**ITU and CCU Chest Radiographs**

**Descriptor:**

The quality of ITU and CCU chest radiographs.

**Background:**

Allowing for the difficult circumstances in which these examinations are performed, the received view is that these images are often of poor quality when compared to those obtained in the main department.   This audit can assist in maintaining and providing reassurance on image quality.

## The Cycle

**The standard:**

A locally agreed standard.

The quality of all chest images obtained in ITU and/or CCU should be deemed to be adequate by the clinicians, the radiologists, and the radiographers.

**Target:**

100%

## Assess local practice

**Indicators:**

% of chest images regarded as adequate to excellent by the ITU/CCU clinicians, by the radiologists, and by the radiographers.

**Data items to be collected:**

Evaluate each image as follows:

The radiographer who took the image should complete Questionnaire A, part 1 (See Resources).

ITU/CCU clinician should complete Questionnaire A, part 2 (See Resources).

The reporting radiologist should complete Questionnaire B (See Resources).

Two independent radiographers should complete Questionnaire C (See Resources).

Record the number of images passed as adequate to excellent by all groups.

**Suggested number:**

100 consecutive chest images.

**Suggestions for change if target not met:**

1.  Present the audit results to all staff, and follow up with full and frank discussion.

2.  The Superintendent Radiographer and Clinical Director should address any problem areas revealed by the audit.

3.  It may be necessary to (1) improve the equipment; (2) re-train in mobile radiography.

4.  Reporting radiologists should bring unsatisfactory images to the attention of the radiographer on an individual case basis.

**Resources:**

Ongoing data recording via questionnaires A, B and C datasheet (see attachment below).

Audit Officer for data analysis.

Radiologist: 4 hours.

Radiographers: 20 hours total.

[**26\_datasheet.doc**](https://www.rcr.ac.uk/sites/default/files/audit_template/26_datasheet.doc)WORD - 46.5 KB

**References:**

1. Winer-Muram HT et al. Guidelines for reading and interpreting chest radiographs in patients receiving mechanical ventilation. Chest 1992;102(supplement):5655–705.
2. Goodman LR. Cardiopulmonary disorders in the critically ill. In: Goodman LR, Putnam CE, eds. Intensive Care Radiology: Imaging of the Critically Ill. Second edition. Philadelphia: WB Saunders, 1983: 61–113.
3. Goodman LR, Putnam CE. Diagnostic imaging in acute cardiopulmonary disease. Clin Chest Med 1984;5:247–64.
4. Wiener MD et al. Imaging of the intensive care unit patient. Clin Chest Med 1991;12:169–98
5. Turner AF. Interpretation of the conventional chest x-ray in the critically ill and injured. In: Shoemaker WC et al. eds. Textbook of Critical Care. Second edition. Philadelphia: WB Saunders, 1984: 230–41.
6. Watkins PR. A Practical Guide to Chest Imaging. Edinburgh: Churchill Livingstone, 1984.
7. Wandtke JC. Bedside chest radiography. Radiology 1994;190:1–10.
8. Paulin S. Bedside chest radiography. Radiology 1994;192:282–4.
9. Glazer HS et al. New techniques in chest radiography. Radiol Clin North Am 1994;32:711–29.

**Editor's comments:**

​This maybe the initial audit as part of a Quality Improvement project as so many factors may need improvement  with many different "stakeholders".

**Submitted by:**

Dr G Kaplan and Mrs S Taylor , revised by Dr Kaplan in 2007, updated by CRAC in 2012, updated for CRAC by J Iles

**Published Date:**

Monday 7 January 2008

**Last Reviewed:**

Wednesday 1 January 2020