



Case Study **Pushing Beyond Compliance** **to Drive Quality**

Introduction

When the goal is reducing patient CT dose exposure, healthcare institutions need the right data comparisons to improve and ensure quality. Understanding how to use these evidence-based data can help drive organization quality initiatives.

Benchmarking opportunities became much more plentiful—and meaningful—when a formerly independent facility joined a world-class organization with multiple campuses.

A leading healthcare system had acquired a community hospital located nearly 200 miles away from its main campus. The acquisition ensured that high-quality, community-based care would remain available to residents of the small town.

During the integration process following the merger, the radiology administrator, the lead radiology technologist, and the Bayer in Radiology team looked for opportunities to extend the same high-quality support the parent institution had always received through the Radimetrics™ Enterprise Platform.

Method

While conducting staff training on the Radmetrics® platform at the new institution, Bayer Clinical Performance team helped the customer discover that the hospital's protocol called for using 140 kVp for head CT scans.

To help the radiology administrator and lead tech take advantage of the increased opportunities for benchmarking, the Bayer team combed through the analytics to identify equipment records for the entire healthcare system.

The Bayer in Radiology clinical performance specialist found a comparable in-system facility with an identical scanner to use as a benchmark for head CT scans. The team was able to verify that the other facility was using a lower kVp.

Results

Using the data uncovered by the team, the community hospital's lead CT technologist and their radiologist decided to lower the kVp to 120 to achieve parity with the benchmarking site. The CTDIvol went from 55 to 40 and the effective dose went from 2.9 mSv to 1.8 mSv for brain scans. In addition, the site introduced a new pediatric brain protocol, resulting in a significant reduction in pediatric dosing. Finally, the community hospital's sinus dosing has significantly decreased by changing the image thickness of the x-ray beam for the CT sinus protocol.

By matching the benchmarked dose, the community hospital increased standardization and decreased patient radiation exposure while maintaining system-wide quality.

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Conclusion: Why Invest in Bayer

Developing a benchmarking program can push your initiative beyond compliance to drive quality. Having a partner in radiation dose management that can not only identify and compare variations in performance, patterns, and utilization trends of scanner and injector protocols, but who compliments it with clinical performance expertise to help address your quality initiatives and teach you about best practices can be critical to your success. Bayer is committed to helping you improve quality, safety, and patient care by providing customers with support from our Clinical Performance team, training programs and access to our MyRadiologySolutions Customer Portal. The Bayer in Radiology focus is always on ensuring that you and your team have everything you need to achieve your clinical goals.

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