

Improving Xray Start Times



In October 2017, a team of 13 Radiology department staff completed a one-day Rapid Process Improvement Workshop (RPIW) to address some inefficiencies in the Diagnostic X-Ray section. The Diagnostic section had a significant problem with patients experiencing high (30+ minutes) wait times for X-Ray exams. This had led to frustration for not only the patients, but the staff who felt the stress of managing a high patient workload while dealing with frustrated patients and referring providers. The department also had trouble retaining experienced technologists due to the chaotic nature of the work.

The RPIW led the team to better understand the process from ordering to completing an x-ray exam; thus, they were able to design a more efficient system for patient and staff. The biggest issue was 50% of the X-ray volume was same-day or walk-in patients. This high volume of same-day requests were never accounted for in the schedule design for the Diagnostic section. Half the patients had a pre-scheduled appointment, however, they were being seen on a first-in-first-out basis leading to delays. This led to frustration across the board because of unmet expectations for patients. Finally, the referring clinics, who had access to schedule the Diagnostic X-Ray template, were not given guidelines around capacity constraints so patients were often double or triple booked into the same time slots.

The major changes implemented were scheduling patients based on the actual capacity for completing X-ray exams, designing a template to account for pre-scheduled and walk-in patient volume, and matching technologist staffing assignments more appropriately to workload. The RPIW team collaborated with Orthopedics, a major referring clinic for X-Rays, and trialed the new process. The implemented changes showed significant improvement to the system during the pilot and control phases of the project. Patient wait times dropped to an average of three minutes with no patients waiting over 15 minutes by the second pilot. Two months into the Control phase, patients are being seen by their scheduled appointment time 94% of the time. It has now become a rare exception that any patient has to wait past their appointment time for their X-ray.