

# Remote monitoring post-TAVI to expedite discharge – The Remote study

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- Transcatheter Aortic Valve implantation (TAVI) is a recommended treatment option for patients with symptomatic severe aortic stenosis.
- There is a well-documented risk of high-degree atrio-ventricular block post-TAVI, where a patient may require a permanent pacemaker (PPM).
- Following TAVI, patients routinely require a cardiac monitored bed for up to 24-72 hours, which is a limited resource in NHS hospitals throughout the UK.
- In our trust many on-the-day cancellations occur due to the lack of monitored beds that are required.
- Our aim is to trial an early discharge protocol of post-TAVI patients with a real-time remote monitoring service.
- This will reduce the patient's length of stay, free up cardiac-monitored beds and patient's can be monitored in the comfort of their own home.

## Objectives

The aim is to evaluate the safety and efficacy of remote monitoring in post-TAVI patients in a pilot study.

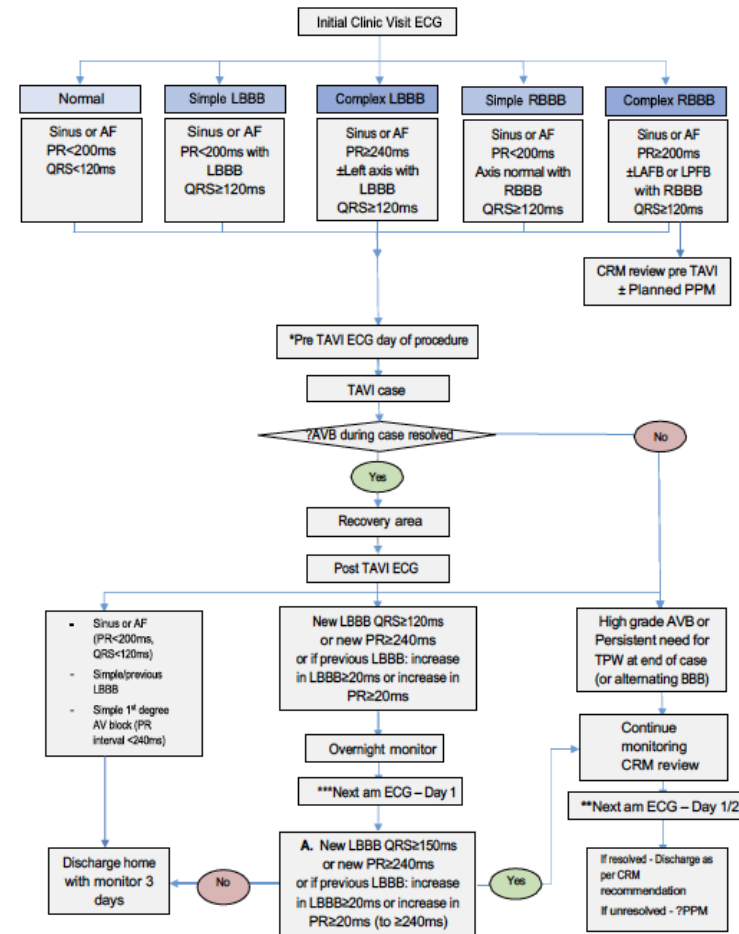
## Patient selection

This pilot study of 50 patients will include patients who will be suitable for same-day discharge or next-day discharge who still require continuous monitoring. (See TAVI ECG Monitoring Pathway)

Inclusion criteria for this sub-group:

1. Social support on discharge arranged.
2. Patient can have 6 hours of cardiac monitoring post-TAVI in hospital, therefore TAVI procedure completed before 11am.
3. Uncomplicated procedure with no vascular access complications.
4. If no conduction abnormalities or no new ECG changes then patient is suitable for same-day discharge with remote monitoring.
5. If minor conduction abnormalities and stable overnight then can be discharged with remote monitoring.

## TAVI ECG Monitoring Pathway



\*If complex LBBB or complex RBBB, consider CRM review pre TAVI.  
 \*\* go to A. and review ECG parameters. Answer yes or no and continue from there.  
 \*\*\*New LBBB – QRS stable and <150ms, New 1<sup>st</sup> degree AV block and stable (200-240ms) – early discharge with remote monitoring.

## Methods

Checkpoint Cardio is a European company that specialises in real-time remote ambulatory cardiac monitoring and has experience of working with numerous hospitals around Europe. A standard operating pathway has been designed and will be put in place on who to contact when a conduction abnormality requiring PPM implantation is observed. The patient will be contacted either by the TAVI team or on-call registrar for further assessment and management. We will look to submit the data as an article once the project is completed.

## Current project status

I have obtained industry funding of £16,000 to complete this project. The funding will enable us to perform remote monitoring on 50 post-TAVI patients for up to 72 hours which has been approved by local managers. We hope to start with our first case in June 2024.