RSNA 2023
LEADING THROUGH CHANGE

Structured Computed Tomography Quality Assurance Program in Neuroradiology

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Purpose

This project aims to determine whether a structured Quality Assurance (QA) process in the neuroradiology section can decrease the number of QA flags, improve **patient care**, strengthen **physician trust** and improve department **efficiency.**

Methods

- Once Technologist gets the QA, they have 1 week to respond with confirmation of message.
- QAs are discussed at team huddles and during 1:1 meetings between supervisor and technologist.
- CT leadership and Neuroradiologists have monthly meetings to review QA issues and resolutions as well as work on quality improvement projects.
- Group chat was created to increase communication for day-to-day operations.

Modality	Date	Study Description	Radiologist	Technologist	0 vs. 1	Category	Quality Issue
CT	7/11/22	CT Head w/o Contrast	XX	XX	1	Protocol	Bone filter not applied
CT	8/13/22	CT Head w/o Contrast	XX	XX	0	Technique	Cerebellum not included in the field of view
CT	8/9/22	CT Head w/o Contrast	XX	XX	0	Recon	No coronal or sagittal reconstructions
CT	9/5/22	CT Head w/o Contrast	XX	XX	1	Scanner	Poor gray-white differentiation
CT	8/26/22	CT Head w/o Contrast	XX	XX	1	Other	Unknown artifact at the top of the head

Protocol:

- To ensure correct exam is done according to the indication.

Technique:

- To ensure patient is in perfect anatomical position and all area(s) of interest is included in the scan.

Reconstruction:

- Making sure that all required reformats is completed and sent to PACS prior to ending the exam, indicating it is safe for dictation.

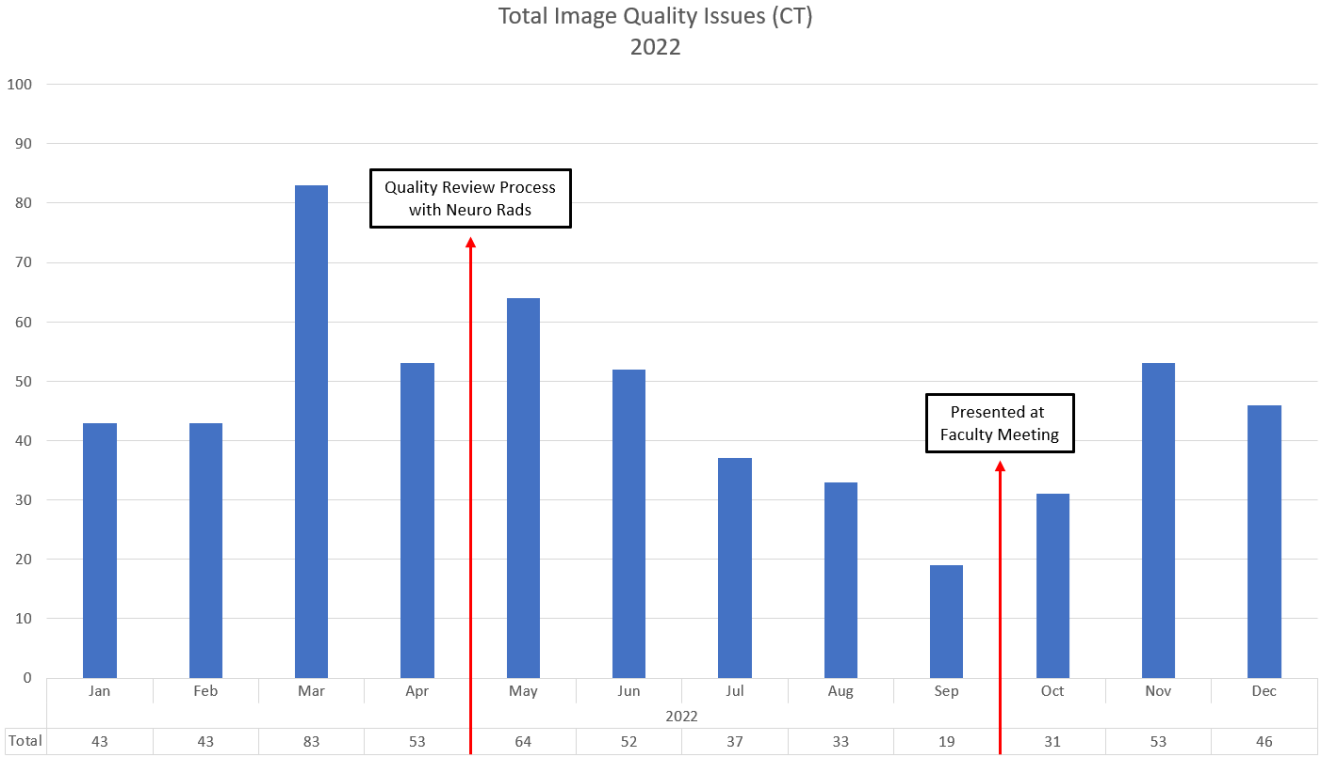
Scanner:

- Making sure that all scanning parameters, kV/mAs, is within ACR guidelines and producing optimal diagnostic images. Keeping up with required preventative maintenance and daily/monthly QA/QC are completed accordingly.

Other:

- For example, unexplained artifact.

Results


Total Image Quality Issues (CT)
2022
100
90
80
70
60
50
40
30
20
10
0
Quality Review Process with Neuro Rads
Presented at Faculty Meeting
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2022
Total
43
43
83
53
64
52
37
33
19
31
53
46

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