

# Research and Innovation - How our Patients & Public Benefit

## From Strategy to Action.

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# TriTech Institute - Collaborations

## International

- International - European Horizon work – 1. Dynamo & 2. Invest4Health.
- International - European Horizon work – 3. circHealth.

## National

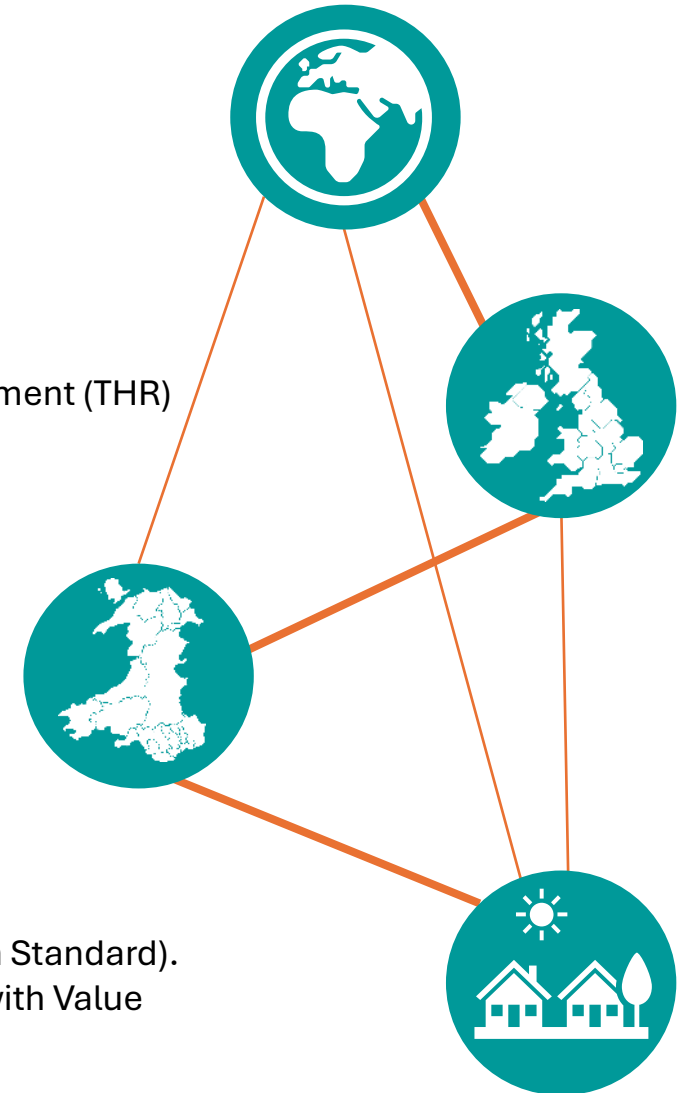
- National RWE - The Institute of Clinical Science & Technology (ICST) Respiratory toolkit.
- National RWE - Community HealthPathways.
- National RWE - Prostate Cancer Pathway optimisation with Cancer Research UK (CRUK).
- National RWE - Cardiovascular disease, Predict and Prevent with Amgen.
- National RWE - Asthma pathway with AstraZeneca & Northern Ireland.
- National Research work – Orthopaedics, Mako Total Knee Replacement (TKR) and Total Hip Replacement (THR) with Warwick University and Stryker.

## Regional

- Regional RWE - Asthma pathway work with AstraZeneca, Hywel Dda, & Aneurin Bevan.
- Regional RWE – Arts in Health to enhance health and well-being.
- Regional RWE – Social Innovation Institute with University of Wales Trinity Saint David (UWTSD).

## Local

- Prostate cancer - Prostate Artificial Intelligence (AI) JIVA.
- Mental Health – Drug Resistant Depression Transcranial Magnetic Stimulation (TMS) with Magstim.
- Dementia - G-Data software for early Mild Cognitive Impairment – Alzheimer’s Disease (MCI-AD) Screening/Diagnostics.
- Paediatrics - Development of a paediatric / neonatal echo device for use within Primary Care (Bloom Standard).
- Tech enabled care – Chronic obstructive pulmonary disease (COPD), and Heart Failure (cross over with Value based health care (VBHC) programme) with Tunstall.
- Chronic pain – biopsychosocial Learning Management System (LMS) and service model with Pfizer.



# Strategic partnerships and collaborations with large multi nationals

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Over the past three years, Tritech has established collaborations with two major pharmaceutical companies to conduct a series of evaluative research projects.

## Prevention Agenda

Both partnerships are strongly aligned with a prevention-focused approach. The aim is to support individuals in staying healthy, happy, and independent for as long as possible by proactively addressing health needs before they escalate.



These partnerships are centred on delivering care earlier in a person's health journey by developing and evaluating services that:

- Enhance condition management,
- Improve therapy adherence and control and,
- Where appropriate, guide individuals to other relevant services within the healthcare system.

# Strategic partnership working towards a Cardiovascular Disease (CVD) prevention agenda

1

## Why ?

- CVD is the leading cause of death and disability in the UK, affecting over 7 million people and costing the health system more than £8 billion.
- Despite treatment availability, many CVD patients remain unmanaged post-event.
- Only 15% of eligible CVD patients receive treatment according to national and international guidelines.

2

## How ?

The partnership aims to address the current gap in 3 important Ways

### Phase 1 & 2 Local Level Hywel Dda UHB & SBUHB

#### 1) Data analytics (Secure Anonymised Information Linkage (SAIL))

The project aims to leverage the existing Informatics ecosystem to identify patient cohorts at high risk.

#### 2) Real World Evaluation of a CVD prevention Clinic

The project aims to test different ways of delivering care and interventions to specific selected patient cohorts to reduce the treatment gap and improve outcomes.

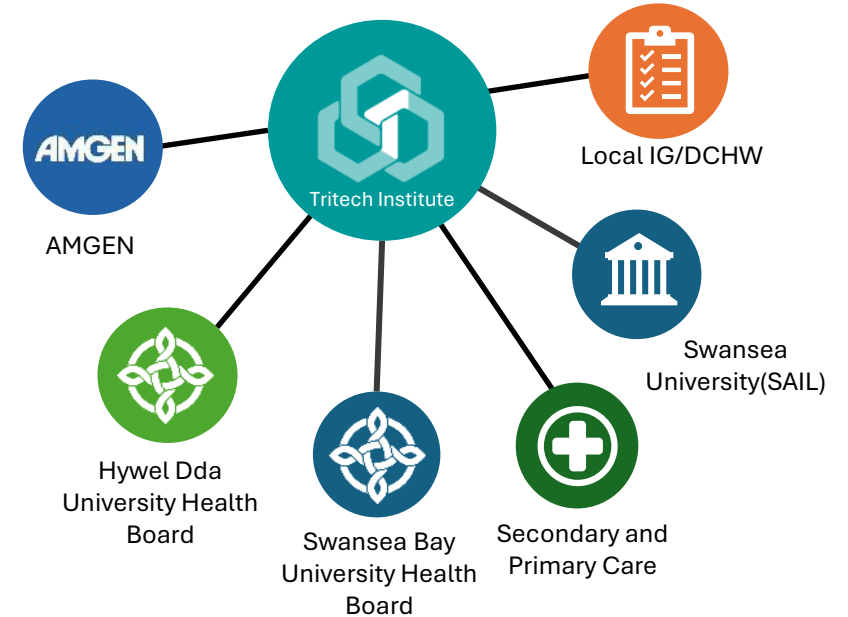
### Phase 3 National Level (all Wales approach)

#### Affordability Analysis

Provide a robust, data-driven foundation for understanding the resource allocation required to deliver a state-of-the-art CVD risk management service.

#### Strategy Playbook for Health Care Providers (HCPs)

The Strategy Playbook for HCPs is crucial for establishing a scalable solution for managing High risk CVD patients.



3

## Outcomes ?

The final report for phase 1 & 2 is under production with Phase 3 being started in April 2025.

### Key Findings of Phase 1:

- The gap and size of the CVD risk problem is much larger than initially thought
- A new stratified risk calculator has been developed

### Key Findings of Phase 2:

- Intensive prevention based clinics for CVD are effective, in reducing Lipid (48% in recommended guidelines) & Blood Pressure (BP) (81% within recommended guidelines)

# Service Evaluation of the Asthma Interface Network (AIN) Team at HDdUHB

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## Why ?

The AIN is a specialist respiratory team at HHdUHB that are tasked with working in the community to:

- Reduce unwarranted variation in patient care in the community
- Reduce inequity of access
- Improve workforce planning
- Reduce the numbers of people using Short Acting Beta-Agonists (SABA), in line with NICE guidelines
- Reduce the number of high global warming potential inhalers.

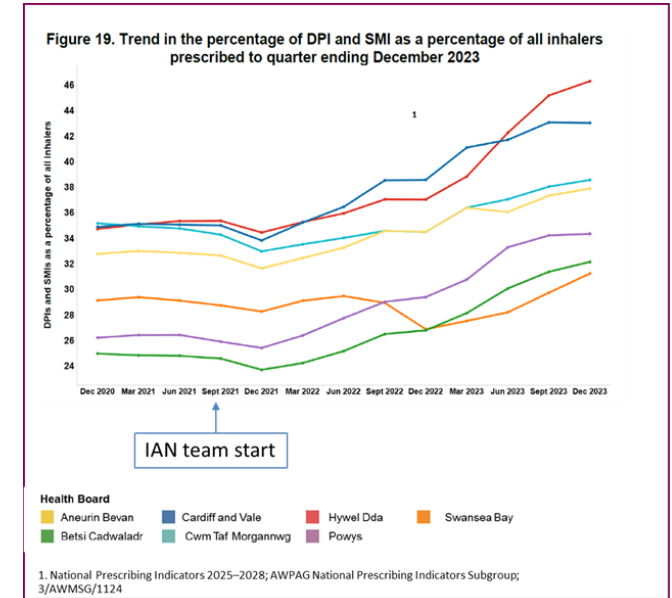
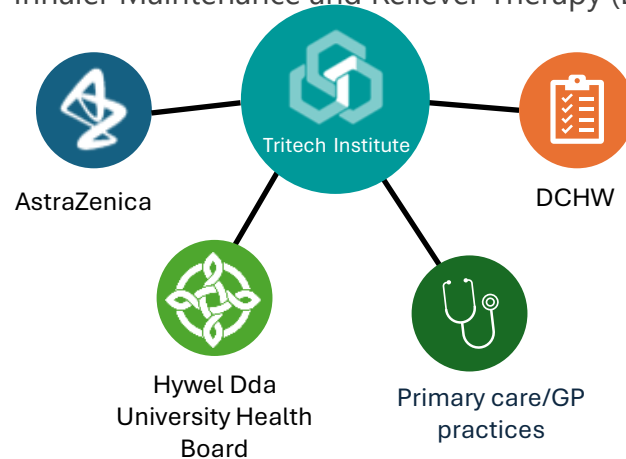
Hywel Dda UHB strategic focus on high quality asthma care has made it a leading organisation in improving Asthma Management in Wales (and the UK)

2

## How ?

Tritech were commissioned to evaluate the AIN to understand its success with particular focus on:

- potential improved respiratory health outcomes
- Assess healthcare utilisation costs: Referral rates
- Reduction in carbon footprint through reduced use of SABA inhalers and increased use of Dry Powder Inhaler Maintenance and Reliever Therapy (DPI MART ).



3

## Outcomes ?

- The project has just finished year 1 with a year 1 report due in July 2025
- Data is showing that the AIN have been effective in reducing >12 SABA usage in all but 1 of the 15 practices observed (by as much as 57.8%)
- The data shows increase in pro re nata (PRN) dry powder inhaler usage in all practices (by as much as 45.5%)
- An important part of collaborations such as these is to look at them as strategic partnerships and to build the relationship. As a result, several other projects have been developed with Astra Zeneca

## Service Evaluation of the Asthma Interface Network (AIN) Team at HDdUHB

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This work has evolved into a broader collaboration focused on evaluating and understanding respiratory services.

Ongoing and emerging projects with AstraZeneca (AZ):

- Evaluation of the Asthma Care Team in the Community – Aneurin Bevan University Health Board (Wales): Contracting phase
- Evaluation of the COPE Template (Wales): In progress
- Evaluation of the Chronic Obstructive Pulmonary Disease (COPD) Care Bundle (Northern Ireland): Contracting phase
- Review, Design, and Evaluation of COPD Care Guidelines (Midlands, England): In development

# Supporting Research

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Sally Hoare  
Head of Research and Development,  
Hywel Dda University Health Board



# Improving Outcomes For Parents and Newborns through Research



## First Health Board in Wales to open

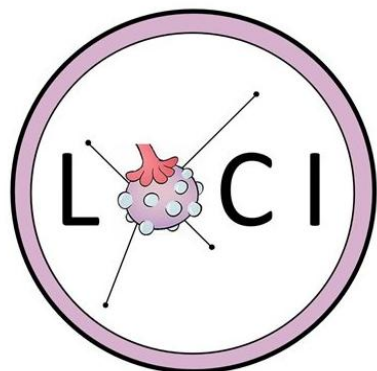
Pregnant people under the care of Hywel Dda University Health Board are being offered the opportunity to take part in this important UK wide trial sponsored by NHS Blood and Transplant. The medication trial is randomising participants to received preventative iron for the duration of their pregnancy or placebo to find out if this reduces the incidence of maternal anaemia, preterm birth and other adverse outcomes.

## Geographical barriers in HDDUHB

To overcome recruitment challenges the maternity research team and research pharmacist have trialled a model of posting the medication out to participants which has successfully improved recruitment.



# The LOCI Trial in Glangwili Hospital (GGH)

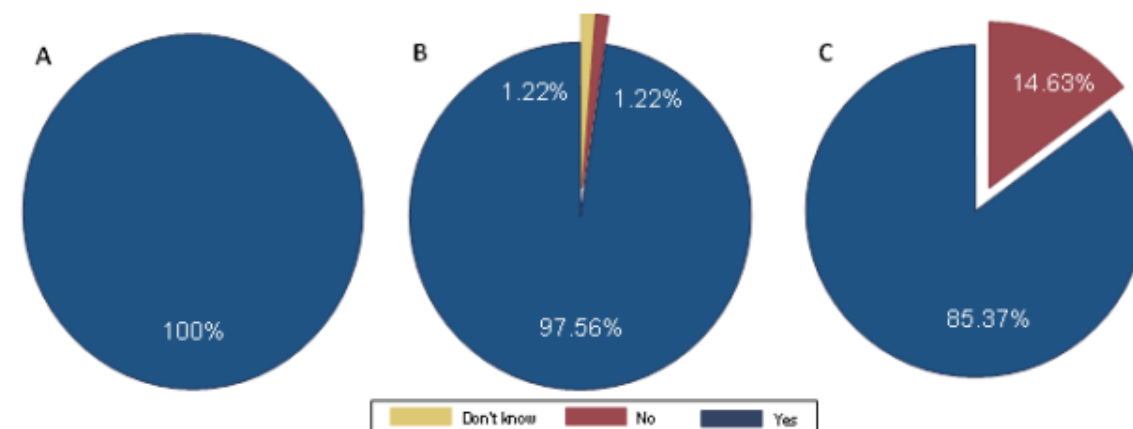


**Aim:** To investigate the clinical and cost-effectiveness of letrozole or clomifene, with or without metformin, for ovulation induction in women with polycystic ovary syndrome (PCOS).

Although it took a while to be accepted onto the Loci trial, once I was on it, it was very easy to get the medication needed. The instructions were clear and simple to follow for the trial, and luckily for me, they worked first time. I will be forever grateful to the trial for helping to give me my beautiful son. The support on the trial was brilliant, and any questions I had were always quickly answered. - LOCI participant in GGH.

## Why did this study have such patient impact?

Women are often told that due to their PCOS they will struggle to have children and often do not receive any support after diagnosis. Many struggle with weight issues but are not referred to dietetics or weight management programmes meaning they are often not eligible for NHS treatment or In vitro fertilisation (IVF). Women frequently report feeling isolated, unsupported and like they 'don't matter'. LOCI shone a light on women's health and gave them a platform and a voice. The trial provided women and their partners with a named research nurse as a point of contact; something often lacking in standard care and were monitored more closely - this made a huge difference to anxiety levels and medication compliance.



**Figure 6.** Patient opinion on (A) whether they think further research is needed for women with PCOS and infertility, (B) whether the LOCI trial is needed and (C) if they would be willing to take part?

# Our five-year plan

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2025 - 2030



## Strategic Aims and Objectives (Part 1)

Theme/Workstream	Ref	Objective
<b>Strategic Aim 1: Improve access to high-quality research and innovation that improves services, health and wellbeing</b>		
Harness opportunities and investment associated with national initiatives and developments	1.1	Increase the number and type of commercial research studies supported.
	1.2	Work with national research centres to sustain Health and Care Research Wales Faculty awards.
	1.3	Collaborate with National Strategic Clinical Networks on innovation programmes.
	1.4	Further develop the TriTech Institute to support MedTech, clinical pathway, and innovation strategies.
Work with Swansea Bay and Hywel Dda UHB Joint Committee	1.5	Develop clear research and innovation plans for service areas of joint interest.
	1.6	Increase commercial research and innovation through existing institutional support.
Increase R&I opportunities within Hywel Dda UHB	1.7	Establish thematic groups with public and patient engagement.
	1.8	Develop R&I capacity in corporate departments.
	1.9	Support community-based social research and innovation.

## Strategic Aims and Objectives (Part 2)

Theme/Workstream	Ref	Objective
	1.10	Develop TriTech Institute as a centre of excellence for evaluative research.
	1.11	Strengthen R&I's contribution to operational challenges.
	1.12	Utilise VBHC assets to support R&I programmes.
<b>Strategic Aim 2: Create an environment and culture that enables researchers and innovators to flourish</b>		
Develop a dynamic and enabling department	2.1	Strengthen communication and engagement through conferences and events.
	2.2	Enhance researcher development and staff capabilities.
	2.3	Increase use of facilities, including Pentre Awel.
	2.4	Ensure consistent performance against Key Performance Indicators (KPIs).
	2.5	Implement TriTech business plan aligned to clinical strategy.
	2.6	Diversify income sources.

## Strategic Aims and Objectives (Part 3)

Theme/Workstream	Ref	Objective
	2.7	Resolve wider barriers to R&I in enabling services.
	2.8	Develop innovation adoption framework.
	2.9	Build capacity for R&I in social determinants of health.
	2.10	Strengthen commercialisation expertise.
Develop next generation of R&I leaders	2.11	Increase number of professionals with time to lead R&I.
	2.12	Consider joint clinical academic posts with SBUHB.
	2.13	Allocate R&I time for wider professional range.
Embed R&I into planning, performance, governance	2.14	Embed R&I in governance and workforce strategy.
	2.15	Develop researcher development programme.
	2.16	Engage with professional groups to advance the strategy.

## Strategic Aims and Objectives (Part 4)

Theme/Workstream	Ref	Objective
<b>Strategic Aim 3: Develop and Sustain Partnerships that maximise R&amp;I access and impact</b>		
Improve university alignment	3.1	Refresh university collaboration agreements.
New University Partnerships	3.2	Create new university partnerships.
Evolving Industry Partnerships	3.3	Agree with Growth Deal schemes to support industry.
	3.4	Develop long-term industry collaborations.
	3.5	Launch joint clinical fellowships with industry.
	3.6	Develop innovation skills programme for NHS staff.
Strengthen public and community partnerships	3.7	Collaborate with NHS Wales Executive on national projects.
	3.8	Work with public bodies (e.g. Delta Wellbeing).
	3.9	Support South West Wales Joint Committee R&I agenda.

**Diolch |**  
**Thank you**



**GIG**  
CYMRU  
**NHS**  
WALES

Bwrdd Iechyd Prifysgol  
Hywel Dda  
University Health Board

