

Why invest in safety innovation? Physician Perspective

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Safety

- ❑ Safety is an investment not a cost
- ❑ More complex treatment and more automation (VMAT, HyperArc, SBRT etc)
 - ❑ mistakes can happen because of both
- ❑ To be a highly reliable organization we need to adopt safety technologies
 - ❑ Airline industry and nuclear industry

Quality

- ❑ Can we assure the patient received the correct dose on the nth fraction?
 - ❑ Do we know this quantitatively?
- ❑ Fractional Dose Variation: Radiobiology effects
 - ❑ How does that affects outcomes?
- ❑ We need to reduce variance in every step of the patient care process.

Adaptive Radiation: Dose based

- ❑ Adaptive planning decision support parameters
 - ❑ What parameters do you use? – Physical or Dosimetric
- ❑ How about dosimetric parameter in real-time?

Patient: Peace of mind

There is one person who is nervous and it is all of our responsibility to keep them peaceful

Safe and accurate treatment assurance = Patient Satisfaction

Delta4 Discover

Answers the call.



The Unknown – Artificial Intelligence

- ❑ Data is king
- ❑ Each fraction for each treatment course on each patient – Huge data collection
- ❑ Unanswered Research Questions
 - ❑ Based on patterns over a population of patients we can make clinical decisions
 - ❑ Predict treatment delivery errors rather than just measuring

Conclusion

Patient safety and good clinical outcomes are most important

Accurate dose delivery is essential in achieving this goal

Safety is the #1 priority and we owe it to our patients

Delta4 Discover is the technology that supports Safety, Quality and Outcomes (my opinion)