



POSITION STATEMENT ON THE PROGRAMMING OF REMOTE MONITORING ALERTS IN CARDIAC IMPLANTABLE ELECTRONIC DEVICES (CIEDS) ON BEHALF OF BHRHS COUNCIL JULY 2024

INTRODUCTION

The COVID-19 pandemic rapidly accelerated the number of patients with CIEDS being enrolled on remote monitoring platforms. It also saw the rapid implementation of remote monitoring services in centres that had previously not offered this to their CIED patient population. It is therefore more important than ever that Cardiac Rhythm Management Teams fully understand how to use them for high quality and safe patient care.

BHRHS POSITION STATEMENT

The British Heart Rhythm Society (BHRHS) recommends that centres implanting and following up cardiac implantable devices (CIEDS) take all necessary steps to familiarise themselves with the nominal device and home monitoring alert settings and the differences across manufacturers.

Alerts should be tailored to the clinical needs of the patient with collaboration between the patient's Consultant, Physiologists and Clinical Technical Specialists from the device manufacturer. Centres should work alongside Clinical Technical Specialists from the device manufacturers to ensure ongoing education and awareness is in place around how these alerts work and how to program them in different clinical scenarios including ⁽¹⁾: -

- Nominal settings for alerts and the difference between manufacturers.
- Personalisation of alerts to patients underlying pathology and disease progression.
- The activation/prioritisation of alerts within each manufacturers home monitoring platform, e.g., the prioritisation of therapy episodes.
- Use of alerts to manage patients heart failure (HF) status for example:
 - In patients with ICD or CRT have underlying HF specific monitoring for signs of HF decompensation.
 - In patient without CRT pacing monitoring for right ventricular pacing burden may be of interest.
- Patient criteria for the use of alert based follow up only.

It's important to ensure that all programming steps are checked to ensure that critical alerts are transmitted via remote monitoring as failure to identify a patient who is receiving therapy can be associated with patient harm². The nominal settings for various aspects of remote monitoring functions vary across manufacturers for example in Medtronic ICDs the nominal setting for patient therapy delivery alerts is currently "off".

Reference: -

1. Ferrick, A. M., Raj, S. R., Deneke, T., Kojodjojo, P., Lopez-Cabanillas, N., Abe, H., Boveda, S., Chew, D. S., Choi, J.-I., Dargès, N., Dalal, A. S., Dechert, B. E., Frazier-Mills, C. G., Gilbert, O., Han, J. K., Hewit, S., Kneeland, C., DeEllen Mirza, S., Mittal, S., ... Varma, N. (2023). 2023 HRS/EHRA/APHRS/LAQRS expert consensus statement on practical management of the remote device clinic. *Heart Rhythm*, 20(9), e92–e144.
<https://doi.org/10.1016/j.hrthm.2023.03.1525>
2. Whittaker L, Thomas H, Twomey D, et al. Learning from patient complaints; a regional quality improvement project concerning home monitoring settings for implantable cardioverter defibrillators and opportunities to effect change in 'big industry' *Heart* 2023;109: A132-A133
https://heart.bmj.com/content/heartjnl/109/Suppl_3/A132.full.pdf