Define

Problem/Opportunity Statement

Radiologists have identified a problem with MR quality, with suboptimal examinations frequently being submitted for interpretation.

Technologists have identified a problem with their training and performance expectations that are not clearly delineated.

The results are dissatisfaction on the part of radiologists and technologists.

There is an opportunity to identify the root causes of the problems, resulting in improved MR quality and technologist and radiologist satisfaction.

Voice of the Customer (VOC)

SURVEY RESPONSES:

MRI-Technologists
- Communication (including feedback on why a scan was sub-optimal)
- Programmed protocols (lacking)
- Desire more experience/training working with Siemens MRI scanners
- Not enough information on non-standard/complex exams

Radiologists:
- Concern about quality control
- Protocols not sufficient/protocol sheet confusing
- Skill variation
- Inconsistent use of coil type

Survey comments:

MRI-Technologists:
“we lack proper training! Dealing with new software, unfamiliar exams, trying to figure out when patient on table!!”
“It would be helpful if radiologist communicate clearly what they want -like slice thickness FOV etc.”

Radiologists:
“There is marked variation in image quality due to difference in skill levels of technologists”
“It is extremely difficult when scans were not performed as scripted! Often—techs “forget” to do a sequence, we should have a system in place that would ensure the exams are completed as scripted”
“Difficult and complex exams are done well by more experienced technologists”

Measure

Current Status

Tech Surveys (Sample Responses)

If the Radiologist finds an exam to be sub-optimal, how often do you feel the following (communication, training, protocol, scripting) were an issue?

MD Surveys (Sample Responses)

Primary Themes:
- Concern about quality control
- Protocols not sufficient/protocol sheet confusing
- Skill variation
- Inconsistent use of coil type

Analyze

Root Causes

- No QC process in place
- No standard protocols in system
- Lack of Clinical application training for MRI Technologists

Improve

Action Plan

- Develop a Quality control process as part of work-flow (Done, implemented)
- Develop advanced application training for MRI-Technologists (Done, completed)
- Arrange advanced continuing education in complex MRI imaging (Ongoing)
- Develop MRI protocol optimization plan (In progress)
- Develop a control plan (Done)

Sample protocol sheet