

Using Event Reporting to Improve Patient Safety

SAMs Session

AAPM 2015 Spring Clinical Meeting, St. Louis, MO

Sunday 7:30-9:30 am

March 8, 2015

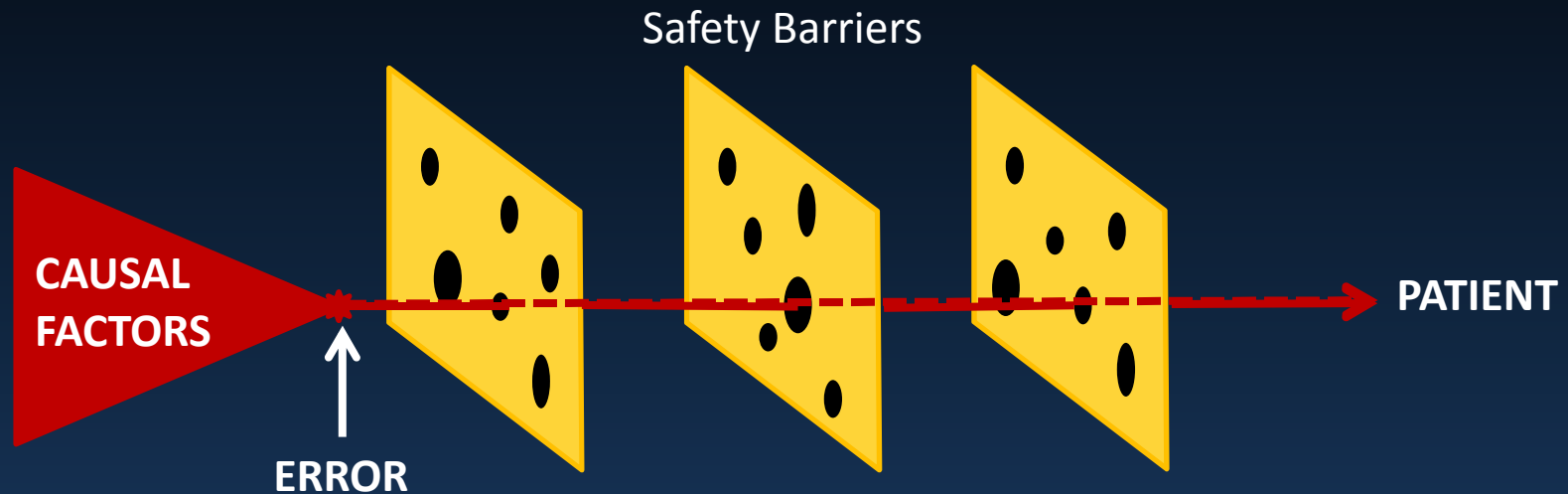
Outline

- Eric Ford, PhD, University of Washington
 - Incident learning and the AAPM/ASTRO RO-ILS system
- Susan Richardson, PhD, Swedish Cancer Center
 - Case studies
- Suzanne Evans, MD, Yale University
 - Barriers and buy-in

Disclosures

- R18 HS22244-01
- Chair ASTRO MDQA committee
- Vice-chair AAPM QASC
- Vice-chair AAPM WGPE
- Member ROHAC

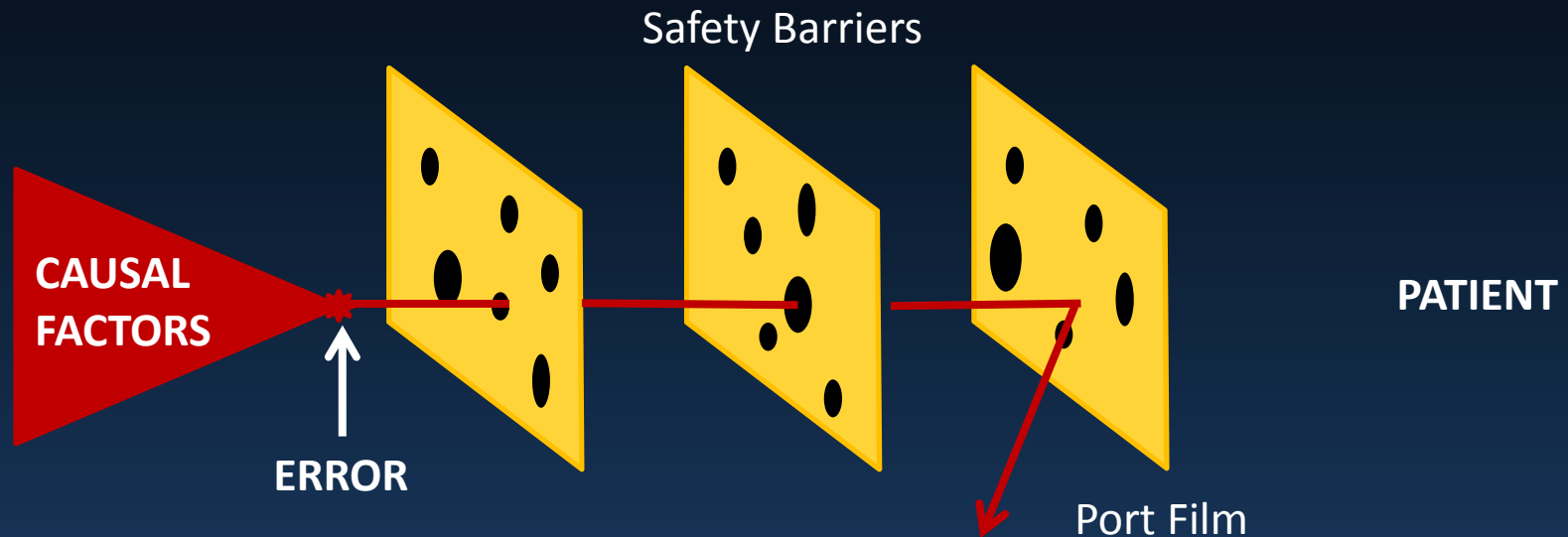
Incident Learning: Three types of reports



1. Incident

- Impacted the patient in some way
- May or may not cause harm

Incident Learning: Three types of reports



2. Near-miss

- Event is stopped by some safety barrier

Incident Learning: Three types of reports



3. Unsafe condition

Any circumstance that increases the probability of a patient safety event.

Incident Learning: Three types of reports

1. Incident – reached patient
2. Near-miss
3. Unsafe condition

All three types of events are recorded and analyzed in incident learning.

Systematically analyzing events presents a learning opportunity.

Agency for Healthcare Quality and Research (pso.ahrq.gov)

Incident Learning in RO

What does it look like today?

- An official recommendation of ASTRO (c.f. “Safety is No Accident” report and Safety White papers)
- Requirement for practice accreditation
- Can be part of ABR board maintenance of certification (via a PQI project)

Incident Learning in RO

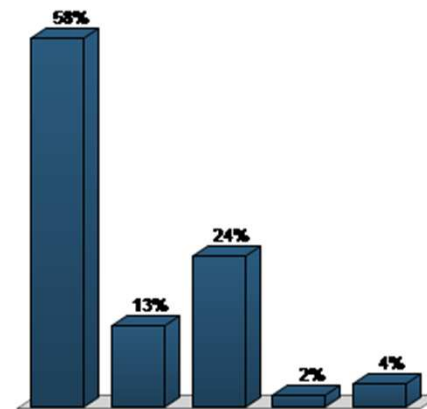
What does it look like today?

Most centers are engaged in incident learning

2. What system is used to log and review reports?

| | Responses | |
|---|-----------|-------|
| | Percent | Count |
| Hospital incident reporting system | 58.18% | 32 |
| Electronic system within the department | 12.73% | 7 |
| Other system within the department (e.g. paper) | 23.64% | 13 |
| No formal system for reporting | 1.82% | 1 |
| -- | 3.64% | 2 |
| Totals | 100% | 55 |

Some system to incident reporting



Spring Clinical Meeting 2014

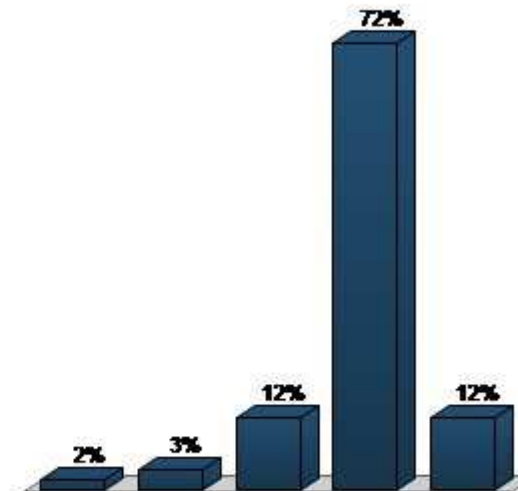
Incident Learning in RO

What does it look like today?

Low volume of reports

4. How many reports are registered per month?

| | Responses | |
|----------------------------|-----------|-------|
| | Percent | Count |
| >40 | 1.67% | 1 |
| 20-40 | 3.33% | 2 |
| 4-20 | 11.67% | 7 |
| <4 | 71.67% | 43 |
| Don't know / No experience | 11.67% | 7 |
| Totals | 100% | 60 |



Spring Clinical Meeting 2014

National Voluntary System



RO•ILS

RADIATION ONCOLOGY
INCIDENT LEARNING SYSTEM

Sponsored by ASTRO and AAPM

The RO-ILS mission 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.



RO-ILS is the only medical-specialty-sponsored radiation oncology PSO. Data collected from RO-ILS will educate the radiation oncology community on how to improve safety and patient care.

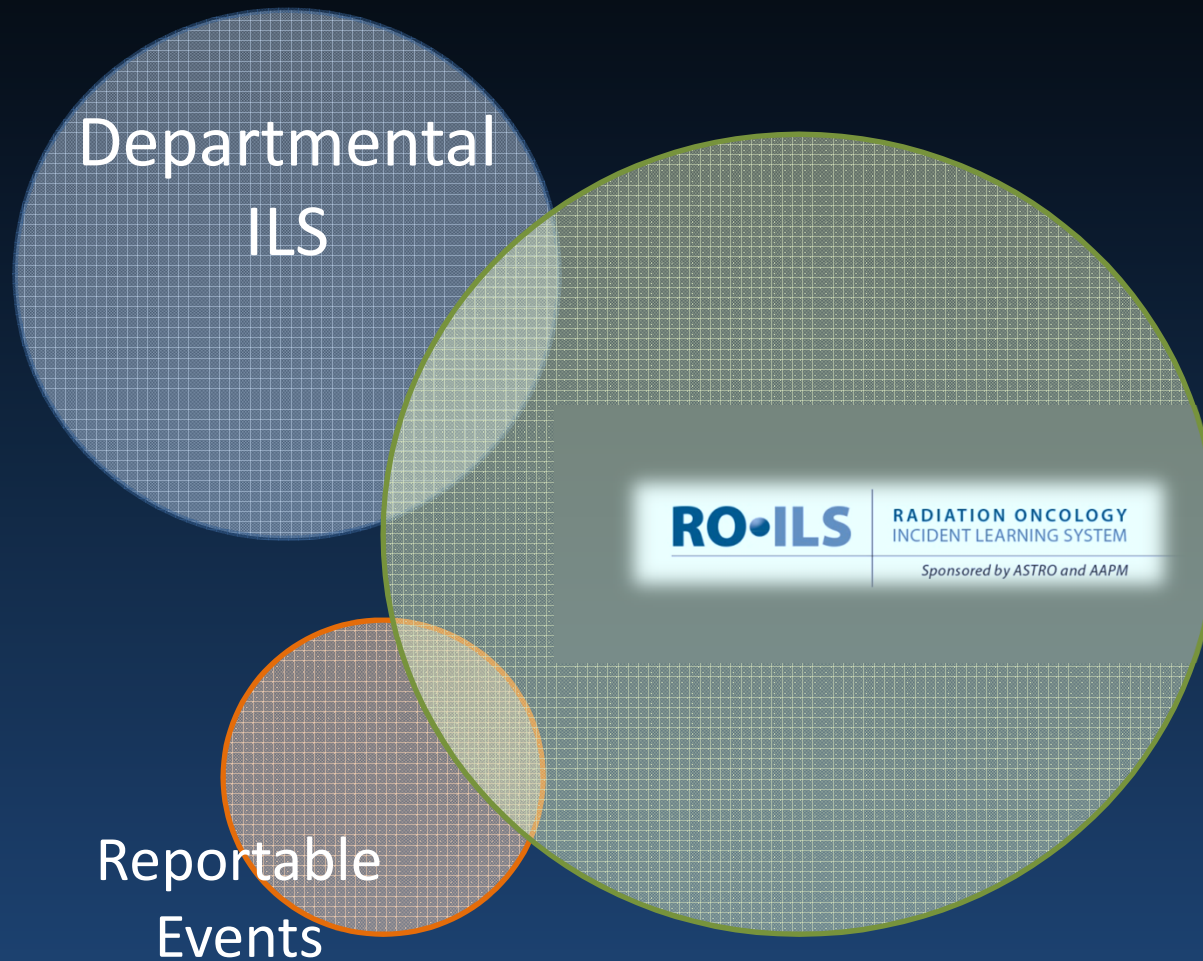
**For more information, visit: www.astro.org/ROILS
Email: ROILS@astro.org**

RO-ILS Launch



June 19, 2014

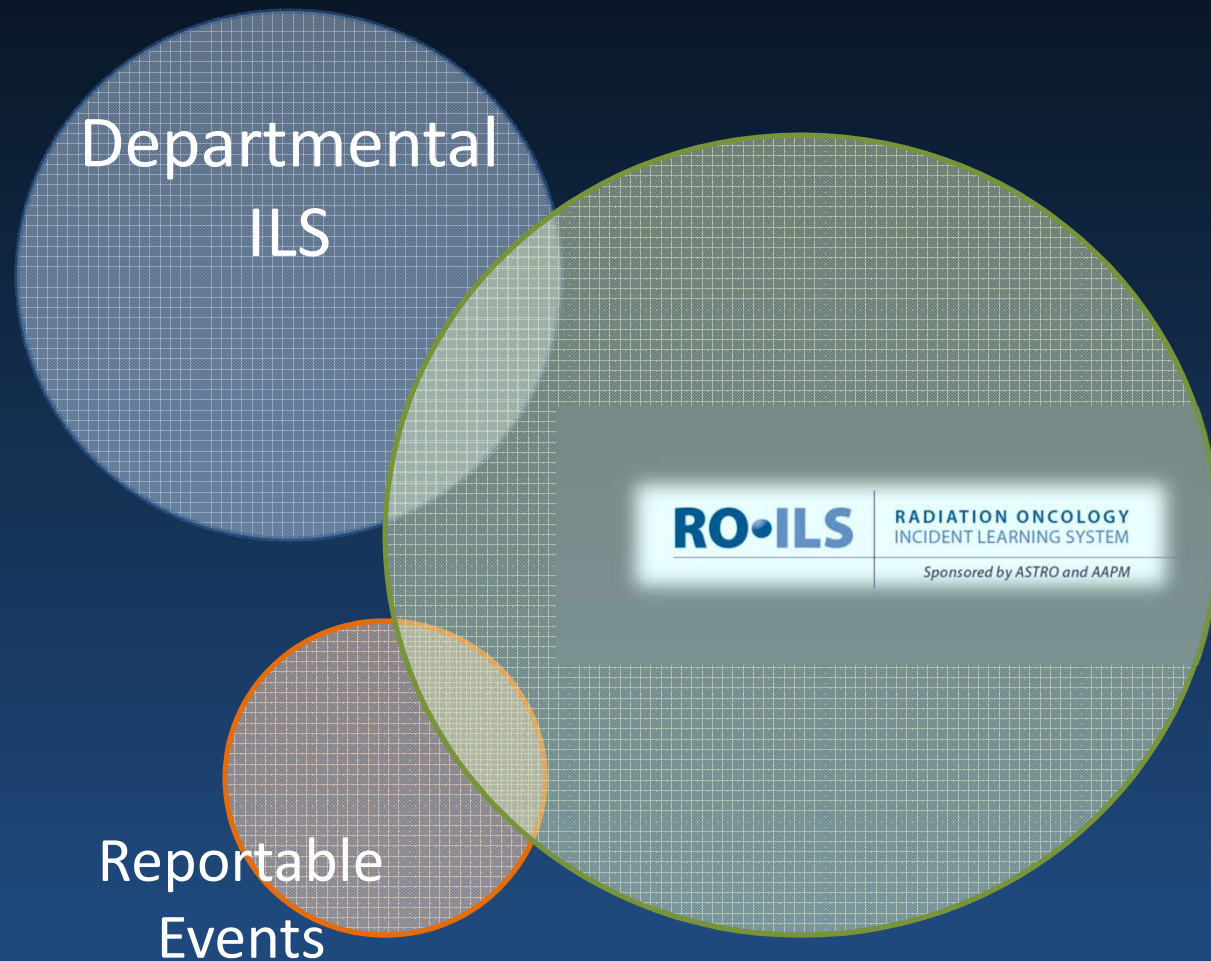
Incident Learning in RO



Reference: RO-ILS Users' Guide (astro.org/roils)

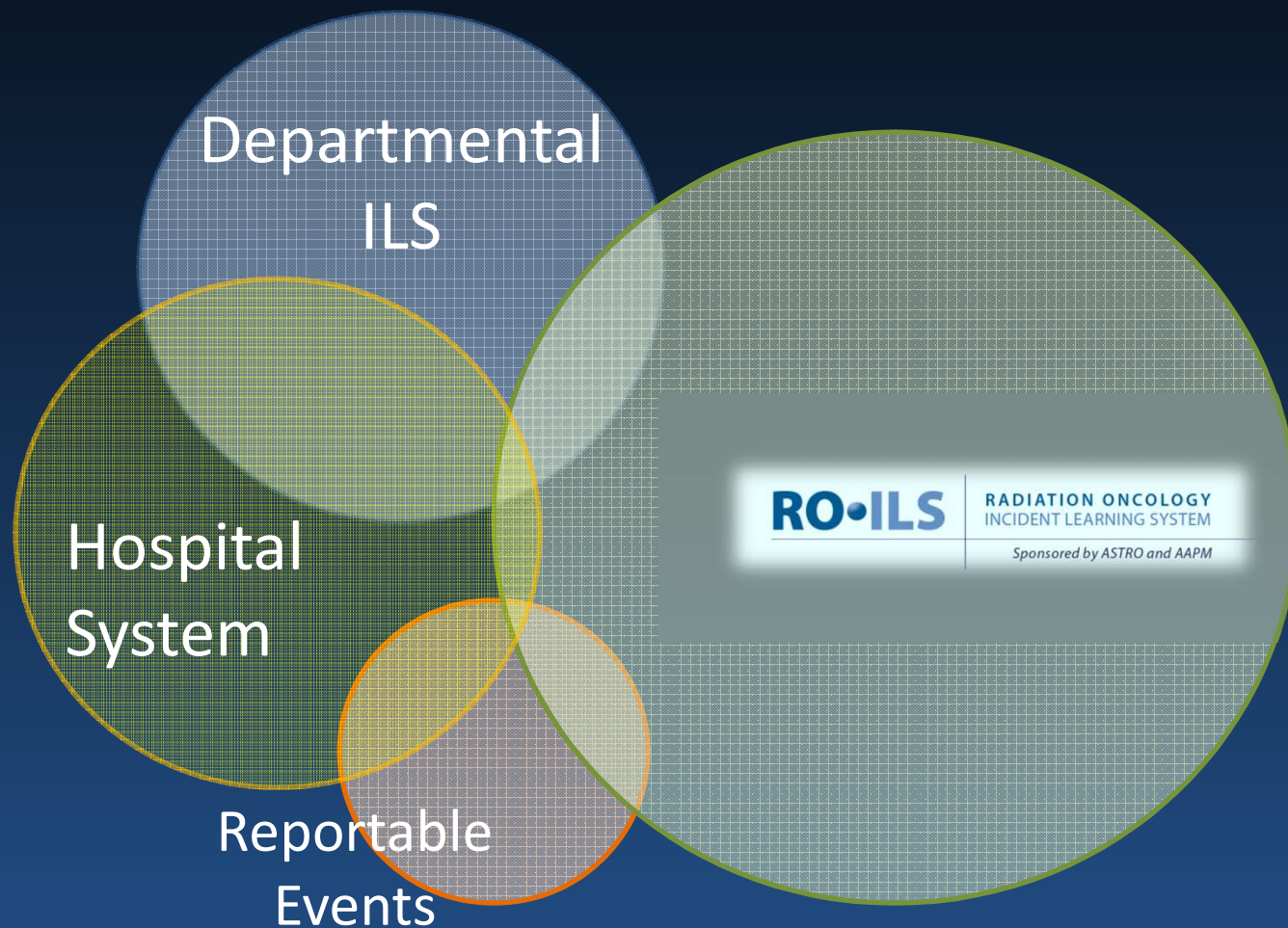
Incident Learning in RO

What does it look like today?



Incident Learning in RO

What does it look like today?



RO-ILS System

A “how to” overview

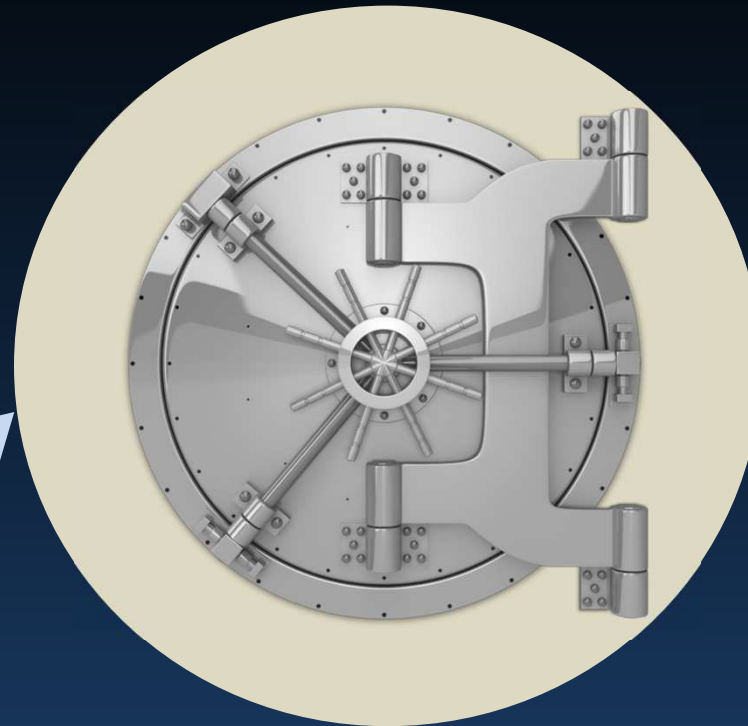
- Structure and contracting process
- Live demo of the portal
- Use as an institutional QI tool

First year of experience

- Statistics and overview

Structure of RO-ILS

**Patient Safety
Organization
(PSO)**
Clarity Inc.



Sign Contract

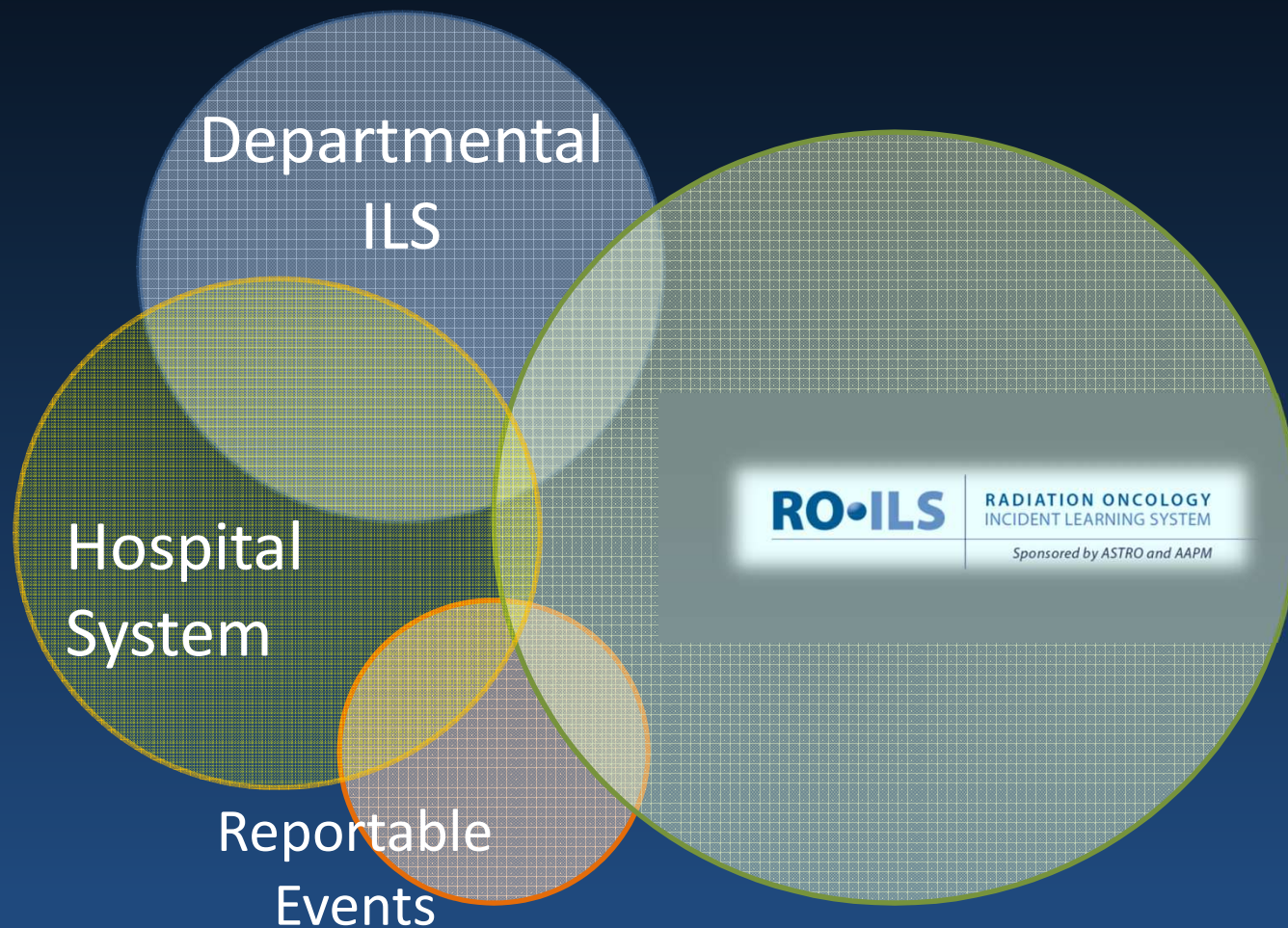


Download
RO-ILS Users' Guide
(astro.org/roils)

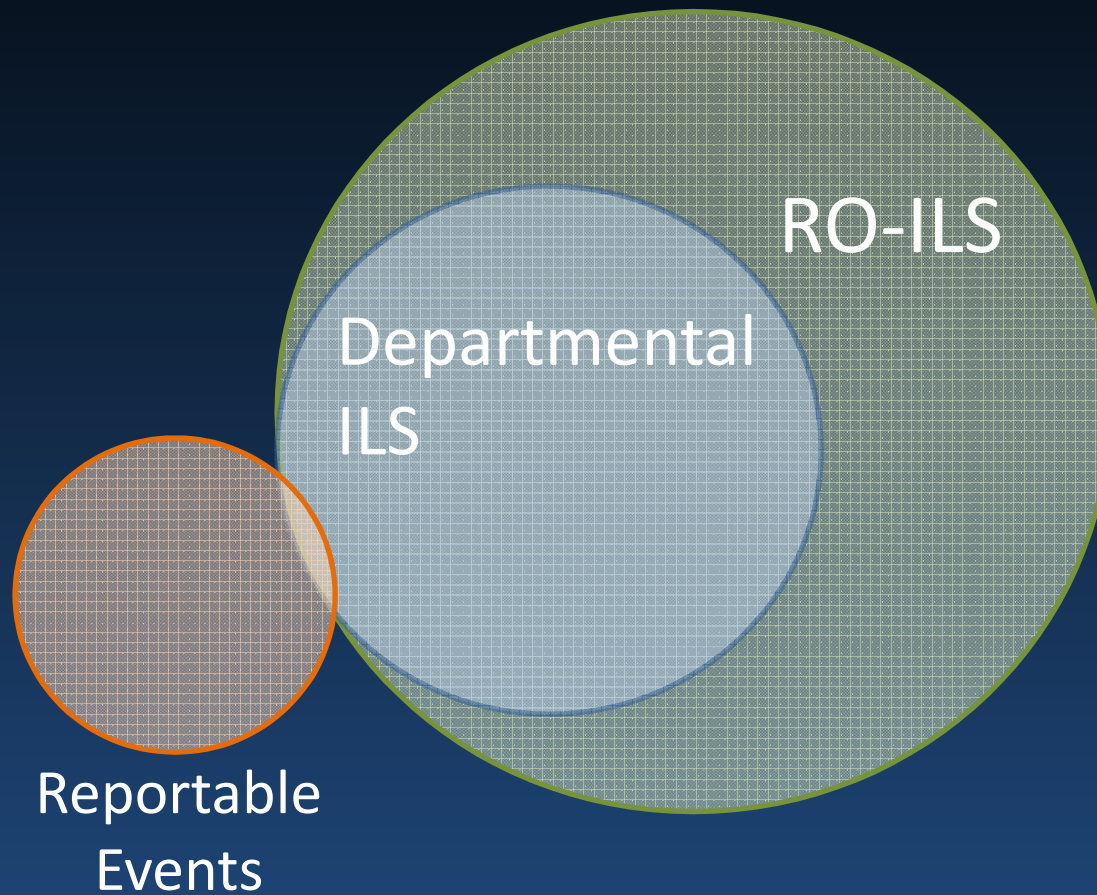


Incident Learning in RO

What does it look like today?

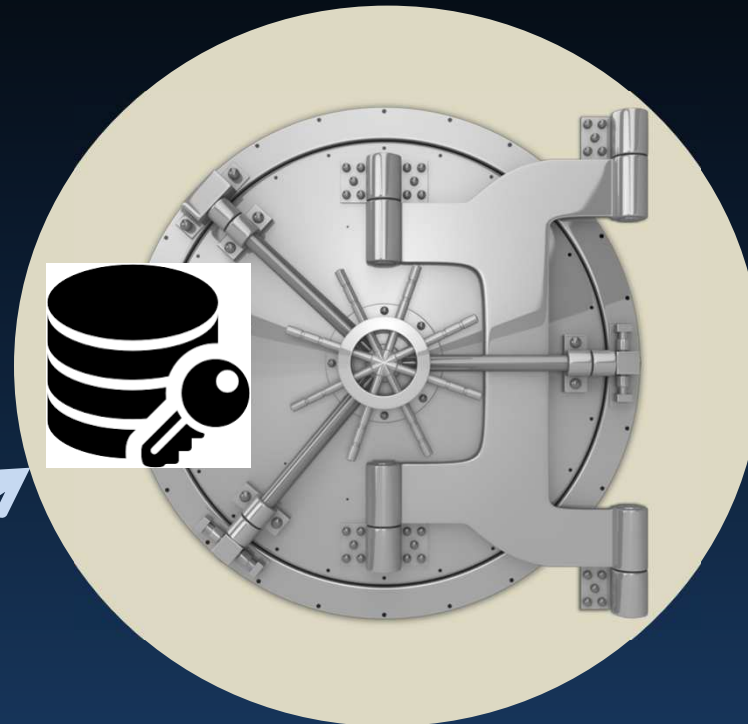


Incident Learning in RO



Structure of RO-ILS

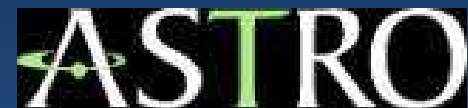
**Patient Safety
Organization
(PSO)**
Clarity Inc.



Incident
Reports



Advisory Council



LIVE DEMO

- Demo of web-portal reporting and analysis

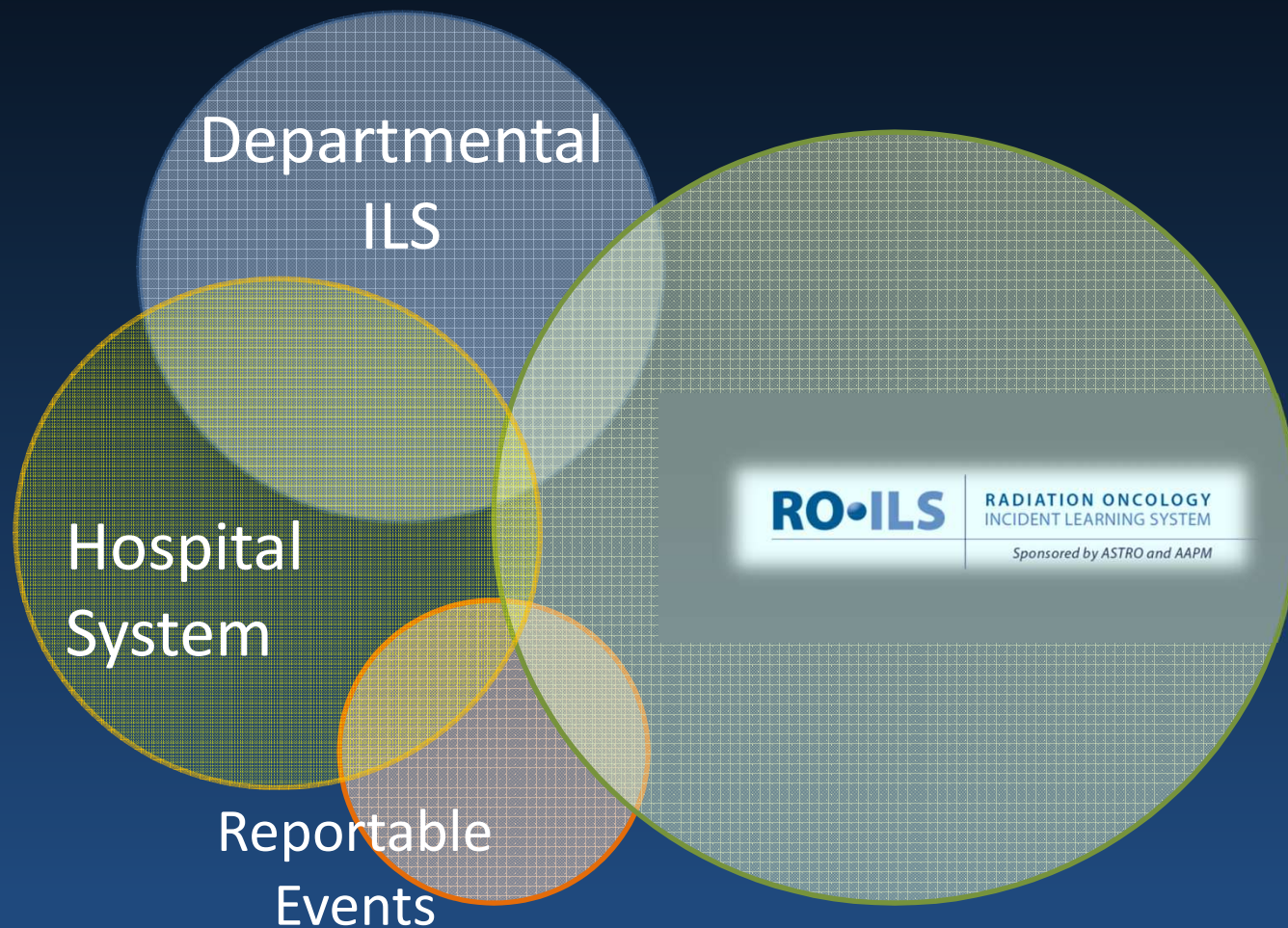
RO•ILS

RADIATION ONCOLOGY
INCIDENT LEARNING SYSTEM

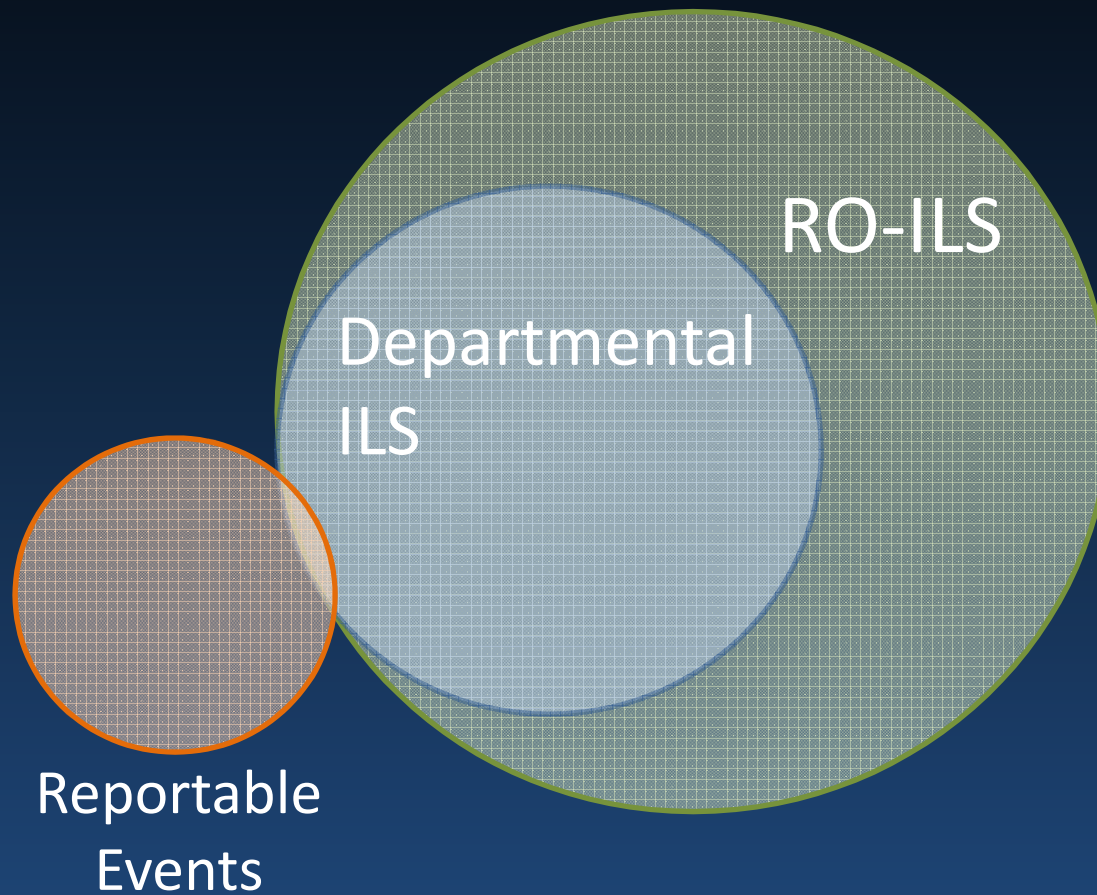
Sponsored by ASTRO and AAPM

Incident Learning in RO

What does it look like today?



Incident Learning in RO



LIVE DEMO

Further demo of use as a departmental ILS tool

RO•ILS

RADIATION ONCOLOGY
INCIDENT LEARNING SYSTEM

Sponsored by ASTRO and AAPM

RO-ILS: Year 1

Launched June 19, 2014

Current status (Feb 24, 2015)

- 46 contracts. 33 pending.
- 358 reports to PSO.
- Quarterly reports being issued to participants.

RO-ILS

RADIATION ONCOLOGY
INCIDENT LEARNING SYSTEM

Sponsored by ASTRO and AAPM



RO•ILS™

**RADIATION ONCOLOGY
INCIDENT LEARNING SYSTEM**

Sponsored by ASTRO and AAPM



QUARTERLY REPORT PATIENT SAFETY WORK PRODUCT

Q3 2014

JULY 1, 2014 – SEPTEMBER 30, 2014

CLARITY PSO,
a Division of Clarity Group, Inc.
8725 West Higgins Road • Suite 810 • Chicago, IL 60631
T: 773.864.8280 • F: 773.864.8281
www.claritypsa.com

AGGREGATE REPORT CARD –

Q3 2014

July 1, 2014 – September 30, 2014

| Metric | Aggregate Current Quarter | Aggregate Previous Quarter | Provider Historical Quarter Average |
|--|---|---|--|
| Total number of Events | 60 | 81 | |
| Patient Incident | 24 | 35 | - |
| Near Miss | 25 | 23 | |
| Unsafe Conditions | 11 | 22 | |
| Not patient related | 0 | 1 | |
| Most Commonly Identified Characteristic Event | Desired Procedure Inadvertently Omitted: 20% (12/60) Unanswered/Not Sure: 58% (35/60) | Desired Procedure Inadvertently Omitted: 19% (15/81) Unanswered/Not Sure: 53% (43/81) | - |
| Most Commonly Identified Workflow Step Where Event Occurred | Treatment Planning: 17% (10/60) Unanswered: 70% (42/60) | Treatment Planning: 16% (13/81) Unanswered: 65% (53/81) | - |

CASE REVIEWS

Case reviews offer an opportunity to learn about patient safety through sharing of actual events. Below are two events reported that were identified as opportunities for reflection and learning.

CASE REVIEW 1

- Two patients with similar disease/dose/fractionation were treated out of order and the incorrect plan (i.e. other patient's plan) was treated on the first patient. The pretreatment "time-out" process used to verify correct patient, site and procedure did not prevent this incident. Two other cases this quarter included the incorrect extremity imaged or planned for treatment, but these incidents were identified and corrected before radiotherapy began.
 - These incidents highlight the importance of performing a robust pre-procedure verification and "time-out" process before every simulation and every fraction.
 - According to the ASRT Radiation Therapy Clinical Performance Standards (http://media.asrt.org/pdf/governance/practicestandards/ps_rt.pdf): "The radiation therapist... performs procedural timeout," and "documents procedural timeout."
 - Such incidents share commonalities with wrong site surgery cases
 - The Joint Commission (TJC) includes the use of a "time-out" immediately prior to surgeries and "other invasive procedures that expose patients to harm."
 - Every radiotherapy clinic should implement a formal time-out process. TJC Universal Protocol for Preventing Wrong Site, Wrong Procedure and Wrong Person Surgery is available as a resource at http://www.jointcommission.org/standards_information/up.aspx.