



Prospective Risk Management in the Wild: Tales from Community Practice

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Seven horizontal lines for notes.

Disclosure

- Financial support from the Banner Health Risk Management Fund Program

Seven horizontal lines for notes.



Learning Objectives

- Learn about risk management experience in a community practice setting.
Learn specific recommendations for performing risk management in the context of TG-100... meeting structure.
Learn some unforeseen benefits of performing the various steps.

Seven horizontal lines for notes.



Scope of the Presentation

WHAT THIS IS

A discussion of the subtleties and nuances we found working through FMEA for the first time as a small community practice.

WHAT THIS ISN'T

Instruction on how to perform FMEA.



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The Problem for Small Clinics

Clinical process is equally complicated across various practice sizes.

Therefore,

Small clinics may have difficulty performing prospective risk management given the time and effort required to complete it.



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McKee Medical Center (MMC), Loveland, CO

- Single linac clinic: TrueBeam STx
- 20-30 patients/day
- SRS, SBRT, motion management
- Individuals from each discipline form the core of the clinical team.
- We exist as part of unified regional network, but our FMEA was concentrated at this site.



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MMC FMEA



Process Map

- 15 major process steps identified.
- 183 sub-process (minor) steps identified.




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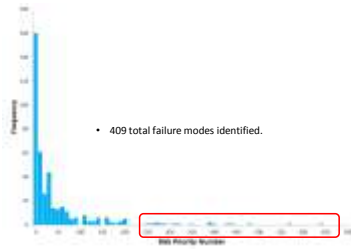
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MMC FMEA



- 409 total failure modes identified.




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MMC FMEA

Task	Resource Time Required	Estimated Process Hours
Project Review Meeting in 10/10/18 (1 hour)	1 hour	100 hours
Identify Failure Modes (10/10/18) (1 hour)	1 hour	100 hours
Identify Potential Causes (10/10/18) (1 hour)	1 hour	100 hours
Identify Potential Effects (10/10/18) (1 hour)	1 hour	100 hours
Identify Potential Controls (10/10/18) (1 hour)	1 hour	100 hours
Identify Potential Mitigation Strategies (10/10/18) (1 hour)	1 hour	100 hours
Identify Potential Risk Reduction Strategies (10/10/18) (1 hour)	1 hour	100 hours
Identify Potential Risk Reduction Strategies (10/10/18) (1 hour)	1 hour	100 hours




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Buy-In

- Sometimes, there is an assumption that buy-in is automatic.
- We anticipated that prioritizing this project would be a substantial hurdle.
- We dedicated a lot of time to our initial pitch to the department.

Initial Pitch to the Department (Presentation and Q&A)	4 Hours
Department Education	4 Hours
Team Recruitment	1.5 Hours




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Buy-In: Initial Department Education

- Make quality and safety concepts tangible to the entire program.



- Consensus that prospective risk management should be a priority.




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Buy-In: Team Recruitment (TG-100 Sec.8 – Multi-D team)

- Individuals were approached.
- Time was used to assess interest and willingness to participate.

9-person team accounted for a large percentage of the clinical staff.




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Buy-In: Team Education

- Once FMEA team was assembled, 2 hours were spent teaching the mechanics of FMEA.
- This energizes the team and re-establishes the motivation for the project.



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Process Mapping: Meeting Structure

- SRS chosen as the scope of the project. (TG-100, Sec.8).
- Major process steps determined as a group.
- Sub-process steps determined by small groups with the most domain expertise.



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Process Mapping: How Much Detail?

- TG-100 Appendix B: Recommends to “choose the right level of detail”.
  - For the first process map, err on the side of including more detail.
  - This minimizes the risk of missing important failure modes due to lack of sufficient detail in the process map.
- \*\* We aimed to provide enough detail such that another radiation oncology team could execute our SRS procedures.



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FMEA: Meeting Structure

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- Facilitator guidance is key here.
- \*\* Meetings are difficult to schedule since the team comprises a large percentage of the available clinical staff.
- \*\* Schedule open meetings for people to attend when their schedules permit.
- Facilitator attends every meeting.
- FMEA topic dictated by the expertise of the attendees.



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FMEA: Scoring Consistency

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- Facilitator provides an important anchor point to help maintain consistent scoring.
- This ensures that no major process step is over- or under-emphasized due to inconsistent scoring bias.
- Note on scoring bias: FMEA meeting structure described above could introduce bias, but at least the facilitator provides some consistency.



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Importance of the Facilitator

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- The facilitator is the driving force behind the FMEA project.
- Training is key:
  - TG-100
  - TG-100 workshops
  - 2013 AAPM Summer School Material



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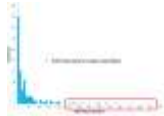
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Post-FMEA Practice Changes

- Simple mitigation steps were implemented to reduce risk.
- Focused on redundancy (TG-100, Sec.8).
- For our 10 highest scoring failure modes:
  - 5 checklist additions
  - 5 simple procedural changes.



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Unforeseen Benefits

- Process mapping.
- Multi-D meetings.
- Spending time together in a different context.



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Future Directions

- Maintenance of the FMEA. What if the process map changes?
- Expansion into a large-scale system level implementation.



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Summary

- It pays to spend time on department buy-in.
  - Education.
  - Approach individuals to gauge level of interest.
- Process map detail is an important consideration.
- Voluntary FMEA meeting structure helps maintain progress.
- The facilitator is the driving force behind the project.
- Watch out for scoring bias.
- Simple practice changes have a large impact on risk reduction.

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