RT treatment planning requires high levels of accuracy for clinical success. While the number of errors remain small, operators are responsible for the majority of them. Today’s automatic contouring methods can be highly variable, leading to unnecessary margins and uncertainty in RT treatment.

Even with excellent contouring, your staff may be challenged by motion artifacts in RT treatment planning.

Top 3 reasons for inaccuracy in radiation therapy planning

Risks that may exist in your radiation oncology department

1. Human Error
   Staff may make more errors than you think

   60% of errors are due to human factors²
   related to scan setup and workflow complexity.

   1. **Human Error**
   Staff may make more errors than you think

   2. **Imprecise Contouring**
   Contouring isn’t precise and/or takes too long

   3. **Motion Artifacts**
   Breathing irregularities are common

2. Imprecise Contouring
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   Even with excellent contouring, your staff may be challenged by motion artifacts in RT treatment planning.

   Today’s automatic contouring methods can be highly variable, leading to unnecessary margins and uncertainty in RT treatment.

   These errors can be fixed with manual detection and correction, however this can be a tedious, time-consuming process. Maybe even rescans are required.

   75% of patients breathe irregularly, which can lead to image acquisition challenges, artifacts, and consequently inaccuracies in the treatment plan.³

   To deliver the most effective RT treatment possible for a patient, you need accurate, reliable RT planning – overcoming the challenges of human error, imprecise contouring, and 4DCT motion artifacts.

3. Motion Artifacts
   Breathing irregularities are common

   These errors can be fixed with manual detection and correction, however this can be a tedious, time-consuming process. Maybe even rescans are required.

   Manually detection and correction is user-dependent, thus making consistency across clinical staff difficult.

   Even with excellent contouring, your staff may be challenged by motion artifacts in RT treatment planning.

   To deliver the most effective RT treatment possible for a patient, you need accurate, reliable RT planning – overcoming the challenges of human error, imprecise contouring, and 4DCT motion artifacts.

Learn more

Learn more

Watch a video to learn more about the risks that can occur in your radiation oncology department.

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