Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Innovation, Technology and Partnerships team Newsletter

Spring edition

Life Sciences & Innovation Division Health & Social Services Group, Welsh Government



In this edition....

- 1. Wales Innovates: launch of the Innovation Strategy for Wales
- 2. Priorities of the Health and Social Services Minister Written Statement
- 3. New SBRI / Welsh Ambulance Funded Competition Open for Applications
- 4. Health Technology Wales open topic call 2023 communications toolkit
- 5. Health Technology Wales Appraisal Process Guide consultation
- 6. Five year progress review report highlight strong progress for Health Technology Wales
- 7. BioWales in London and MediWales Connects Conference
- 8. Velindre Cancer Centre launches artificial intelligence chatbot RITA
- 9. TERMS (Technology Enabled Remote Monitoring in Schools), an all-Wales pilot study
- 10. Interventional Radiology department at Aneurin Bevan University Health Board has been awarded an Exemplar site status by the British Society of Interventional Radiology!
- 11. Natalie Janes (Senior Nurse-Primary Care) and Lloyd Hambridge (Pharmacist and NCN Lead Caerphilly East) present an innovation project at the Senedd
- 12. New First in Wales, Minimally Invasive Procedure to Help Combat Pain from Osteoarthritis
- 13. Cardiff & Vale UHB Endoscopy Challenge
- 14. Cardiff and Vale Regional Innovation Co-ordination Hub Updates
- 15. Bevan Commission
- 16. Public Health Wales leads the way on Greener Primary Care in Wales
- 17. Life Science Hub Wales update
- 18. ACTing Minds
- 19. New 'Connecting Realities' Toolkit Launched
- 20. Air monitor produced to highlight pollution challenges
- 21. Principles of Value-Based Health and Care Short Course at Swansea University

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Wales Innovates: launch of the Innovation Strategy for Wales

On Monday 27th February, Wales Innovates: the innovation strategy for Wales was launched. The strategy has been developed following 18 months of research, engagement and public consultation across Wales by our Innovation, Technology and Partnerships team.

Developing a culture of innovation at the heart of government is one of the key aims of the strategy. This means integrating innovation across all of our devolved policy areas to create a stronger and more resilient economy, better educational outcomes, more effective and sustainable health and social care and responding to the separate emergencies of climate nature in everything we do.

Health and Social Care has its own mission chapter within the strategy. The key message is to bring further alignment to our innovation infrastructure and strengthen leadership, supporting us to use innovation to more effectively address our Welsh health and care system challenges.

Links to the Innovation Strategy for Wales:

Innovation strategy for Wales | GOV.WALES

Strategaeth arloesi i Gymru | LLYW.CYMRU

HSS Ministers Priorities – Written Statement

The Health and Social Services Minister has recently spoken about the need for clear priorities – this statement highlights the priorities that she has set for health and social care in Wales. They will help address the immediate pressures and help to build a sustainable health and care service over the next year.

Attached is the Written Statement, which was published on 7th February 2023.

Written Statement: Ministerial Priorities for the NHS in Wales (7 February 2023) | GOV.WALES

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

New SBRI / Welsh Ambulance Funded Competition Open for Applications



Challenge Background

There is an exciting opportunity to work with the Welsh Ambulance Services NHS Trust (WAST) and Health Boards within Wales to reduce the unprecedented demand on both ambulances and Urgent & Emergency Care services across Wales. Our patients are waiting longer than they should for an ambulance response and once at hospital (Emergency Department (ED), can spend a considerable amount of time in the ambulance before handover to the ED clinical teams.

We would like to be able to transform the way urgent and emergency care is given, looking to support WAST's strategic ambition to care for more patients in their own home or in a community setting, thus safely reducing the number of patients requiring conveyance to hospital.

There is an opportunity to enhance the WAST infrastructure to allow us to provide care closer to home. WAST is a 'super-connector' across health and care settings with ambitious plans to transform their service delivery model to improve clinical outcomes, improve patient experience and alleviate 'system pressure' upon Urgent & Emergency Care services. To do this, equipping our people with the right tools and technology is important to enable the 'right care in the right place'.

Challenge details

We would like to invite industry to enable us to provide care closer to home. Innovative solutions are sought to enhance one (or more) of the themes:

- Improving capabilities in the pre-hospital setting that can enable patients to be cared for closer to home. This could include Point of Care Testing (e.g. blood tests with rapid results), wearable technology solutions and mobile scanning equipment; and
- Use of technology to support patient care, enhance communication and improve patient safety during initial diagnosis or in cases of prolonged community waits for an ambulance or 111 response, or awaiting an urgent appointment at a place definitive care".

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

We are looking for solutions that will provide a positive outcome, high-impact for the population of Wales. In particular, demand for ambulance/Urgent and Emergency Care services is high for:

- People that have fallen patients that have been on the floor for a significant amount of time (long lies);
- People experiencing respiratory problems especially acute exacerbations of chronic conditions:
- People experiencing chest pain where the nature of the pain cannot currently be confirmed in the pre-hospital setting.

There are many diagnostic solutions on the market. This challenge aims to bring solutions together to develop an ambulance sector solution for use in the pre-hospital environment. We are looking to identify, develop and demonstrate technology and equipment that could:

- Be suitable for mobile use (pre-hospital use);
- Fit into the current infrastructure and be deployable across vehicle types;
- Use artificial intelligence, augmented technology and or natural language processing to enhance current systems and processes;
- Be of suitable for use across pre-hospital clinical professionals/response personnel;
- Support appropriate use of ambulances by the community;
- Building community resilience to support patients at home during an episode of urgent/emergency care need;
- Enable decision making and care to be provided closer to home;
- Support patients' continued independent living;
- Complement and encourage community support; and
- Be sustainable and affordable for both the public sector and the patient.

Out of Scope:

- Replacement of vehicles;
- Integration to any national systems.

Challenge phases - Structure

Phase 1: Development – From a total of £225,000, we expect to fund up to 3 projects up to a value of £75,000 (inclusive of VAT) each.

Note: Only projects successful at phase 1 will be eligible to apply to phases 2 and 3.

Phase 2: Testing – This Phase will be to robustly test in a real-life environment up to 3 of the successful Phase 1 solutions from a total fund of up to £800,000. We expect to fund up to 3 projects at up to £265,000 (inclusive of VAT) each.

In applying to this Phase 1 competition, you are entering into a competitive process. Any adoption and implementation of a solution from this competition would be subject to a separate, possible competitive, procurement exercise. This competition does not cover the purchase of any solution although we will investigate and explore innovative procurement routes as part of this challenge, should a successful solution emerge.

The total funding available for the competition can change. The funders have the right to:

adjust the provisional funding allocations between the phases;

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

- apply a 'portfolio' approach; and
- fund a Phase 3 to allow thorough more widespread testing of the developed solutions.

Key Dates table:

Phase 1 Activity	Key Dates **subject to change**
Open Date – Phase 1	31/01/2023
Briefing event	23/02/2023
Close Date	17/03/2023 12:00 noon
Applicants notified	24/03/2023
Phase 1 Contracts awarded	24/03/2023
Feedback	April 2023
Projects Commence	03/04/2023
Projects Complete	19/06/2023
Phase 2 Activity	Key Dates **subject to change**
Phase 2 applications to be reviewed and decision	June/July 2023
on company/companies to take forward	
Feedback to unsuccessful applicants	June/July 2023
Contracts signed and commencement	June/July 2023
Project closure	April 2024

Briefing Event

Please follow the link below and register your interest for the virtual Briefing Event held on Thursday 23rd February 2023. <u>Link to register for the Briefing Event</u>

Commercial plan notice

Please note if you are successful in Phase 1 and go through to Phase 2, you will need to provide a commercialisation plan/strategy as part of your contractual deliverables.

Further information

For more information on this competition, visit: Apply here

For any enquiries about this competition e-mail: SBRI.COE@wales.nhs.uk

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Health Technology Wales open topic call 2023 - Communications toolkit



Health Technology Wales has launched an open topic call to find non-medicine health and care technologies that could improve the lives of people living with cancer in Wales.

HTW are inviting health and care professionals, technology developers, academics, and members of the public to submit their ideas.

HTW, which appraises non-medicine health and care technologies and produces national guidance on whether they should be adopted in Wales, will assess the evidence available on each health or care technology submitted.

A decision will then be made on whether there is sufficient evidence to publish national guidance that may support adoption of the technology in Wales.

Previous examples of cancer related topics which HTW has published national guidance on, include:

- Stereotactic ablative radiotherapy (SABR) for the treatment of renal cell carcinoma
- Extreme Hypofractionated Radiotherapy (EHFRT)

According to Cancer Research UK, in the UK 1 in 2 people in the UK will be diagnosed with cancer in their lifetime.

Every year around 19,500 people in Wales are diagnosed with cancer.

Anybody who would like to take part in the open topic call should do so by visiting the <u>Suggest</u> a Topic page on the Health Technology Wales website.

Health Technology Wales Appraisal Process Guide consultation

<u>To support the development of the Health Technology Wales Appraisal Process Guide</u>
Health Technology Wales has produced a draft <u>Appraisal Process Guide</u>, which aims to clearly explain its health technology appraisal process to external stakeholders.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

It is asking for feedback about the clarity of the guide and if additional information should be included.

The aim of the guide is to increase understanding of the Health Technology Wales appraisal process, for anyone interested in its work or considering submitting a non-medicine health or care technology for appraisal.

The document explains the process used for appraisals including:

- Initial topic submission and selection
- Production of a Topic Exploration Report (TER)
- Selection of topics for further work, in the form of an Evidence Appraisal Report (EAR)
- Production of an EAR
- Production of guidance

The appraisal process guide can be read here

The appraisal process guide glossary can be read here

The guide is a draft document, and HTW is seeking feedback on whether it provides a clear description of the appraisal process and if there is additional information that should be included.

HTW would very much appreciate your feedback which you can submit here.

Five year progress review report highlights strong progress for Health Technology Wales

Health Technology Wales is pleased to announce the publication of its <u>five-year progress</u> <u>review report</u> which highlights its strong progress and excellent prospects for future development.

The organisation commissioned an independent healthtech consultant to produce the report, which followed on from a three-year review carried out in 2020 and used a specification based on the 2014 Access to Medical Technologies in Wales report recommendations,

Overall, the report demonstrates that HTW has made good progress and is a trusted and valued part of the innovation landscape in Wales.

During the review process, which took place in October and November 2022, the consultant interviewed staff, observed key HTW decision making groups and examined documentary information produced by HTW.

The aim of the review was to examine its progress on improvement suggestions made in the three-year review and in achieving the objectives set out in the

HTW Strategic Plan 2021-2025">https://example.com/html/>
HTW Strategic Plan 2021-2025.

Other areas for review included: the quality of its appraisal function, its contributions to the COVID-19 response in Wales, key contributions HTW can offer to the forthcoming Welsh

Y Rhaglen Arloesi, Technoleg a Phartneriaethau

Gyrru arloesi, cefnogi technoleg ac ysgogi partneriaethau ym maes lechyd a Gofal yng Nghymru

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Government Innovation Strategy for Wales; and HTW's capacity and capability in terms of staffing and leadership.

Key findings of the five-year-review include the following:

- HTW strongly and demonstrably fulfils its core functions, and has made good progress on the improvement suggestions in the 3-year review
- HTW is a distinct, trusted and valued part of the innovation landscape in Wales and its strategic plan provides an excellent foundation for future development.
- Notable developments since 2020 include a significant contribution to the COVID-19 response in Wales, the development of a strong strategic plan, completion of a pilot adoption audit and innovative work on evaluating social care technologies.
- Stakeholders who work with HTW recognise and value its expertise in the identification, appraisal and adoption of health technologies and see HTW as a wellgoverned organisation

Professor Peter Groves, Chair of Health Technology Wales, said: "There is an exciting future ahead for Health Technology Wales and I am confident that we can continue to expand the scope of our work.

"We have established a reputation as a trusted health technology assessment organisation with expertise that is valued across the health and care sectors.

"We look forward to continuing to work with our partners to address key health and social care priorities in Wales."

Dr Susan Myles, Director of Health Technology Wales added: "I am very proud of the progress that has been made by Health Technology Wales and excited about the role we will play in the achieving the aims of the forthcoming Innovation Strategy for Wales.

"Our relationship with partner organisations is key to the success of our work and I am particularly pleased to read that our stakeholders trust and value our expertise in health technology assessment.

"We will continue to refine our processes and monitor the impact of our work to ensure we are delivering the best possible outcomes to support health and social care in Wales."

A copy of the report can be read here.

BioWales in London and MediWales Connects Conference

BioWales in London will be held on Tuesday 14th March at PwC's Embankment Office, London.



230123_BioWales_A 5Flyer.pdf

Y Rhaglen Arloesi, Technoleg a Phartneriaethau

Gyrru arloesi, cefnogi technoleg ac ysgogi partneriaethau ym maes lechyd a Gofal yng Nghymru

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

This event provides a unique platform for exciting new innovations and companies looking for investment and collaborations. With presentations from a variety of Welsh companies at various stages of their investor journey and an expert investor panel.

We will also highlight NHS innovation and research collaboration opportunities, with our session 'Working with the Welsh NHS' discussing clinical access, adoption and clinical trials. To view our current programme and to register please click here: https://mediwales.com/event/biowales-in-london-3/

MediWales Connects Conference 2023 - Thursday 29th June at the All Nations Centre, Cardiff.



230119_Connects_20 23_A5_Flyer.pdf

NHS colleagues from across Wales, local companies and the wider industry sector will join to share clinical innovation in practice to improve patient outcomes. The event includes keynote presentations, CPD training seminars, workshops and an exhibition. The aims of the conference are to:

- Highlight and showcase the excellent work and research being carried out by the health and care communities in Wales
- Improve collaborative working between the health boards and research communities
- Raise the profile of NHS Wales and clinical innovation across the UK and help promote recruitment for research
- Support closer working relationships between industry, NHS and research groups and clinical trials capabilities

To view our 2022 programme and to register please visit our Connects website: https://mediwalesconnects.com

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Velindre Cancer Centre launches artificial intelligence chatbot RITA



The innovation team at Velindre Cancer Centre has launched an artificial intelligence (AI) chatbot to support patients, their loved ones, and members of the public.

RITA is the world's first artificial intelligence enabled virtual assistant to be trained specifically in oncology. Over 100 clinicians, staff and patients have been involved in the development process.

Now live on the Velindre Cancer Centre website, the AI chatbot has been trained to understand and respond to a variety of frequently asked questions and direct users to useful information. RITA uses natural language processing to learn from previous interactions and provide intelligent answers.

Ross McLeish, the lead Innovation Project Manager, said:

"We're really pleased to make RITA available to cancer patients and their families. We've developed this tool to help them get on the front foot and to empower them to access helpful and high-quality information anytime, anyplace, and anywhere. The COVID-19 pandemic allowed us to refocus on scenarios when people may be visiting the cancer centre for the first time, and it currently supports around 190 topics. These cover a number of frequently asked questions, along with information about support services, facilities, and other resources."

Peter Barrett-Lee, Medical Director at Velindre Cancer Centre, added:

"We know from experience that when a patient receives a cancer diagnosis, accessing and absorbing information can be a challenge and sometimes overwhelming. The purpose of RITA is to enable patients and their families to access helpful information on their own terms and in their own time. RITA has undergone extensive testing before we released it to a wider audience and I'm confident it will really benefit the emotional, psychological and physical wellbeing of its users."

There are also several benefits to Velindre Cancer Centre's services, including:

- Support for patients and their families 24 hours a day, seven days a week.
- Access and signposting to support services and resources provided by Velindre and charity partners.
- Centralised source of information, contacts, and useful media all in one place.
- Reduced strain on both clinical and clerical staff time dealing with routine queries.

Plans to develop RITA in the near future will involve pre-recorded videos with healthcare professionals. This means newly diagnosed patients can be virtually introduced to the clinicians who will provide their care ahead of their first appointment.

The inspiration for the AI chatbot came from Velindre Cancer Centre's very own receptionist, Rita, who worked on reception for 19 years until retirement in December 2021. Having been

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

the first line of communication for 1,200 daily calls at main reception, Rita's vital role and inspirational efforts involved supporting patients and their families at their most vulnerable.

To access RITA, visit the <u>Velindre Cancer Centre website</u> and click the blue message icon that appears in the bottom right of the screen.

A wide variety of partners supported the development of RITA, including partners in academia, industry, and the third sector. Collaborators included Pfizer Oncology, IBM, Meridian IT, Concentric, Macmillan Cancer Support, Tenovus Cancer Care, Accelerate, Cardiff University, Swansea University, and the University of Wales.

Interested in collaborating? To learn more about potential opportunities to work together, please contact the RITA project via email: Velindre.Innovation@wales.nhs.uk or call: 02920 615 888.

TERMS (Technology Enabled Remote Monitoring in Schools), an all-Wales pilot study

TERMS (Technology Enabled Remote Monitoring in Schools) is an exciting and innovative all-Wales pilot study being conducted by a team in TEC Cymru, hosted by Aneurin Bevan University Health Board (ABUHB). This project is also being supported by the Royal College of Psychiatrists (RCP) Wales.

Ollie John, Manager of the RCP, said "We've been delighted to support the work of TEC Cymru into remote monitoring. Importantly the work has been co-designed with young people, and it has the potential to deliver a timely, efficient intervention."

TERMS is a project which is piloting the use of remote monitoring, with a vision to bring health and social care into schools to improve access to healthcare services. Remote monitoring is the ability to monitor and manage aspects of patient health from a distance, through the use of technology. The technology can collect information on measures such as blood pressure, heart rate, and weight.

We have recently secured the remote monitoring technology to undergo our pilot testing for this project. We are now ready to begin testing user experience of the technology within schools and clinical teams.

This is a very exciting opportunity for schools to become involved in a pioneering project taking place within Wales, to develop and improve NHS services.

The Principal Investigator, Alka Ahuja MBE has said: "We are delighted to receive the funding from the Q lab (Health Foundation) for TERMS (Technology enabled remote monitoring in schools). The introduction of remote monitoring for young people in schools has the potential to provide an efficient service that saves time, reduces cost and reduces stress for young people, families and clinicians while improving communication between health and education." Alka Ahuja is a Consultant Child and Adolescent Psychiatrist and is the National Clinical Lead for the Technology Enabled Care Programme.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Our Research Assistant, Vicky Daniels has said "this is such an exciting project to be involved in, it is going to be ground breaking for many different services in Wales in supporting young people with their physical and mental health."

"The project is being fully evaluated, through adopting a phased, embedded approach to understand the full impact that TERMS could have across Wales." Said Gemma Johns, the Head of Research at TEC Cymru.

The research and evaluation approach that TEC Cymru follow can be found using this link: https://digitalhealth.wales/tec-cymru/research/research-evaluation-framework

For updates as the project progresses, we have social media accounts that are updated regularly: Twitter: @TERMScymru Facebook: TERMS Cymru

Interventional Radiology department at Aneurin Bevan University Health Board has been awarded an Exemplar site status by the British Society of Interventional Radiology!



Congratulations to the Interventional Radiology department at Aneurin Bevan University Health Board, which has been awarded an Exemplar site status by the British Society of Interventional Radiology!

The Health Board's Interventional Radiology team has received this prestigious accolade after being recognised for demonstrating a commitment to developing high-quality Interventional Radiology Services.

The opening of The Grange University Hospital in November 2020 brought two new state-of-the-art Interventional Radiology suites and a 5 bed Radiology Day Case Unit; allowing the Health Board to further expand its Interventional Radiology services. The well-established department has also been delivering specialist services on a national level.

Receiving this Exemplary Status recognition reflects the level of service provided consistently to patients.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Dr Nimit Goyal, Consultant Interventional Radiologist, said:

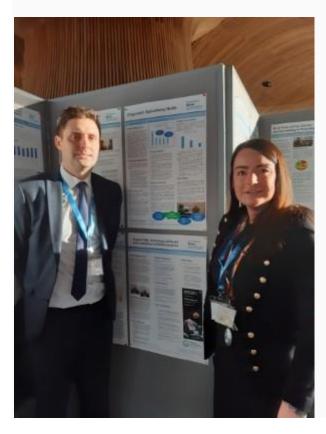
"It's an honour to receive this Exemplary Status in recognition of our hard work. As a department, we're passionate about continually improving the quality of our work, particularly concerning patient safety, quality and experience. It is a recognition of the hard work that all our staff members have done in caring for our patients.

"We're actively involved in research and have worked tirelessly to develop new services, such as Prostate Artery Embolization. We've also collaborated with neighbouring Health Boards to develop an out-of-hours Interventional Radiology service so that a 24/7 service is available to all patients."

Congratulations to all involved in this well-deserved recognition!

Natalie Janes (Senior Nurse-Primary Care) and Lloyd Hambridge (Pharmacist and NCN Lead Caerphilly East) attended the Senedd to present an innovative project

Natalie Janes (Senior Nurse-Primary Care) and Lloyd Hambridge (Pharmacist and NCN Lead Caerphilly East) attended the Senedd this month on behalf of the Primary Care Respiratory Nursing team, Bevan Commission and Aneurin Bevan University Health Board to present an innovative project.



Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

The provision of diagnostic spirometry across primary and community care was severely disrupted by the COVID-19 pandemic. Initially, spirometry was withheld in these settings in line with National Guidance due to concerns surrounding infection prevention control, suitable facilities, and equipment. 90% of COPD and Asthma patients are diagnosed within their GP practice. Therefore, alternative ways to perform diagnostic spirometry were required. The availability of accurate data to ascertain the backlog of patients requiring spirometry was limited; however, compared with Clinical Commission Group databases, predictions of 550 patients awaiting spirometry were noted.

The project developed two diagnostic spirometry hubs, one at Trevethin Health Centre Torfaen and the other at Trethomas Health Centre Caerphilly. Spirometry and fractional exhaled nitric oxide (FENO) testing was undertaken, results interpreted, diagnosis confirmed

and where appropriate treatment and management pathways commenced. The hubs also supported the educational and training requirements for healthcare professionals across ABUHB. The potential benefits of the project were to improve diagnostic assessment and management of COPD, Asthma, Pulmonary Fibrosis and ILD and reduce in-patient waiting lists for lung function tests across respiratory directorate and Primary and Community Care, supporting earlier diagnosis/onward care, with improved treatment outcomes for patients presenting with respiratory diseases.

Additionally, ensuring prudent prescribing/appropriate medicines management, reduction in A&E attendance, OOH/GP contacts and secondary care services, providing care closer to home in line with "A Healthier Wales". Furthermore, it would aim to support the training and education of the healthcare professional workforce for a sustainable future, ensuring staffmaintained skills and competence with ARTP-approved accreditation and re-accreditation.

The respiratory team continue to support spirometry across ABUHB with an assessor, supervisor and education and training events that will continue to be launched throughout 2023 via the Primary and Community Care Academy.





Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

New First in Wales, Minimally Invasive Procedure to Help Combat Pain from Osteoarthritis

A Radiology team at Aneurin Bevan University Health Board has become the first in Wales to undergo a new procedure that helps people who suffer from mild to moderate Osteoarthritis (OA), a condition of musculoskeletal (MSK) pain.

The procedure is a geniculate artery embolization, which helps people by aiming to relieve pain through embolising the pathological new vessels while maintaining the larger vascular supply to the bone. Ultimately minimising the pain to levels that patients may find more manageable in their day-to-day life.

Approximately 450,000 individuals in Wales live with Osteoarthritis. Many of them, experience mild to moderate knee OA symptoms. Often not severe enough to warrant joint replacement and other nonsurgical options.

This represents a specific challenge that Dr. Nimit Goyal, Consultant Interventional Radiologist, hopes can be helped with this new procedure: "Existing procedures tend to have a short-term benefit outcome. So these patients will hopefully have a much longer pain-free interval."

The aim is to reduce pressure on primary care and waiting lists for physiotherapy and occupational therapy treatments. The new minimally invasive procedure is also part of a research project to find alternative treatments for osteoarthritis. With the support of the Welsh Government through the Bevan Commission and the teams at Aneurin Bevan University Health Board.

"The more things that we can do as a day case, that is where the innovation of this procedure lies, because we can change the way that we are treating patients. So the hope is that this provides an option to those patients so that they can live pain-free and have a better quality of life." Dr. Nimit Goyal continued

Genicular artery embolization (GAE) is an Interventional Radiology procedure that aims to relieve pain by embolising the pathological new vessels while maintaining the larger vascular supply to the bone. The fact that it is done as a day case using local anaesthesia makes it a quick and convenient solution for patients

Mr Andrew Miller, Consultant Orthopaedic Surgeon said: "Early intervention for osteoarthritis is almost unheard of. If you can intervene early in the early arthritic process, that will benefit the patient, prevent OA progression, and prevent the need to use healthcare resources and joint replacements.

"The exciting thing about this trial is that we are actually changing the biology of the joint without surgically changing the mechanical access to it which we could also do. So, this preventative medicine is the future and the only way we can get on top of the huge demand that is in our population rather than waiting for them to have their joints changed he continued

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

, "Although this was its first trial in Wales, it took place with the support of Prof. Mark Little, Consultant Interventional Radiologist, Royal Berkshire Hospital. Who is experienced in carrying out this procedure in England. "Research and data is key to the development of this procedure so that we can ascertain whether we can offer it to patients long term. It has the potential to change how we treat Osteoarthritis of the knee."

The project will explore the effectiveness of this novel interventional radiological procedure as a treatment option to reduce pain and improve joint mobility, overall quality of life and wellbeing in patients living with mild-moderate knee OA.

As the first known study in Wales to investigate the potential benefits of this procedure, it is hoped the study will realise the benefits of this intervention ultimately leading to widespread adoption within Wales.

The National Institute for Health and Care Excellence (NICE) published in its guidance in October 2021, considering GAE to be a safe procedure. It has recommended that long-term efficacy should be assessed in a research setting. "

Cardiff & Vale UHB Endoscopy Challenge







Cardiff Capital Region Challenge Fund

Cardiff & Vale UHB (C&V UHB) continue to collaborate with Cardiff Capital Region (CCR) to manage the Endoscopy Challenge as Phase 1 of the project comes to a close.

During Phase 1, Two applicants received support to develop their projects further and run feasibility studies. Swansea based company; CanSense is developing a blood-based test to help prioritise patients on the endoscopy waiting list and reduce time to diagnosis, while IQ Endoscopes, based in Chepstow, are developing a single use endoscope that negates the need for time consuming and expensive decontamination processes and allows a more flexible approach to completing an endoscopy procedure.

The challenge will be delivered using a 3 phase Innovation partnership process that is managed by the C&V UHB procurement team. Phase 1 of the project ended on 28th February 2023 and the project is currently assessing development work complete in phase 1 before moving into phase 2 at the end of March. It is anticipated that newly developed services or products will be adopted and implemented regionally across the NHS in Wales and beyond after the challenge project is complete from March 2024 onwards.

The Endoscopy Challenge seeks innovative approaches to accelerate the delivery of endoscopy procedures in Wales, improve access and reduce waiting times for patients. The waiting list for endoscopies in Wales is currently around 30,000 and continues to grow.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Professor Jared Torkington and CAV UHB's Shaping Change team are leading the Challenge, funded by a £750k grant from the CCR Challenge Fund.

Cardiff and Vale Regional Innovation Co-ordination Hub Updates





Social Prescribing





Over the last year, <u>Cardiff and Vale Regional Innovation Co-ordination Hub</u> has partnered with the Wales School for Social Prescribing Research (WSSPR) to develop a social prescribing evaluation framework to help us better understand social prescribing in our region and inform future development in our health and social care system. The framework can be used by social prescribing providers to measure and demonstrate how their services function and deliver outcomes for those who use them.

As part of this work, WSSPR have produced a Development Matrix to help services compare their progress over time and facilitate conversation between services in Wales. Alongside this, WSSPR have undertaken a Scoping Review into the patient experience of social prescribing and produced a Group Concept Mapping Report to present the findings of a study into stakeholder views, which has shaped the data included in the Development Matrix.

The next phase of this project is to embed the framework into practice with local social prescribing providers and develop a Community of Practice for providers to share learning and best practice. For more information or to get involved, get in touch with the Hub via Dylan.John4@wales.nhs.uk

Lived Experience as an Asset

Building on the success of <u>Stacey and Joanna's Story</u>, Cardiff and Vale Regional Innovation Co-ordination Hub has collated a number of resources exploring different ways lived experience is improving our health and social care system into a <u>newsletter</u>.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

The newsletter showcases local innovations, such as Stacey and Joanna's Story, Peer-to-Peer Naloxone and Cardiff Regional Partnership Board's Unpaid Carers Rep, to help spread and scale best practice and contribute to the cultural change of viewing lived experience as an asset and a crucial element of health and social care in the future.

The Hub has created guides on engaging with people with lived experience and employing people with lived experience, which provide tools and an evidence base to assist people to incorporate the voice of lived experience in our services. Links to regional and national assets are also provided to enhance a collaborative partnership approach.



To see more of the work the Hub has been doing over the last year, visit our website.

Bevan Commission

Bevan Future Thinkers Awards

Professor Sir Mansel Aylward 'Bevan Future Thinkers' in Health and Care Award
The Bevan Future Thinkers Award provides an opportunity for students undertaking health
and care related studies across Wales to provide fresh insight and vision to inform the Bevan
Commission's thinking in securing sustainable health and care that is fit for the future.
Students are tasked with answering, in the form of an essay, What should health and care
services in Wales look like in 2050 and what will need to happen to achieve this? The
closing date for submissions is Friday 24th March. You can find out more information on how
to apply for this award through this link https://www.bevancommission.org/the-professor-sir-mansel-aylward-bevan-future-thinkers-in-health-and-care-award/

Bevan Young Future Thinkers Award

The Bevan Young Future Thinkers award is an opportunity for primary and secondary schools across Wales to showcase their exemplary health and wellbeing initiatives, developed and delivered by both pupils and teachers. Schools are invited to share their initiatives in the form of a poster and the closing date for submissions is Friday 28th April. If you would like to find out more, contact us at young-bevan-future-thinkers@swansea.ac.uk

The winners of both awards will receive a voucher and the opportunity to present their work at the Bevan Commissions National NHS 75 event in July. Shortlisted submissions will also be included in the competition compendium.

NHS 75 Event

Bevan Commission NHS 75 Conference, 5/6 July 2023, Celtic Manor Resort

Y Rhaglen Arloesi, Technoleg a Phartneriaethau

Gyrru arloesi, cefnogi technoleg ac ysgogi partneriaethau ym maes Iechyd a Gofal yng Nghymru

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

The conference we will reflect upon the origins of the NHS, its achievements and changing needs, to help find innovative, transformative and sustainable solutions for health and care for future generations.

The conference will have four core themes over the two days, based around the new sustainable model for health and care:

- 1. Resilient and Resourceful People and Communities
- 2. Prudent, Integrated Health & Care Systems and Workforce
- 3. Sustainable and 'Equally Well' approaches- Economic, Environmental, Social
- 4. Transformative, Fit and Flexible for the Future

We have drawn together a dynamic and challenging programme of eminent national and international speakers to share their experience and learning across the health and care community. Confirmed speakers include Prof Donald Berwick, Prof Sir Michael Marmot, Prof Sir Andy Haines and the Minister for Health and Social Services, Eluned Morgan MS.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Public Health Wales leads the way on Greener Primary Care in Wales







A team from Public Health Wales' Primary Care Division, led by Sian Evans, Angharad Wooldridge and Victoria Hannah, has developed the **Greener Primary Care Wales Framework and Award Scheme – due to relaunch in March 2023.**

The Scheme is a collection of actions to support community pharmacy, community dental practice, community optometry and general practice to improve the environmental sustainability of their day-to-day practice and to reach the Welsh Government decarbonisation targets.

Through the <u>Bevan Exemplar programme</u> (2022), the team piloted the approach by supporting the four independent primary care contractors in Wales to undertake environmental sustainability actions in practice. Feedback included:

- "It is massively refreshing to be doing something creative and innovative. We often follow set pathways and set governance, whereas here we are looking for creative ideas and solutions."
- "It highlighted the overlap between greener practice and astute business management."
- "The Framework was a breath of fresh air post-Covid."

The Framework and Award Scheme was developed in collaboration with a wide range of stakeholders and was formally <u>launched</u> on 8 June 2022 by the Minister for Health and Social Services in Wales.

Eluned Morgan, MS said: "In joining the Scheme, you'll be part of a growing network of healthcare professionals committed to building greener practice into everyday decision making."

Actions are clinical and non-clinical, which means that **the whole team can get involved**, and covers categories such as procurement, waste, buildings and estates, and transport and smart working (these are aligned to the themes in the NHS Wales Decarbonisation Strategic Delivery Plan).

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Join the 2023 Scheme to take action on the climate emergency

The Scheme will re-launch on 20 March 2023, marked by a live webinar at 12:30-13:45. Click here to register your place.

Practices can choose which actions they wish to work on and, depending on progress, practices will be awarded a 'working towards', bronze, silver or gold award at the end of the year.

Further information about the Scheme can be accessed at Primary Care One.

Any comments or queries should be directed to greenerprimary care@wales.nhs.uk.



Life Sciences Hub Wales

News:

Latest figures show how Wales is fuelling the UK's life sciences vision

The importance of Wales to the UK life sciences sector has been highlighted in two sets of recent figures that demonstrate strong performance in key aspects of life sciences businesses in Wales.

February's Inspiring Innovation

Inspiring Innovation is a collection of the latest news stories across Wales' innovation landscape. Collated by our Sector Intelligence Team, they demonstrate Wales' thriving ecosystem and how innovation is supporting the transformation of health and social care services.

Life Sciences Hub Wales supports the Social Care Wales Accolades 2023

There is incredible work by organisations and individuals going on across social care in Wales. We're helping to celebrate this by supporting the 'Supporting Unpaid Carers' award at the Social Care Wales Accolades on 27 April 2023.

Blogs:

How does data integration drive decision making in health and social care?

Last November we hosted Palantir and Google alongside other key data industry experts at Life Sciences Hub Wales. In a series of panel discussions, we explored how data is becoming ever more crucial for transforming health and social care and improving patient outcomes.

How digital innovation is changing medicine management in social care

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

In Wales, supporting people to independently manage their health and wellbeing is a priority. Cwm Taf Morgannwg Health Board are currently trialling a digital medication management technology to empower people, improve health outcomes, and work toward streamlining health service delivery across Bridgend.

Events:

Explore Remote Monitoring

We're excited to join forces with M-SParc to bring you a unique Remote Monitoring event on 16 March. You have the option of joining us in south or north Wales.

Big Data Event

We've partnered with the National Data Resource to host a Big Data event on 29 March at the Principality Stadium, Cardiff.

Get in touch:

Are you interested in finding out more about Life Sciences Hub Wales and the services we have on offer? Contact us via catrin.isaac-rees@lshubwales.com to organise a meeting today.

ACTing Minds



Dr Darren Edwards is a psychologist who specialises in the area of 'Acceptance and Commitment Therapy'- ACT. He first reached out to AgorIP when he'd created the idea of a video game that incorporated Acceptance and Commitment Therapy into the gameplay.

Having spent many years researching this area of study, and realising it too often affects young people, Darren thought the best way to reach out to those suffering from anxiety and depression, was through an app to help increase accessibility of mental health support within a format for many young people engage in. This new idea is referred to as 'gamification of mental health' and has proved successful in reaching struggling young people, who wouldn't necessarily have reached out due to the stigma that still seems to surround mental health problems.

The idea of the game is to go through the story of a man who has been through a lot of traumatic experiences and has hit rock bottom. The aim of the game is to help him overcome the difficult thoughts and feelings he faces through developing acceptance and values orientation is his life. The game focuses on how you move through trauma and rewards the player when you open to difficult emotional experiences rather than trying to avoid or suppress them. This becomes a key factor in progressing through the game, by using ACT-based skills to address your emotions and understand how to move forward.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Darren came to AgorIP as he had the idea and the logistics behind the app but needed help making it a reality. After submitting an inquiry and being referred to a Technology Transfer Manager, he was approved for support from AgorIP, who are part funded by the European Regional Development Fund through the Welsh Government. Based at Swansea University's School of Management, AgorIP helps researchers, entrepreneurs, and inventors take their intellectual property (IP) to the marketplace and make it a commercial success.

AgorIP was able to fund a specialist video game company to help Darren write the game and create the app.

Moving forward, Darren is hoping to develop the app further, creating a safe space online for users to connect and build a community, where users can support one another and encourage each other to be more open and supportive in the area of mental health. Having such an online community can help people who are struggling and encourage them to seek further support more openly rather than keeping things bottled up inside. This could be a fantastic way to facilitate mental health support for those who don't always know where to look for it, and through a platform, they are familiar with.

We look forward to watching the app progress and can't wait to see how it goes!

The app has been launched on the Apple and Android app stores and is available now.





Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales





A new 'Connecting Realities' toolkit is being launched, designed to support local care homes and day care centres, clinical groups, and community organisations in Pembrokeshire to implement immersive technology solutions. The toolkit was created in response to the needs and opportunities identified through two Bevan Exemplar cohort 7 projects, 'Connecting Realities' and 'VR Inclusive Mental Health Interventions.'

The 'Connecting Realities' project, a collaboration between Hywel Dda, Pembrokeshire County Council, and local community organisations—and designed and coordinated by Vere Experiences CIC—explores how digital media, with a focus on Virtual Reality, can support people at risk of isolation, particularly those living with mobility-affecting conditions. Meanwhile, 'VR Inclusive Mental Health Interventions' is a collaboration between the Pembrokeshire Older Adult Community Mental Health Team and Vere Experiences CIC, providing tailored Virtual Reality experiences to improve outcomes in patients presenting with low mood who may have a history of suicidal thoughts or attempts.

Through these projects, over 100 sessions have been delivered, resulting in mood improvement and new ways for healthcare professionals to connect with their patients. The Connecting Realities Toolkit includes an App that allows organisations to access locally filmed virtual reality experiences, an interactive digital map with access information through virtual tours and facility details, and VR Supporters visiting day care centres and care homes around Pembrokeshire. The project has also developed processes to share with organisations wishing to use VR and is participating in the development of a network of collaborating VR creators working with artists, poets, and musicians, as well as healthcare professionals, academia, and service-users to create high-quality new virtual and extended reality material.

Sarah Beauclerk, VR Coordinator, adds, "Our project is not just about providing digital and immersive wellbeing experiences but also breaking down barriers to access them. We're excited to be part of a network of collaborating XR creators, and we believe that there is so much potential for innovation in the field to develop ground-breaking new material and processes that will provide new solutions within healthcare."

If you're interested in learning more about the Connecting Realities Toolkit, take a look at our Website or please contact connectingrealities@gmail.com and @VrConnections.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

Air monitor produced to highlight pollution challenges





A new low-cost air monitor created at the University of South Wales (USW) could revolutionise the way authorities react to the challenges caused by pollution.

The device has been designed and developed by the USW team as a way to streamline the collection of data on air quality.

The work is being supported by the Welsh Government, Rhondda Cynon Taf (RCT) County Borough Council, Respiratory Innovation Wales (RIW), and Wales Institution for Digital information (WIDI).

The USW team has been motivated to develop the monitor because of the influence roadside pollution can have on the public, particularly school pupils walking close to busy traffic when making their way to and from school.

"We have made an effort to ensure the quality of air in a variety of locations can be easily monitored and the data collected made readily available," said senior lecturer Dr Leshan Uggalla.

"At present air monitors can be very expensive and only available to record data for a certain number of days or weeks before being moved to other locations to take readings. This cost can be prohibitive, so they will only be in place for a short time.

"This new device (left) can be installed with minimum maintenance at a fraction of that cost and the data can be collected and visualised very easily through smart networks and devices.

"This means they can stay in place for a much longer period of time and collect a great deal more information, giving policymakers more details of what may be needed to address air pollution problems. We are planning meetings with other public bodies who may be interested in using the USW-developed monitor.

"Further integration of technologies, such as Artificial intelligence, could provide rapid solutions to minimise the pollution, such as introducing alternative routes for traffic and controlling live speeds on roads to control the levels."

Welsh Government Economy Minister Vaughan Gething said: "Tackling air pollution is one of the most complex challenges we face, with no simple solution.

"It's great to see local government and academia collaborating on such an important issue and developing technology that adds to Wales' capabilities and understanding in this area.

"I am delighted we have been able to support Rhondda Cynon Taf County Borough Council to start its LoRaWAN journey through Tech Valleys funding."

Councillor Tina Leyshon, RCT Council Cabinet Member for Climate Change and Corporate Services, said: "We are proud to be part of such an innovative project, which really opens up the possibility of capturing this vital data easier and in a more cost-effective way.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

"It's great to see such a pioneering piece of equipment being created and developed in Rhondda Cynon Taf, and adds to the fantastic reputation that USW has locally, nationally and internationally.

"We look forward to seeing the technology in action, and helping us to inform future decisions to create a healthier environment for our residents."

Dr Philip Webb of RIW said: "As CEO of Respiratory Innovation Wales, I am delighted we have been involved in this project.

"Lived air quality has a significant impact on the health and wellbeing of our population and being able to accurately monitor lived air quality is critical – not only as it enables us to be able to assess the real-time impact of pollution today but also generates data about how we should design and build our houses, towns and cities of the future to support the wellbeing of our future generations."

Professor Andrew Ware, Director of Research at WIDI and Professor of Computing at USW, said: "Poor air quality shortens lives, creates significant demands on the health service, and spoils the environments in which we live.

"Measuring its quality can help determine what is causing bad quality air. When the cause is known decisions can be made about what interventions are appropriate to try to rectify the situation."

The project is funded by University's internal research funding through Higher Education funding Council Wales (HEFCW).

Principles of Value-Based Health and Care Short Course at Swansea University





The <u>Value-Based Health and Care (VBHC) Academy</u> at Swansea University, part of the Welsh Government Intensive Learning Academy programme has three core services:

- World-leading Educational Programmes
- Innovative Research
- Bespoke Consultancy Service

The educational offers include DBA, <u>MSc in Advanced Health and Care (Value-Based)</u> as well as a short, intensive VBHC Executive Education programmes and masterclasses, such as **Principles of Value-Based Health and Care**. As a leader or manager, this course will ensure you return to your organisation equipped to validate or build a strategy defined by value and outcomes.

Innovation, Technology and Partnerships Programme

Driving innovation, supporting technology and stimulating partnerships across Health and Care in Wales

The **Principles of Value-Based Health and Care short course** is delivered by an international faculty of leaders with expert knowledge of health and social care systems – providing diverse insight and experience; to help challenge and shape your thinking and support you in defining the right approach for your organisation and system. Gaining invaluable experience exploring VBHC with peers across all sectors; sharing diverse experiences and perspectives – all essential in the successful adoption of VBHC.

Next Course Dates Available:

- June 2023 In-person, 2 full days
- October 2023 Virtual, 7 sessions over 5 weeks
- March 2024 In-person, 2 full days

There are limited scholarships available for those working in Health, Social Care and Third Sector in Wales. Scholarship deadline for June 2023 is Monday 20th March 2023.

For further details, please visit the Swansea University webpage <u>here</u> or email the team on vbhcacademy@swansea.ac.uk

END

If you would like further information on items within this newsletter, please contact:

Alex Gibbon - Programme Manager - Innovation, Technology and Partnerships

Gwyddorau Bywyd ac Arloesi / Life Sciences and Innovation Grwp Iechyd a Gwasanaethau Cymdeithasol / Health & Social Services Group Ffon / Tel No: 03000 253802

Ebost / Email Address: alex.gibbon@gov.wales