Radiographer Preliminary Clinical Evaluation : a safe approach to reduce waiting times in Accident & Emergency?

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Radiographer Preliminary Clinical Evaluation: A Safe Approach to Reduce Waiting Times in Accident & Emergency?

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Introduction:

The Francis Report (2013) highlighted the need for waiting times within A&E Departments to be reduced.

The SCoR (2013) policy & practice guidance states that radiographers should be able to provide reliable preliminary clinical evaluation (PCE) which, even in the absence of an official report, could potentially improve patient triage times.

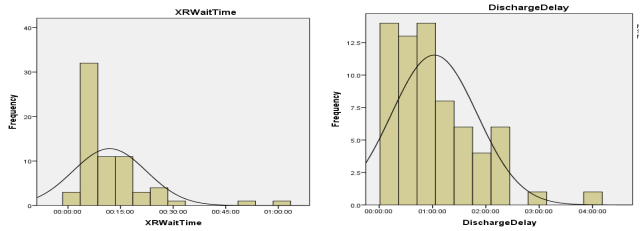
Method:

An retrospective audit was devised to;

1) assess waiting times for A&E patients.
2) assess radiographer image interpretation performance

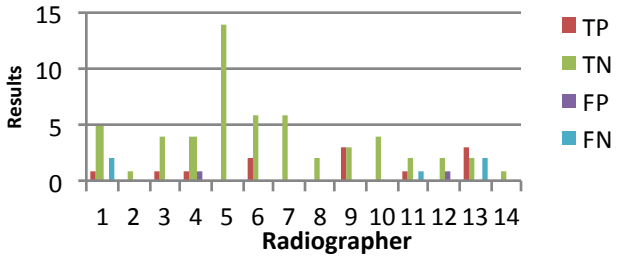
The research question is could waiting times be reduced if radiographer PCE is acted upon?

Results:



From initiation of the request (N=67), patient waiting times for x-ray ranged between zero and 1 hour; mean 11.5 minutes. Discharge delay ranged from zero to 4 hours; mean 1.02 hours.

Mean image interpretation accuracy was 91%. A good level of agreement (Kappa 0.729) was demonstrated between the PCE and the formal report.



Analysis by specific body part highlights differences in image interpretation performance.

	Accuracy	Sensitivity	Specificity
Ankle	100%	100%	100%
Elbow	100%	100%	100%
Finger	100%	100%	100%
Foot	83%	50%	83%
Hand	94%	83%	100%
Shoulder	83%	100%	83%
Thumb	100%	100%	100%
Tib/Fib	100%	100%	100%
Toe	67%	0%	100%
Wrist	88%	75%	100%

Foot, toes, hand and wrist were the greatest sources of error.

Conclusion:

Waiting times could potentially be reduced if the radiographer PCE is accurate, as is the expectation of hot reports. This in turn could relieve the pressure from the A&E Department and improve patient experience. Radiographers unable to provide reliably accurate abnormality detection should arguably not be performing PCE.

Image interpretation performance should be regularly assessed using Radbench (Wright.C, 2013) as part of a quality process, highlighting areas for improvement and ensuring a high standard is achieved and maintained. Supplementary ad hoc on-site audits can be used to confirm performance.

References:

Wright. C, (2013),. ' Radbench: Benchmarking Image Interpretation Performance'. Liverpool: UKRC., Hunt.A, (2014). Would a radiographer led discharge service reduce waiting times in an Accident and Emergency Department?., Beardmore. C, (2013) Preliminary Clinical Evaluation and Clinical Reporting by Radiographers: Policy and Practice Guidance. [Online] Available at https://www.sor.org