



PWYLLGOR CRONFA ELUSENNOL CHARITABLE FUNDS COMMITTEE

DYDDIAD Y CYFARFOD: DATE OF MEETING:	15 March 2022
TEITL YR ADRODDIAD: TITLE OF REPORT:	Consideration of Charitable Funds Expenditure Requiring Committee Approval - Cardiology Equipment (Withybush General Hospital Paediatrics)
CYFARWYDDWR ARWEINIOL: LEAD DIRECTOR:	Andrew Carruthers, Director of Operations
SWYDDOG ADRODD: REPORTING OFFICER:	Nick Williams-Davies, Service Delivery Manager Lisa Humphrey, General Manager (Interim)

Pwrpas yr Adroddiad (dewiswch fel yn addas)

Purpose of the Report (select as appropriate)

Ar Gyfer Penderfyniad/For Decision

ADRODDIAD SCAA SBAR REPORT

Sefyllfa / Situation

Within Pembrokeshire, Paediatric Cardiology is a sub-speciality, which sits both locally within the Health Board (HB) Consultant Paediatrician portfolio and with the tertiary networks based at University Hospital of Wales, Cardiff.

Cardiology outpatient services are provided at Withybush General Hospital (WGH), providing under-16s in Pembrokeshire with access to a local Paediatrician with Expertise in Cardiology. (PEC).

The Health Board is required to provide initial assessment and cardiac imaging for all patients from birth up to 16 years of age, many of whom may have cardiac risk factors or anomalies that have been detected by antenatal screening.

The purpose of this application is to maintain this cardiology screening provision within Pembrokeshire through the purchase of an echocardiography and ECG machine for the service.

The Committee is requested to approve the application for £110,329.94 of charitable funding from the T460 Pembrokeshire Cardiology Equipment Fund to support the purchase of an echocardiography machine and an electrocardiogram (ECG) machine, prior to presentation to the Board at its Public meeting on 31st March 2022 for ratification in its role as Corporate Trustee.

Cefndir / Background

As a result of the response to the COVID-19 pandemic, there has been a significant change to the under-16 paediatric pathway in Pembrokeshire, which has focussed on acute medical presentations and the need for admission or secondary care intervention. However, a significant level of outpatient activity has been maintained throughout the pandemic.

Clinic activity for Cardiology has been maintained at the Child Health department, Withybush General Hospital (WGH) in order to maximise access to the local population and to ensure that care of this nature is provided as close to the patient's home as possible. This has been a challenge due to significant gaps in the paediatric consultant establishment, particularly for medical staff who have attained the required skills to support cardiology examinations.

In the past 18 months, this position has significantly improved, and the service currently employs 4 PEC Consultant Paediatricians, who are further supported by tertiary care Consultants based at the University Hospital of Wales (UHW). This has resulted in the re-establishment of regular clinics and the reinstatement of regular cardiac imaging within the county.

Asesiad / Assessment

Current Position

Within Pembrokeshire, a paediatrician attends on a monthly basis to undertake cardiology clinics in WGH. As part of the specialist role, they undertake echocardiography and ECG examinations. A second consultant visiting from UHW, and operating in a tertiary capacity, provides additional capacity. Both consultants require regular access to echocardiography and ECG machines to maintain their clinics and ensure patients are able to be diagnosed and referred correctly.

Caseload

The Cardiology caseload is streamed into two main classifications, general and congenital cases. In November 2021, the Congenital Heart Disease Networks, which supports the Hywel Dda University Health Board (HDdUHB) population, conducted a peer review of service provision. In preparation for this, a number of issues were highlighted, with a view to improving Cardiology care for the population.

These included:

- The need to digitalise the current waiting list referrals that are currently managed manually via a paper and pen system.
- A review of waiting lists to rapidly identify congenital conditions from other streams (coding)
- A focus on reducing any delays in accessing specialist review, including echocardiography.

Within Pembrokeshire, records have indicated that there are 62 "new" patients to be seen by both consultants, with a further 220 patients in the "follow up" stage. Patients within these lists hold a significant clinical risk related to cardiac defects and anomalies, which will only be detected by echocardiography scan. The majority of these will be identified and monitored by detailed echocardiography examination within the WGH clinic.

Current equipment.

Despite the continued provision of the service within Pembrokeshire, there is a specific, longer-term risk to the patient population.

Both the echocardiography and ECG machines used within the Child Health department are borrowed from the Cardiology technician team based at WGH and have to be reallocated to paediatrics whenever the clinics are held, which impacts on the ability to deliver an inpatient service.

Specifically in relation to the echocardiography machine, there have been issues concerning reliability of the equipment. However, other factors affecting service provision include:

- The scanner is funded for use by adult services; use by paediatrics is provided by exception.
- When in use by the Paediatric teams, the machine is not available for ward-based inpatient requirements, therefore any bedside scan requirements are postponed until the machine is available.
- This is especially challenging during the current COVID-19 climate where patients are required to be isolated. Consequently, the number of bedside scan requests has increased.
- As the Child Health department sits outside of the main hospital estate, the machinery is currently transported between departments. Movement across rough ground, and in all weathers, is a risk to the integrity of the machinery.
- Despite being a fairly new machine, there have been issues with the power supply and software malfunctions, which has meant that the machine has not always been available for use when required and there is no secondary unit for use in this scenario. Although this has now been rectified, use by paediatrics may place the machine at additional risk of damage. This has placed clinics at risk of cancellation.
- In terms of paediatric specification, the current echocardiography machine does not have a “high frequency paediatric probe” and is therefore sub-standard in terms of the required paediatric settings. This can result in the quality of some types of imaging falling below the anticipated standard.

The risk of damage to the ECG machine is of relative concern and, given the clinic requires both echocardiography and ECG examination, it would be beneficial for the service to also purchase a dedicated ECG machine.

Case for Charitable Support

The benefits to the population can be quantified as follows:

- In every 3-month period, the local consultant alone would see approximately 80 patients.
- Of these, there is an expectation that 20-30% of scans would identify an anomaly; up to 24 cases each quarter.
- In the past three months, there have been 3 cases where severe abnormalities have been identified, which have required urgent referral to tertiary care.

Despite the above numbers, it is important to recognise that each case would provide reassurance and peace of mind to the children and young people who require examination, and to their parents/carers.

It is therefore imperative, to be able to provide local and regular access for this level of examination. In order to maintain service provision, investment in new, reliable and modern equipment that meets the paediatric specification is essential. It is equally important to ensure that access for the inpatient population in WGH is not impacted upon and that risks relating to the transportation of the current machine are mitigated.

Charitable Fund and Costing

Within the charitable funds establishment, there is a dedicated Pembrokeshire Cardiology Equipment Fund account (T460), which is specifically for the purchase of cardiology equipment for Pembrokeshire-based services. This application can be considered as an appropriate use of the fund and has received support from the General Manager at WGH.

Echocardiography Options.

Advice on an appropriate Echocardiography option has been received from the Health Board's Medical Device Coordinator, Head of Clinical Engineering, and the Senior Diagnostic Imaging Advisor (Specialist Estates Services). The identified machine, Vivid E95 4d Ultra Edition, meets the requirements of the National Framework Agreement for Ultrasound and the required specifications for cardiac imaging within paediatrics. The device is supplied by the NHS supply chain and as such, a saving of £22,578.50 has been identified. The overall cost is £105,173.94 exclusive of VAT.

ECG Options

In line with health board predetermined ECG requirements, a quote has been obtained for the GE Mac 2000 model and includes a 5 year return-to-base warranty. The cost for this equipment is £5,156.00 exclusive of VAT.

Therefore, the combined cost of this application to the Charitable Funds Committee amounts to **£110,329.94.**

Revenue Costs - Servicing/Maintenance of Equipment

The service has allocated £15,000 per year to support with ongoing upgrade/servicing costs for the first 5 years post purchase, should this bid be accepted. This will allow support to be commissioned with the manufacturers, or with local electrical and biomedical engineering (EBME) services, in line with existing financial and engineering requirements.

Argymhelliad / Recommendation

The Committee is requested to **APPROVE** the application for £110,329.94 of charitable funding from the T460 Pembrokeshire Cardiology Equipment Fund to support the purchase of an echocardiography machine and an electrocardiogram (ECG) machine, prior to presentation to the Board at its Public meeting on 31st March 2022 for ratification in its role as Corporate Trustee.

Amcanion: (rhaid cwblhau)

Objectives: (must be completed)

Cyfeirnod Cofrestr Risg Datix a Sgôr Cyfredol: Datix Risk Register Reference and Score:	Not Applicable
Safon(au) Gofal ac Iechyd: Health and Care Standard(s):	2.9 Medical Devices, Equipment and Diagnostic Systems 3.1 Safe and Clinically Effective Care
Amcanion Strategol y BIP: UHB Strategic Objectives:	3. Striving to deliver and develop excellent services 5. Safe sustainable, accessible and kind care
Amcanion Llesiant BIP: UHB Well-being Objectives: Hyperlink to HDdUHB Well-being Objectives Annual Report 2018-2019	4. Improve Population Health through prevention and early intervention, supporting people to live happy and healthy lives

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Gwybodaeth Ychwanegol: Further Information:	
Ar sail tystiolaeth: Evidence Base:	Need to develop equality of service provision at each Paeds Cardiac centre. South Wales and South West Congenital Heart Disease Network Standards RCPCH Cardiology guidance
Rhestr Termiau: Glossary of Terms:	Included within the report
Partïon / Pwyllgorau â ymgynhorwyd ymlaen llaw y Pwyllgor Cronfa Elusennol: Parties / Committees consulted prior to Charitable Funds Committee:	Not applicable

Effaith: (rhaid cwblhau) Impact: (must be completed)	
Ariannol / Gwerth am Arian: Financial / Service:	Reduced risk of damage to existing specialist equipment. Potential risks of poor patient outcomes related to delayed diagnosis Improved reliability in service provision and stability in equipment availability
Ansawdd / Gofal Claf: Quality / Patient Care:	Improved accuracy and swifter, more reliable waiting list performance This application will improve equity across the Paediatric service, ensuring each county is able to support with screening. Risk of delay in diagnosis of cardiac defects- to include mortality without access to this new equipment. Improved screening and improvement in waiting list performance/ clinical outcomes.
Gweithlu: Workforce:	Congenital Heart Disease Network Standards – risk of non-compliance without appropriate screening technologies.
Risg: Risk:	Risk managed by temporary arrangements- this procurement will support a more stable service delivery. Without new equipment, risk register entry would be considered.
Cyfreithiol: Legal:	Not Applicable
Enw Da: Reputational:	Opportunity for media coverage of any successful application

Gyfrinachedd: Privacy:	Not Applicable
Cydraddoldeb: Equality:	Not Applicable