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Establishing a national network for POCT – challenges and benefits

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Structure – what do we do?

What's the structure in Wales?

[Home](#) > [Who We Are](#)

Who We Are



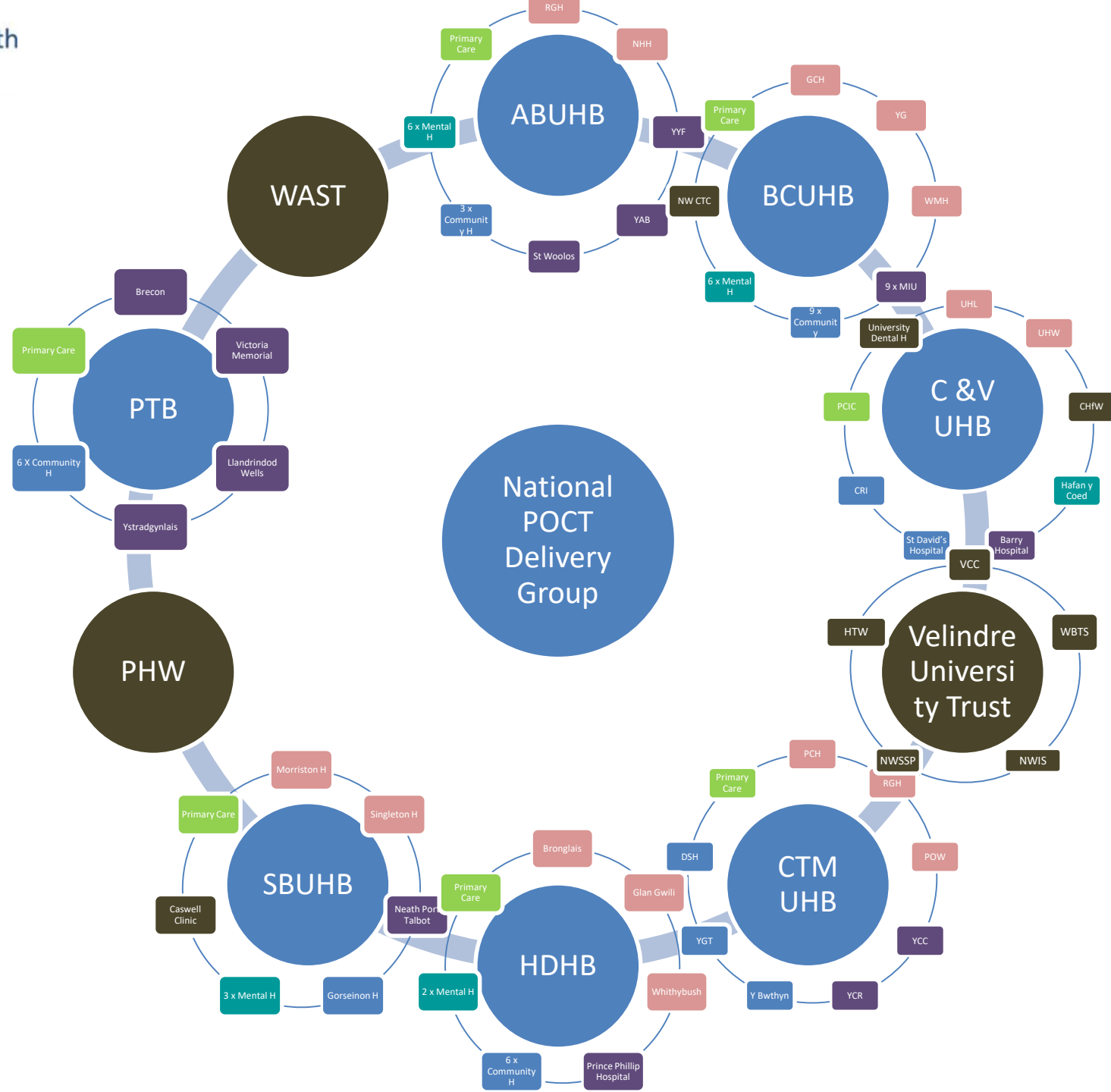
The All Wales Point of Care Testing Committee is comprised of Representatives with expertise in point of care testing, from each Health Board across Wales including:

- 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.

Population: 3.1M

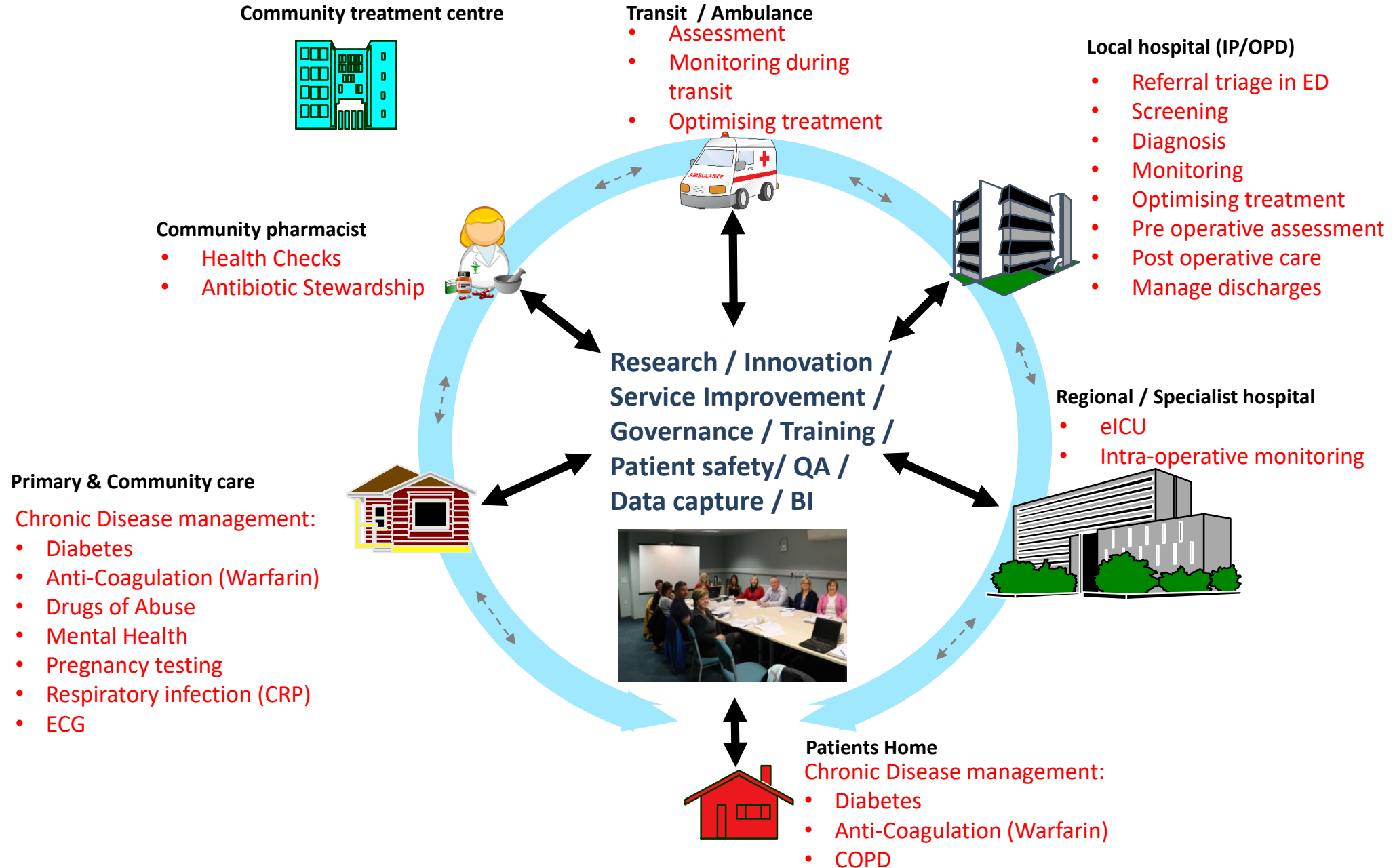
| | |
|--|------------------------------|
| 15 Major Acute (A&E) | 21 MIU Hospitals |
| 30 Community Hospitals | 18 Mental Health Hospitals |
| 7 Primary care commissioners 500 GP Sites 2000 GPs | National Specialist Services |



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.**

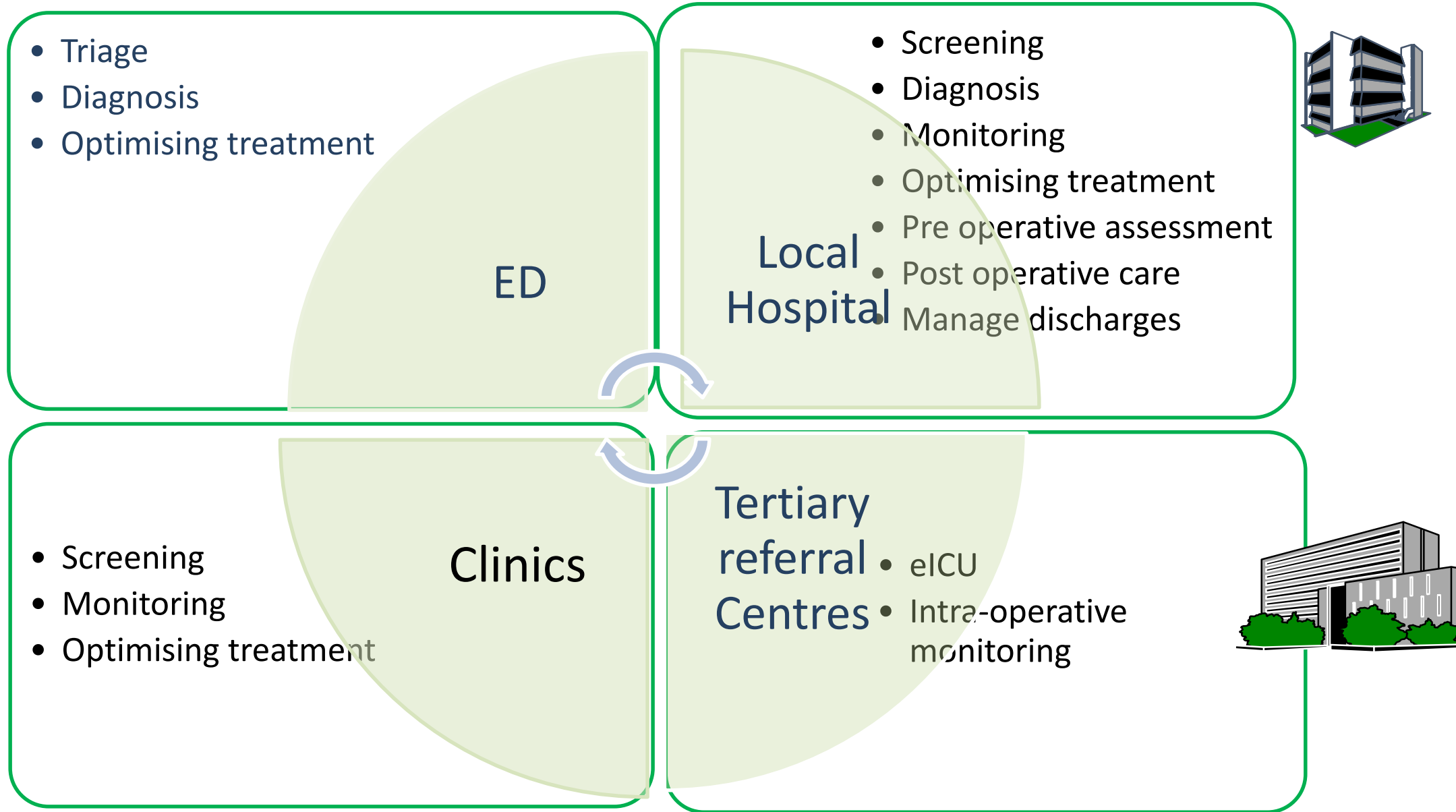
PoCT Services: Support provision and clinical impact



POCT in Secondary Care in Wales



Governance /
Training/
Patient
safety/ QA /
Support



POCT in Primary and community care in Wales



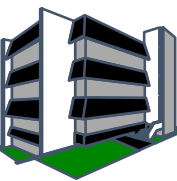
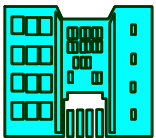
- Assessment
- Pre-hospital assessment
- Monitoring during transit
- Optimising treatment

- Health Checks
- Antibiotic Stewardship
- Strep A Group – test & treat



No QA from POCT Team

**Governance / Training/ Patient safety/
QA / Support**



Transit /
Ambulance

Community
pharmacist

Primary &
Community
Care

Urgent
Treatment
Centres

- 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

- Alternative to A & E (outside standard services) led by GPs:
- Acute patient management
- Triage, Diagnosis and optimising treatment

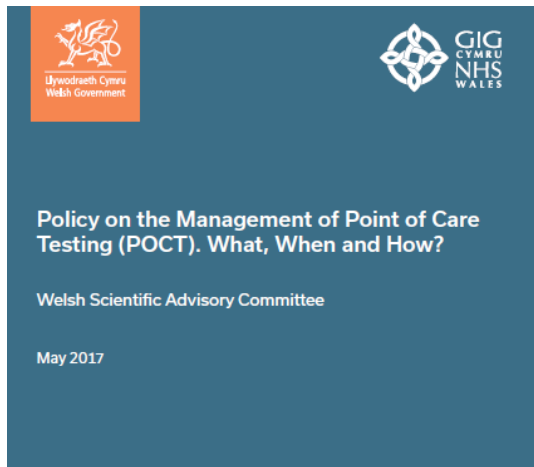


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Governance

Mandatory Standards – What are they?

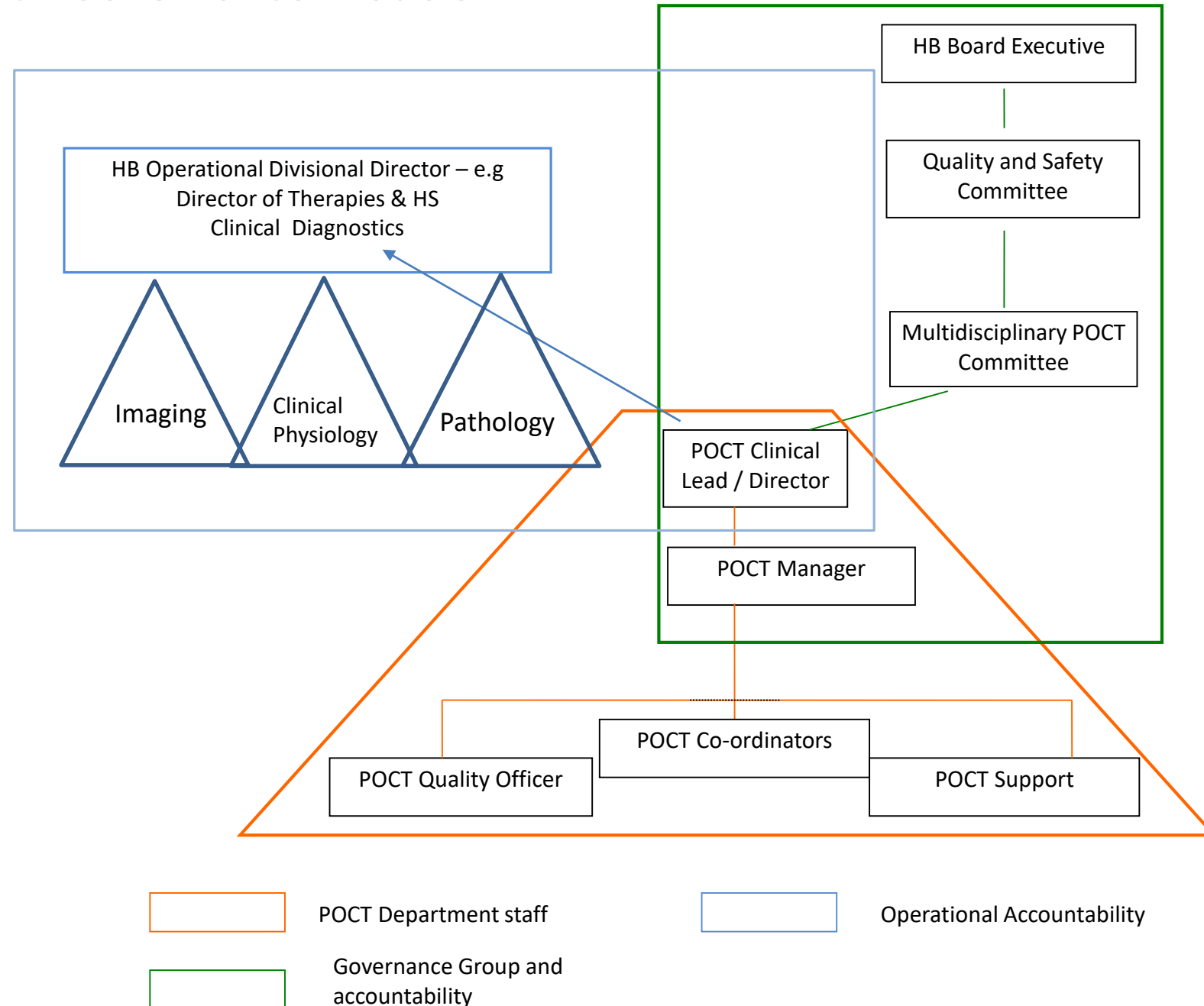


POCT Guidance mapped to Health & Care Standards and underpinned by the Principles of Prudent Healthcare. HB Policies comply with these standards.



| | |
|---|--|
| Reference Number: UHB-062-¶ Version Number: 2¶ | Date of Next Review: To be included when document approved¶ Previous Trust/LHB Reference Number: UHB71-¶ |
| POINT-OF-CARE TESTING (POCT) POLICY¶ | |
| Policy Statement¶ ¶ To ensure the Health Board delivers its aims, objectives, responsibilities and legal requirements transparently and consistently we will have an evidence-based, consistent approach in the use and management of Point of Care Testing (POCT).¶ The Health Board will comply with the relevant guidelines on POCT: the Welsh Government Policy on the Management of Point of Care Testing: What, when and how? (WSAC) 2017 and the relevant clauses relating to POCT (Standard 3.1, 5.1, 2.9, 2.1, 3.4, 3.5), Health and Care Standards for Wales, 2015.¶ ¶ | |
| Policy Commitment¶ ¶ POCT is usually carried out in a busy environment with little or no 'thinking-time' before a change in patient management is instigated. Adequate checks and balances must therefore be in place to prevent medical errors and reduce risks. In considering the medico-legal status, under clinical governance and controls assurance directives and | |

Health Board POCT Governance Models

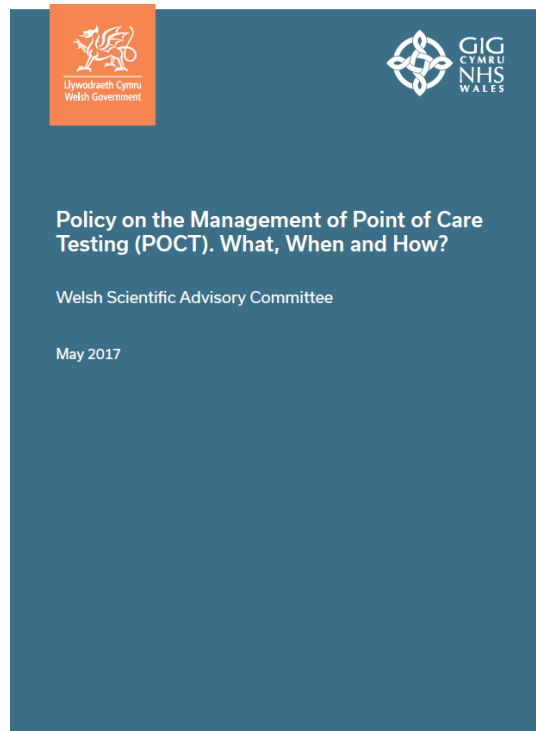


AB, BC ,CAV ,CTM, HD Health Boards, PTB and VCC have policies and procedures in place for the governance of POCT.

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

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



Contents

| | |
|--|----|
| 1. Introduction | 3 |
| 1.1. What is Point of Care Testing (POCT)? | 3 |
| 1.2. When can Point of Care Testing be used? | 3 |
| 2. Evidence based patient care..... | 4 |
| 2.1 Undertake a needs assessment..... | 4 |
| 2.2 Undertake risk and benefits mapping | 4 |
| 3. How to implement the right test that is cost effective? | 6 |
| 3.1 Seek Advice - contact your local POCT Department..... | 6 |
| 4 Minimise avoidable harm | 7 |
| 4.1 Ensure appropriate training and competence | 7 |
| 4.2 Competence assessment | 7 |
| 4.3 Understand Quality Assurance principles | 8 |
| 4.4 Internal Quality Control | 8 |
| 4.5 External quality assessment | 9 |
| 4.6 What to do if you get a poor result? | 9 |
| 4.7 Measuring Outcomes – Audit..... | 10 |
| 4.8 Risk Management | 10 |
| 5 Information management | 12 |
| 5.1 Ensure good record keeping | 12 |
| 5.2 Supporting shared decision making | 12 |
| 6 Maintenance | 13 |
| 7 Safety | 13 |
| 8 References | 13 |
| Appendix (1) CHECK LIST | 14 |
| Appendix (2) Example Cost Considerations | 15 |
| Appendix (3) SERVICE LEVEL AGREEMENT SPECIFICATION (If appropriate)..... | 16 |
| Appendix (4) Stakeholder input | 17 |



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What have we achieved?

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- Supported the establishment of appropriate POCT management and governance structure within each HB.
- Advised Government on developing a Policy on POCT.
- Developed All Wales Training and competency documentation for POCT devices.
- Developed All Wales POCT website resource
- Developed All Wales procurement frameworks and specifications for POCT devices and consumables.
- Identified VBH initiatives.
- Developed All Wales POCT IT Strategy and connectivity solution.
- Share best practice:
 - Device Evaluations
 - National Audit - lessons learnt/ recommendations for improvement.

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Making the most effective use of skills and resources.

All Wales Generic documents produced for:

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



Training credits



Communicating effectively

- Research & Evaluation

- Research
- Evaluation
- Regulation Alerts

- Poct Network

- Who we are
- What we do
- Governance

- Standards and Policies

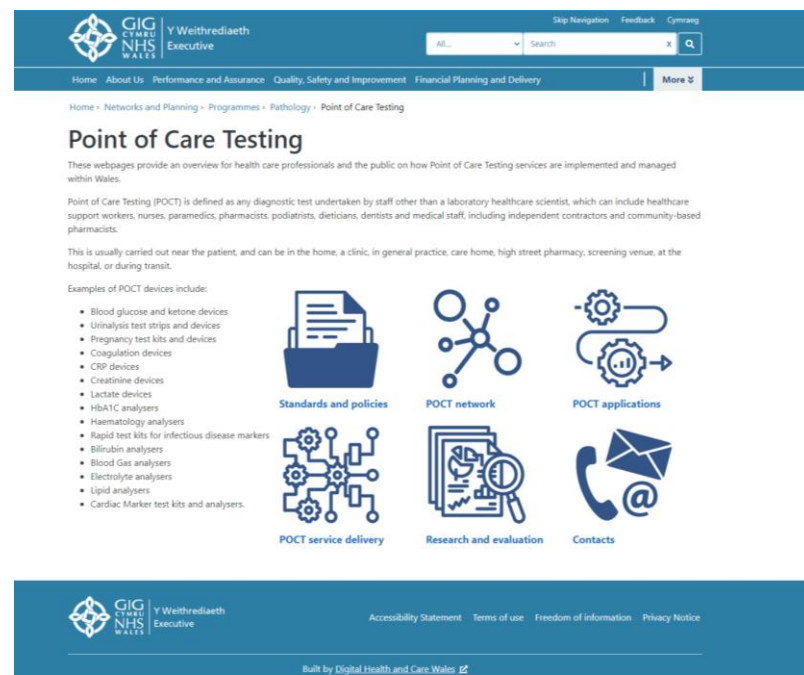
- Government policy
- H & C standards
- ISO Standards
- MHRA

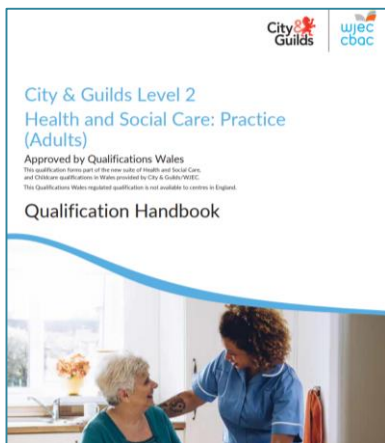
- Service delivery

- Clinical Need
- Purchasing - Which equipment?
- Training and Competency / e-Learning
- IT
- QA
- Audit

- Contacts

- Where to find information on your local POCT Team





Unit 214 Undertaking point of care testing

| | |
|---------------|---|
| Level: | 2 |
| GLH: | 15 |
| Credit: | 3 |
| Unit Summary: | <p>This unit is aimed at supporting learners to provide point of care testing (POCT). Learners who complete this unit will be able to perform accurate POCT testing within a range of environments to gain accurate results.</p> <p>In the context of this unit, the term 'individual' refers to adults, children and young people.</p> |

Learning outcome:

1. Guidance, policies and protocols related to point of care testing

Assessment criteria

You know:

- 1.1 Current national point of care testing regulations
- 1.2 The role of governance when conducting point of care testing
- 1.3 The importance of conducting point of care testing procedures in accordance with set protocols and policies
- 1.4 Types of point of care investigations and equipment required within organisation/setting
- 1.5 Risks and benefits of point of care testing
- 1.6 The role and responsibility of the point of care testing operator
- 1.7 Conditions needed for storing consumables related to point of care testing
- 1.8 Internal quality measures relating to point of care testing
- 1.9 Information recorded when carrying out all point of care tests

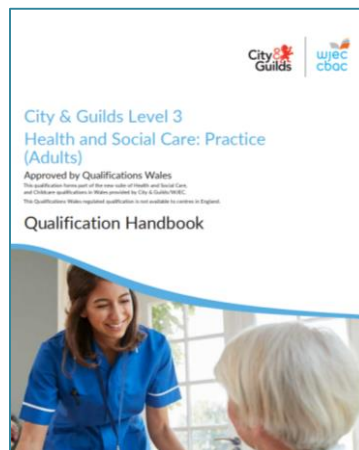
Learning outcome:

2. Conduct point of care testing

Assessment criteria

You know:

- 2.1 Factors that can pose a risk when undertaking point of care testing
- 2.2 Types of equipment and instruments that are safe to reuse, and those which must be discarded after a single use
- 2.3 Explain to the individual, their family or carer what physiological measurements will be undertaken and gain valid consent



Unit 314 Undertaking capillary blood glucose monitoring

| | |
|---------------|---|
| Level: | 3 |
| GLH: | 15 |
| Credit: | 3 |
| Unit Summary: | <p>This unit covers the skills and knowledge required to enable learners to undertake capillary blood glucose monitoring. Learners will cover practical skills required to monitor blood glucose levels to maintain control over diabetes in others.</p> <p>In the context of this unit, the term 'individual' refers to adults, children and young people.</p> |

Learning outcome:

1. Legislation and policies relevant to supporting capillary blood glucose monitoring

Assessment criteria

You know:

- 1.1 Current national and local guidelines and protocols which influence capillary blood glucose monitoring
- 1.2 Organisational/setting processes relating to capillary blood glucose monitoring
- 1.3 Why it is important to take responsibility and accountability in relation to scope of practice
- 1.4 Potential consequences of not adhering to procedures
- 1.5 Why valid consent must be obtained and confirmed prior to actions being taken
- 1.6 What a capillary blood sample is and sites where they can be taken

Learning outcome:

2. Undertake capillary blood glucose monitoring

Assessment criteria

You know:

- 2.1 The importance of cleaning sites when obtaining capillary blood samples
- 2.2 The importance of collecting capillary blood samples of the right quality
- 2.3 Factors which could affect the quality of the capillary blood sample
- 2.4 Concerns which individuals, or their families/carers, may have in relation to capillary blood sampling
- 2.5 Ways to prepare individuals for obtaining sampling capillary blood
- 2.6 Potential causes of discomfort to individuals during and after obtaining capillary blood samples
- 2.7 Ways in which discomfort can be minimised

Evidence requirements If not assessed through the holistic tasks, a portfolio of evidence must be kept for the knowledge and practice outcomes within this unit. The evidence within the portfolio should be kept following the conditions outlined in the assessment pack. For the practice outcomes, the following minimum evidence requirements must be met through the portfolio of evidence: **Observe the learner monitoring the capillary blood sampling of an individual/child on a minimum of three occasions.**

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The right technology - Value based Procurement

Working together for a National procurement solution:

Preferred suppliers for: Blood gas / Pregnancy testing /
Urinalysis

Value based procurement for INR monitoring in primary care including
patient self management - completed

Professional blood glucose managed service for acute care – completed

National formulary for patient self testing devices for diabetes –
completed

Rotem

Working together for a National solution for INR monitoring – What did we do?

Established Value Based procurement framework

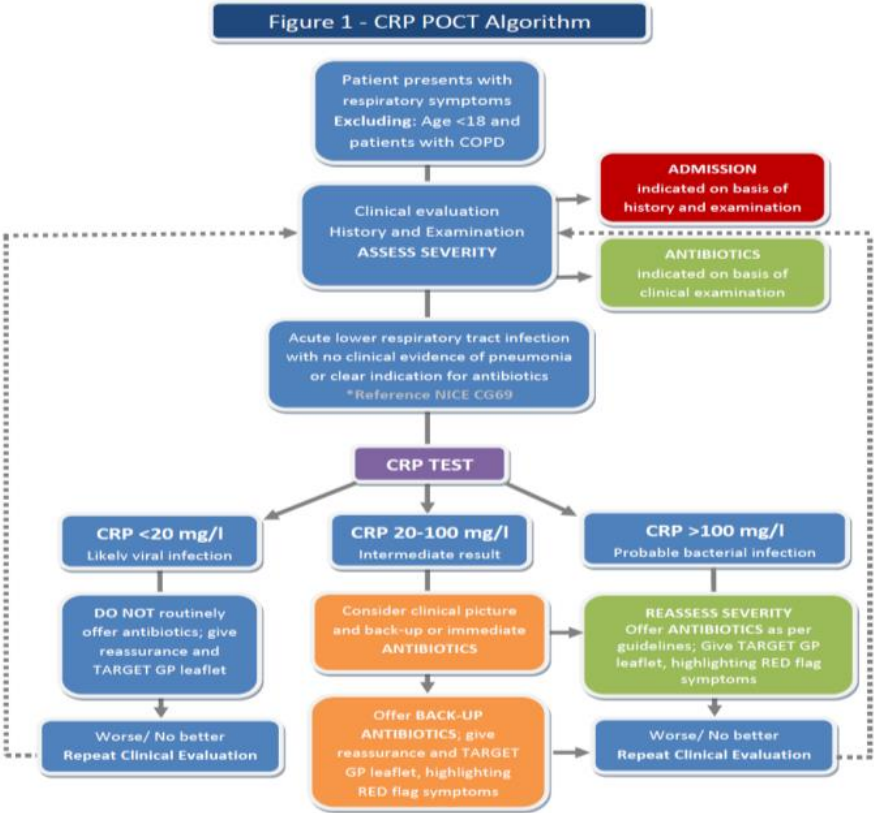
- Deliverables:
 - Equipment & all associated consumables
 - Dosing software and interfacing
 - Training for healthcare professionals and patients
 - Option for self monitoring/ testing/ management
 - Supply and distribution across NHS Wales
 - Helpline/ tech support/ for patients and healthcare professionals
 - EQA provision
 - Business intelligence Data & reporting
- Stakeholder engagement:
 - Primary care leads
 - POCT Co-ordinators
 - Pharmacists
 - GMC leads
 - Lead thrombosis CNS

CRP in LRTI and COPD patients

In Primary care – POCT CRP rolled out to 75 GP practices – National roll out planned for 500 practices



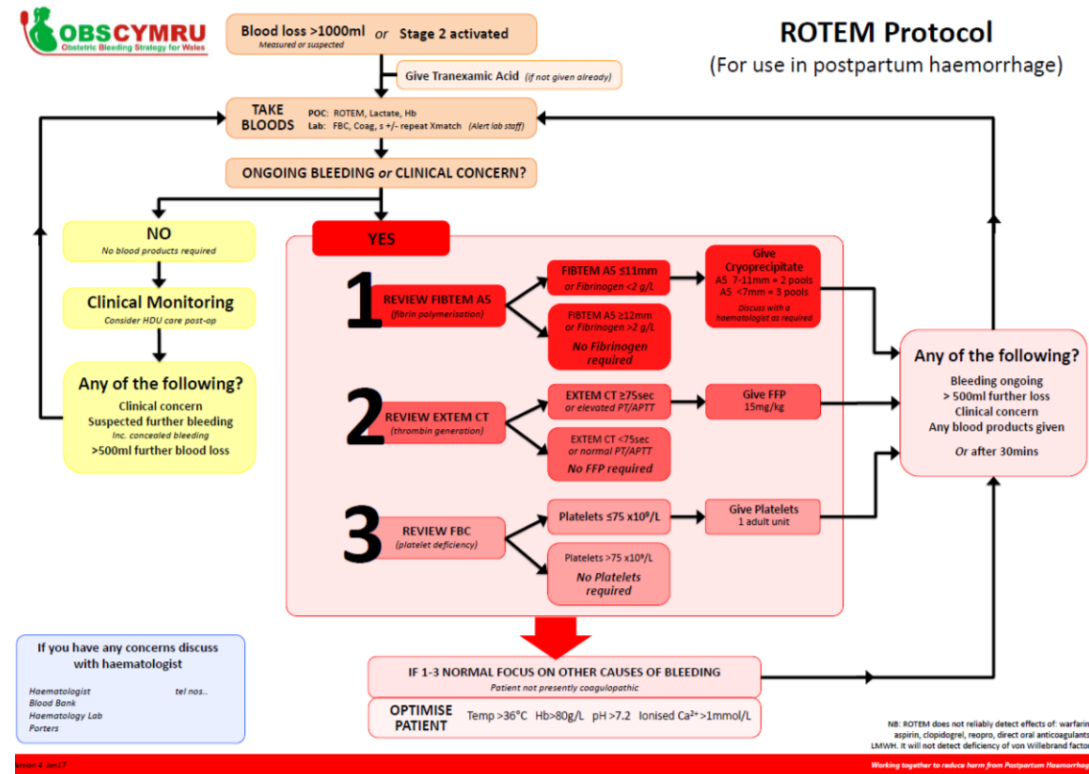
LRTI algorithm



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

Weqas

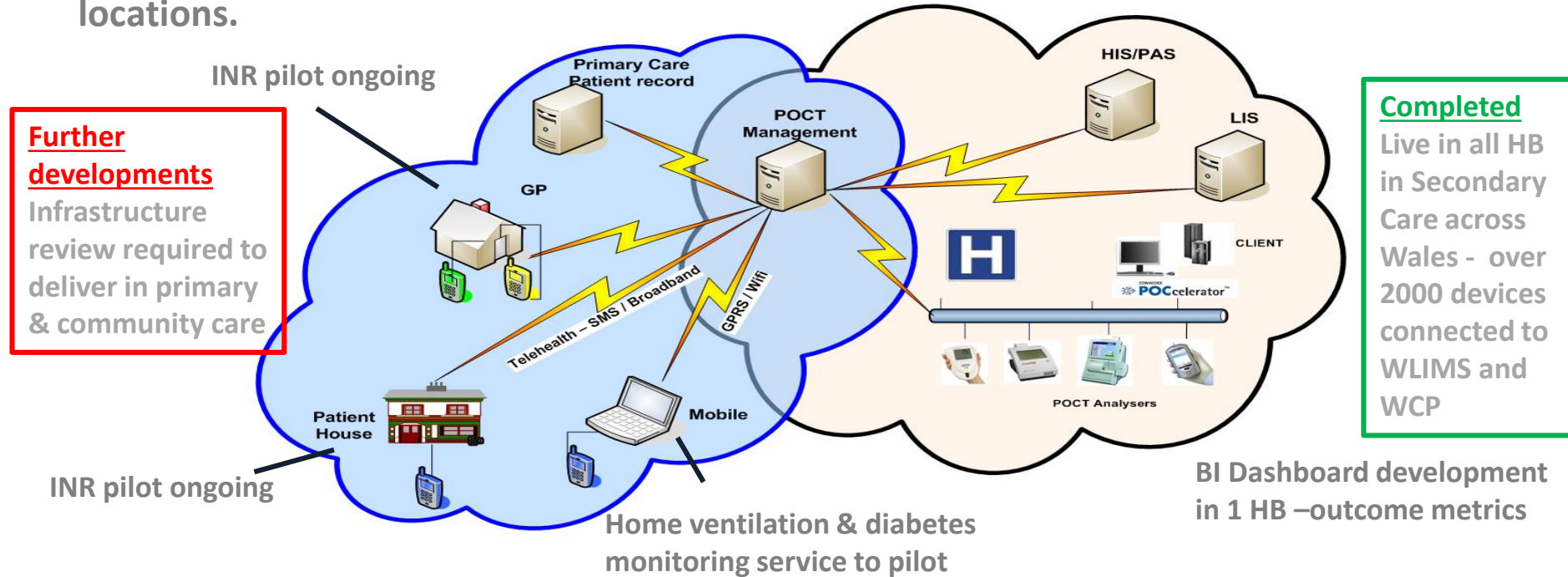


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The right infrastructure - WPOCT

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.



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



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



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Challenges and Benefits

What were the Barriers?

- Initial “buy in” from each Health Board.
- Very different POCT service models provided by each HB
- Different cost models and level of existing connectivity
- ADT not standardised, different config even on same PAS systems
- Middleware to Middleware issues
- Existing infrastructure - insufficient ports/ sockets
- Existing devices have inadequate wifi security
- On going costs and resource

Lessons learnt



- There is no POCT middleware available that will do everything we needed
- Country wide connectivity can be done
- It will take longer than you think - be open for change
- It will be challenging – reflect and learn
- You may have to compromise – harmonization across Wales,
- Working together in partnership-beneficial for patients, staff and Wales.

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National response to the pandemic

- In response to the COVID-19 pandemic, the Welsh Government National COVID–19 Test Plan set out a phased and scaled approach to COVID testing. To facilitate this 6 workstreams were created, 2 of which were directly concerned with the identification and implementation of Point of Care tests as part of the strategy.
 - Introduction of ‘lateral flow’ antibody tests to monitor exposure and immune response to COVID-19.
 - Point of Care testing (Antigen and antibody) to control future outbreaks (e.g. prisons, care homes, EDs, points of entry).
- Much of the early work was in identifying potential candidate methods and kits. Following this a subgroup was created to specifically to provide advice on both the science and operational issues around these devices. These included : POCT scientists, Immunologists, academics, clinical scientists, IT experts, logisticians, procurement and nursing/ clinical colleagues.
- The work of the POCT Strategy Board and POCT Delivery Group were repurposed to undertake an all Wales verification of the candidate devices as well as identifying the operational requirements such as resource needed, training, data capture, IT connectivity and quality monitoring of these devices.

National response- cont.

National R & D initiatives

- Identification and verification of candidate Lateral flow devices for Sars Cov-2 Ab. - Rolled out to Health Boards for Ab testing as part of sero prevalence – July 2020.
- Working with academia to develop a novel method for Sars Cov -2 Ab testing using Dried blood spots.
- Identification and verification of candidate POCT Sars-Cov2 Ag / RNA devices for secondary care. – FALCON study **Facilitating Accelerated CLinical evaluation Of Novel diagnostic tests for COVID-19**
- Verification of candidate POCT Sars-Cov2 Ag / RNA and multiplex devices in readiness for the winter season.
- Developed training videos and material for Sars-Cov 2 Ab and Ag tests
- Extensive testing for end to end connectivity of new devices- developed new LIMS test codes/sets, standard comments

What were the lessons learned?

- Departments can work together far more effectively than in the traditional silos. From POCT Manager – “All teams, who collaborated on the Field Hospital benefited from the united approach to problem solving and were collectively supportive of each other. Feedback was that we’d all like to sustain the ‘*community-feel*’ and continue to work collectively post COVID.”
- That when funding is made available much can be achieved.
- The value proposition of POCT has been identified to a much wider audience. It is now recognised as an enabler for patient management and most staff on the front line found it to be beneficial.

What are the benefits of networking?

- Importance of networking in Wales
- Learning and Sharing of best practices/ knowledge/ resource
- Help and support each other – e.g. training & competency
- Evaluations for POCT implementation undertaken once and shared across HBs.
- Identify key project/ areas where POCT could improve service delivery e.g. Strategy for INR patient self management.
- Provide a voice for POCT – Government, Advisory Committees, National Pathology Board.

What's next - our Vision

Building on the success of the informal network to create a structured network within Wales to deliver a PoCT service with appropriate resource and capacity to meet current and future needs of the population that is a nationally co-ordinated, sustainable service, delivered at national, regional and local levels.

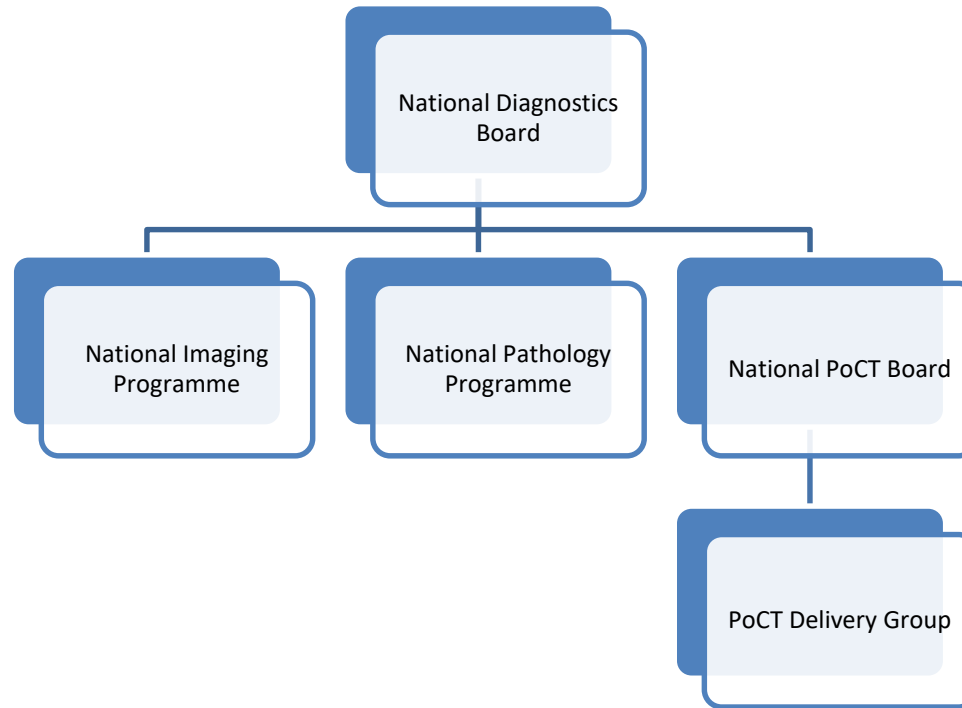


The Vision

A “one Wales” PoCT service that is patient focused that is aligned with “Healthier Wales” and Pathology/ Imaging Sol:

- Delivers a “diagnostics anywhere” approach to healthcare; providing diagnostic testing **where it is needed**.
- Reduces inappropriate variation using evidence based practices consistently and transparently.
- Works in partnership with academia for opportunities, making best use of innovation with disruptive and transformational technology.
- Embraces multidisciplinary working, a workforce that is flexible that can work across geographical boundaries breaking down the barriers between Health Boards and the “silo” specialities.
- Ensures workforce models are sustainable; that standardised training programmes are developed at all levels at the right level for the clinical need.
- Makes effective use of resource, establish efficiencies of scale for equipment and consumables through managed service contracts on an All Wales basis.
- Builds on the IT Strategy for future needs, making best use of business intelligence.

Proposed structure for POCT governance



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 Wales Collaborative reporting to the National Diagnostics Board. A clinically led, National PoCT Strategy Board shall be established to co-ordinate, and support the planning, implementation, and delivery of PoCT services.

Acknowledgements



POCT Coordinator Group – All singing from the same hymn sheet

Thank you for listening

