NHS Improvement

Pathology Consolidation – State of the Nation

Presenters: *David Wells, Head of Pathology Consolidation*

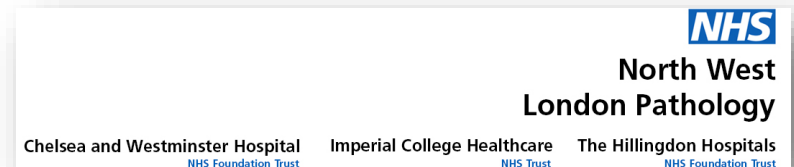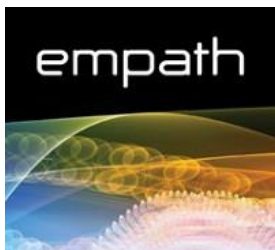Date: 20/06/2019

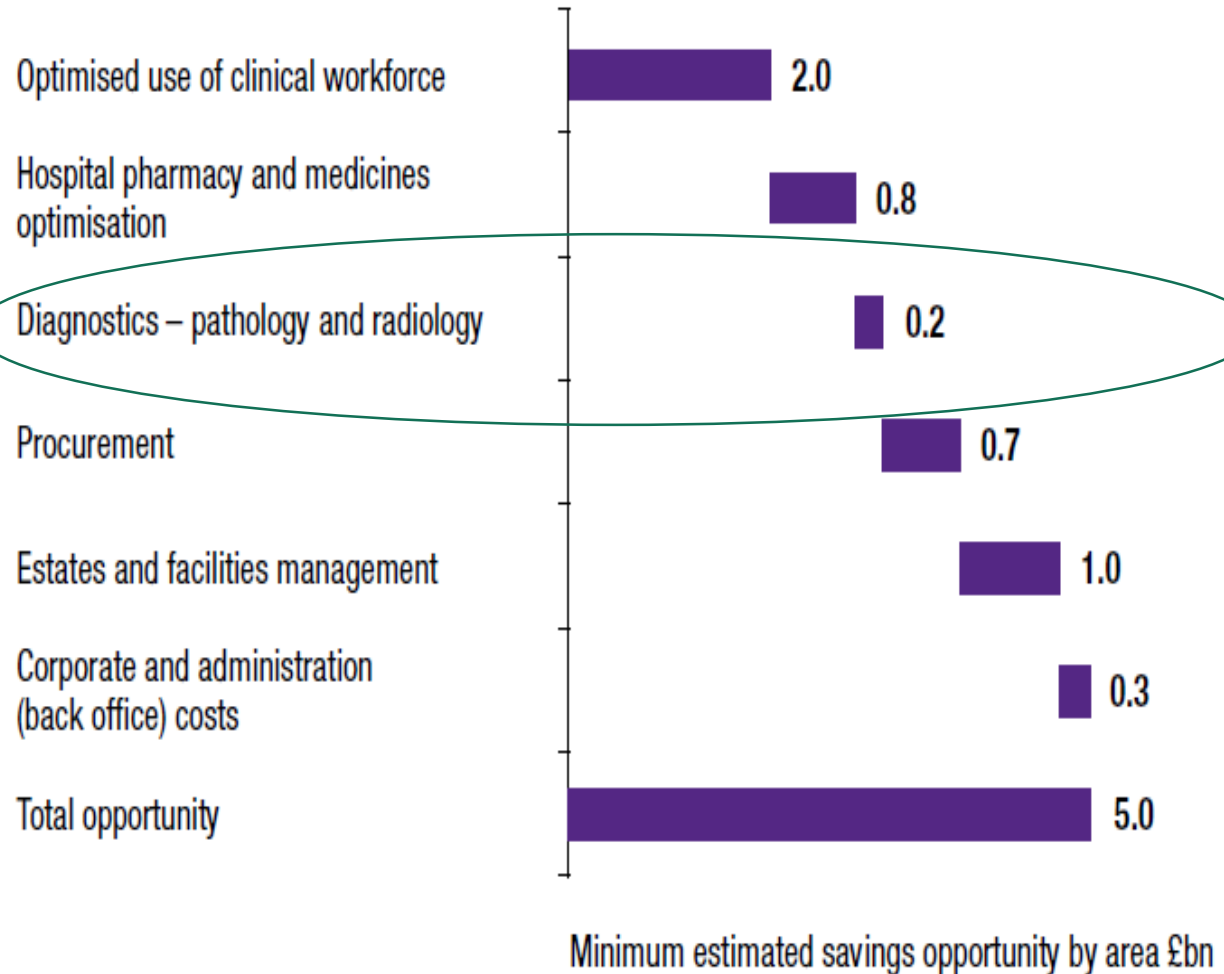NHS England and NHS Improvement

Networking – The case for change

Benefits of Consolidation

Results : The Carter review

The opportunity

- Report saw £5bn of value opportunity 2020-21, if unwarranted variation removed.
- New Operational Productivity Directorate in NHSI to deliver report's recommendations 09.16)

Optimised use of clinical workforce — 2.0

Hospital pharmacy and medicines optimisation — 0.8

Diagnostics – pathology and radiology — 0.2

Procurement — 0.7

Estates and facilities management — 1.0

Corporate and administration (back office) costs — 0.3

Total opportunity — 5.0

Minimum estimated savings opportunity by area £bn

Benefits of Consolidation

Clinical

- Allows for Essential Services Laboratories to focus on what is clinically urgent for a patient and provides faster turn around times for these tests
- Allows for greater collaboration between pathologists, resulting in better quality diagnoses
- Increases the standardisation of service across the UK
- The economies of scale benefits can lead to faster turn around time of routine work and can enable the latest technology to be purchased

Financial

- Economies of scale benefits allow for better utilisation of expensive capital equipment
- Less duplication of functions across the network such as HR, finance, logistics, marketing etc
- Increased volume allows for greater negotiating power to drive down costs of equipment, IT, reagents and consumables

Operational

- Improves service resilience through backup sites and increased workforce
- Networking across wider geographies provides a solution to localised recruitment challenges
- Economies of scale allows for centralisation of low volume, high expertise testing
- Allows for standardisation of IT systems, logistics and result delivery

Improving the quality and value of NHS pathology services
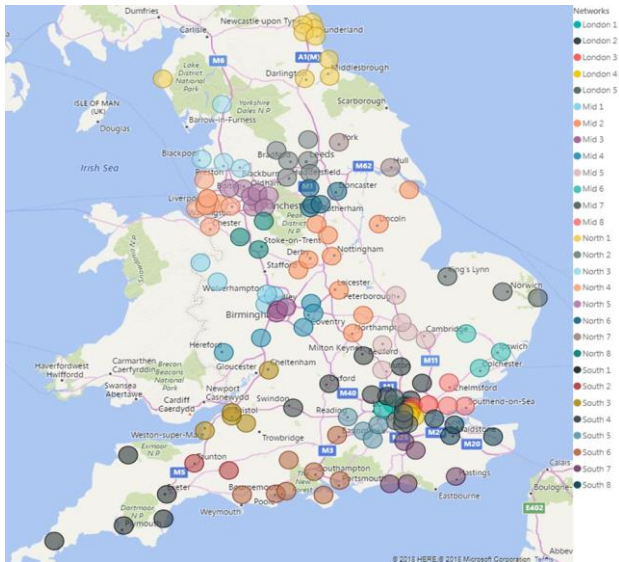
| 122 Pathology providers | Workforce of 25 thousand | Processing 1.1 billion tests per year | £2.1 billion delivery cost | Data shows +£200m efficiency saving |

NHS Improvement is working with trusts to move towards 29 pathology networks across England
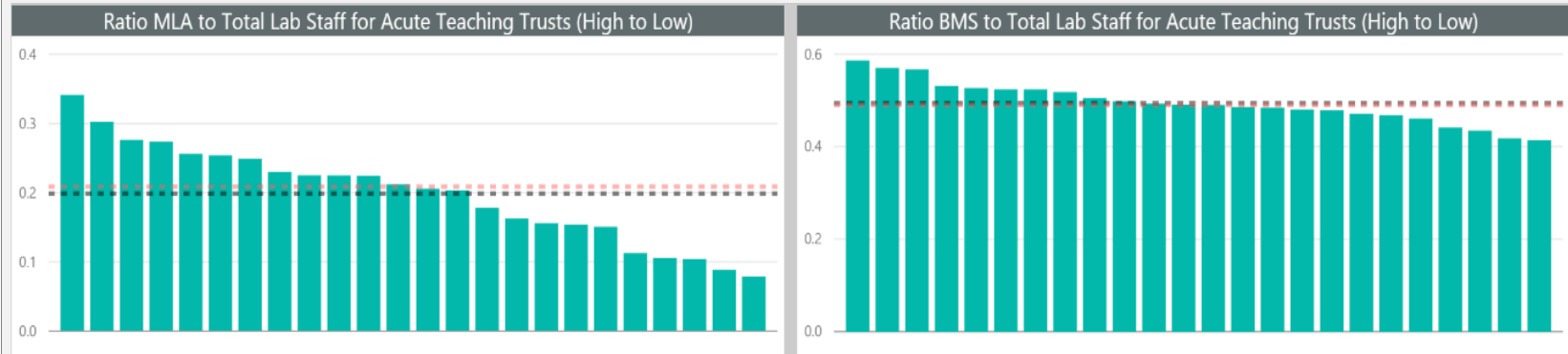

- **Pathology is essential in over 70% of patient pathways.**

- High quality services, delivering timely results for patients, will also support national priorities in genomics, cancer care and integrated healthcare

- Currently there is **national excess capacity in equipment**, yet we are seeing **local workforce shortages**

- **Variation** of non-pay costs in routine testing from **2p to £1.26 per test**

- **Networking at scale** allows for better value, better utilisation of capital equipment, faster turn around times where required and more **opportunities for the workforce to undertake extended roles**.

- NHS Improvement is engaging with the sector, with **strong support for the hub and spoke model**

By next year, the networks need to be operational and starting to deliver these quality and efficiency improvements.

Pathology Under the Microscope

Variation In Use Of MLA And BMS Staff In Acute Teaching Trusts

Ratio MLA to Total Lab Staff for Acute Teaching Trusts (High to Low)

Ratio BMS to Total Lab Staff for Acute Teaching Trusts (High to Low)

Average Non-Pay Cost Per Blood Sciences Test For Large And Medium Acute Trusts

Average Non-pay Cost Per Blood Sciences Tests in Large & Medium Acute Trusts
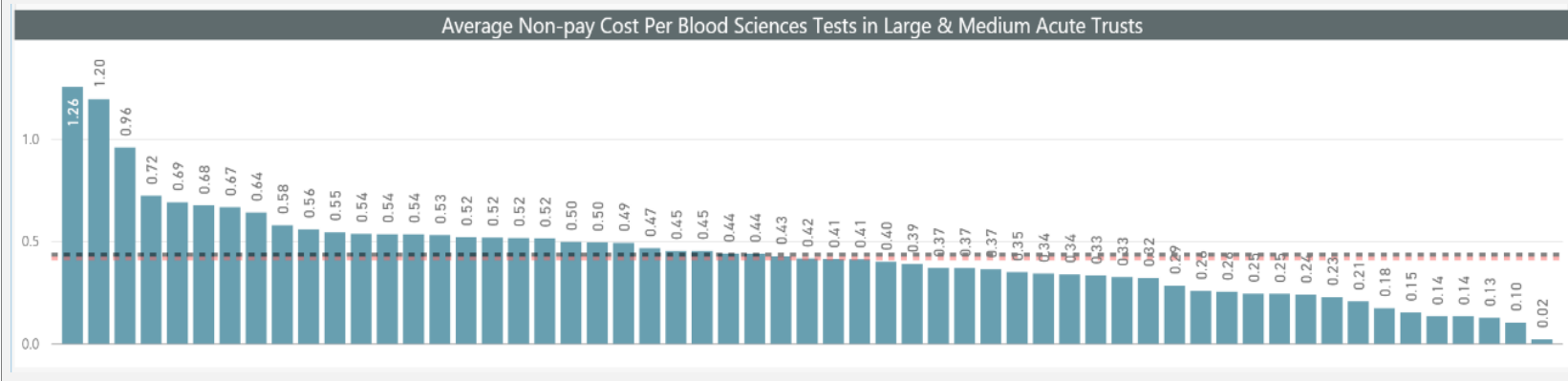
Network & Methodology

- Patient Flows
- Population Size
- STP Boundaries
- Existing Partnerships
- Modelling
- Analysis of 2015/16 Data
- Hub Shortlist

- 29 Networks
- £200 million opportunity
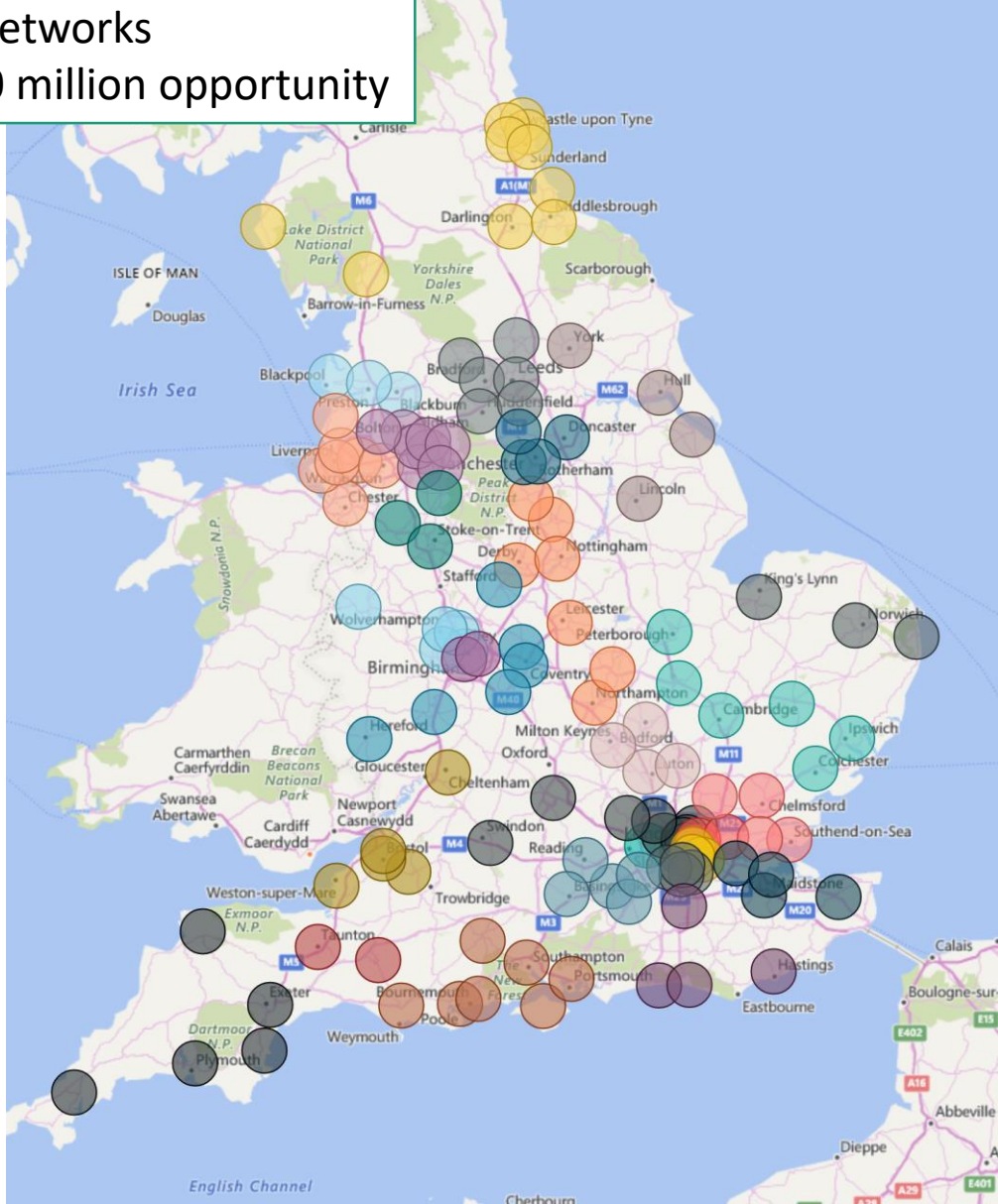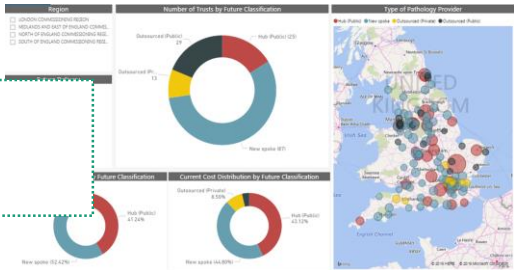
Networking – Not without Challenges

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Consolidation process – Key Lessons

Lessons learned from TPP

The lessons

- The Basic requirements
    - Effective honest pre-go-live due diligence-management, operational, financial and regulatory.-What is the starting point.
    - Clearly defined final end structure and time line with
        - A realistic Operational Implementation Plan (with medical by in, logistics, operational volumetrics analysis ,"resulting" IT solutions with results formats and staffing plans)
        - Costs of implementation with timeline and
        - financial forecasts
    - Clinical and Sponsor buy-in and commitment.
    - Management team bought into the vision and capable of delivering it
    - Governance structure so progress vs both ops plan and finances can be monitored
    - Understanding of what is really being undertaken time and resources required
    - Real understanding of any IT requirements, commercial basis and changes/implications (in detail) and the clinical impact
    - Operational requirements
    - and delivery -capability, capacity and commitment
    - Understanding of and commitment to the Regulatory environment.
- Based on what I and others have found--TPP had none of the above

Consolidation process – Key Ingredients

- Agree a common set of values from the outset
- Ensure a strong governance system is in place that confirms accountability
- Establish a strong auditable baseline
- Agree a robust business plan
- Accept, expect and budget for transition costs
- Develop a strong target operating model and plan for implementation including IT, equipment and logistics
- Ensure clinical engagement
- Ensure executive engagement
- Gain a thorough understanding of regulatory and accreditation environment
- Engage with regulators and accreditation bodies
- Invest in operational transformation resources
- Be pragmatic

Consolidation process – Key Decision Points

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Commercial structure

- Collaboration
- Alliance contracting
- Arms length hosted joint venture
- Joint venture – Limited Liability Partnership
- Joint venture – Limited Company by Shares or Guarantee
- Community interest company
- Outsourcing

Governance structure

- Board structure
- Responsibility & accountability
- Executive governance
- Clinical governance including Quality Accreditation
- Key commercial terms
- Transformational governance

Due Diligence

- Standardisation of activity
- Standardisation of workforce
- Agreement of inclusions and exclusions

Legal considerations

- Organisational Form
- Governance – Heads of terms of reference
- Finance
- Competition
- Workforce
- Relationships with customers and suppliers and existing contracts
- Outsourcing

Operational

- IT platform – single LIMS or middleware
- Equipment platforms – break existing contracts or await contract completion
- Logistics – utilise trust logistics, outsource or create new system controlled by entity
- Location for each service and the scope for essential service laboratories (spokes)
- Standardisation of operating procedures
- Future state workforce design

Outputs

Described and enabling 29 Pathology networks: To set out the direction and ambition.

Publication of clinical and operational advice in the form of toolkits: To share learning and provide consistent advice with agreement of the professional bodies and other ALBs

Development of specialist testing networks: To ensure highly complex clinical services are sustainable and efficient, supporting faster access to sub-specialist clinical expertise

Facilitating network workshops involving clinical and operational teams: To drive the pace of change to ensure local empowerment and ownership of networks.

Development and launch of the National Pathology Quality Assurance Dashboard: To monitor and measure quality of pathology services clinically and operationally. To ensure good practice in adoption of national guidance, accreditation, training and education and also to ensure corporate good practice in monitoring supplier performance, quality of industry service delivery and provider interactions for new models of care (e.g Point of care testing in primary care).

Identifying national funding and innovations: A Working with Office of Life Science to ensure innovation pipelines to digitise and adopt AI where clinical appropriate at pace and scale. Working with industry to identify disruptive technologies – for example drone delivery for blood samples, or point of care diagnostics to improve bed utilisation

Collecting system wide data….

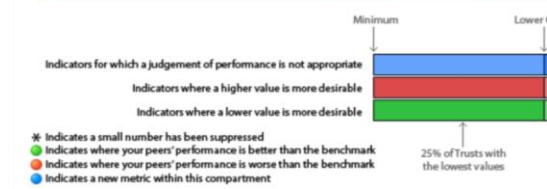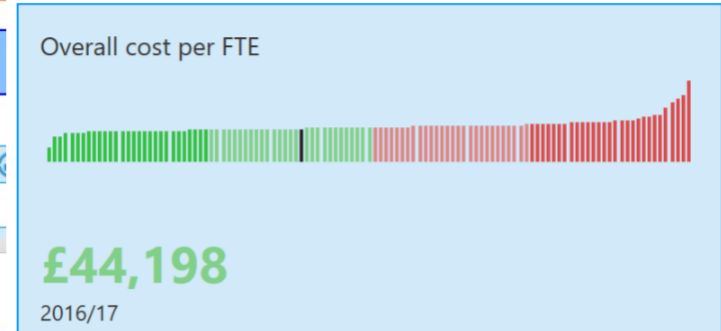# Model Hospital – With data comes insight

Networking – Supporting formation

Pathology

Covers all healthcare across prevention, screening, monitoring and diagnosis from before conception until post mortem. All with appropriate clinical and scientific support for local clinical teams.

- **Clinically lead service**. Every result issued has been monitored, reviewed or commented upon by a medical clinician or state registered (via HCPC) Biomedical or Clinical Scientist.
- **Integrated access** to sub-specialty expertise available for community, primary, secondary and tertiary at a single touch point. Scientists all have a sub-speciality training, and have an active role in many specialist MDT meetings.
- **Accreditation and quality assurance** integral to service delivery. Pathology in the UK has lead the way in clinical accreditation for more than 20 years. UK system is the basis of the current international accreditation standard.
- Keen **technology adopters**. Moving academic and novel technologies into routine, safe, clinical practice.
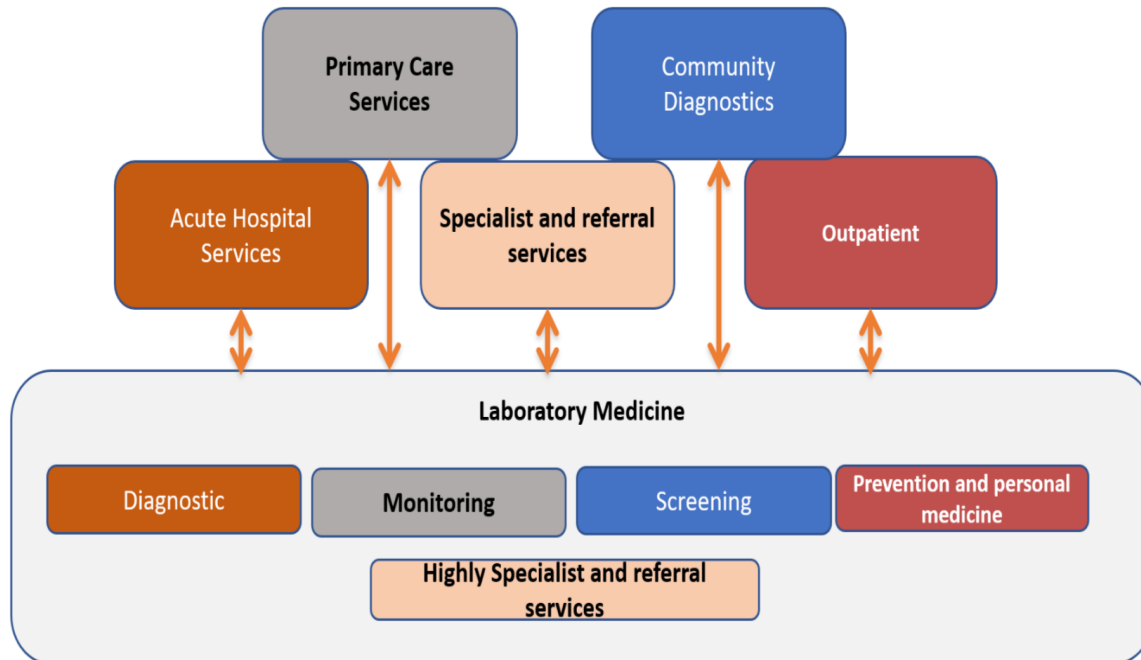
Networks & Consolidation with engagement

The programme is working in true partnership with the clinical and scientific community to deliver the right test, with the right advice at the right time – utilising the right approach and technology via the National Pathology Delivery group (NPODG)
We are working with other colleagues in legal, procurement, finance. In addition with are also aligned and contributing to national programmes for example Genomics, AMR, sepsis and digital / AI with NHS England, Public Health, and Office of Life Science

Regulators
- UKAS
- CMA
- BIVDA

Workforce
- Unions such as UNITE
- Health Education England

Clinical community
- RCPATH
- IBMS

NPODG

Commissioners
- NHSE
- CCGs

Providers
- Trusts
- Private sector providers

Suppliers
- Equipment
- Private sector operators

The benefits are:
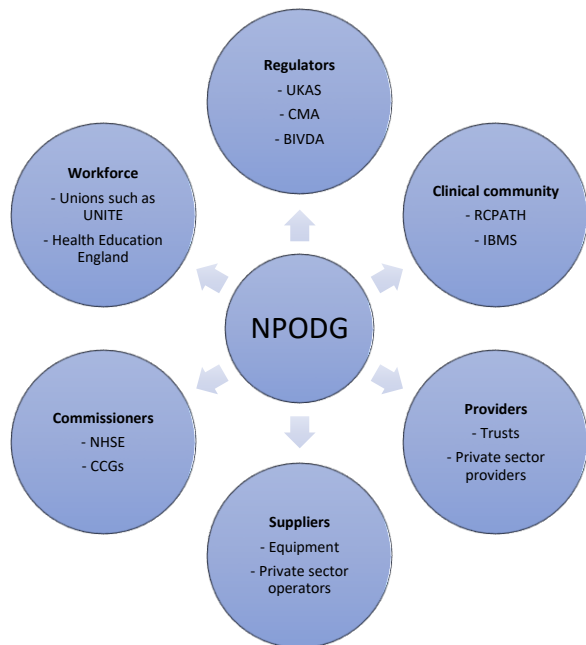
- Driving up clinical quality, better for patient outcomes
  - Faster turnaround times
  - Right testing available at the right time.
  - Better access to sub-specialty expertise
  - Access to new technology

- Improving service resilience

- Efficient use of highly skilled staff. Right role, right person.

- Economies of scale and purchasing – linking into the current NHS Improvement Procurement teams and Category Tower provider using the NPODG to set the clinical standard and requirements for national purchasing

- National excess equipment capacity, yet workforce shortages
  - Networking across wider geographies provides a solution to localised recruitment challenges and development of advance scientific roles.

Pathology Quality Assurance Dashboard

The first iteration of the PQAD was launched in response to the Dr Barnes' Pathology Quality Assurance review.

Health check
- SIs
- Staff turnover / Sickness
- Activity

Operational performance
- TATs
- Logistics

Aspirational metrics

PQAD

Quality and clinical Governance
- Accreditation
- Adherence to national standards

Commercial / procurement / Innovation
- Capital planning / Contractual meetings
- Innovation and adoption planning

People
- Training and Education
- Agency and locum use

Stakeholder engagement
- Clinicians and users
- Commissioners

- **This is a tool for individual Trusts to assess and manage the benefit Pathology services can deliver.**

- **It is not a contractual tool to manage the service**

- **Timely collection of appropriate data.**

- **Board visibility of system wide metrics that Pathology has an impact.**

- **Support national initiatives**

- **Collecting data in one place, once.**

- **Benchmarking for some metrics to continuously drive improvement.**

- **Innovation and Training, a method to and report and support long term sustainability of workforce and adopting advance and innovative roles and technologies.**

Next steps for NHS Improvement

- NHS Improvement will continue to support and guide the development of these networks, ensuring that services are safe, effective, caring, and responsive.

- We will work with trusts in networks yet to become operational to jointly agree milestones, establish what extra support they need and ensure local leadership (across trusts and commissioners) is in place to complete or network becoming operational.

- Support progress at pace.

- Continue data collection and providing insight support to providers and commissioners.

- Release Pathology Quality Assurance Dashboard

Networking – The state of the nation
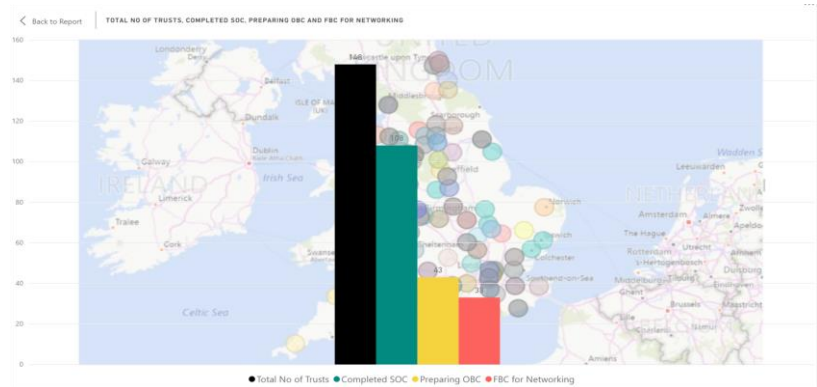
National Programme Updates

NHS

Progress so far:

State of the Nation follow up:
- All networks have been written to with follow up timelines and actions.
- 5 Networks working at the size and scale described by NHSI.
- 21 Networks have an approved Strategic Outline Cases (SOC).
- 18 Networks working up Outline Business Cases (OBC)
- Data collections made quarterly and annually.

Sub- committees:
- Pan UK Specialist Bone cancer group
- Blood Transfusion group
- Specialist testing
- Digital and LIMS group.
- Electron microscopy
- Paediatric Pathology

- Broad agreement that these committees, via NPODG, should be agreeing standards and specifications which NHS Improvement will mandate to providers and suppliers.

TOTAL NO OF TRUSTS, COMPLETED SOC, PREPARING OBC AND FBC FOR NETWORKING

● Total No of Trusts ● Completed SOC ● Preparing OBC ● FBC for Networking

Co-signed COSD data standards letter
- Cancer Outcomes and Services Dataset (COSD) will support the monitoring of earlier diagnosis initiatives that are developed as part of the Long Term Plan.
- Trust are required to meet the data standards on reporting by September 2019
- Current adoption across England is poor.

Digital and LIMS data standards letter issued
- Requirements for SNOWMET CT, Hl7 FHR messaging
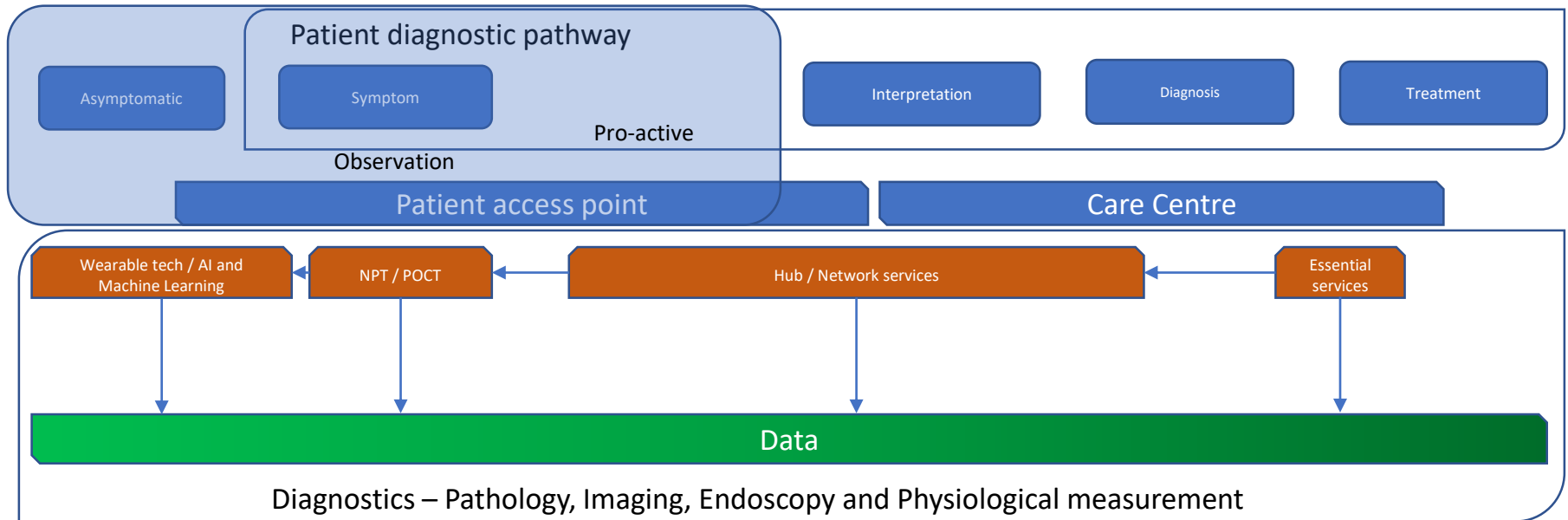
Work continuing…..

Networking – The future promise
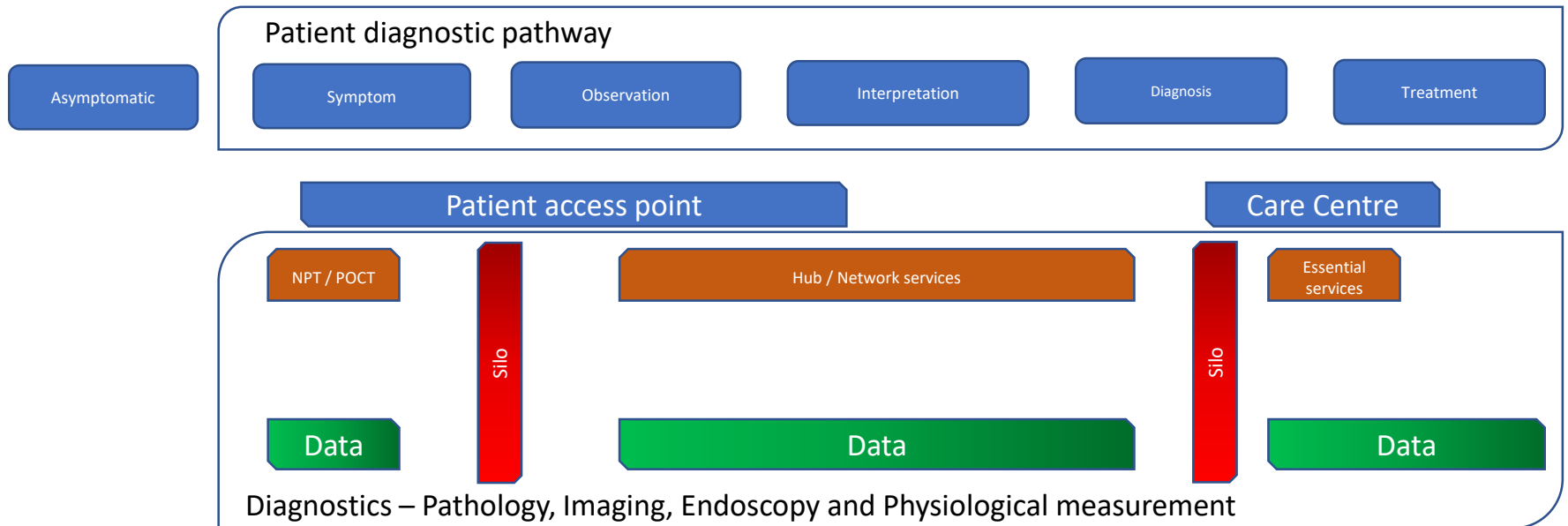
Diagnostics are characterised as:
- Siloed
- Testing is duplicative, reactive and incomplete
- Reliant on available capacity
- Inflexible
- System lead
- Data naive

Networking – The future promise

Patient diagnostic pathway

| Asymptomatic | Symptom | | Interpretation | Diagnosis | Treatment |

Pro-active

Observation

Patient access point — Care Centre

| Wearable tech / AI and Machine Learning | NPT / POCT | Hub / Network services | Essential services |

Data

Diagnostics – Pathology, Imaging, Endoscopy and Physiological measurement

Diagnostics are characterised as:
- Joined up
- Right patient, right test, right time
- Less capacity dependant
- Agile
- Clinically lead
- Data enabled

Diagnostics to realise the LTP

Now	Future	Need
Lack of time	Time prior to pathways	Pro-active testing using big data risk analysis based testing strategies
Lack of capacity	Appropriate capacity	Capacity that has flex and deployed at point of need (not want). Clear equipment specifications and framework/network purchasing agreements.
Lack of workforce	Range of workforce skilled to deliver service need working to top of licence	Development of new roles Adoption of extended roles Adoption of novel approaches to ensure availability of skilled advisory services
Over provision of service (where it exists)	Service provided on need (not want)	Regional, networking approached to service provision. Professional leadership to champion and support change. Clear business continuity plans with live capacity mapping.
Inequality of access to service	Equality of access to service	Defined what services require delivery (not how) across the diagnostic pathway.
Lack of interoperability	Complete interoperability at user interface	Defined standards, defined codes, agreed diagnostic protocols.
Variable service delivery	Service delivery around standard specifications.	Defined service specifications
Adoption and innovation lacks consistent evidence base and shows variable pace of adoption	Innovation by exemplars leading and supporting adoption.	Innovation exemplars, funding once for each innovation, with requirement to lead adoption across healthcare economy. National Innovation pipeline.

Questions?

NHS England and NHS Improvement