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
September 7, 2019

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

CLARITY PSO
A Patient Safety Organization

Patient Safety Listed PSO Organization

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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?

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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?

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Risks of Event Reporting

- Fear Factor
- Blame Game
- Limits potential for shared learning

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Benefits of Event Reporting

- Increased reporting improves:
  - Patient safety
  - Staff safety
  - Identifies risks that can be mitigated before they cause patient harm

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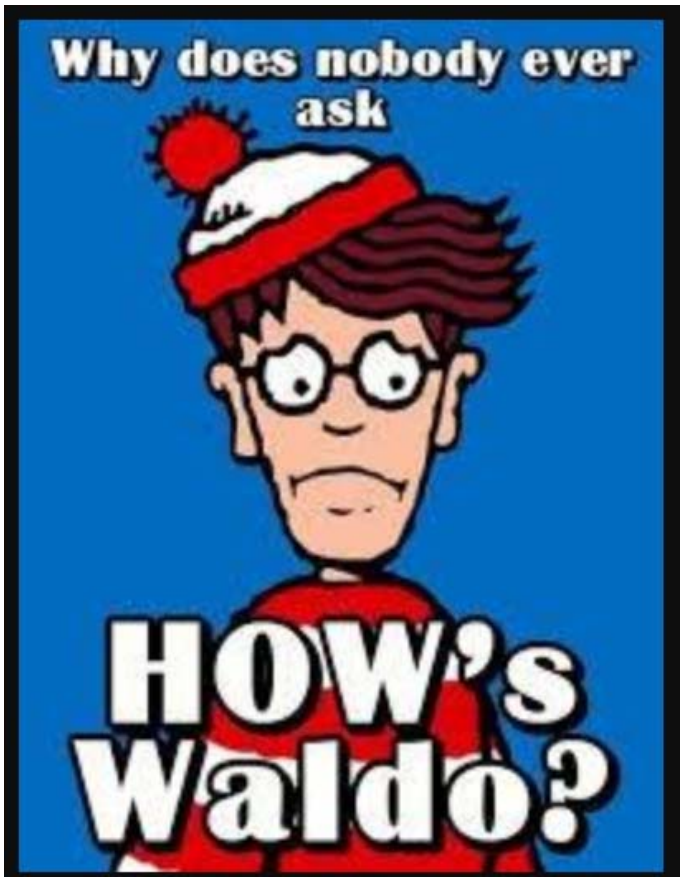
Not Who or What but Why and How may we prevent it?



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Safety Culture Components

- Culture of Safety
- Culture of Learning
- Culture of Justice

- Does our current culture align with these components?

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Culture of Safety

- It is ok to talk about when things go wrong.

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Culture of Learning

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

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Culture of Justice

- Everyone in the department needs to hold themselves and each other accountable for making and sustaining safety and quality improvement efforts.

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RO•ILS | RADIATION ONCOLOGY® INCIDENT LEARNING SYSTEM

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RO-ILS Training and Kickoff

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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.

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Access for all staff at any site

Click

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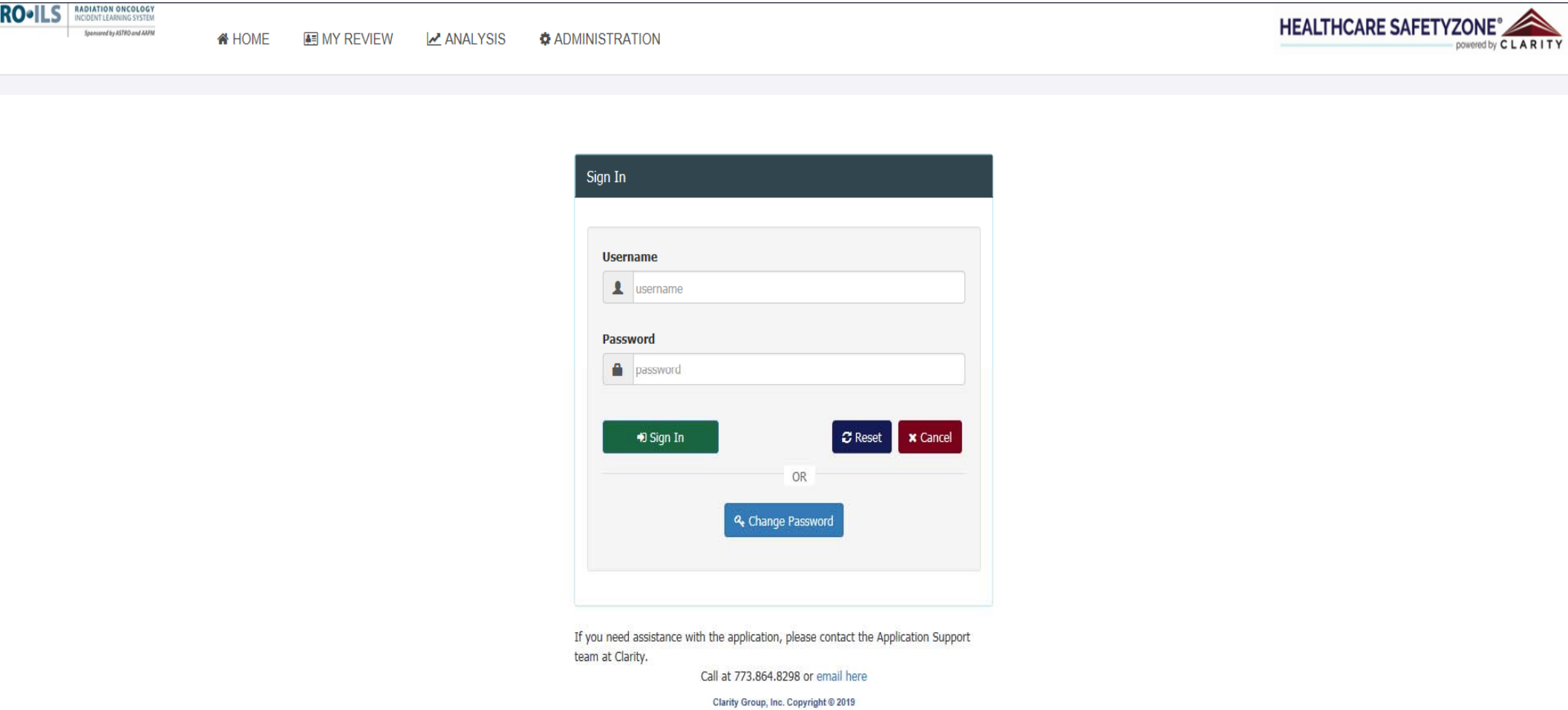

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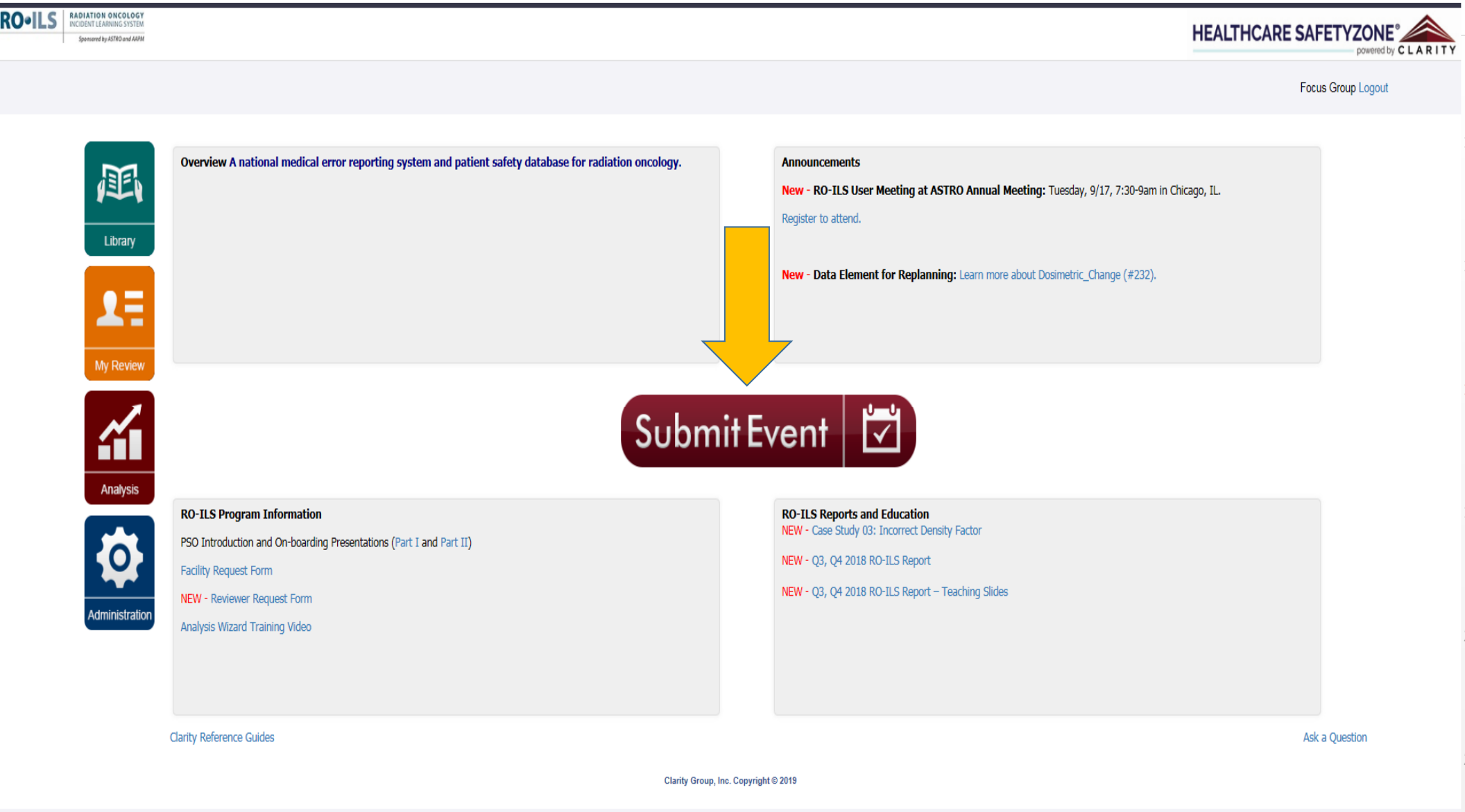
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Focus Group Logout
Library
My Review
Analysis
Administration
Overview A national medical error reporting system and patient safety database for radiation oncology.
Announcements
New - RO-ILS User Meeting at ASTRO Annual Meeting: Tuesday, 9/17, 7:30-9am in Chicago, IL.
Register to attend.
New - Data Element for Replanning: Learn more about Dosimetric_Change (#232).
Submit Event
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
Clarity Reference Guides
Ask a Question
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Focus Group Logout

Please select a form to continue.

Select Form

Please select a form from the list below.

Event Form

Document Upload

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

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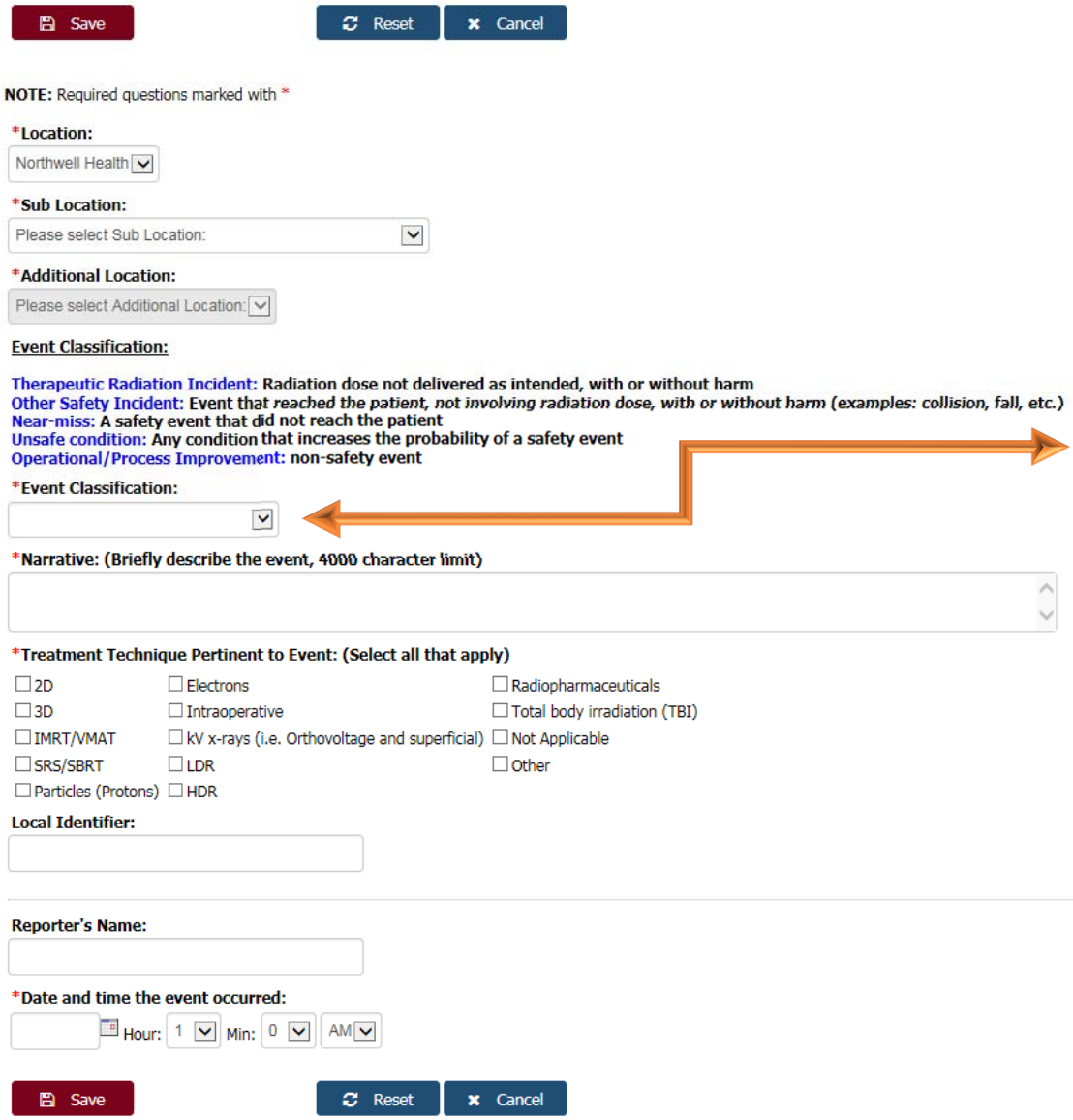

- Therapeutic Radiation Incident
- Other Safety Incident
- Near-miss
- Unsafe Condition
- Operational/ Process Improvement

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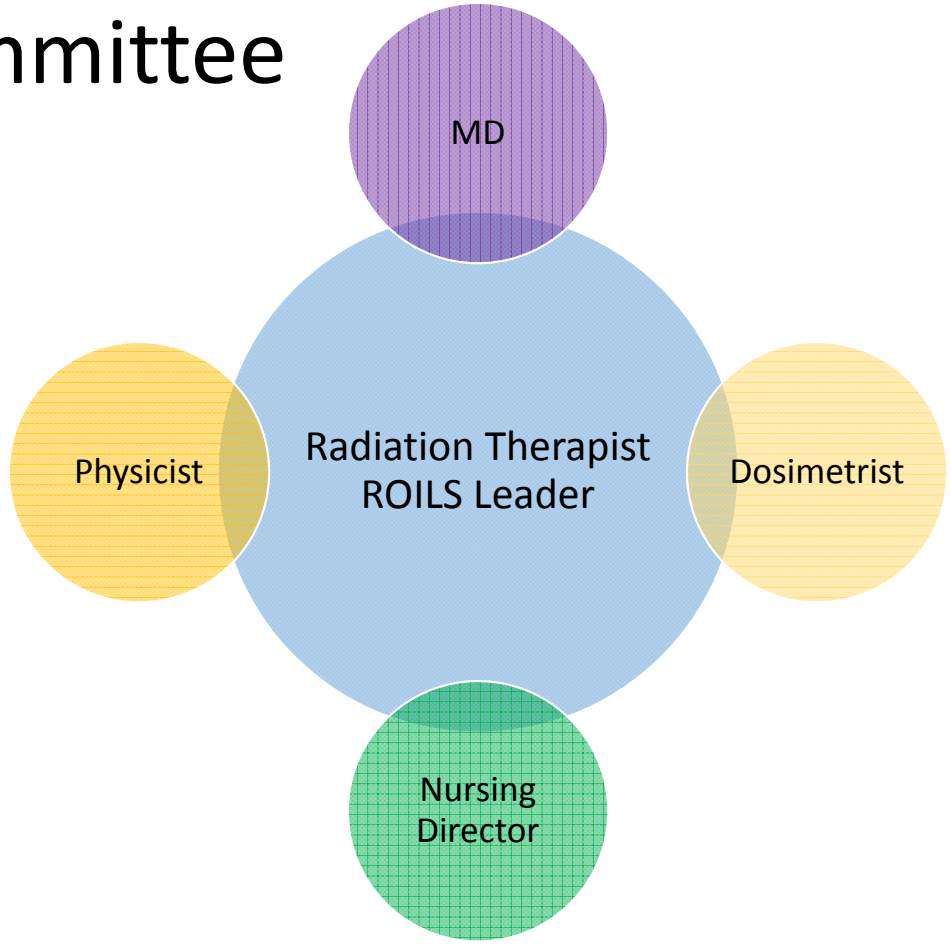
RO-ILS committee



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NEW - Reviewer Request Form

Analysis Wizard Training Video

RO-ILS Reports and Education

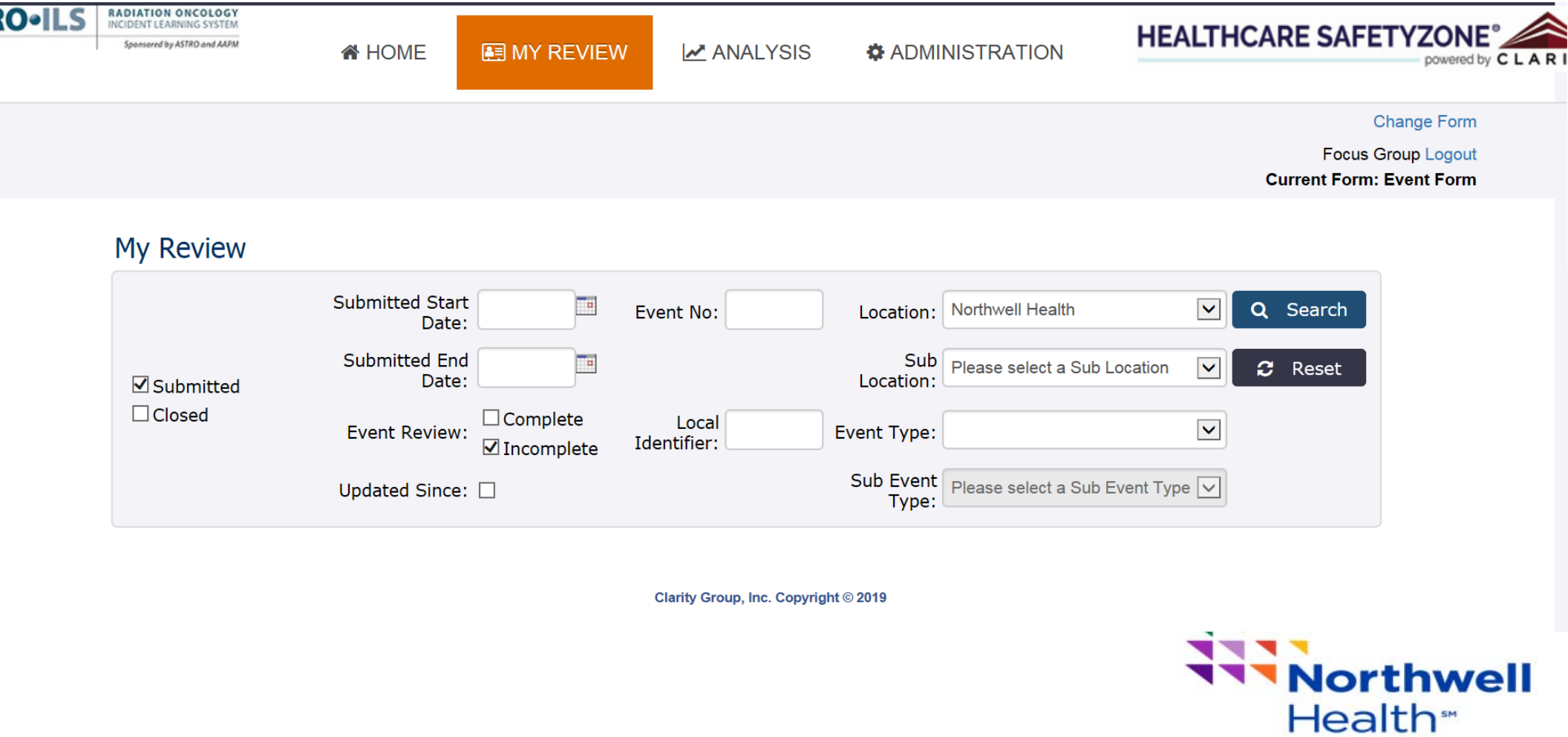
NEW - Case Study 03: Incorrect Density Factor

NEW - Q3, Q4 2018 RO-ILS Report

NEW - Q3, Q4 2018 RO-ILS Report – Teaching Slides

Clarity Reference Guides

Ask a Question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HOME
MY REVIEW
ANALYSIS
ADMINISTRATION
HEALTHCARE SAFETYZONE powered by CLARI
Change Form
Focus Group Logout
Current Form: Event Form
My Review
Submitted
Closed
Submitted Start Date:
Submitted End Date:
Event Review:
Complete
Incomplete
Updated Since:
Event No:
Local Identifier:
Location:
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Sub Location:
Please select a Sub Location
Event Type:
Sub Event Type:
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Analysis Wizard

Date Option: (•) Submitted Date ( ) Event Date

Start Date: 01/01/2018

End Date: 12/31/2018

Days:
- [x] Sunday
- [x] Monday
- [x] Tuesday
- [x] Wednesday
- [x] Thursday
- [x] Friday
- [x] Saturday

Start Time: : AM

End Time: : AM

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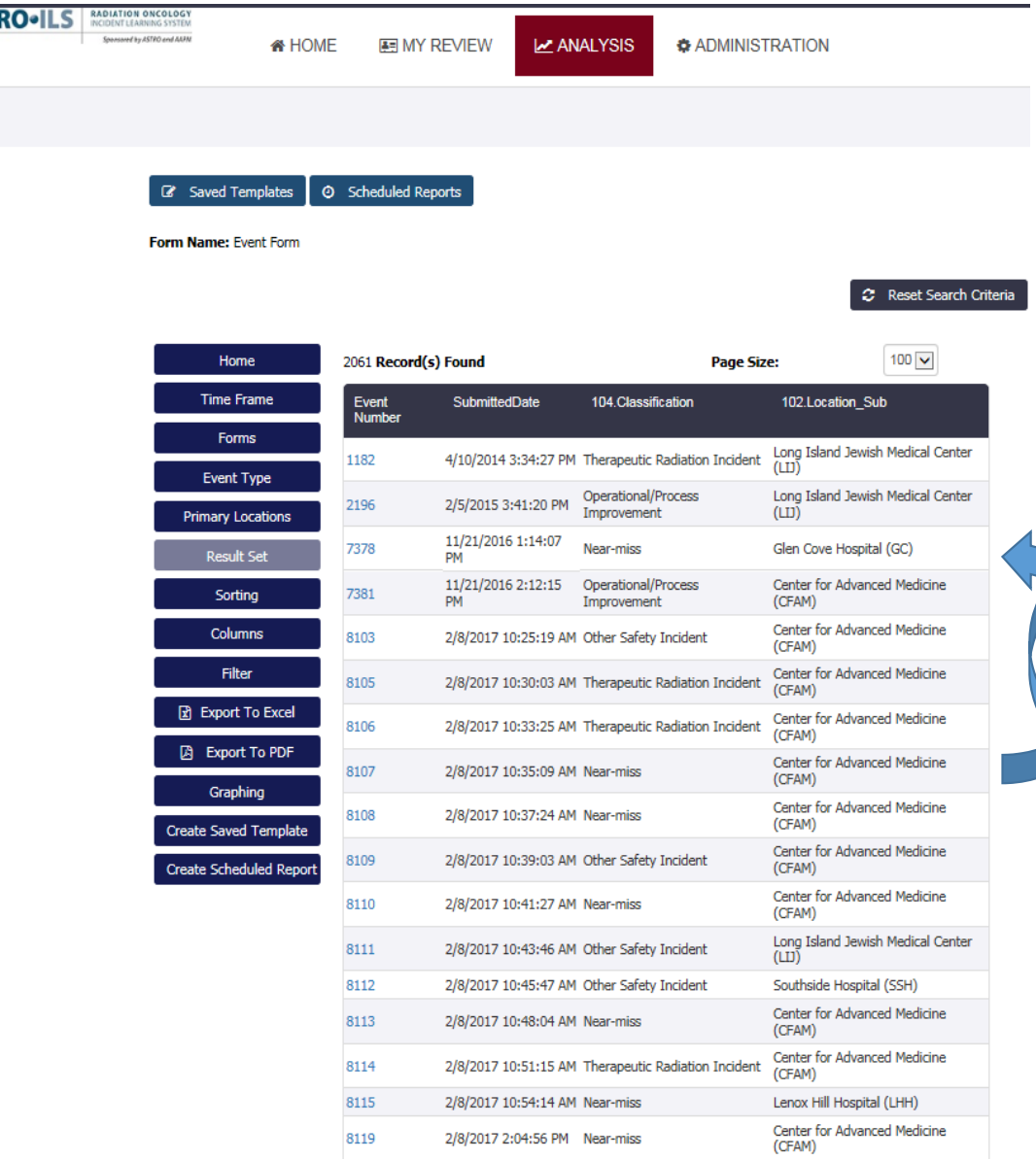

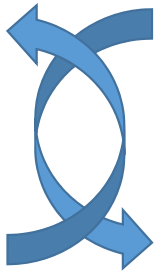

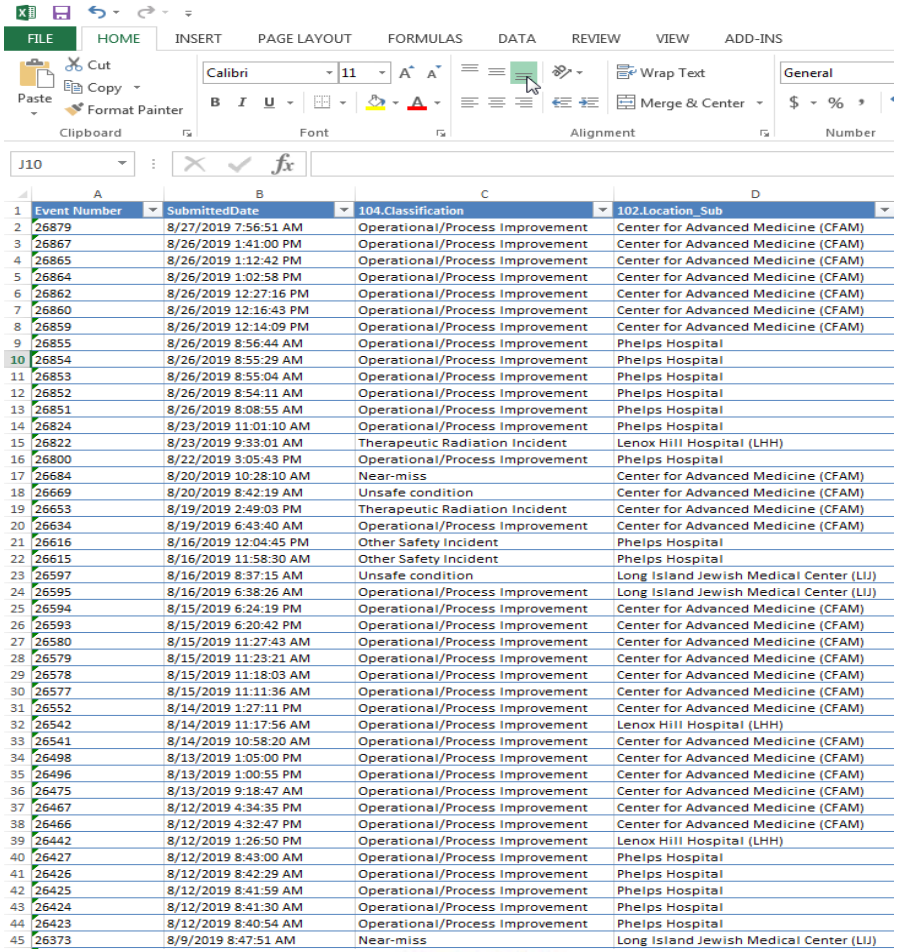

	A	B	C	D
1	Event Number	SubmittedDate	104.Classification	102.Location_Sub
2	26879	8/27/2019 7:56:51 AM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
3	26867	8/26/2019 1:41:00 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
4	26865	8/26/2019 1:12:42 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
5	26864	8/26/2019 1:02:58 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
6	26862	8/26/2019 12:27:16 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
7	26860	8/26/2019 12:16:43 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
8	26859	8/26/2019 12:14:09 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
9	26855	8/26/2019 8:56:44 AM	Operational/Process Improvement	Phelps Hospital
10	26854	8/26/2019 8:55:29 AM	Operational/Process Improvement	Phelps Hospital
11	26853	8/26/2019 8:55:04 AM	Operational/Process Improvement	Phelps Hospital
12	26852	8/26/2019 8:54:11 AM	Operational/Process Improvement	Phelps Hospital
13	26851	8/26/2019 8:08:55 AM	Operational/Process Improvement	Phelps Hospital
14	26824	8/23/2019 11:01:10 AM	Operational/Process Improvement	Phelps Hospital
15	26822	8/23/2019 9:33:01 AM	Therapeutic Radiation Incident	Lenox Hill Hospital (LHH)
16	26800	8/22/2019 3:05:43 PM	Operational/Process Improvement	Phelps Hospital
17	26684	8/20/2019 10:28:10 AM	Near-miss	Center for Advanced Medicine (CFAM)
18	26669	8/20/2019 8:42:19 AM	Unsafe condition	Center for Advanced Medicine (CFAM)
19	26653	8/19/2019 2:49:03 PM	Therapeutic Radiation Incident	Center for Advanced Medicine (CFAM)
20	26634	8/19/2019 6:43:40 AM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
21	26616	8/16/2019 12:04:45 PM	Other Safety Incident	Phelps Hospital
22	26615	8/16/2019 11:58:30 AM	Other Safety Incident	Phelps Hospital
23	26597	8/16/2019 8:37:15 AM	Unsafe condition	Long Island Jewish Medical Center (LIJ)
24	26595	8/16/2019 6:38:26 AM	Operational/Process Improvement	Long Island Jewish Medical Center (LIJ)
25	26594	8/15/2019 6:24:19 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
26	26593	8/15/2019 6:20:42 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
27	26580	8/15/2019 11:27:43 AM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
28	26579	8/15/2019 11:23:21 AM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
29	26578	8/15/2019 11:18:03 AM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
30	26577	8/15/2019 11:11:36 AM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
31	26552	8/14/2019 1:27:11 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
32	26542	8/14/2019 11:17:56 AM	Operational/Process Improvement	Lenox Hill Hospital (LHH)
33	26541	8/14/2019 10:58:20 AM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
34	26498	8/13/2019 1:05:00 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
35	26496	8/13/2019 1:00:55 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
36	26475	8/13/2019 9:18:47 AM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
37	26467	8/12/2019 4:34:35 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
38	26466	8/12/2019 4:32:47 PM	Operational/Process Improvement	Center for Advanced Medicine (CFAM)
39	26442	8/12/2019 1:26:50 PM	Operational/Process Improvement	Lenox Hill Hospital (LHH)
40	26427	8/12/2019 8:43:00 AM	Operational/Process Improvement	Phelps Hospital
41	26426	8/12/2019 8:42:29 AM	Operational/Process Improvement	Phelps Hospital
42	26425	8/12/2019 8:41:59 AM	Operational/Process Improvement	Phelps Hospital
43	26424	8/12/2019 8:41:30 AM	Operational/Process Improvement	Phelps Hospital
44	26423	8/12/2019 8:40:54 AM	Operational/Process Improvement	Phelps Hospital
45	26373	8/9/2019 8:47:51 AM	Near-miss	Long Island Jewish Medical Center (LIJ)

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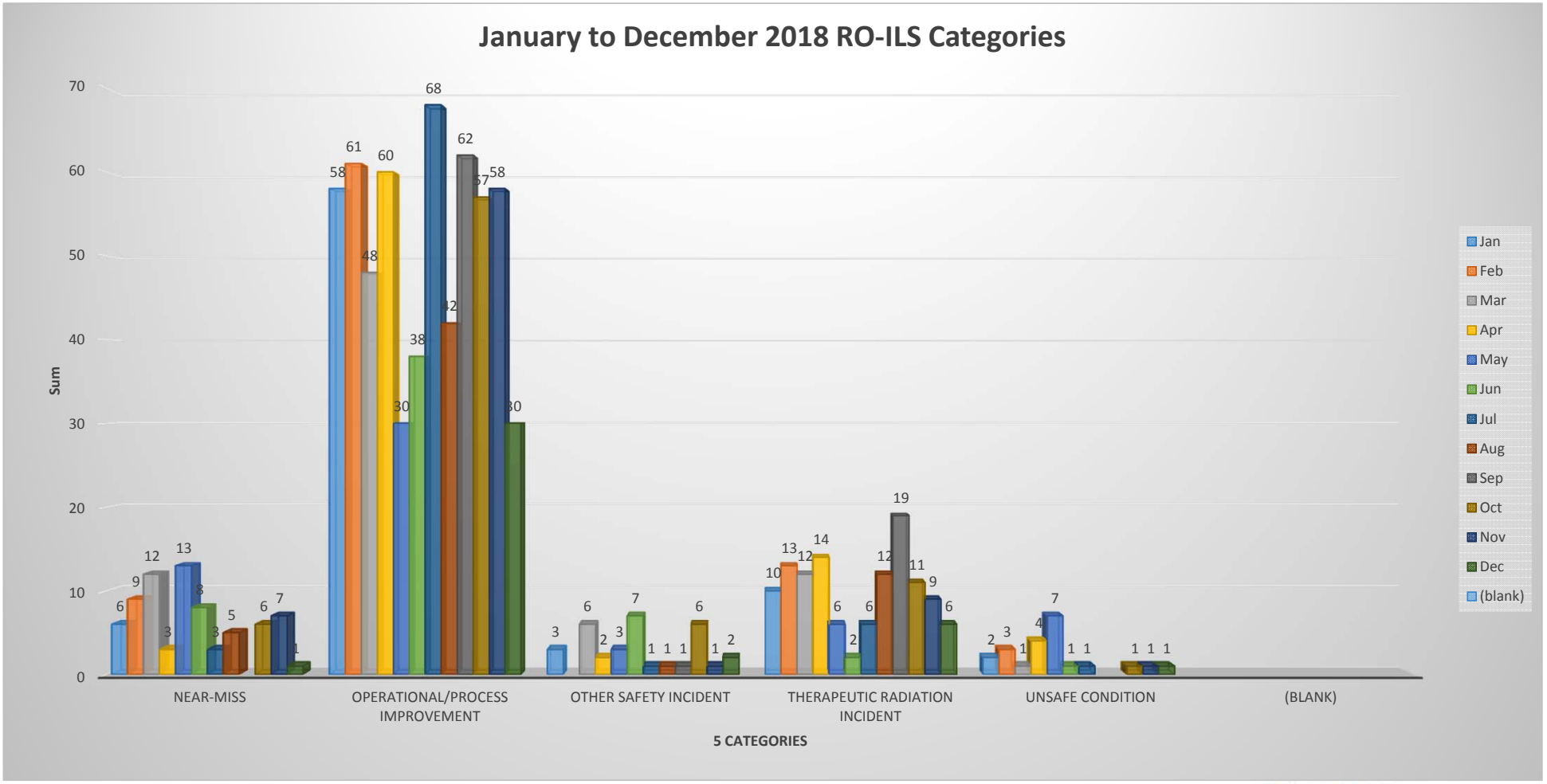

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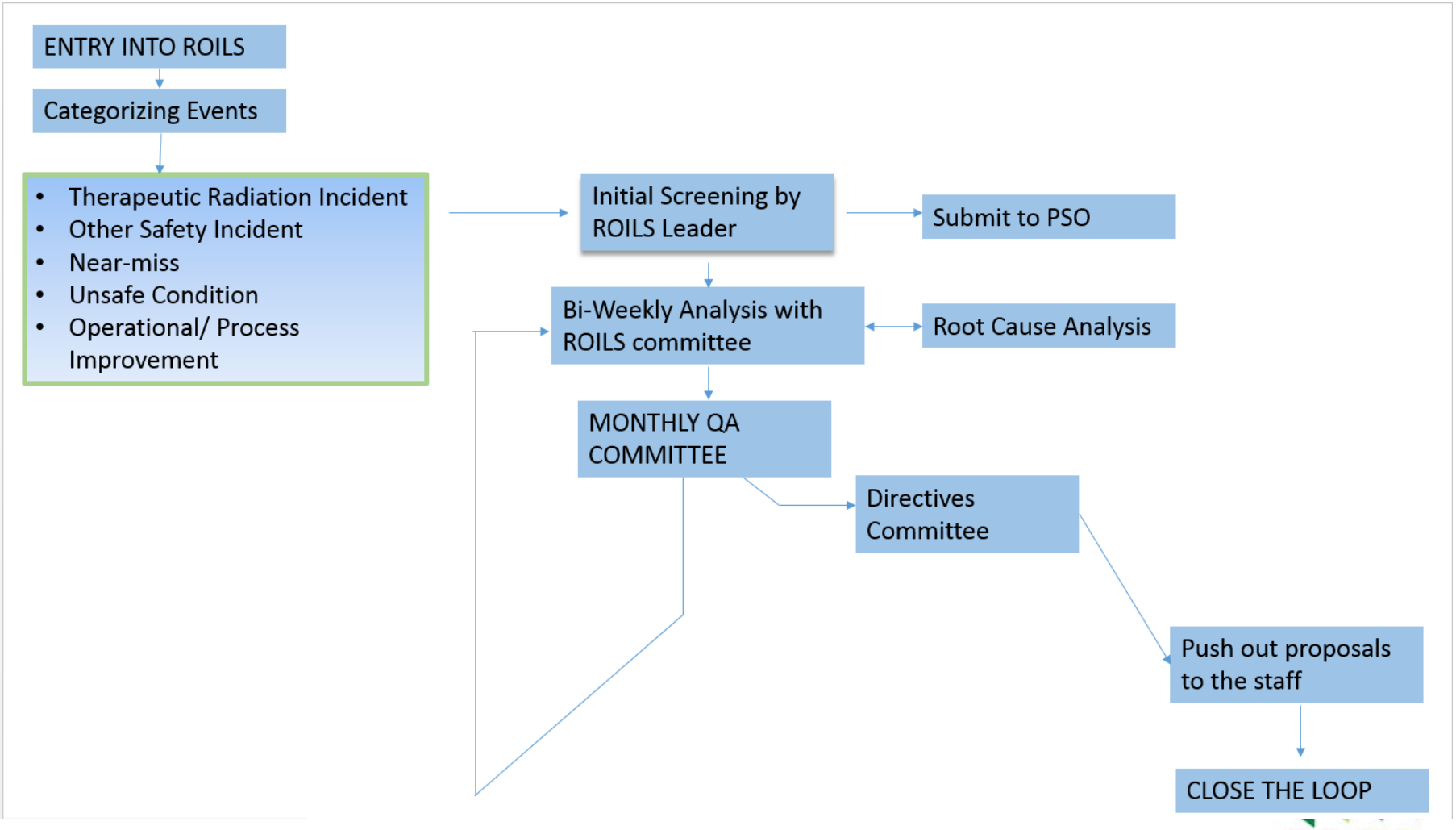

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Why break the event Sub Type down further?

Select All	Event Sub Type
Therapeutic Radiation Incident	
Other Safety Incident	
Near-miss	
Unsafe condition	
Operational/Process Improvement	

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Example – Sept 2018

Name	Count
Operational/Process Improvement	62
Other Safety Incident	1
Therapeutic Radiation Incident	19
Total	82

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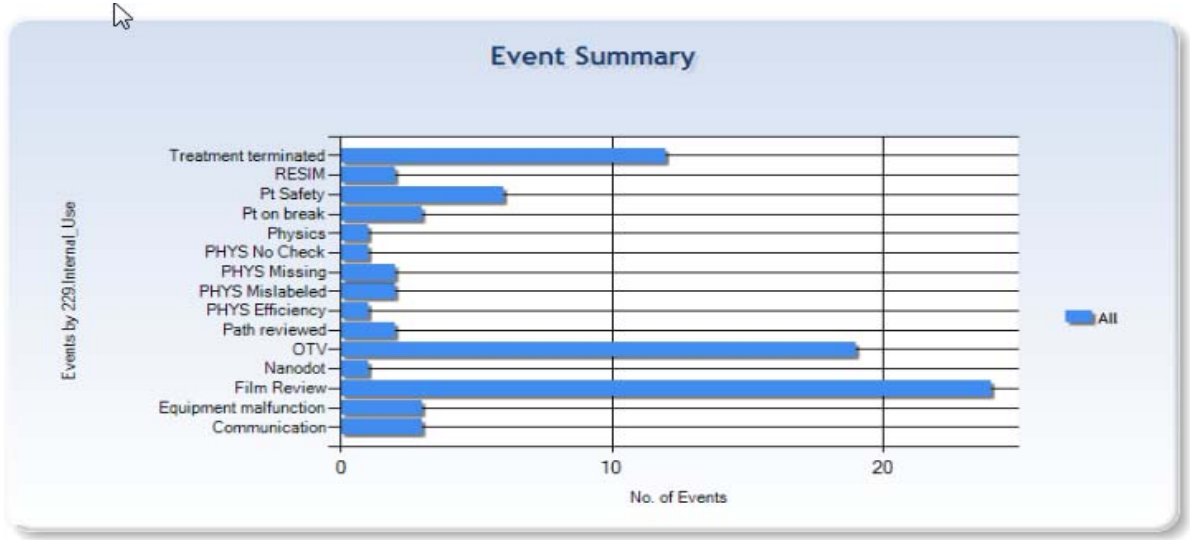

Name	Count
Communication	3
Equipment malfunction	3
Film Review	24
Nanodot	1
OTV	19
Path reviewed	2
PHYS Efficiency	1
PHYS Mislabeled	2
PHYS Missing	2
PHYS No Check	1
Physics	1
Pt on break	3
Pt Safety	6
RESIM	2
Treatment terminated	12
Total	82

Same month – more data to report out – more opportunity for operational process improvements

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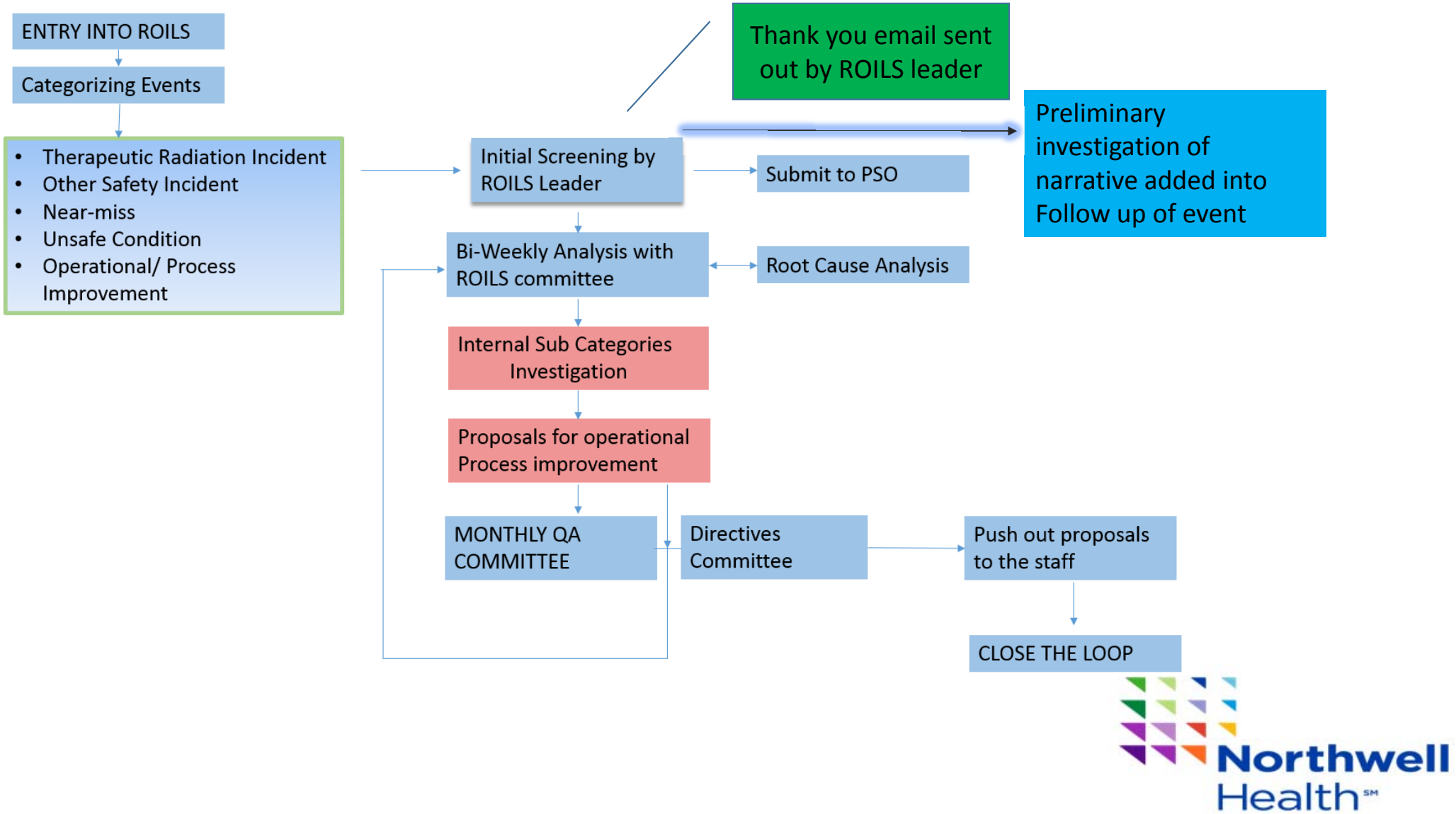

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Mindsets that we embrace - Why we do what we do.

- Patient Safety
- Compassion and Teamwork
- Communication

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Patient Safety

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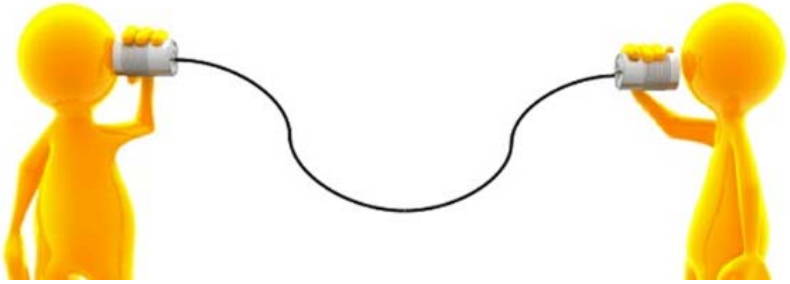
How do we communicate?

- Verbally
- Email
- Note?



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What happens when the ball gets dropped?

- Easy to point fingers BUT is it easy to report an event you were apart of?

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What is the point of us reporting an event?

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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

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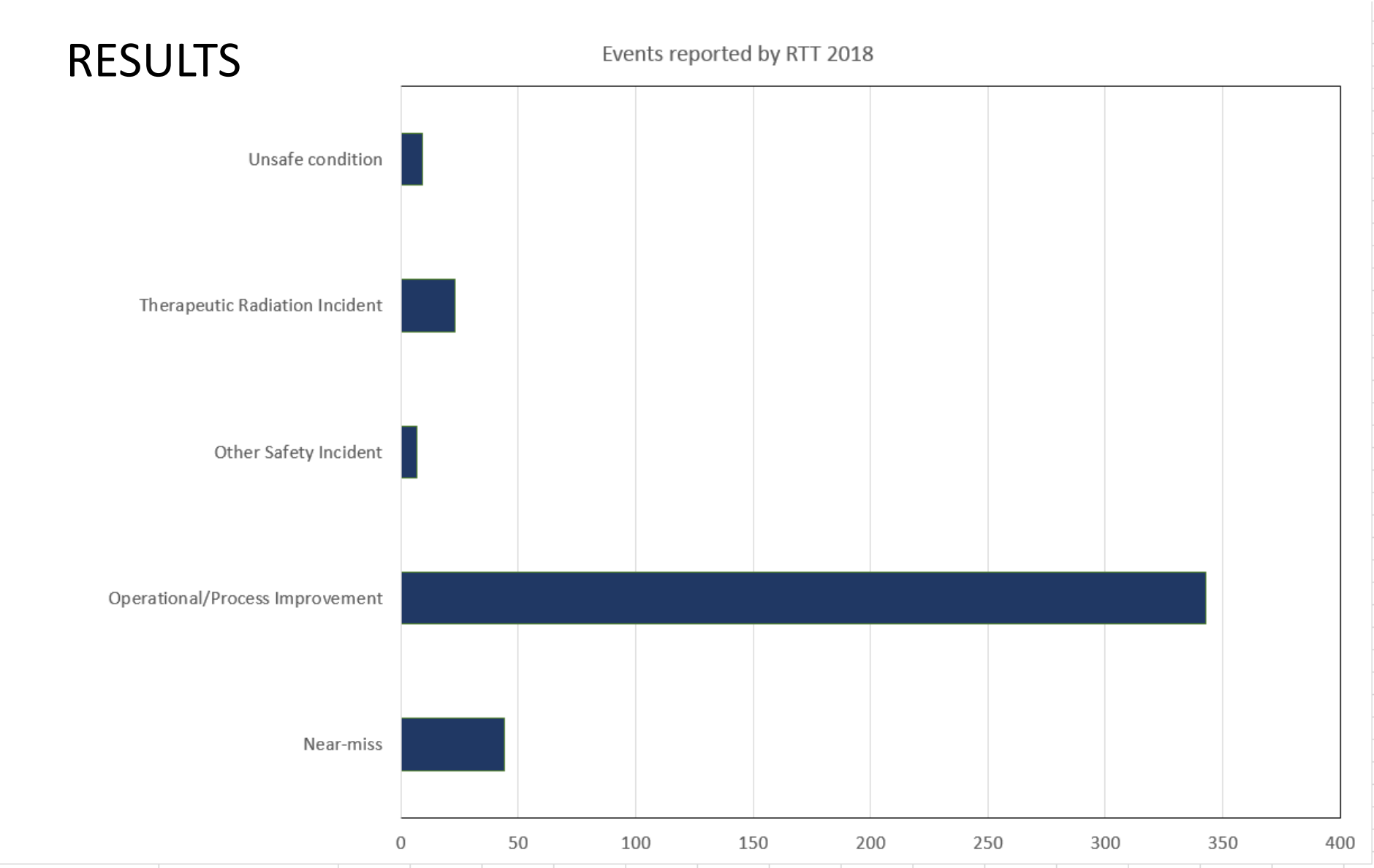
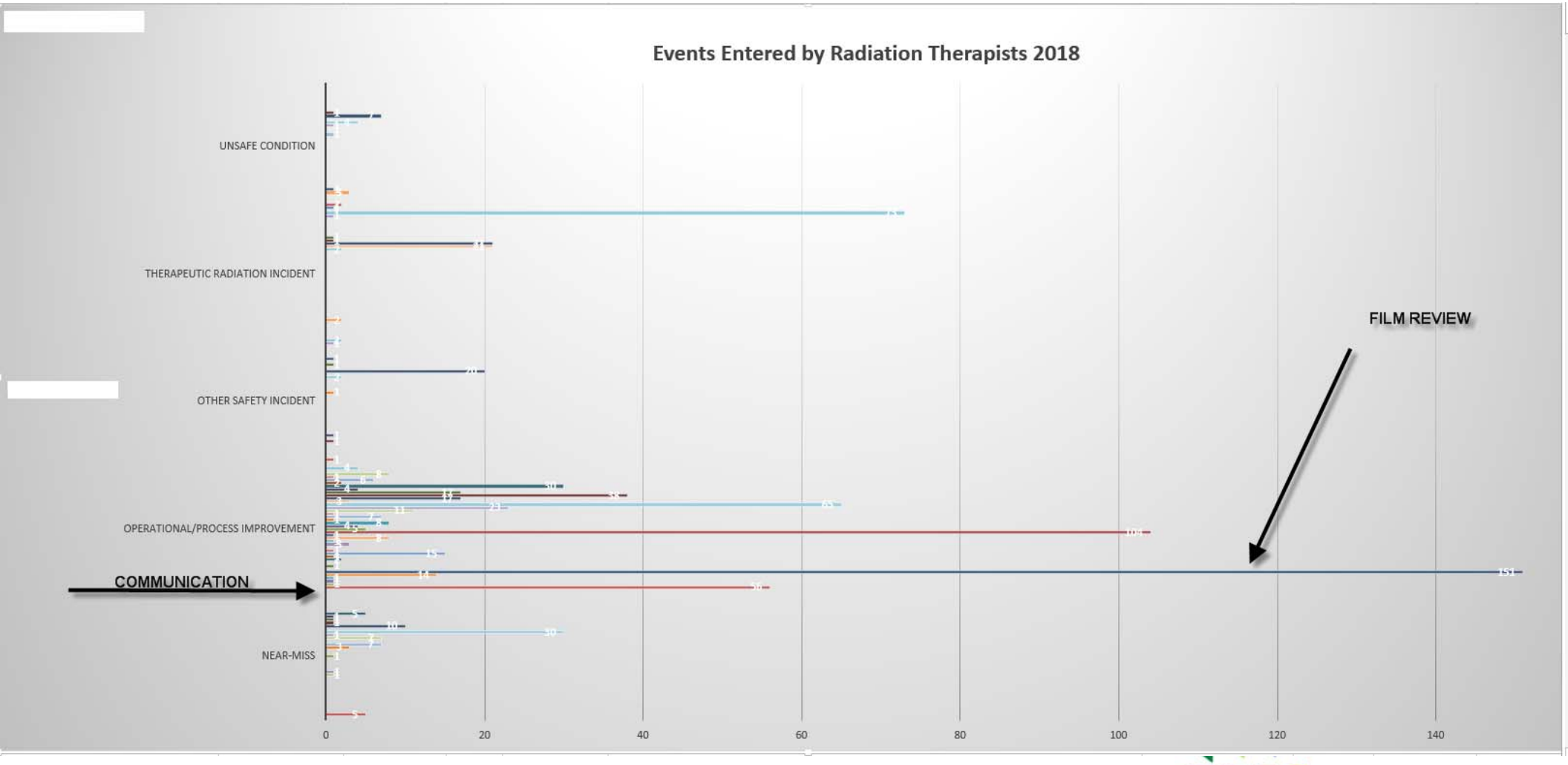
RESULTS


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



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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.

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RO-ILS Reporting & Changes Implemented

1. Communication
2. Staff Safety
3. Film Review

1. Work with Chiefs and Dosimetrists to communicate if patients are changed to another machine during planning
2. Patient safe handling community developed and patient lifting equipment acquired
3. Implementing peer-to-peer feedback. Accountability. Number of events decreased going into next quarter.

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We hear you…

We have observed reinvigorated enthusiasm in staff members as a direct result of this program.

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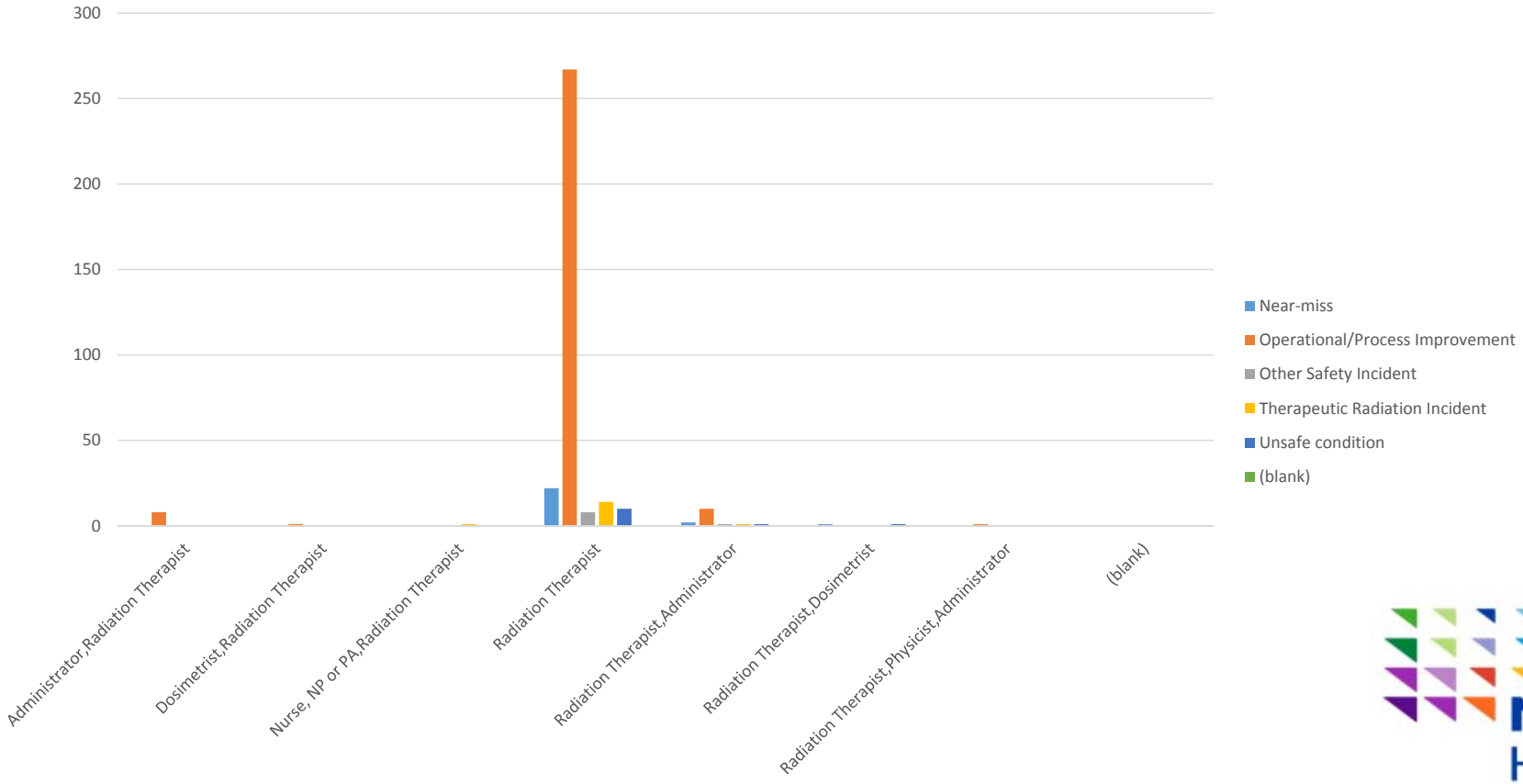
From Jan 2019 - Aug 2019, Therapists have reported 349 events out of 641 events in RO-ILS



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DISCUSSION
Why we embraced RO-ILS

- Operational Learning

- How each RO-ILS event may help us learn as a team?

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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

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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.

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Rounding -

- Leadership asked therapists for suggestions on how processes could be improved to minimize the error pathway.

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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.

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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.

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Acknowledgements

Jeff Antone, CMD

Adam Riegel, PhD

May Lim, MD

Gayle Somerstein, RN

Louis Potters, MD

References

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Thank you