Developing a National POCT Strategy for Wales.

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National PoCT Clinical Lead

Chair National POCT Strategy Board

National Pathology Programme

NHS Wales Executive
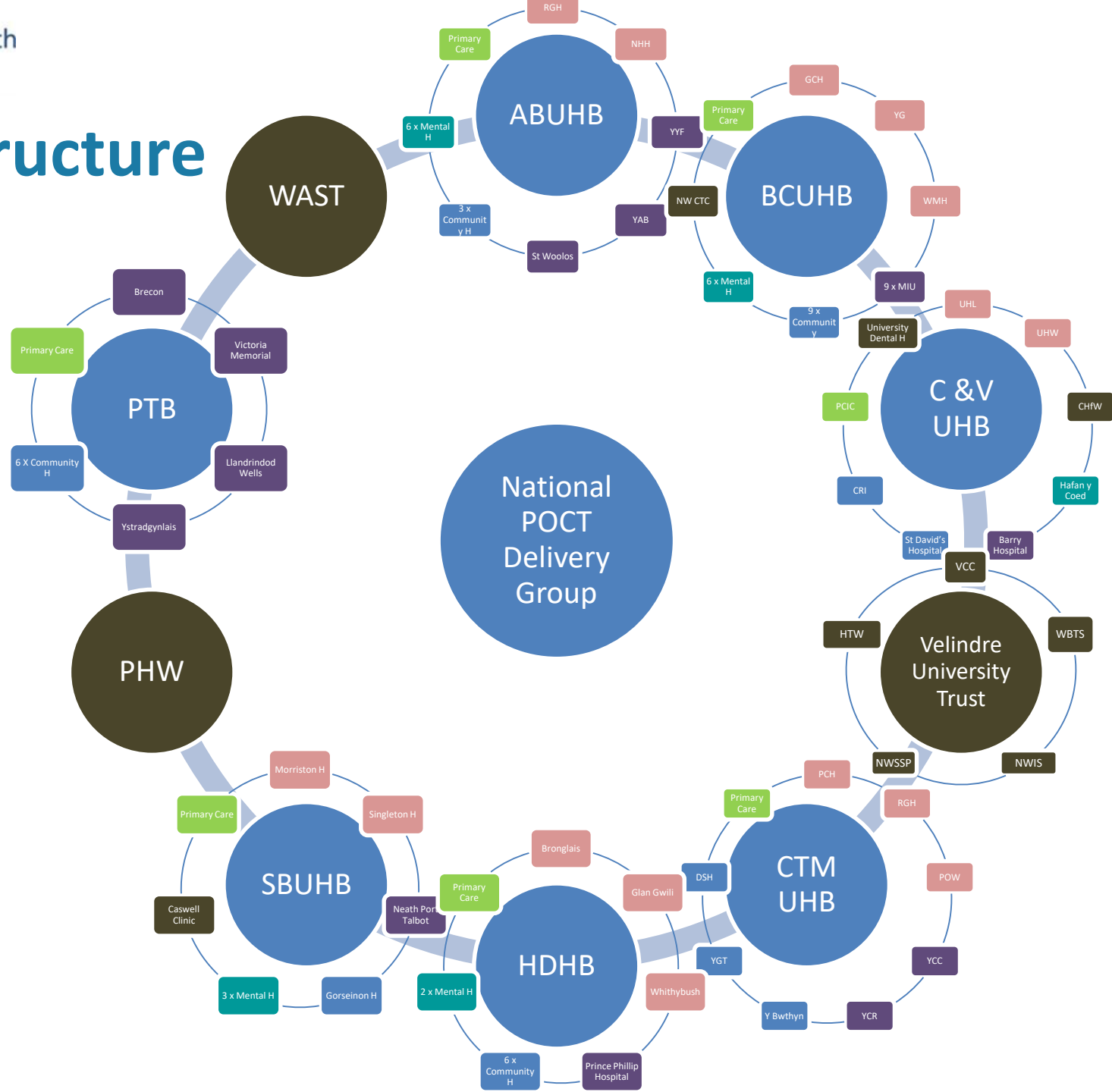
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NHS Wales Structure

Population: 3.1M

- 15 Major Acute (A&E)
- 30 Community Hospitals
- 7 Primary care commissioners 500 GP Sites 2000 GPs
- 21 MIU Hospitals
- 18 Mental Health Hospitals
- National Specialist Services

Serving a population of ≈ 3.1M, the health service in Wales is provided by 7 Health Boards (HB) and 3 specialist Trusts. The HBs are responsible for the provision of a POCT service within 15 Major acute, 21 Minor injury Unit (MIU), 18 mental Health Hospitals and 30 Community Hospitals, along with commissioning of services over 2000 General practitioners.

What's the POCT structure in Wales?

Home > Who We Are

Who We Are

The All Wales Point of Care Testing Committee is comprised of

Representatives with expertise in point of care testing, from each

Health Board across Wales including:

Cardiff and Vale
Swansea Bay
Aneurin Bevan
Betsi Cadwaladr
Hywel Dda
Powys
Cwm Taf Morgannwg

Current Structure is a National POCT Strategic Board and a POCT Delivery Group (formerly All Wales POCT Co-ordinators Committee). The POCT Delivery Group, was established in 2006 as an informal network of POCT managers and co-ordinators from across Wales as an open forum to discuss the implementation of new POCT programmes, share best practice and inform government on quality and safety issues. Membership also included procurement and informatics experts. The Group is responsible for oversight of the acquisition, implementation and monitoring of POCT services to National standards.

https://executive.nhs.wales/networks/programmes/pathology/point-of-care-testing/poct-network/
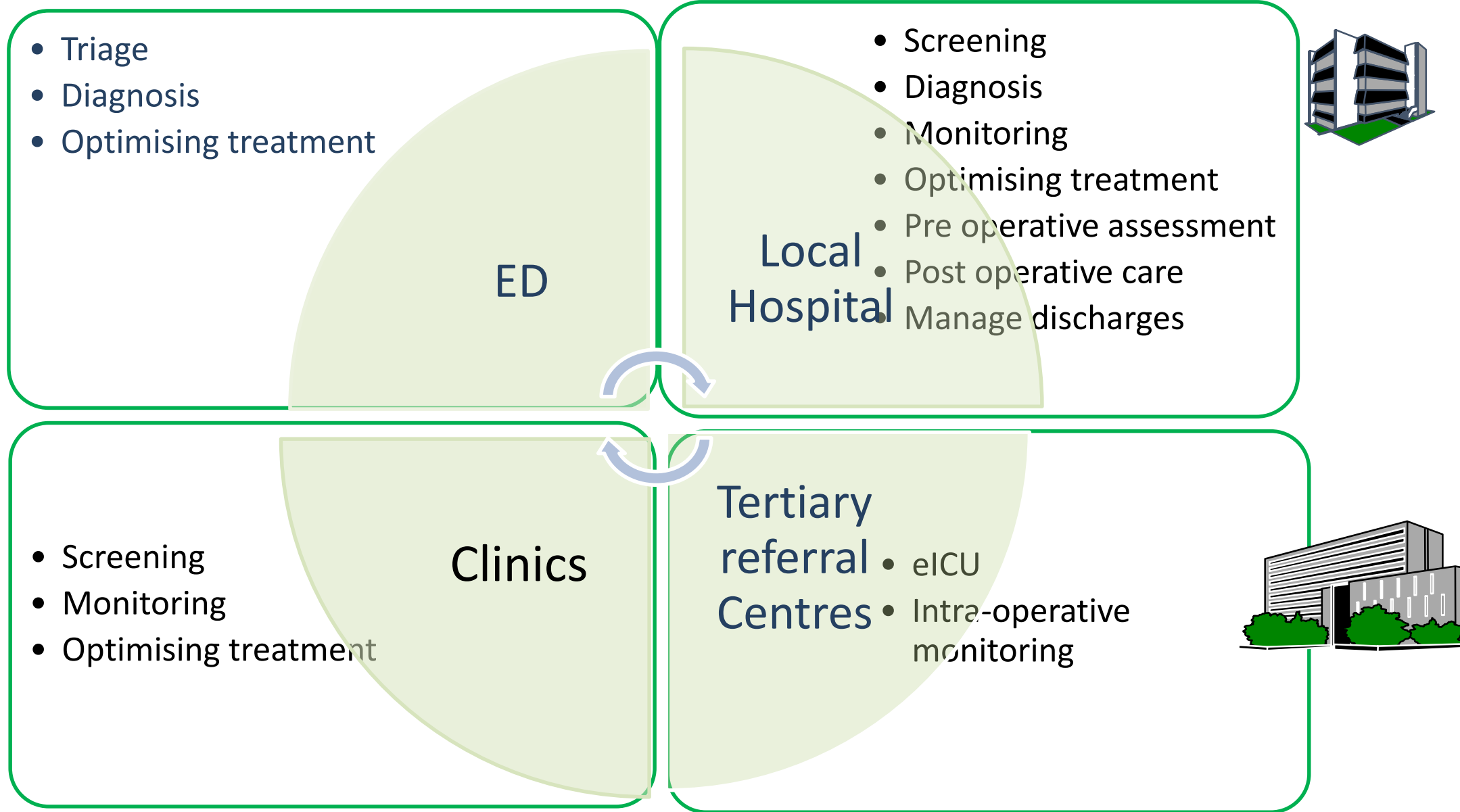
What the POCT Teams do

- the PoCT Team is responsible for agreeing a specification for proposed acquisition of PoCT devices and **their integration into patient care pathways,** as part of clinical effectiveness. Its remit is extensive and covers:

- procurement advice - the POCT Department will advise on the suitability of devices for the clinical utility of the test

- equipment evaluation - verification of quality

- training and competency assessment

- device connectivity and IT infrastructure advice

- quality assurance monitoring

- performance surveillance

- audit

- governance surveillance and incident reporting within the UHB

- consideration may also need to be given to ensuring comparability of results between POCT and those of the accredited laboratory where patient management is shared.

- **Provides assurance that the right test and quality is being used for its clinical utility, that users are trained and competent to safely undertake the test, that the limitations of the test is understood, that there is access to personnel that can interpret the test correctly and that there is a complete audit trail of the process.**

POCT in Secondary Care in Wales

- Triage
- Diagnosis
- Optimising treatment

- Screening
- Diagnosis
- Monitoring
- Optimising treatment
- Pre operative assessment
- Post operative care
- Manage discharges

ED

Local Hospital

Governance / Training/ Patient safety/ QA / Support

- Screening
- Monitoring
- Optimising treatment

Clinics

Tertiary referral Centres

- eICU
- Intra-operative monitoring

POCT in Primary and community care in Wales

Transit / Ambulance
- Assessment
- Pre-hospital assessment
- Monitoring during transit
- Optimising treatment

Community pharmacist
- Health Checks
- Antibiotic Stewardship
- Strep A Group – test & treat
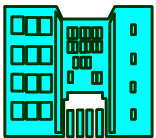
No QA from POCT Team

Governance / Training/ Patient safety/ QA / Support

Primary & Community Care
- Community Diagnostic Hubs – acute & chronic
- Home – chronic: diabetes, COPD anticoagulation
- GPs –acute & chronic: Anticoagulation, diabetes, COPD, respiratory infection, ECG
- Community nurses –chronic: Anticoagulation, Diabetes, COPD
- Family Planning– pregnancy tests

Urgent Treatment Centres
- Alternative to A & E (outside standard services) led by GPs:
- Acute patient management
- Triage, Diagnosis and optimising treatment
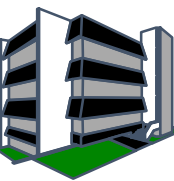
2009-2019
What did we achieve?

Governance

- The establishment of appropriate management and governance structures within each HB.
- Advised Government on developing a National Policy on POCT which was approved and implemented in 2017.

Mandatory Standards – What are they?

General Quality Standards in Healthcare

The Duty of Quality is part of the Health and Social Care (Quality and Engagement) (Wales) Act 2020 – *effective April 2023*

POCT specific standards

Welsh Government Policy on the Management of POCT 2017.

This Guidance is mapped to Health & Care Standards 2017. HB Policies must comply with these standards.

Local POCT Policy

Health Board POCT Governance Models

AB, BC ,CAV ,CTM, HD Health Boards, PTB and VCC have policies and procedures in place for the governance of POCT.

All comply with WHC (2017) 034 and cover the same elements

HB Operational Divisional Director – e.g Director of Therapies & HS Clinical Diagnostics

Imaging

Clinical Physiology

Pathology

HB Board Executive

Quality and Safety Committee

Multidisciplinary POCT Committee

POCT Clinical Lead / Director

POCT Manager

POCT Co-ordinators

POCT Quality Officer

POCT Support

POCT Department staff

Operational Accountability

Governance Group and accountability

POCT governance in primary and Community care

- Community services are provided by HBs – compliance with local HB and national policies on POCT

- Most GPs in Wales are independent contractors - compliance with national policy on POCT

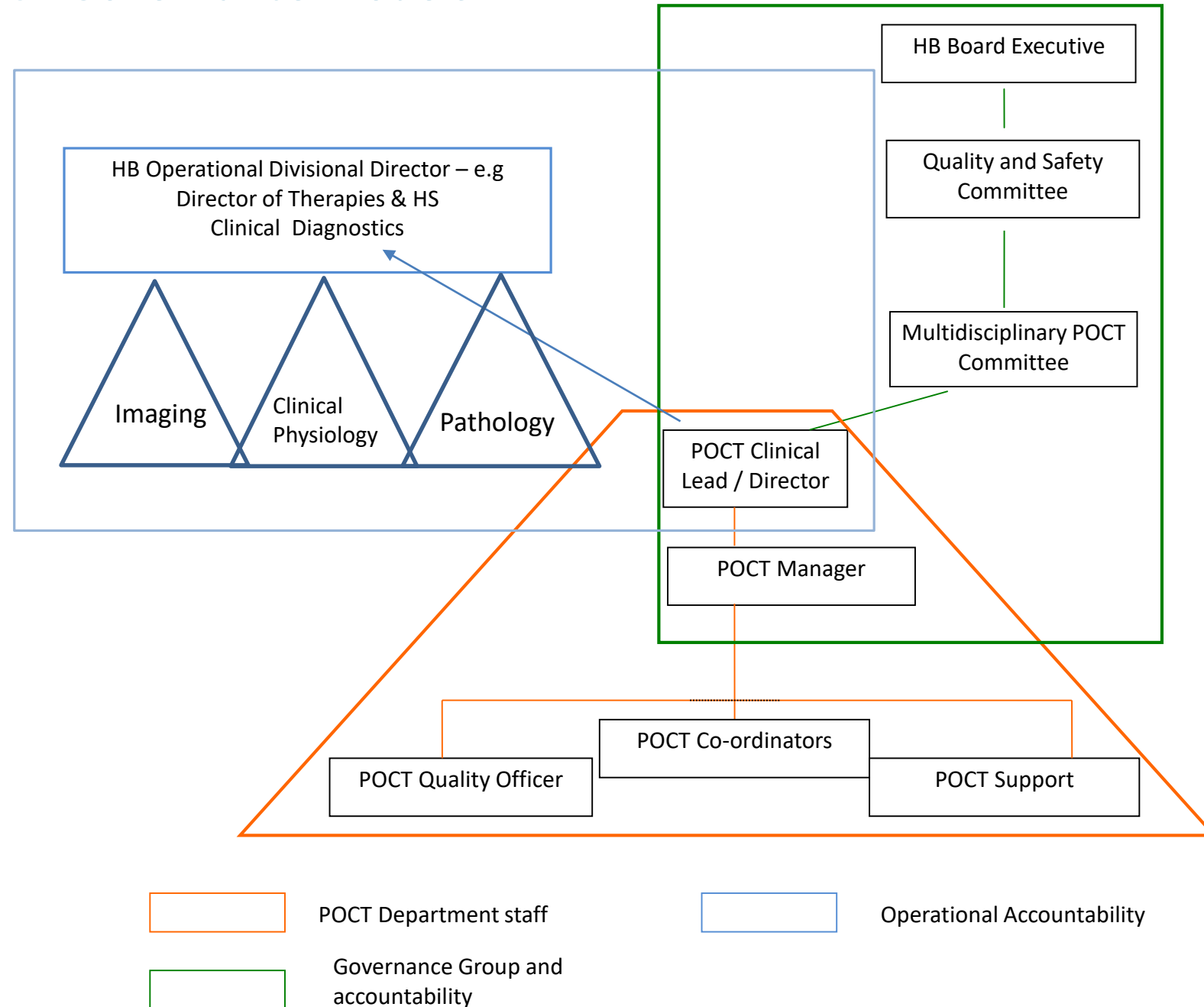**Policy on the Management of Point of Care Testing (POCT). What, When and How?**

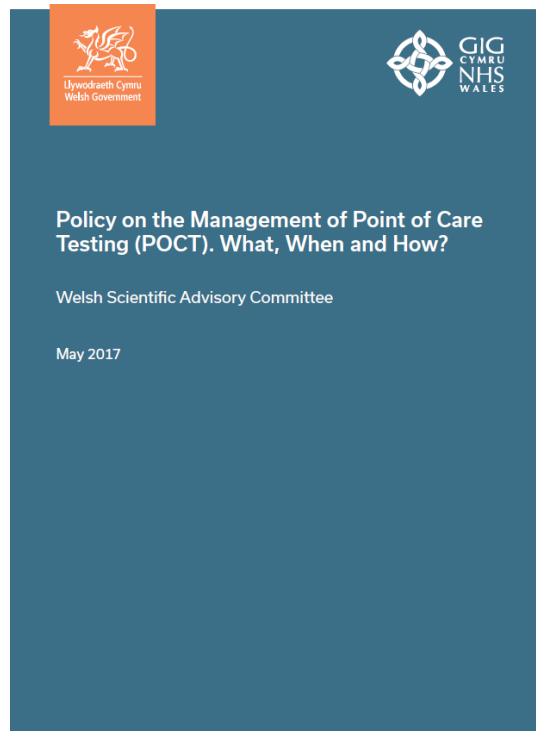Welsh Scientific Advisory Committee

May 2017

Training

All Wales Generic documents produced for:

- Blood Glucose
- Urinalysis
- Blood Gases
- INR testing
- Pregnancy testing
- Drugs of Abuse
- HbA1c
- Ketones
- Cholesterol
- Rotem

→ Training credits

IT Strategy

Developed a National POCT IT Strategy and specification for a connectivity solution.

- A system was procured that provided the infrastructure to enable full connectivity of all approved POCT devices across Wales to support shared decision making.
- To date, seven HBs, covering multiple hospital locations in both urban and rural area, and 1 cancer trust, have been connected representing over 3200 devices, 35 different interfaces and a wide variety of devices.
- The platform was interfaced to a national Laboratory Information System, (LIMS), facilitating integration to the patient result portal and further downstream systems.
- Recent developments include an infrastructure design review and a pilot for primary and community care connectivity.

Developed All Wales POCT IT Strategy and connectivity solution.

A system which supports shared decision making providing the infrastructure to enable full connectivity of all approved Point Of Care Testing devices across Wales in all suitable locations.

INR pilot ongoing

Further developments
Infrastructure review required to deliver in primary & community care

Primary Care Patient record

POCT Management

GP

Telehealth – SMS / Broadband

GPRS / Wifi

Patient House

Mobile

HIS/PAS

LIS

CLIENT

POCcelerator™

POCT Analysers

Completed
Live in all HB in Secondary Care across Wales - over 2000 devices connected to WLIMS and WCP

BI Dashboard development in 1 HB –outcome metrics

INR pilot ongoing

Home ventilation & diabetes monitoring service to pilot

Patients, users clearly identified

Quality checks on user/ device/ reagents - safer testing

Safer data exchange

Data collected to support audit and outcome measurement

Facilitates Sharing of information

Public and professionals are EQUAL PARTNERS through CO-PRODUCTION

What did we connect?

- 7 Health Boards - multiple Hospital sites both urban and rural.

- 1 Cancer Trust.

- > 3200 devices

- 35 interfaces

- Wide variety of devices

Secondary Care
glucose, ketones, HbA1c,
urinalysis, microalbumin
INR, ACT, TEG, TEM
haemoglobin, FBC & 5 part diff
hCG,
fetal fibronectin, Actim Partus, Actim Prom
HIV, Influenza, RSV, Sars CoV-2
blood gases and co-oximetry,
i-calcium, electrolytes, urea and creatinine
lactate
drugs of abuse,
D-dimer

Procurement

Developed National value-based procurement specifications and frameworks for POCT services:

- Preferred suppliers' framework for Blood gas / Pregnancy testing / Urinalysis, Viscoelastic haemostasis assays.
- Healthcare professional blood glucose device managed service for secondary care.
- National formulary for patient self-testing devices for diabetes.
- Managed service for INR monitoring in primary care including patient self-management.
- National procurement for POCT devices for SARS-Cov2 Ag testing in secondary care.

Working together for a National solution for INR monitoring
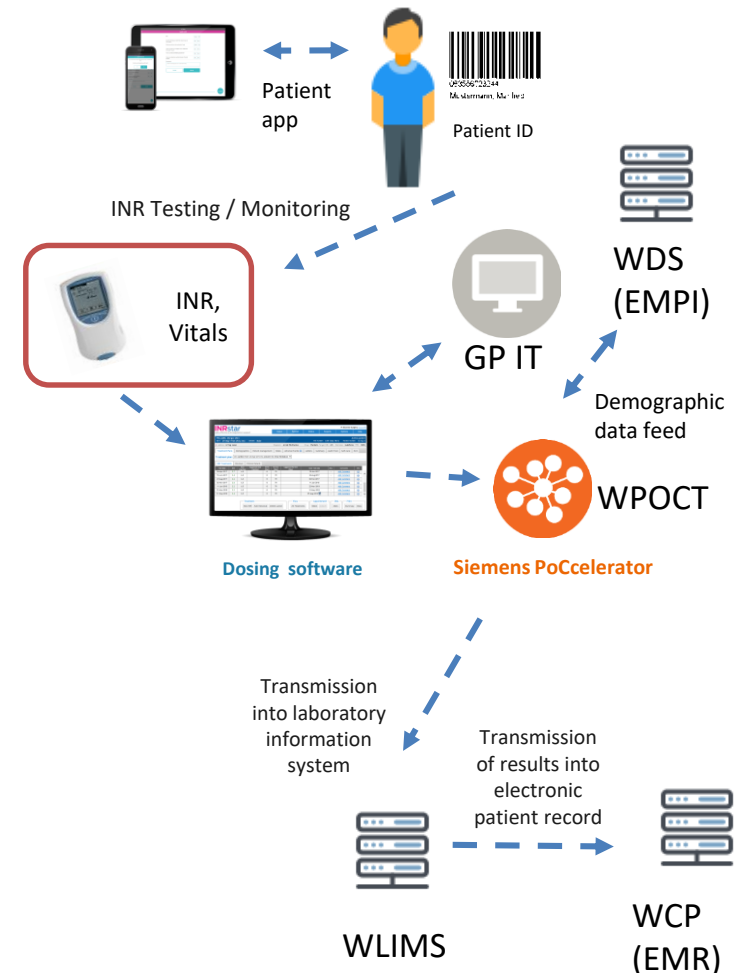
What has been achieved to date?

- **Roll out in progress across All HBs.**
  - **In ABUHB** project board set up to include members from all relevant stakeholders, ensuring engagement.
  - **In ABUHB** phased role out to ensure staff from all surgeries received comprehensive training on devices, quality assurance procedures and issued with passwords to access devices.

Outcome for ABUBH:

- 90% surgeries within the HB have taken up the service.
- A significant reduction (>20%) in the number of patients attending emergency services with high INR's.
- Patients happy with service as get to discuss any issues that they have at the time of getting the result and are more inclined to take ownership of their condition and compliance.
- Quality assurance monitoring has shown that the INR results obtained are safe, reliable and comparable to the laboratory.

What next?

Fully integrated IT solution for shared care

Patient app

Patient ID

INR Testing / Monitoring

INR, Vitals

Dosing software

GP IT

WDS (EMPI)

Demographic data feed

WPOCT

Siemens PoCcelerator

Transmission into laboratory information system

Transmission of results into electronic patient record

WLIMS
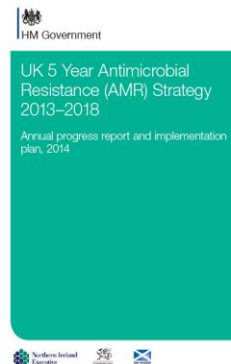
WCP (EMR)

CRP in LRTI and COPD patients

In Primary care – POCT CRP rolled out to 75 GP practices – National roll out planned for further 150 practices

LRTI algorithm

Protocol in postpartum haemorrhage – NHS Wales

National co-ordinated approach
"All Wales" obstetric protocol using POCT
All POCT Co-ordinators trained as superusers
All operators trained
EQA programme developed by
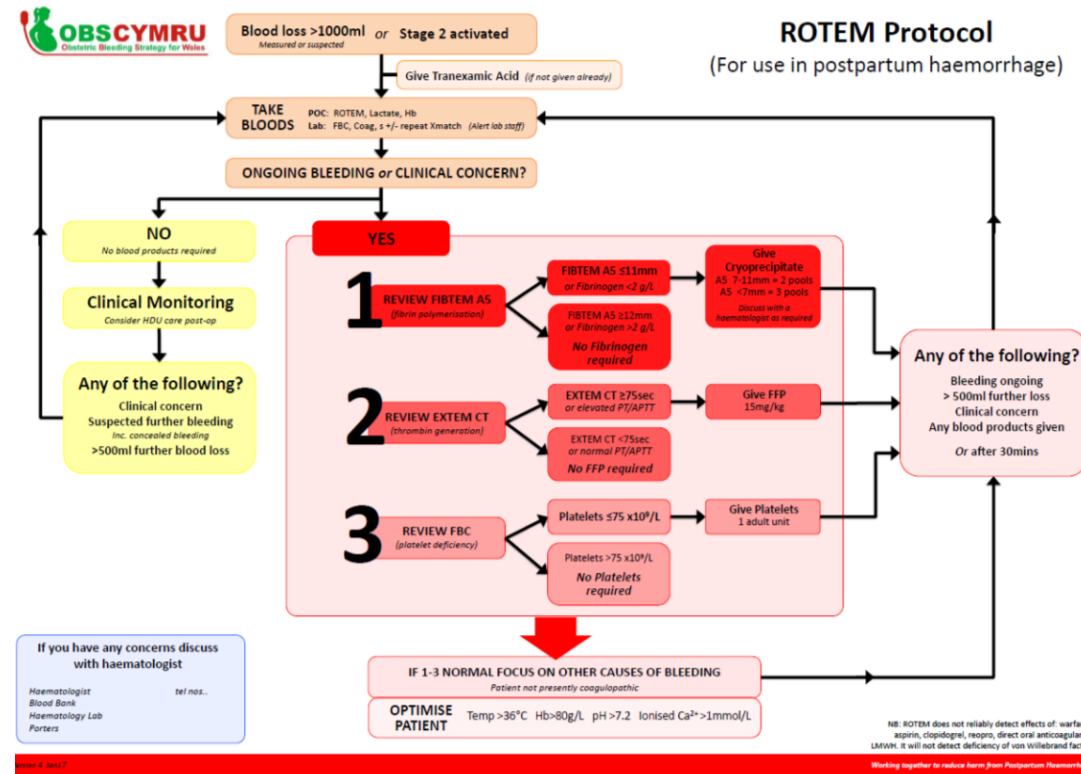
What did we achieve?

- Developed National POCT website information resource for all healthcare providers and users.
- Shared best practice on device evaluations such as the identification and verification of candidate POCT Sars Cov 2 Ag and Ab tests during the pandemic.
- Conducted National Audits of the service and recommendations for improvement.

https://executive.nhs.wales/networks/programmes/pathology/point-of-care-testing/poct-network/

Challenges and Benefits

Benefits of networking?

- Learning, Sharing of best practices/ knowledge/ resource
- Supporting each other
- Evaluations for POCT implementation undertaken once and shared across HBs.
- Financial benefits include cost effective procurement contracts due to economies of scale,
- Improved efficiencies through standardisation of devices, standardisation of processes such as training & competency assessment,
- Working collectively to improve service delivery and a more streamlined approach for the rapid deployment of a POCT service when needed.
- The collaborative approach, also provided a more powerful voice for POCT in Government.

The disadvantage of an informal group was the inequity of resource and staff structures between HBs; service requirements differed and some did not have the capacity or resource to deliver what was needed; there was a lost opportunity to have more "joined up " services across all Wales. Scope was also limited to pathology testing for most Departments and therefore imaging, respiratory, cardiac physiology devices were either not considered or there was a duplication of governance.

Challenges and Enablers!

- Resource - Physical premises
  - New build, use of existing community hospitals, GP super practice. Most POCT uses small footprint imaging equipment tend to be large footprint.
- Governance
  - Good governance already in place in HBs for commissioned services. Non commissioned services pose risk.
- Resource – Staff
  - Staff "buy in" to undertake testing
  - training and competency oversight needs to be well structured.
- IT infrastructure
  - WPOCT already in place in most HBs. Can provide enabler of device connectivity to a POCT database and WCP. Next generation is being developed as aggregation platform for other devices including physiological measurement and imaging, i.e. blood pressure, spirometry, US images. Scoping required for impact on eMPI.
- Information governance
- Outcome measures
  - POCT data needs to be part of a much larger Data warehouse providing BI on patient flow, where TAT, time to treatment, LoS, Infection rates, complication rates, referral rates, HRQoL can be measured.

Why did we do this?

Building on the success of the informal network, one of the key actions in the National Pathology Programme Statement of intent, published in 2019, was to establish a more formal structured arrangement to deliver Point of Care Testing services in NHS Wales.

Next Steps – developing a Strategy

A National Strategy Group of POCT clinical leads and POCT Managers from each HB, stakeholders and government representatives was established with the aim of setting the strategy and standards with the existing National POCT Delivery Group supporting the delivery of the service. However, during the pandemic the work of the two groups was repurposed to undertake verification of candidate POCT devices / methods as part of the COVID testing strategy as well as identifying and providing advice on operational issues.

Timeline

- Establishment of informal National POCT Strategy Group ToR (Terms of Reference). Agreed by WSAC October 2018, modified in 2019 to reflect joint reporting structure to WSAC and NPN (National Pathology Network) and further amended in 2021 to describe membership representation and specialty.

- Review of POCT funding for each HB undertaken by POCT Delivery group, in June 2019 and further updated in April 2021 following pandemic.

- October 2019 – workshop held to 'Develop A National Roadmap for Point Of Care Diagnostics. Stakeholders included POCT service providers, users, primary care, other diagnostics services such as Imaging. Output: broad support was for a hybrid structure for POCT services, which would encompass some national functions but with local delivery.

- April 2021 review of governance structures by POCT delivery group. Output: Governance Overview Document.

- May 2021 – agreed 4 model options, scoring criteria and definitions with weightings. Output: Model Option Appraisal document.

- September 2021 – virtual workshop held with stakeholders to undertake formal options appraisal process for service reconfiguration. Outcome of option appraisal workshop discussed at POCT Strategy Group on 07/10/21. Out of the 4 options – options 2 (national service – do maximum) and option 3a – ("Strict" National Board) were selected as the preferred options to take forward.

National PoCT Board oversight with Local delivery of service

In 2023, a National PoCT Strategy was developed, highlighting the vision for the delivery of services along with the creation of a more formal National PoCT Strategy Board; a clinically led Board established to co-ordinate, and support the planning, implementation, and delivery of PoCT services

This approach consists of the positive aspects of a Nationally managed service i.e. a National Board that defines standards and addresses inequalities of the service with the flexibility of local delivery to meet local needs.

The service delivery and management of the PoCT service shall remain with each Health Board (or legal entity). Governance arrangements and clinical liability shall remain under the existing structure.
A more formal National PoCT Board, shall be created, hosted in the first instance by NHS Wales Collaborative reporting to the National Diagnostics Board. This board will differ from the existing informal National PoCT Strategy Group in that it will have delegated authority to influence and drive change.

The existing National PoCT Strategy Group will form the basis of the new National PoCT Strategy Board, however, terms of reference and membership were reviewed to ensure that the composition of membership have the appropriate skills and expertise to undertake the requisite tasks.
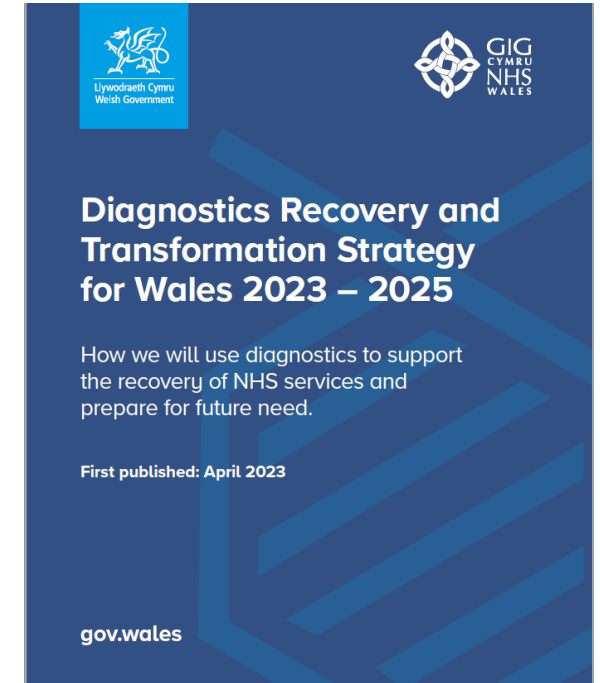
National POCT Strategy key success criteria

1. **Service Transformation** - Delivers a "diagnostics anywhere" approach to healthcare.

2. **Quality Assurance** - Ensures that the provision of PoCT services support the required (current and future) models of care and that all PoCT services comply with best practice and recognised quality standards.

3. **Procurement** - Facilitates efficient procurement processes for PoCT related equipment and consumables taking a value-based approach.

4. **Workforce** - Makes efficient and effective use of workforce resources; ensures workforce models are sustainable; career pathways and opportunities for progression are well described and available within the specialty of PoCT, embraces multidisciplinary working, investing in advanced training of PoCT teams to provide diverse and relevant skills across specialties appropriate for our future need e.g., training delivery, digital intelligence, molecular diagnostics, imaging, medical devices.

5. **Research and Innovation** - Ensures a systematic approach to realising clinical, quality and efficiency benefits of innovative technologies; working in partnership with academia and industry in identifying and maximising development opportunities, making best use of innovation with disruptive and transformational technology, optimising advances in technology such as AI and being proactive in pathway redesign for new models of care.

6. **Digital** - Builds on the IT Strategy in continuing to integrate and digitalise the testing and reporting across HB boundaries via national platforms such as the Wales PoCT connectivity platform; develop WPoCT for future needs, making best use of business intelligence, information sharing, providing metrics for compliance, patient safety, workload activity, clinical effectiveness, reducing waste and inappropriate testing and monitoring and designing service delivery to meet demand.

National Diagnostic Board set up to support the recovery of NHS services and prepare for the future
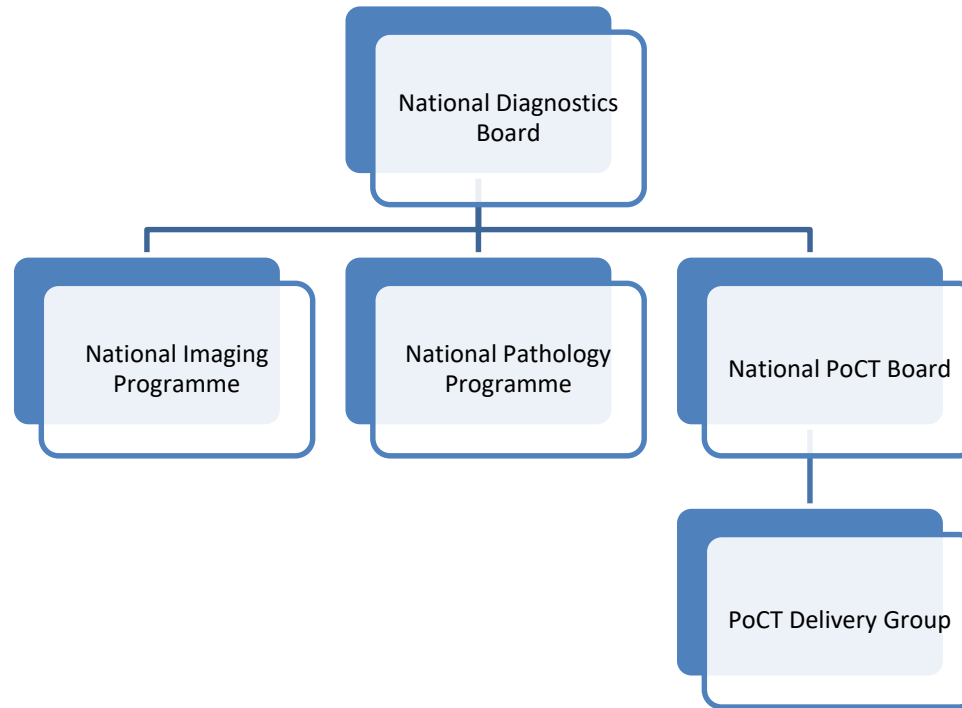
Nine themes of focus

1. People and Patients
2. Workforce
3. Service Transformation
   - *Create national or regional models for fragile services with consolidation of some services to improve safety, throughput and efficiency.*
   - *Push less complex diagnostics closer to primary and community care.*
4. Digital
   - *Integrate and digitalise all test requesting and reporting via single national platforms, with reporting across Health Board boundaries and adopt innovative digital technology solutions including artificial intelligence (AI).*
5. Commissioning and Procurement
6. Quality and Safety
   - *Ensure all diagnostic (and supporting) services gain formal accreditation.*
7. Performance
8. Estates
9. Research and Innovation
   - *Thorough testing of emerging technologies*
   - *and accelerated scale up across Wales*

Diagnostics Recovery and Transformation Strategy for Wales 2023 – 2025

How we will use diagnostics to support the recovery of NHS services and prepare for future need.

First published: April 2023

gov.wales

Commitments to develop a national Point of Care Testing Plan.
National Strategy paper approved by National Diagnostics Board in April 2023.

New structure for POCT governance & delivery

National Diagnostics Board

National Imaging Programme

National Pathology Programme

National PoCT Board

PoCT Delivery Group

POCT Clinical Leads from each Health Board, stakeholders and government representatives tasked with setting strategy and standards.

POCT Managers and Teams in each Health Board tasked with the delivery of the service.

- The service delivery and management of the PoCT service shall remain with each Health Board (or legal entity). Governance arrangements and clinical liability shall remain under the existing structure.
- A more formal National PoCT Board, shall be created, hosted in the first instance by NHS Executive reporting to the National Diagnostics Board. A clinically led, National PoCT Strategy Board has been established to co-ordinate, and support the planning, implementation, and delivery of PoCT services.

NATIONAL POCT BOARD REMIT

To:

- Establish PoCT National Plan and its delivery, aligned to the National Diagnostic Plan and National Pathology Programme.
- Define National and local governance policies and processes. The existing Welsh Government policy on the Management of PoCT shall be reviewed to ensure alignment with National priorities.
- Define quality specifications and standards for the service including expected outcomes.
- Establish value-based procurement frameworks and harmonised local rollout processes.
- Define specifications for evaluation of devices for national procurement where indicated. Clinical and technical evaluation should be shared between HBs to avoid duplication of effort.
- Standardise processes for selection of devices locally if required.
- Provide strategic and clinical leadership and advice in PoCT diagnostics at a national level.
- Provide advice to Welsh Government on standards, delivery, and resources for the current and future planning of the PoCT service.

- Evaluate the clinical effectiveness of a PoCT implementation in line with WG priorities for care.
  - Provide oversight of equity of PoCT provision across Wales.
- Work with academic and industry partners to develop, advise and undertake collaborative Research Innovation
- Undertake horizon-scanning of innovative technologies identifying potential areas for implementation and impact on patient care and clinical service delivery.
- Identify and disseminate the impact of PoCT research and clinical service delivery.
- Standardise training in terms of a national "procedure" e.g., common documentation, training standards including expected outcomes and confirmation of competency. Ensure consistency of training.
- Develop the career pathway of PoCT support workers and scientists.
- Provide oversight role for national IT connectivity and standardisation of PoCT diagnostic tests information.
- Provide Co-ordination of the Once for Wales approach to the PoCT digital agenda, and for Community Diagnostic.

Acknowledgements

Gorsedd of the Bards

POCT Coordinator Group – All singing from the same hymn sheet

Thank you for listening