Management Tools to Ensure Quality and Safety

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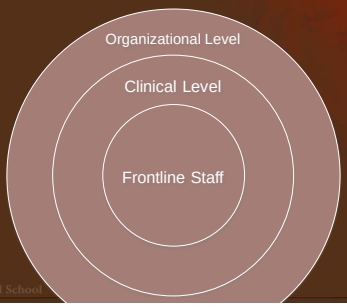
Strata we must influence for Q&S Cultural Shift



Managing to promote quality and safety

Promote an organizational culture that values quality and safety

- Leadership buy-in is essential
  - Engage Physicians & Administrators need in the process
- Cultural changes are difficult
  - Tools can help demonstrate tangible, quantitative benefits

Managing to promote quality and safety

Nurture a clinical culture that looks for opportunities to improve quality and safety

- Focus on systems & processes
  - *"It's the process, not the person"*
- Find faults before faults find you
  - Regular, recursive self-auditing of workflows & policies

Managing to promote quality and safety

Empower the front-line staff to guide strategies to improve safety and quality

- Therapists, techs, and nurses are your eyes & ears
  - First to know of breakdowns in workflows lying upstream
- Consider an integrated versus hierarchical approach to Q&S strategies

Empowerment – Hierarchical vs. Integrated model

Concept from Chera, Semin Radiat Oncol 22:77-85

Empowerment – Hierarchical vs. Integrated model

Reactive

Empowerment – Hierarchical vs. Integrated model

Continuous monitoring of processes

Empowerment of everyone to improve processes

Nurtures a Culture of Safety

Support quality and safety initiatives

Concept from Chera, Semin Radiat Oncol 22:77-85

Empowerment – Hierarchical vs. Integrated model

Proactive

Tools to empower staff & nurture a culture of Quality & Safety

1. Integrated Improvement Methods
2. Mapping & Assessing Clinical Workflows
3. Patient Safety Event Reporting

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Tools to empower staff & nurture a culture of Quality & Safety

Integrated Improvement Methods

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Integrated Improvement Methods

- Include clinical shareholders when developing processes & policies
  - "Generate light, not heat"
  - Make it easy to try & do the right thing

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Tools to empower staff & nurture a culture of Quality & Safety

Integrated Improvement Methods

- Standardize what is "standardizable"
  - Take advantage of technology
  - Across network


Task Group 142 report: Quality assurance of medical accelerators[a)]

Eric E. Klein[b)]

Washington University, St. Louis, Missouri

JOURNAL OF APPLIED CLINICAL MEDICAL PHYSICS, VOLUME 16, NUMBER 3, 2015

Medical Physics Practice Guideline 4.a: Development, implementation, use and maintenance of safety checklists

Task Group Authors: Luis E. Fong de los Santos, Chair, Suzanne Evans, Eric C. Ford, James E. Geiser, Sandra E. Hayden, Kristina E. Huffman,

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Integrated Improvement Methods

- Standardize what is "standardizable"
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Tools to empower staff & nurture a culture of Quality & Safety

Mapping & Assessing Clinical Workflows

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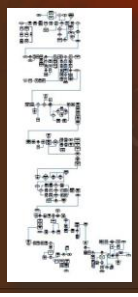
Tools to empower staff & nurture a culture of Quality & Safety

Mapping & Assessing Clinical Workflows

- Complex & time-consuming, but encapsulate all steps
- Required dialogue promotes a better understanding of the process & its boundaries



Ford IJROBP 2009

Tools to empower staff & nurture a culture of Quality & Safety

Mapping & Assessing Clinical Workflows

- Complex & time-consuming but encapsulate all steps
- Required dialogue promotes a better understanding of the process & its boundaries

VisionRT DIBH workflow, RIH

Tools to empower staff & nurture a culture of Quality & Safety

Patient Safety Event Reporting

Tools to empower staff & nurture a culture of Quality & Safety

Patient Safety Event Reporting

- Classes of events? → "Incident"
  Any unintended or unexpected event which is not a part of the standard clinical operation and which causes, or may cause an adverse effect to patients.

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Definitions from cars-pso.org

Tools to empower staff & nurture a culture of Quality & Safety

Patient Safety Event Reporting

- Classes of events? → "Good Catch"
  unplanned event that did not result in injury, illness, or damage – but had the potential to do so *i.e. A near miss*

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Definitions from cars-pso.org

Tools to empower staff & nurture a culture of Quality & Safety

Patient Safety Event Reporting

- Classes of events? → "Unsafe condition"
  A hazardous physical condition, circumstance, or work environment that has the potential to directly lead to an incident

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Definitions from cars-pso.org

Tools to empower staff & nurture a culture of Quality & Safety

Patient Safety Event Reporting

- Classes of events?
- Ways to track & analyze:
  1. Extra-institutional PSOs
     - Confidential / non-punitive
     - Non-discoverable
     - Feedback / benchmarking

RIRAS Radiotherapy Incident Reporting & Analysis System
For patient safety, quality improvement and prevention of errors in Radiation Oncology

RO-ILS RADIATION ONCOLOGY INCIDENT LEARNING SYSTEM
Sponsored by ASTRO and AAPM

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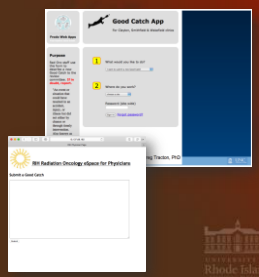
Tools to empower staff & nurture a culture of Quality & Safety

Patient Safety Event Reporting

- Classes of events?
- Ways to track & analyze:
  2. Intra-institutional
     - Flexible implementation
     - Immediate feedback



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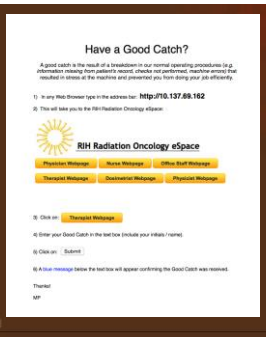
RIH Incident Reporting System



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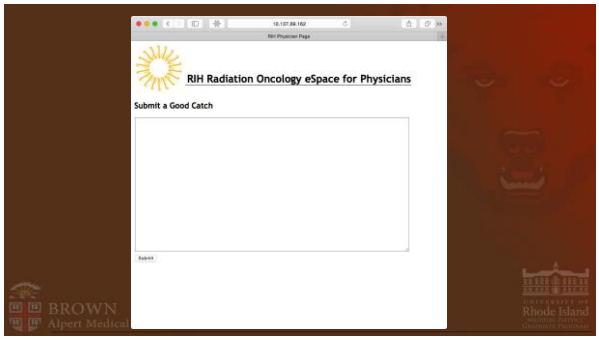

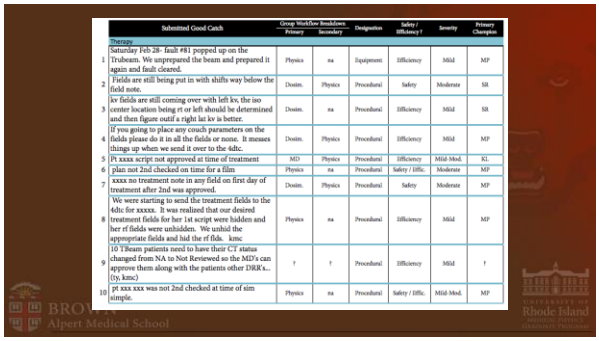

	Submitted Good Catch	Group Workflow Breakdown: Primary	Secondary	Designation	Safety / Efficiency ?	Severity	Primary Champion
	Therapy						
1	Saturday Feb 28- fault #81 popped up on the Trubeam. We unprepared the beam and prepared it again and fault cleared.	Physics	na	Equipment	Efficiency	Mild	MP
2	Fields are still being put in with shifts way below the field note.	Dosim.	Physics	Procedural	Safety	Moderate	SR
3	kv fields are still coming over with left kv, the iso center location being rt or left should be determined and then figure outif a right lat kv is better.	Dosim.	na	Procedural	Efficiency	Mild	SR
4	If you going to place any couch parameters on the fields please do it in all the fields or none. It meases things up when we send it over to the 6dtc.	Dosim.	Physics	Procedural	Efficiency	Mild	MP
5	Pt xxxx script not approved at time of treatment	MD	Physics	Procedural	Efficiency	Mild-Mod.	KL
6	plan not 2nd checked on time for a film	Physics	na	Procedural	Safety / Effic.	Moderate	MP
7	xxxx no treatment note in any field on first day of treatment after 2nd was approved.	Dosim.	Physics	Procedural	Safety	Moderate	MP
8	We were starting to send the treatment fields to the 6dtc for xxxxx. It was realized that our desired treatment fields for her 1st script were hidden and her rf fields were unhidden. We unhid the appropriate fields and hid the rf flds. kmc	Physics	na	Procedural	Efficiency	Mild	MP
9	10 TBeam patients need to have their CT status changed from NA to Not Reviewed so the MD's can approve them along with the patients other DRR's... (ty, kmc)	?	?	Procedural	Efficiency	Mild	?
10	pt xxx xxx was not 2nd checked at time of sim simple.	Physics	na	Procedural	Safety / Effic.	Mild-Mod.	MP

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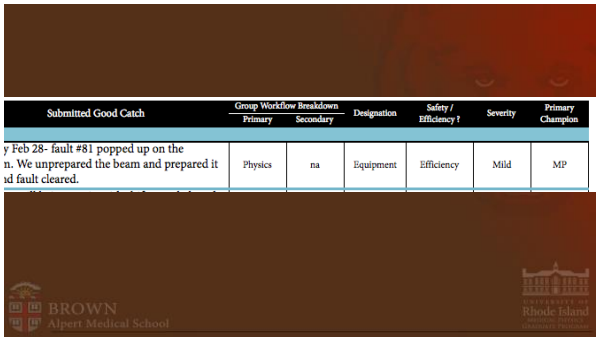

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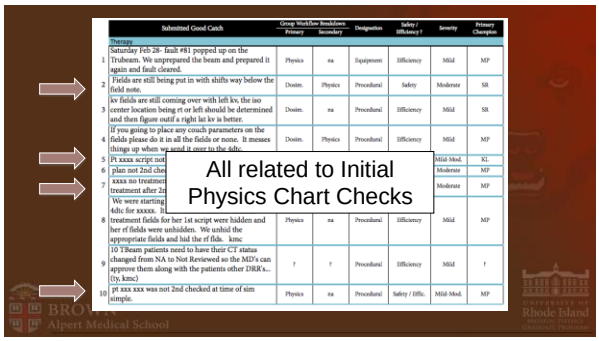

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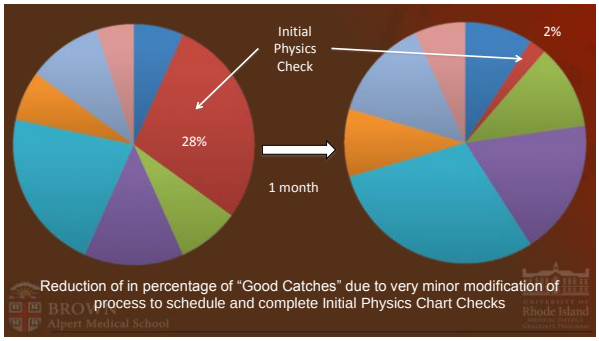

Key take home points

1. Focus on systems and processes
   - *"It's the system that breaks down, not the person"*
2. Leadership buy-in is essential (especially Physicians)
   - Changing organizational culture is difficult, tangible benefits are best lubricant
3. Empower the front-line staff
   - Foster a "no blame" culture

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