



# Case Study

## MVT® Reduces Radiology Report Turnaround Time 70%

### The Opportunity

Administrators at a large hospital found physicians extremely dissatisfied with turnaround times for radiology reports. Some physicians reported that they were considering moving to another hospital unless the situation was improved.

A survey found that turnaround time averaged 12.3 hours and was occasionally as long as 24 hours. In some instances, long turnaround times led to increased patient lengths of stay.

### The Approach

Although some physicians felt hiring another runner to transport film and reports to and from the various departments was all that was needed, the hospital brought in QualPro to assist in improve turnaround times. Project participants defined the key measure of report turnaround time as the time from taking the X-rays until the time the report arrived at the patient floor. Each day the times for each stage of the process were measured for 10 randomly selected X-ray folders.

### The Test

Using QualPro's 12-Step MVT Process®, the group found the turnaround time to be highly variable. (In addition, they found instances where X-ray folders had been removed before reports were completed, violating established procedures.) The team implemented an additional time measure (film-on-floor time) and added stickers to folders emphasizing the need to return them as quickly as possible to radiology. This reduced turnaround time and made it more predictable, but it was not yet satisfactory, so an MVT® experiment was planned.

Brainstorming for test ideas resulted in 12 practical, fast, and cost-free ideas that could be tested using QualPro's MVT® process.

Idea	Old	New
Reprint Orders	No	Yes
Schedule Board for Reports	No	Yes
Consolidate Sorting/Filing Area	No	Yes
Runner on Staff	No	Yes
Quality Control Checks	External Check	Internal Check
Radiologist Schedule	No Change	Increase
X-Ray Procedures Booklet	None	Yes
Film Delivery Frequency	30 minutes	15 minutes
Film Type	Brand A	Brand B
Processing Method	Method A	Method B
X-Ray Pickup Boxes	No	Yes
X-Ray Order Placement	Preset times	On demand

### The Results

Using QualPro's 12-Step Process, the hospital reduced the turnaround time for completing radiology reports from 12.3 hours to 3.7 hours for an improvement of 70%.

The experiment found two of the actions, using no runner and implementing a schedule board, were the keys to improving the process. As often is the case, a change the process improvement team originally thought might be the solution (in this instance, using a runner) turned out not to have the desired result, and the cost of an additional employee, who might have been hired without the MVT® experiment, was saved.