

# Pacemaker fluoroscopy service provided by cardiology health care assistances (HCAs)

## Introduction

Currently there are six pacing sessions per week, delivered in the pacing room in the cardiology department. Of these, three are mostly used for complex procedures such as ICD and bi-ventricular devices. It is appropriate that a qualified radiographer continue to provide this service as the imaging can be complex and the radiation doses can be relatively high.

The remaining three sessions will now be covered by HCAs as named and trained under this protocol. Training will be provided by radiographers with pacing experience as detailed below. Following completion of training the diagnostic imaging department deputy manager (Gill Stapleton-Smith) will sign-off each HCA as competent to work under this protocol.

This protocol is supported by the cardiology department, diagnostic imaging and medical physics.

## Training

Training will be supervised by the diagnostic imaging department deputy manager (Gill Stapleton-Smith) and directly provided by a cohort of experienced pacing radiographers and will include:

- Use of Siemens Varic image intensifier
- Dose management and recording
- Imaging of simple pacemaker procedures
- Problem solving

Each HCA will complete a training and competency log book (appendix 1)

During this training period the HCA will be supervised by the training radiographer. Following completion of training the HCA will be supported as detailed below.

CRIS (radiography patient management system) training will be provided by the imaging department. The HCAs will be responsible for entering the patient and procedure details on to CRIS as detailed below.

A training summary / competency form (appendix 2) will summarise the log books and once completed will be signed-off by the diagnostic imaging department deputy manager (Gill Stapleton-Smith) to signify competency. These completed forms will be kept in the imaging department with this protocol.

The HCA, by signing the training summary / competency form agrees to work under this protocol.

## System of work

- Control of x-ray exposure to be solely by the cardiologist operator (following x-radiation training)
- Support will be provided by radiographers in the cardiac catheterisation labs, if no radiographer is available support to be sought from the imaging department on extension 2312

- A key for the image intensifier will be kept in the Junior sisters office, opposite the pacing room
- This protocol does not cover emergency procedures; these will be covered by radiographers. Procedures covered by this protocol are listed:
  - ICD box or electrode exchange or reposition
  - Any non-emergency pace maker procedure
- The HCA will complete an X-ray request card detailing:
  - patient identification
  - patient location / ward
  - procedure
  - date
  - cardiologist
  - HCA
  - fluoroscopy time
  - dose
  - any other relevant information
- To ensure continuity of data the HCA will enter procedure details onto CRIS and enter their own code as operator
- The X-ray request card will be stored in the cardiology department
- If the Siemens image intensifier is inoperable and an alternative machine is to be used the pacing service will revert to radiographers until the Siemens equipment is operable. This protocol only allows for HCAs to use the Siemens machine they have been trained on.
- On-call pacing will be provided by radiographers as current practice
- The imaging department will audit fluoroscopy times and doses as appropriate and will revisit this protocol if necessary

Signed ..... Gill Stapelton-Smith, Imaging department

Signed ..... Diane Cooper, Cardiology department

Signed ..... Richard Bovill, Medical physics

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# Training log book

## Appendix 1

PACING TRAINING AND LOG BOOK  
ASSISTED AND SUPERVISED

NAME:.....  
RADIATION SAFETY TALK DATE:

DATE:					
PATIENT HOSPITAL NUMBER:					
EXAM:					
DOCTOR:					
SCREENING TIME:					
DOSE:					
<b>ASSISTED (A) SUPERVISED (S)</b>					
<b>RADIOGRAPHER:</b>					
<b>SIGNATURE:</b>					

Connect II and monitor					
Plug in (radiation safety light), Key switch					
<b>Radiation safety</b> -Dose limit protocol -Lead aprons -Check LMP (if applicable)					
Enter patient details					
Programme setting: -Cardiac -Chest -Standard -Pulsed/continuous					
Image orientation					
Moving the II (Locks and brakes)					
Improving image quality -collimators -noise reduction (heart button) -increased dose setting (very large patients only) -pulsed/continuous					
Save ref image (blue trigger)					
Doing a run (if applicable)					
Record a CD (if applicable)					
-Record screening time and dose -High dose form (if applicable)					
End exam					
Shut down/ switch off					
Enter details on CRIS					
Trouble shooting: -over heating -emergency stop -requesting radiographer help (from cath lab or ext.:2312)					
RADIOGRAPHER COMMENTS					

