Completeness of CT Examination QA

The Problem

CT examinations have many components that are merged into a single file in PACS for radiologic interpretation. Feedback from the radiology QA system, as well as on the spot communications from radiologists indicated there were cases with missing information, incomplete examinations or studies not performed as requested per protocol.

Aim/Goal

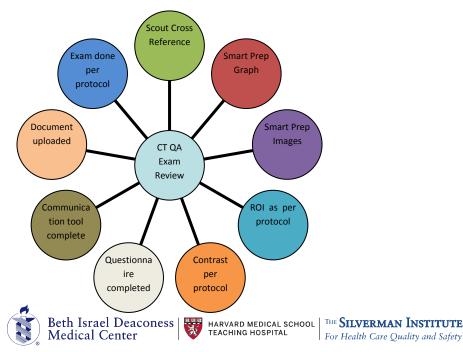
Our Goal was to create a sustainable QA program that would identify trends that could be used to increase compliance in examination presentation and to provide education in exam protocol selection.

The Team

Carol Wilcox (Advanced Imaging Lab Technologist)
Pam Roberge (Weekend CT Supervisor)
Anthony Gattonini (WeekDay evening Supervisor)
Tim Parritt (CT Manager)

The Interventions

We performed random screening of routine CT exams on the overnight shift, screening for 9 specific components that we would expect to see in a complete CT examination.



The Results/Progress to Date

		Cases with	Cases with	Ave # of	
		no	some missing	missing	
	samples	omissions	criteria	criteria	
Oct-12	48	26	22	1.7	5
Jan-13	53	40	13		1
Jun-13	51	51	0		0
Feb-14	81	61	20	1.	4

Data collection began in FY13. 46% of exams reviewed were missing some of the components listed below. Immediate feedback was given to staff, as each case reviewed was shared with the technologist, so we could provide positive feedback on cases completed correctly and identify areas for improvement in the remainder. 8 months later we had 100% compliance for criteria being reviewed.

Lessons Learned

Giving timely feedback to technologist about missing CT examination components reduced incomplete cases from 46% to 0% over an 8 months period. However, sustaining the program proved difficult. The work is manual and it is time intensive to evaluate 9 components for each individual examination. In the absence of the QA program, the percentage of complete CT examination decreased with 25% being incomplete in February 2014.

Next Steps/What Should Happen Next

- Continue Program in the Evening shift
- Early stages of Implementing on the Day shift
- Review the 9 criteria (are all still relevant?)
- Focus on what directly affects image quality and
- Evaluate compliance with new regulations

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