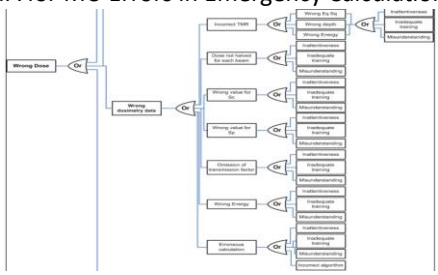
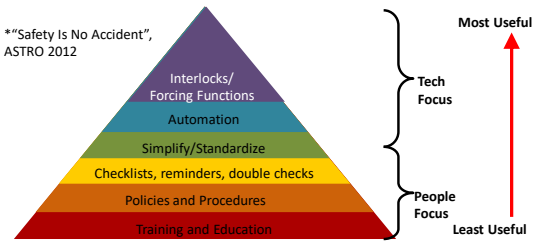
FTA for MU Errors in Emergency Calculations



QM interventions and their Effectiveness Hierarchy *



AAPM 2013, B. Miller, et al

- Not everything can be interlocked

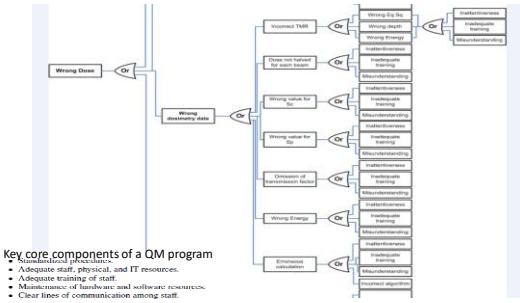
- **Key Core Components of QM program**
  - Standardized procedures
  - Adequate staff, physical and IT resources
  - Adequate training of staff
  - Maintenance of hardware and software resources
  - Clear lines of communication among staff

TG100 Advice

- **"In general it is not a good idea to rely on a single QM step to interrupt the flow of failures."**
  - If that step fails, there is no protection
  - If that step succeeds, you might need to backtrack extensively to identify the root cause
- **"….both QM program efficacy and overall process efficiency are enhanced by incorporating multiple QM measures along the way between a possible fault mode and the final process outcome."**
- Additionally (TG100 Appendix G is an example) **QM implemented to block a cause at one FM may block others with smaller RPNs**

Exercise

- List on your handout at least 4 QM measures that could be implemented to reduce the chance that the 'wrong dosimetry data' FM will reach the patient **and** mark where it could be efficiently placed
  - It is OK – in fact very interesting – to base QM interventions on your own experience



Key core components of a QM program
- Standardized procedures.
- Adequate staff, physical, and IT resources.
- Adequate training of staff.
- Maintenance of hardware and software resources.
- Clear lines of communication among staff.