Using surface-based imaging for patient identification

Rationale: Patient identification is an important process that typically involves multiple forms of identity verification such as asking name and date of birth. This relatively simple process is very effective. However, mistreatment of the wrong patient has still occurred because there are few ways to use software to determine if the correct patient’s treatment has been opened appropriately at the treatment console. An automated detection system has the potential to remove this source of error. We present a feasibility study to understand if daily surface-based imaging could be used for patient identification with reliable accuracy.

Conclusion: Using daily surface-based imaging to identify patients is feasible with AlignRT using a surface statistic threshold of approximately 60%. This has the possibility of improving radiotherapy safety using existing image-guided technology. Further study is needed to better understand the sensitivity and specificity of this tool for a larger patient population.

References:
1. Errors in Radiation Therapy. Pennsylvania Patient Safety Authority. 6(3); Sept 2009.