



Radiology services in a competitive region:

Data-driven decision making focused on the patient experience

Assessment of radiology at Einstein Healthcare Network reveals ways to improve patient experience and operational efficiency while reducing referral leakages

Market situation

Healthcare providers are increasingly focused on improving the patient experience at their facility, as patient satisfaction is now a key metric by which they are measured, referred and reimbursed. The patient experience encompasses a wide range of areas but perhaps the most common satisfaction measure in radiology departments is patient wait times. Imaging providers seek to identify scheduling and staffing improvements to better serve their patients. Highly variable exam durations make optimal scheduling problematic and longer exams increase operational cost. By improving the volumes, speed and efficiency of staff, imaging service providers can more effectively increase patient throughput, optimize available slot times and decrease wait times to improve the patient experience.





Patient satisfaction improvements help with referral and reimbursement rates but healthcare providers often struggle with complicated data challenges. Imaging departments, in particular, have a wealth of data sources, yet each give differing views. The lack of a ground truth baseline and data consistency makes it difficult to derive meaningful information. Healthcare providers need better ways to get accurate, valuable data assessments and determine how it can align with key performance indicators (KPIs) to facilitate improvement.

Case in point: Einstein's market challenge

Based in Philadelphia, Einstein Healthcare Network is surrounded by many large academic hospitals and diagnostic imaging centers presenting very strong competition within its area. There are approximately 130 facilities (including other hospitals and cancer centers) within a ten-mile radius of Einstein Medical Center Philadelphia. Due to continued growth in aging patient population and increase in disease prevalence, the Philadelphia imaging market continues to look likely to grow in the next five years, with ultrasound and magnetic resonance imaging (MRI) expected to be the most promising imaging sub-segments.

With such a competitive and option-rich environment for imaging services, Einstein Healthcare Network realized that improving the patient experience is a powerful way to serve patients and minimize referral leakages out of its system. With this in mind, and as part of its radiology capital asset planning process, Einstein Healthcare Network focused on finding ways to improve patient experience, reduce wait times, increase operational efficiency and gain more insight into reasons for referral leakage. However, accessing and analyzing that data was not easy to do for two key reasons:

- **The sheer volume of information was overwhelming.**
- **The complexity of obtaining the right type and level of specificity of the data.**

To help them address these challenges, Einstein Healthcare Network chose Philips as a strategic partner to establish the data confidence it needed to drive continuous improvement.

Method

Philips conducted a preliminary assessment to identify and quantify clinical, operational, and patient experience improvement opportunities. The assessment included interviews with key facility stakeholders and evaluation of scan volumes, install base and staffing levels.

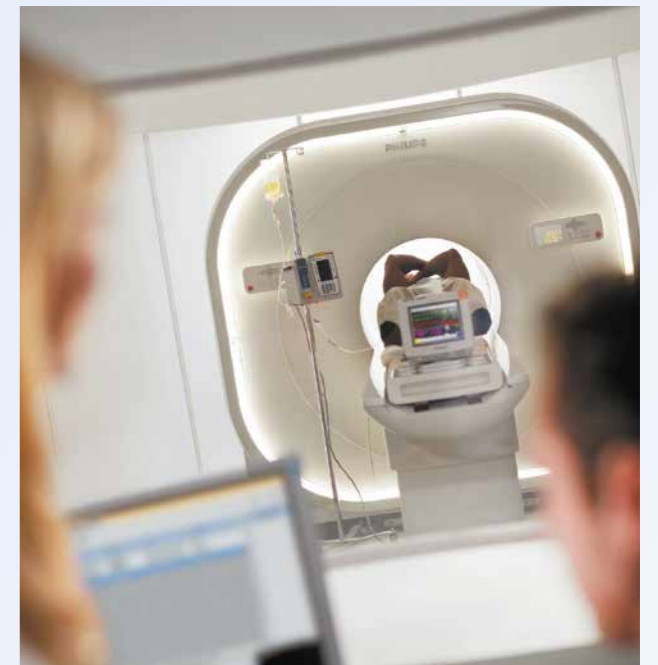
The assessment revealed that Einstein was already utilizing data-driven methods in its radiology operations that were producing positive results. Einstein had achieved a leadership position in its breast-imaging program with patient-centered care and was in the top percentile in radiation dose management. In addition, using a unique peer benchmarking process, Philips concluded that most of Einstein's modalities and staff were optimally utilized in its main campus. However, the analysis helped identify utilization improvement opportunities in Einstein's nuclear medicine (NM) and ultrasound departments.

Specifically, the assessment helped illuminate the potential reasons for long wait times affecting the patient experience in Einstein's MR department and proposed a potential solution to improve productivity of NM and ultrasound departments. Most importantly, the project also included the study of referral patterns to Einstein radiology over the last three years. This analysis helped Einstein understand the referral impact of a recent acquisition of a large suburban hospital by a for-profit health system. Based on the identification of the root cause of key performance gaps, Philips created recommendations for potential solution opportunities through modality and staff utilization analysis, radiology referral analysis and feedback from radiology department leadership.

Customer impact & outcomes

The assessment was performed during a time when Einstein Healthcare Network was looking for a strategic partner for its radiology capital asset planning and operations. After the assessment, Einstein chose Philips as a partner in both operational and capital asset perspective.

Einstein Healthcare Network chairman Dr. Terence Matalon concluded, "What Philips was able to do in a short amount of time was heads and tails above other vendors, who also attempted to do the same thing with the same data. As our strategic partner, the ability of Philips to compute and show



utilization at different sites, and turn those insights into recommendations was great. I know we gave the Philips team only a very short amount of time, but there was just no comparison to others in terms of depth and quality of their work."

The assessment was the first step in effectively gathering data and uncovering ways to connect information across the patient care ecosystem at Einstein Healthcare Network. Working with Philips as a valued partner, Einstein can use these recommendations to facilitate more appropriate, timely clinical workflow and decision-making to improve the overall patient experience and increase market leadership in the Philadelphia region.

Learn more

Philips PerformanceBridge practice can help healthcare organizations identify and address similar challenges in their imaging service line so that they can use data to better inform and direct the management of system resources to initiate improvements and realize greater value.

For more information, please visit

www.usa.philips.com/healthcare/medical-specialties/radiology/performancebridge/performancebridge-practice