Push out proposals to the staff

CLOSE THE LOOP
Why break the event Sub Type down further?

<table>
<thead>
<tr>
<th>Select All</th>
<th>Event Sub Type</th>
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<tbody>
<tr>
<td></td>
<td>Therapeutic Radiation Incident</td>
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<td>Other Safety Incident</td>
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<td></td>
<td>Unsafe condition</td>
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<td>Operational/Process Improvement</td>
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Example – Sept 2018

<table>
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<th>Name</th>
<th>Count</th>
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<td>Operational/Process Improvement</td>
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<tr>
<td>Other Safety Incident</td>
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<tr>
<td>Therapeutic Radiation Incident</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
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</tbody>
</table>
Same month – more data to report out – more opportunity for operational process improvements
Thank you email sent out by ROILS leader

Preliminary investigation of narrative added into Follow up of event

ENTRY INTO ROILS
Categorizing Events

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Root Cause Analysis

Internal Sub Categories Investigation

Proposals for operational Process improvement

MONTHLY QA COMMITTEE

Directives Committee

Push out proposals to the staff

CLOSE THE LOOP
Mindsets that we embrace - Why we do what we do.

• Patient Safety
• Compassion and Teamwork
• Communication
Patient Safety
How do we communicate?

- Verbally
- Email
- Note?
What happens when the ball gets dropped?

• Easy to point fingers BUT is it easy to report an event you were apart of?
What is the point of us reporting an event?
What do we see more of?

• Communication – ball gets dropped
• Staff injuries
  • Lifting patients
  • Short staffed
• Daily Films – CBCT, KV, portal images not checked by MD
  • Must be checked/approved before next treatment – safety issue and billing issue
RESULTS

Events reported by RTT 2018

- Unsafe condition
- Therapeutic Radiation Incident
- Other Safety Incident
- Operational/Process Improvement
- Near-miss

0 50 100 150 200 250 300 350 400
426 Events reported in 2018 from Radiation Therapists

• Implemented several operational changes in 2018.
• This enables team members the ability to feel that their voices are heard and that we are working together to develop and expand operational processes.
RO-ILS Reporting & Changes Implemented

1. Communication
   - Work with Chiefs and Dosimetrists to communicate if patients are changed to another machine during planning

2. Staff Safety
   - Patient safe handling community developed and patient lifting equipment acquired

3. Film Review
   - Implementing peer-to-peer feedback. Accountability. Number of events decreased going into next quarter.
We hear you...

We have observed reinvigorated enthusiasm in staff members as a direct result of this program.
From Jan 2019 - Aug 2019, Therapists have reported 349 events out of 641 events in RO-ILS.
DISCUSSION
Why we embraced RO-ILS

• Operational Learning

• How each RO-ILS event may help us learn as a team?
How we can change the culture?
Encourage a culture of safety

• Allow staff to take a pause when something seems “off”.
• Formalize a “code phrase” for staff to use when they are concerned an error may be taking place, without alarming the patient.
• “I Need Clarity”
• Help them stop the line.

• Remember - Dialogue and Communication
How we can change the culture?

• If an incident or near miss does occur, use that as a teaching moment to see what could have been done to prevent the error and what can be done in the future.

• Focus on the process, not the people when discussing root cause analysis.
Rounding -

• Leadership asked therapists for suggestions on how processes could be improved to minimize the error pathway.
How we close the loop?

• Brief

• Debrief

• Team Huddle
Community rich in patient focus

• Strive for excellence by embracing and enabling change within our field.
Conclusions

• With each event entered, our Multi-site, Multi-faculty Radiation department compares, tracks and trends each event in pursuit of improving Operational Processes within our departments. This mission has helped shape a rich environment of growth, increase in efficient workflows and patient safety.
Acknowledgements

Jeff Antone, CMD
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May Lim, MD
Gayle Somerstein, RN
Louis Potters, MD
References


5. Google images. https://www.google.com/search?rlz=1C1GCEA_enUS817US821&tbm=isch&q=embracing+change&chips=q:embracing+change,g_1:positive:BSIYbDey5GY%3D&usg=Al4_-kR3Ot5hoIPFvvK5BtxFLJSeK2mJag&sa=X&ved=0ahUKEwjvIvNW40qPkAhXlxFlKHThGbcCYUQ4IYIlSgC&biw=1536&bih=750&dpr=1.25&safe=active&ssui=on#imgrc=ZY2IZID6K55HjM:


Thank you