

**POSITION STATEMENT ON THE OUT OF HOURS
MANAGEMENT OF
BRADYARRHYTHMIA EMERGENCIES**

Nick Linker and Mark Earley on behalf of BHRS Council, January 2016

INTRODUCTION

In cardiac rhythm management there is a particular issue in the provision of emergency pacing. In the UK there are a limited number of hospitals designated as pacing centres and even fewer have expertise in implantable cardioverter defibrillators (ICDs). Hospitals that implant pacemakers may not necessarily offer a 24 hour emergency pacing service.

HEART BLOCK

Patients with complete heart block (CHB) can have extremely slow heart rates or long pauses in the heart beat causing presyncope, syncope, or haemodynamic instability. It is often an unstable condition that can be fatal if untreated. Although heart block cases are relatively common, the majority of these can be managed without emergency out of hours pacing, however, for some patients if there is haemodynamic compromise or ventricular arrhythmia, prompt access to transvenous pacing can be lifesaving.

BHRS POSITION STATEMENT

It is the aim of BHRS that there should be nationwide early access to permanent pacing and that temporary transvenous pacing should be restricted to those with bradycardia who are haemodynamically unstable at rest, or who have bradycardia related ventricular arrhythmias.

In NHS England's 2013 'Cardiovascular Disease Outcomes Strategy' – a key goal is that emergency cardiovascular care should be available 24 hours a day, 7 days a week. In line with this, all patients who require emergency pacing should have access to appropriate specialist care at all times.

Patients presenting to the ambulance service with arrhythmia emergencies, specifically complete heart block, should be directed to a hospital where such patients can be safely and appropriately managed. An ECG should be recorded by the paramedics and accompany the patient. Such hospitals must have the facilities and staff to insert temporary pacing wires on a 24/7 basis and to offer permanent pacemaker implantation within 24 hours, if indicated. The specifics of how this is delivered will be up to individual Clinical Networks to decide in consultation with the ambulance service, hospitals and cardiologists within that Network. However, it has been nationally agreed with the ambulance services that they are prepared to utilise established pathways such as those in place for primary PCI to deliver such patients

to these hospitals. Again, it is up to the individual cardiologists, hospitals and Networks to determine how this service will be delivered within the hospital.

Patients presenting to emergency departments with arrhythmia emergencies, specifically complete heart block should be stabilised and then directed by the admitting physicians to the appropriate specialist care. If transfer to another hospital is necessary, the ambulance service should be contacted and a request made for an interfacility transfer. This request should be considered an immediate, time critical, lifesaving intervention.

Patients who are already in hospital for another reason, who develop symptomatic complete heart block must be treated as a medical emergency and need to be assessed and managed by appropriate specialist physicians. If transfer to another hospital is necessary, the ambulance service should be contacted and a request made for an interfacility transfer. This request should be considered an immediate, time critical, lifesaving intervention.

It is acknowledged that these services can only be provided at present in a limited number of hospitals during working hours and fewer out of hours. NHS England (and its counterparts in Scotland, Wales and Northern Ireland) through its regional teams should work with the ambulance service to develop a framework that ensures all hospitals that have acute admissions or emergency departments have an arrhythmia emergency plan with either the ability to provide emergency treatment in house or to have an agreement with a named specialist centre who will accept immediate transfer of these patients.