

**CYFARFOD BWRDD PRIFYSGOL IECHYD
UNIVERSITY HEALTH BOARD MEETING**

DYDDIAD Y CYFARFOD: DATE OF MEETING:	26 September 2023
TEITL YR ADRODDIAD: TITLE OF REPORT:	Funding Application for Replacement of FibroScan Machine to Improve Assessment of Liver Disease in Ceredigion
CYFARWYDDWR ARWEINIOL: LEAD DIRECTOR:	Andrew Carruthers, Director of Operations
SWYDDOG ADRODD: REPORTING OFFICER:	Donna Blinston, Hepatology Advanced Nurse Practitioner Rita Stuart, Service Delivery Manager

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

This request is presented to the Charitable Funds Committee (CFC) to consider and approve an application for £81,690 of charitable funding to support the purchase of a FibroScan® Mini+ 430 – Echosens machine for patients in the Ceredigion catchment area.

Cefndir / Background

Assessment of liver scarring provides prognostic information and assists in establishing treatment priorities. There is a silent epidemic of fatty liver disease in the general population, called nonalcoholic fatty liver disease (NAFLD) / nonalcoholic steatohepatitis (NASH). The main causes of fatty liver disease are excessive alcohol consumption and/or poor diet and sedentary lifestyle. Liver disease is mostly a silent disease until it becomes more advanced, due to the livers ability to compensate, if undiagnosed and untreated, patients go on to develop irreversible cirrhosis of the liver. However early detection and treatment with diet and lifestyle changes, the disease can be reversible. Most patients with the presence of a metabolic syndrome develop fatty liver disease along with patients with the following co-morbidities: Type 2 diabetes · Overweight and obesity · High cholesterol · High blood pressure · High triglycerides.

A FibroScan is a specialised ultrasound machine for the liver which measures fibrosis (scarring) and steatosis (fatty change) within the liver. It is a non-invasive test which stages the severity of the patients' liver disease and is now well established in the management of patients with chronic liver disease.

At Bronglais Hospital (BGH) we are currently using an old model (2008) fibro scanner which is very large and cumbersome when delivering an outreach service where the FibroScan can be taken into the community, to substance misuse clinics, GP clinics and patient homes. The newer models have many more features which will speed up the diagnosis of fatty liver disease and other liver diseases.

The Controlled Attenuation Parameter (CAP) score is the main tool which is required in today's liver health assessments and National Institute for Health and Care Excellence (NICE) guidance. The All-Wales Liver Blood Tests Pathway and the All-Wales Liver Delivery Plan instructs that patients should be offered a FibroScan as per the pathways.

Asesiad / Assessment

Currently we are at risk of losing the ability to provide optimum service for the patients. If a fibro scanner is not available in BGH for patients in Ceredigion, South Gwynedd and part of Powys will not be offered equitable care.

The current scanner is now out of commission (2008 model) and the service contract and parts are no longer available.

For the delivery of an outreach service the fibro scanner is taken out into the community, to substance misuse clinics, GP clinics and patients' homes.

If the current fibro scanner breaks down Ceredigion patients would be required to travel to either Bangor, Wrexham, Glangwili Hospital (GGH), Prince Philip Hospital (PPH) or Worthybush Hospital (WGH). All have significant waiting lists in excess of 12 months.

Newer models have more features and diagnostic tools which will speed up the diagnosis of fatty liver disease and many other liver diseases.

A fibro scanner alone is not fully diagnostic of liver damage but combined with Ultrasound Scan (USS) and bloods informs decisions of care, especially in patients who may require a different care pathway if they had advanced cirrhosis. Knowing that they have lower levels of liver stiffness allows timely hepatology care, informs anaesthetic assessment on safety of surgery and levels of care escalation.

Failure to fibro scan would result in:

- Inpatients being subjected to liver biopsies (the fibro scanner is a non-invasive scan to assess for fibrosis and steatosis) adding additional risk to health and safety.
- Increased gastroenterology/hepatology referrals into secondary care, extending their waiting lists and withhold/delay management/treatment of disease.
- Patients whose fibro scan shows a stiff liver are referred in for variceal screening, DEXA (bone density) scans and cancer (HCC) screening. If this is not maintained it will have a direct impact on the number of emergency admissions with upper gastrointestinal (GI) bleeds, falls and fractures due to osteoporosis and hepatocellular carcinomas.

As per the All-Wales Blood Test pathway GPs are advised to refer patients for a fibro scan in order to determine if they are left under the care of primary or need to stay in secondary care.

Equipment costs

- FibroScan® Mini+ 430 – Echosens machine - £81,690 (VAT exempt).

This includes a 12-month manufacturer warranty.

Workforce and Revenue consequences

The workforce is being trained to deliver the current demand and future development required to deliver hepatic services in BGH and the community. This purchase supports the workforce model and does not incur additional costs.

There is no additional revenue cost associated with this equipment as it is a replacement for the current ageing and damaged model. Maintenance contract is estimated as £5500 per year, this is within department budgeting and will be transferred from the existing equipment following a 1-year warranty period.

The funding of the annual maintenance contract has been approved by the Bronglais General Manager and the Finance Business Partner and these costs are to be met from the revenue budget.

A Statement of Need (SON) has been completed and approved by Clinical Engineering, reference 2023-146.

Availability and Appropriateness of Charitable Funding

The following charitable fund would be used to procure this equipment:

- T330 Bronglais General Hospital Fund (balance: £575,491.06)

This funding application complies with the Charitable Fund eligibility criteria:

- Equipment and consumables: Medical equipment for NHS patient care

This request for charitable funds is being made due to the significant pressures on the HDdUHB 2023/24 capital programme. Although this is replacement equipment, the purchase of this equipment falls within the charity's objects with significant patient benefit outlined within the body of this report.

Argymhelliad / Recommendation

The Charitable Funds Committee is asked to **CONSIDER** and **APPROVE** an application for £81,690 of charitable funding from the T330 Bronglais General Hospital Fund to support the purchase of a FibroScan® Mini+ 430 – Echosens machine for patients in the Ceredigion catchment area.

Amcanion: (rhaid cwblhau)

Objectives: (must be completed)

Committee ToR Reference:
Cyfeirnod Cylch Gorchwyl y Pwyllgor:

4.20 The following thresholds are approved in the Charitable Funds Procedure:
"Expenditure less than £10,000 shall only need approval by the nominated fund manager. All expenditure in excess of £10,000 and up to £50,000 will require the approval of the Charitable Funds Sub-Committee. Expenditure in excess of £50,000 will require the approval of the Charitable Funds Committee. Expenditure over £100,000

	<i>will require the approval of the Corporate Trustee”.</i>
Cyfeirnod Cofrestr Risg Datix a Sgôr Cyfredol: Datix Risk Register Reference and Score:	The loss of equipment directly affects inpatient flow and outpatient care. Loss of equipment will impact on service, delay diagnosis and early detection of reversible liver disease. The fibroscanner is often used on inpatients to inform clinical decisions and ceiling of care.
Parthau Ansawdd: Domains of Quality Quality and Engagement Act (sharepoint.com)	<u>The Duty of Quality</u> Quality is more than just meeting service standards; it is a system-wide way of working to provide safe, effective, person-centred, timely, efficient, and equitable health care in the context of a learning culture. Being able to fibroScan a patient as part of a one stop shop allows diagnosis and prioritisation of patient management, preventing recurrent hospital visits, travel across the health board, and allows the patient to be involved in their care, assessment and decision making from the start.
Galluogwyr Ansawdd: Enablers of Quality: Quality and Engagement Act (sharepoint.com)	1.1 Health Promotion, Protection and Improvement 5. Timely Care 6. Individual care 2.9 Medical Devices, Equipment and Diagnostic Systems
Amcanion Strategol y BIP: UHB Strategic Objectives:	1. Putting people at the heart of everything we do 3. Striving to deliver and develop excellent services 4. The best health and wellbeing for our individuals, families and communities 6. Sustainable use of resources
Amcanion Cynllunio Planning Objectives	4D Public Health Screening 4A Public Health Delivery Targets 1B_22 Hywel Dda Health Hub – Single Point of Contact 5A_22 NHS Wales Delivery Framework Targets 6D_22 Value Based Healthcare and Patient Reported Outcome Programme
Amcanion Llesiant BIP: UHB Well-being Objectives: Hyperlink to HDdUHB Well-being Objectives Annual Report 2021-2022	2. Develop a skilled and flexible workforce to meet the changing needs of the modern NHS 4. Improve Population Health through prevention and early intervention, supporting people to live happy and healthy lives 7. Plan and deliver services to enable people to participate in social and green solutions for health 8. Transform our communities through collaboration with people, communities and partners

**Gwybodaeth Ychwanegol:
Further Information:**

Ar sail tystiolaeth: Evidence Base:	NICE Guidelines BASL Guidelines EASL Guidelines
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	BASO Guidelines BASD Guidelines All Wales Liver Delivery Plan All Wales Liver Blood Tests Pathway.
Rhestr Termau: Glossary of Terms:	Contained within body of the report
Partion / Pwyllgorau â ymgynhorwyd ymlaen llaw y Cyfarfod Bwrdd Iechyd Prifysgol: Parties / Committees consulted prior to University Health Board:	Hywel Dda Hepatology Clinical Lead and Gastroenterologists Hepatology Management Team. Bronglais Hospital Site Managers

Effaith: (rhaid cwblhau) Impact: (must be completed)	
Ariannol / Gwerth am Arian: Financial / Service:	This request is for charitable funds to support a fixed cost/one-time investment in equipment. No recurring or revenue cost
Ansawdd / Gofal Claf: Quality / Patient Care:	As previously discussed, the new fibroscanner will improve patient assessment, diagnostic, outcomes and experience. Allowing timely diagnostics and access to secondary care or advice to primary care on their community management. It will also maintain access to liver disease diagnostic imaging and enhance the service by offering CAP measurements
Gweithlu: Workforce:	Not applicable
Risg: Risk:	<p>If a fibroscanner is not available in BGH patients of Ceredigion, South Gwynedd and part of Powys will not be offered equitable care.</p> <p>Diagnosis of fibrosis level would have to be done by them travelling to either Bangor, Wrexham, GGH, PPH or WGH. Who all have significant waiting lists.</p> <p>Inpatients would be subjected to liver biopsies adding additional risk to health and safety. A fibro scanner alone is not fully diagnostic of liver damage but combined with USS and bloods informs decisions of care. Especially in patients who may not be allowed certain care if they had advanced cirrhosis. Knowing that they have lower levels of liver stiffness allows timely hepatology care, informs anaesthetic assessment on safety of surgery and levels of care escalation.</p> <p>Failure to fibro scan will increase gastroenterology/hepatology referrals to secondary care, extending their waiting lists and withhold/delay management of disease.</p> <p>Patients whose fibro scan shows a stiff liver are referred in for variceal screening, DEXA (bone density)</p>

	<p>scans and cancer (HCC) screening. If this is not maintained it will have a direct impact on the number of emergency admissions with upper GI bleeds, falls and fractures due to osteoporosis and hepatocellular carcinomas.</p> <p>Patients who are referred for a fibro scan due to abnormal LFT's also have secondary liver profiles completed which identify autoimmune and genetical conditions that have an impact on the patient and their wider family. When non-alcoholic, fatty liver disease (NAFLD) is identified then optimisation of hypertensive, diabetic, osteoporotic, and renal management is optimised. This could have a negative impact on the patient's future health if the fibroscanner is no longer in service and liver disease is not identified in a timely manner.</p>
Cyfreithiol: Legal:	Not applicable
Enw Da: Reputational:	Reputational damage caused by inequitable access to services as above.
Gyfrinachedd: Privacy:	Not applicable
Cydraddoldeb: Equality:	<p>A full assessment is not necessary because this is a service that already exists and the decision not to replace would be the withdrawal of the service which goes against the forenamed policies.</p> <p>It would also cause inequality across the health board.</p>