Development of a Cardiac Magnetic Resonance Service in South-East Wales

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Introduction: Cardiac Magnetic Resonance (CMR) scanning in Aneurin Bevan University Health Board (ABUHB) currently falls significantly below the per capita scanning rate recommended by the British Society of CMR, a target of 2275 scans per million population. Scans in ABUHB are outsourced to University Hospitals Bristol through a part-payment commissioning system at above market rates. ABUHB commissioned 276 scans in 2018-2019, a fifth of the projected requirement for a health board population of 594,164 people.3

OBJECTIVES
We sought to develop an in-house CMR service in a phased fashion to improve access to CMR for health board residents, enhance the training & development proposition for staff, and reduce costs. This service would also promote excellence within the health board, meet Cardiology trainee requirements, improve Radiology staff retention, and reinvigorate the downgraded district general hospitals in the wake of the opening of a new acute hospital, The Grange.

RESULTS
Eight inpatient scans have now been completed, resulting in:
- 5 fewer inpatient transfers to Bristol
- Reduction in length of stay
- Significantly altered management in 4 patients
- Markedly reduced waiting time for CMR in all patients.

At a commissioning cost of £633 compared with the in-house price of £250, each scan performed within ABUHB has a saving implication of £383.
- The inpatient service has therefore saved £3064 so far, in addition to costs of transfer to Bristol and reduction in costs associated with bed days.

OUTCOMES
Scans to date have utilised current reporting infrastructure and software. Patients have reported satisfaction with the service and opinion from within the Cardiology and Radiology departments has been positive.

Outpatient scanning is projected to commence in early 2022.
- Costs include upgrade to reporting computers, a virtual server and dedicated reporting software to improve speed and accuracy of reporting. The total cost of these items is £27,385.
- In the first year, we anticipate 250 scans (including 90 inpatient scans), leading to a saving of £95,750.
- We therefore anticipate a saving of £68 365 in the first year alone.
- Projected scanning volumes will allow ABUHB to reach optimal scanning volume per capita within five years, reducing inequality in access to diagnostics.

REFERENCES
2. Cardiac Magnetic Resonance Imaging: Commissioning Intentions and Implementation Plan. March 2015, WHSSC.