Shared Services: Towards a distributed service model for delivery of NHSScotland's laboratory services.

Dr Bill Bartlett
Subject Matter Expert
**Health Portfolio**
Laboratories Programme

Laboratory medicine underpins healthcare delivery

"70 - 80%* of clinical medicine decision making is predicated upon, or confirmed by, or documented by medical laboratory test results"

Impacts of diagnostic services are whole system, therefore our thinking about these services and consequences of change to them should be whole system!

*Report of the Review of NHS Pathology Services in England Chaired by Lord Carter of Coles
Pathology Quality Assurance Review. Chaired by I Barnes   Report 2014
Dighe, A. S. Medicolegal liability in laboratory medicine, Semin Diagn Pathol, 2007;24:98-107

"We cannot solve our problems with the same thinking we used when we created them"
(A. Einstein)
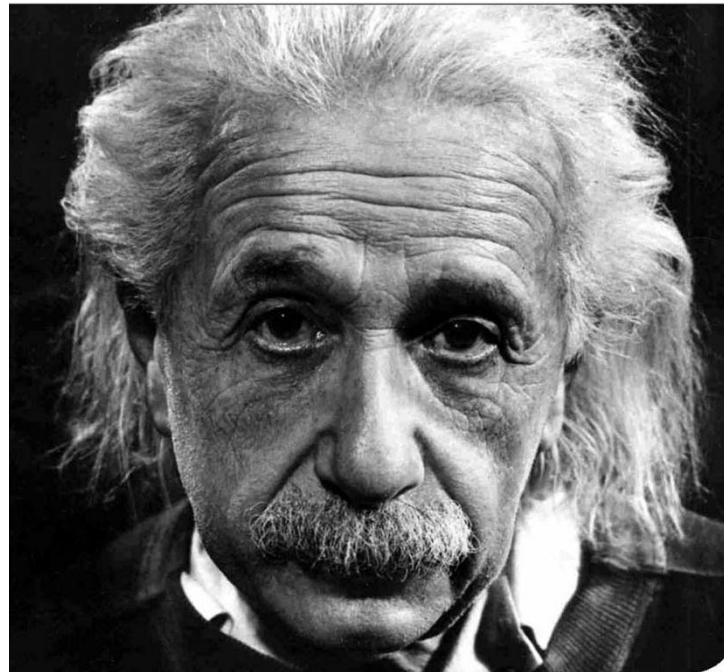
Structure of this Presentation
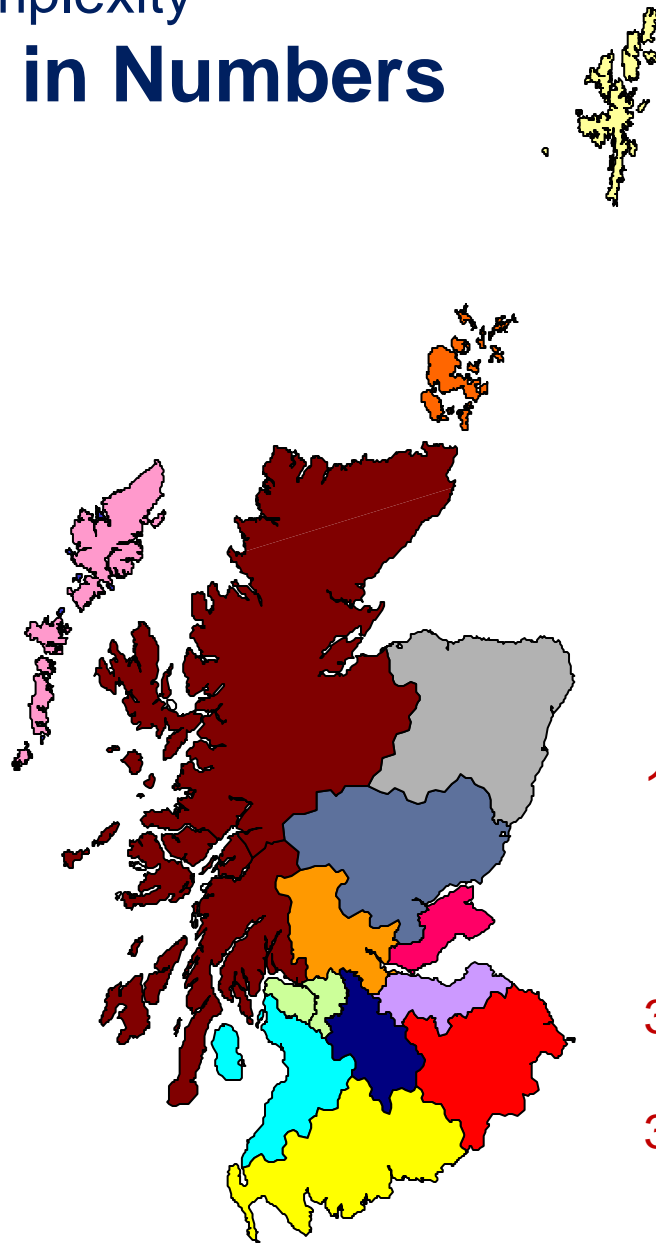
Context

Distributed Service

Next Steps

Context

Organisational Complexity
NHSScotland in Numbers

NHS SCOTLAND

1 Nation

5.3 million People

14 Territorial Boards

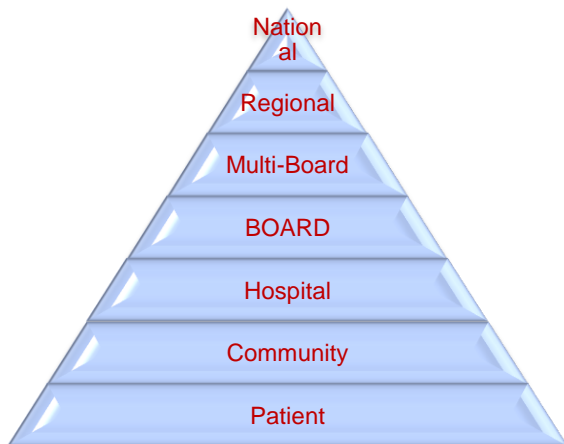2 Special Boards

32 Local Authorities

31 Integration Joint Boards

Labs in Scotland PHI Map

Health Services Cost Book
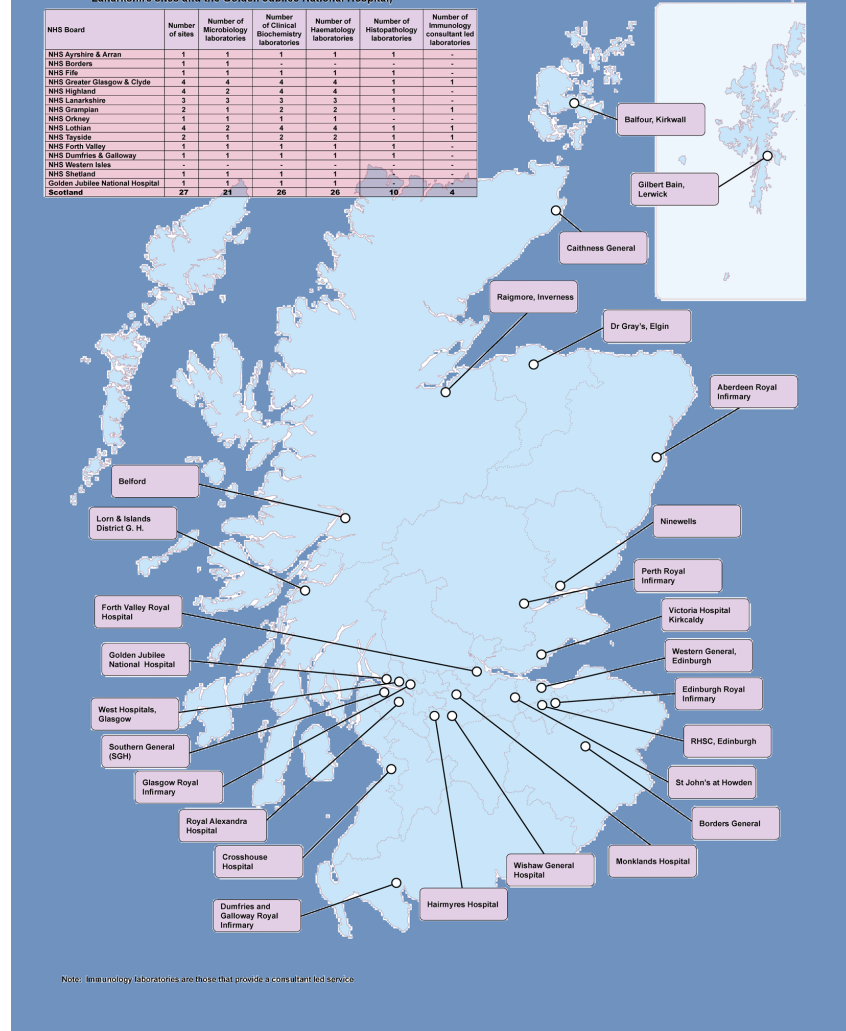2014 to 2015 R130: -

22 locations 13 boards: -

Speciality	Specimens
Microbiology	5 Million
Histopathology	2 Million
Haematology	11 Million
	Tests
Biochemistry	82 Million

National
Regional
Multi-Board
BOARD
Hospital
Community
Patient

Locations providing laboratory services, Scotland, 2015

Sources: Scottish Health Service Costs, year ended 31st March 2015;
Shared Services (Immunology laboratories; additional Grampian, Tayside,
Lanarkshire sites and the Golden Jubilee National Hospital)

NHS Board	Number of sites	Number of Microbiology laboratories	Number of Clinical Biochemistry laboratories	Number of Haematology laboratories	Number of Histopathology laboratories	Number of Immunology consultant led laboratories
NHS Ayrshire & Arran	1	1	1	1	1	-
NHS Borders	1	1	1	1	-	-
NHS Fife	1	1	1	1	1	-
NHS Greater Glasgow & Clyde	4	4	4	4	1	1
NHS Highland	4	2	4	4	1	-
NHS Lanarkshire	3	3	3	3	1	-
NHS Grampian	2	1	2	2	1	1
NHS Orkney	1	1	1	1	-	-
NHS Lothian	4	2	4	4	1	1
NHS Tayside	2	1	2	2	1	1
NHS Forth Valley	1	1	1	1	1	-
NHS Dumfries & Galloway	1	1	1	1	1	-
NHS Western Isles	-	1	1	1	-	-
NHS Shetland	1	1	1	1	-	-
Golden Jubilee National Hospital	1	1	1	1	-	-
Scotland	**27**	**21**	**26**	**26**	**10**	**4**

Balfour, Kirkwall
Gilbert Bain, Lerwick
Caithness General
Raigmore, Inverness
Dr Gray's, Elgin
Aberdeen Royal Infirmary
Belford
Lorn & Islands District G. H.
Ninewells
Perth Royal Infirmary
Forth Valley Royal Hospital
Victoria Hospital Kirkcaldy
Golden Jubilee National Hospital
Western General, Edinburgh
West Hospitals, Glasgow
Edinburgh Royal Infirmary
Southern General (SGH)
RHSC, Edinburgh
Glasgow Royal Infirmary
St John's at Howden
Royal Alexandra Hospital
Borders General
Crosshouse Hospital
Wishaw General Hospital
Monklands Hospital
Hairmyres Hospital
Dumfries and Galloway Royal Infirmary

Note: Immunology laboratories are those that provide a consultant led service.

# Laboratory services

- Current service:
    - 27 laboratory locations, 87 laboratories:
        - 21 Medical Micro
        - 26 Biochemistry
        - 26 Haematology
        - 10 Histopathology
        - 4 Immunology

    - Covering 16 Boards (14 territorial and 2 special)
    - 19 Specialities
    - Approximately 3759 FTE staff
    - Annual costs estimated at £251.6m
        - £178.9m staffing costs
        - £72.7m non-staffing costs

Shared Services
Strategy & Policy Context

Drivers of change applying to services
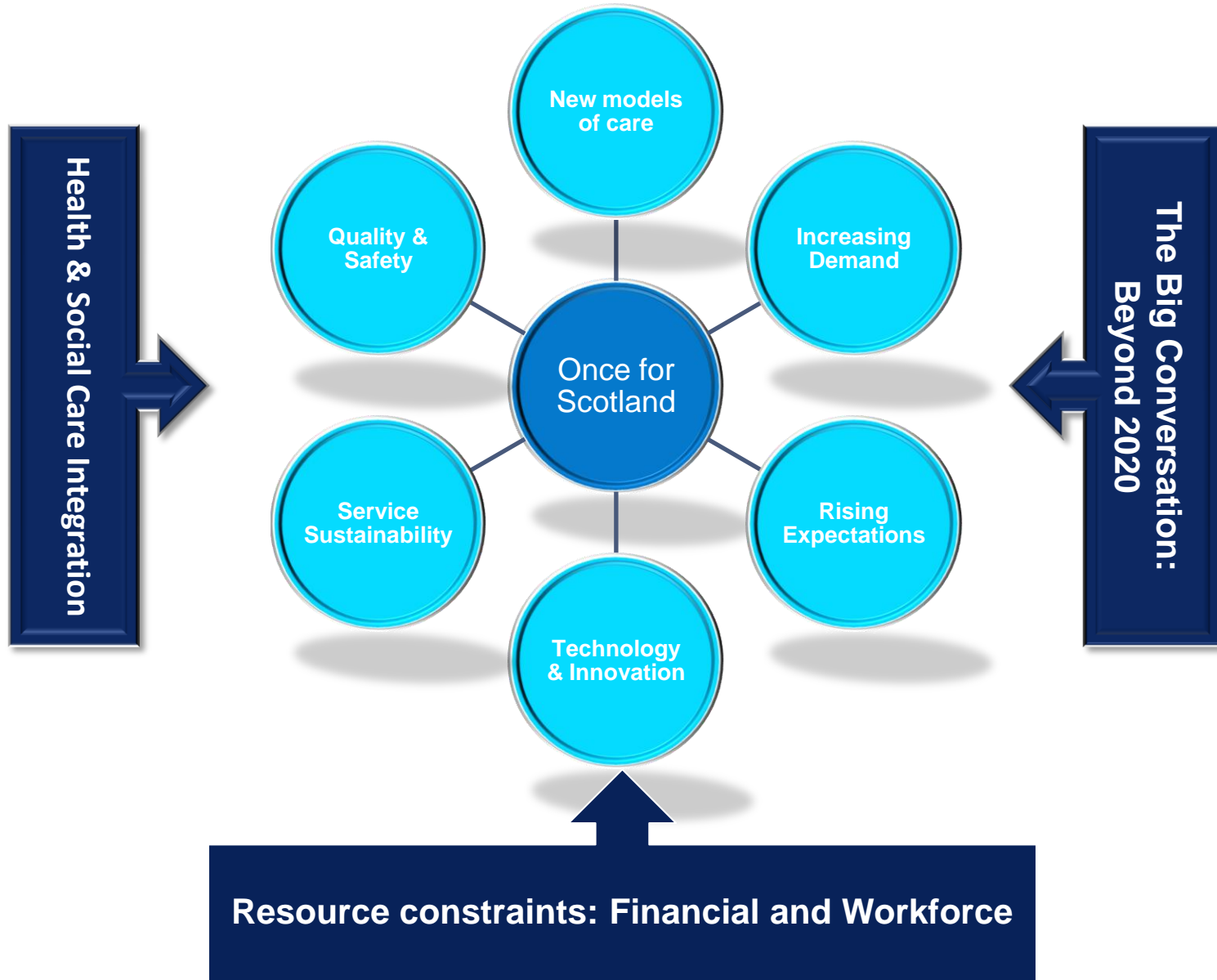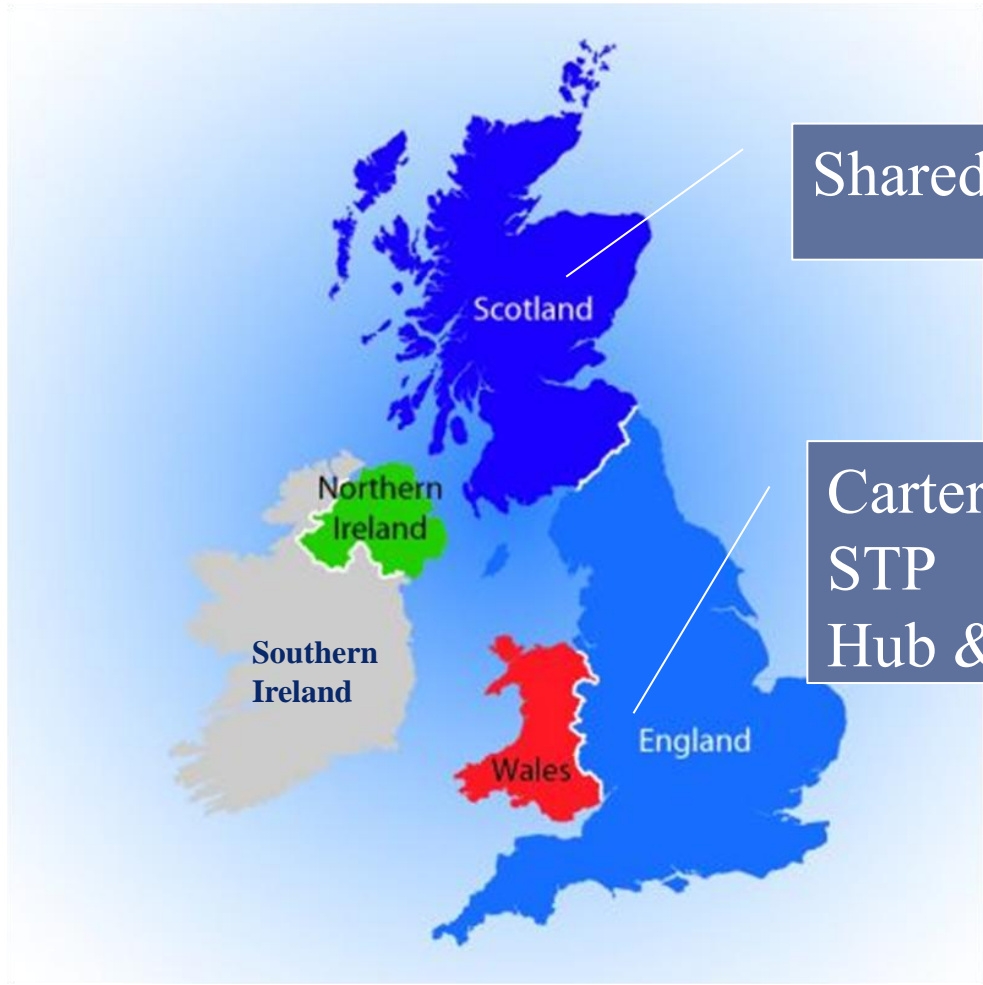
Making the future happen

evidence for better health care

nuffieldtrust

The future of pathology services

Briefing
Sasha Karakusevic, Nigel Edwards, Ruth Lewis and Mark Dayan

June 2016

- **Far greater opportunities exist for systems that want to be ambitious**

- **There is scope for new approaches that consider the whole pathway together with Laboratory Medicine**

- **Systematic collaboration between sites will deliver greater benefits than consolidation**

- **need for better supported IT that is interoperable so patients and other institutions can easily access data**

- **Reinvestment of efficiency savings.**

2014: NHSScotland Shared Services

By working differently, Shared Services will deliver new ways of working which are flexible and responsive to the changing needs of NHSScotland for 2020 and beyond
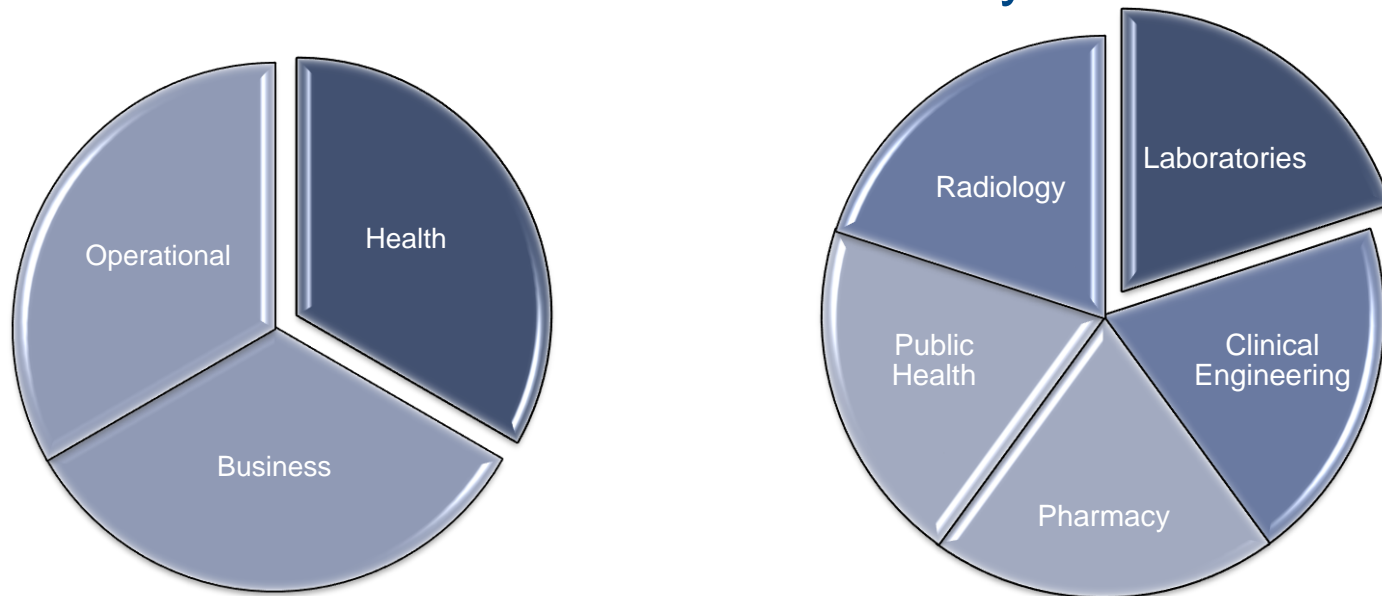
Transformation service to meet needs.

Once for Scotland

www.sharedservices.scot.nhs.uk

Shared Services
Business case for the DSM ?

NHS SCOTLAND

Positioning Paper

Strategic Paper

Business Case

Implementation

MANDATE

Data

IT

Innovation

Standardisation

Distributed Service Model Design Group
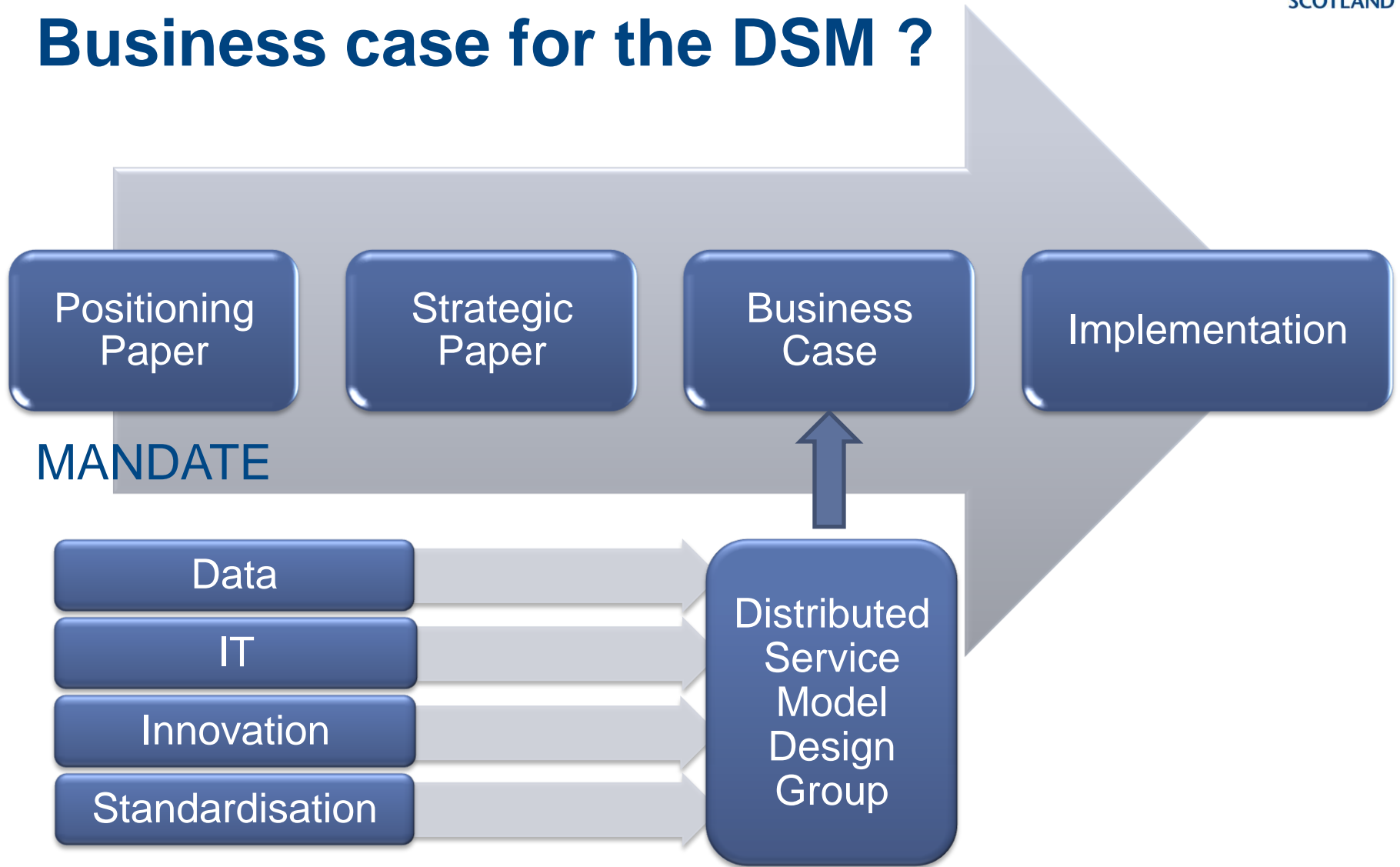
We want to achieve:
(Business objectives)

- **A future proof model**

- **Service resilience across NHSScotland**

- **A sustainable, resilient workforce**

- **Delivery of 2020 Vision and support transformation**

- **Value for money**

Guiding Principles
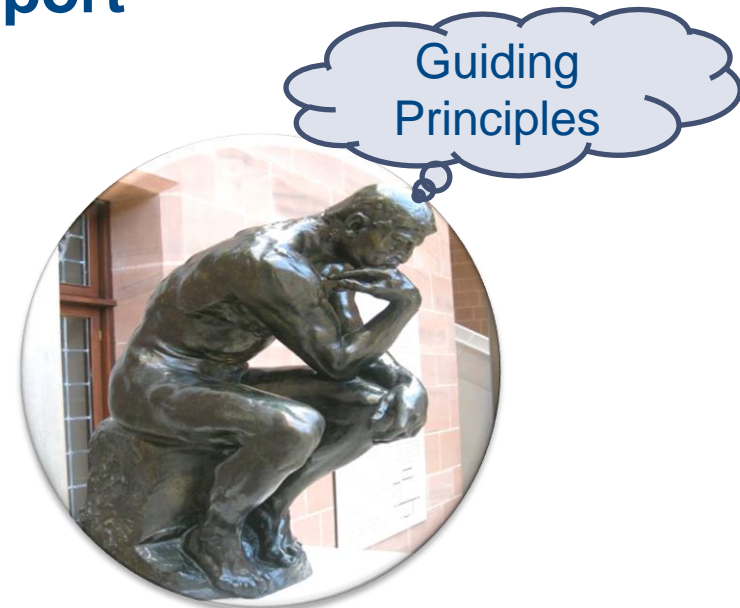
Ambition?

- Right test
- Right place
- Right time

Patient centric, outcome focussed, whole system wise

Scotland wide access to state of the art services through a distributed service
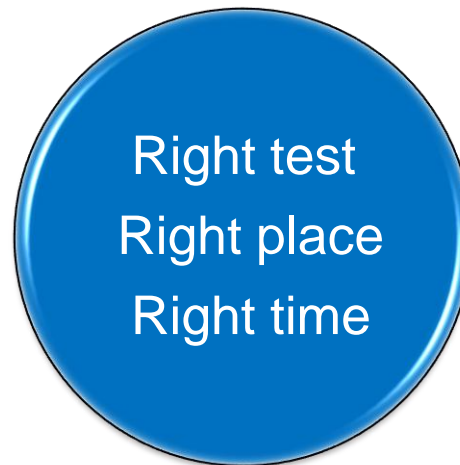
Road map towards a DSM

Triple Aim Focus: Right Test, Right Place, Right Time
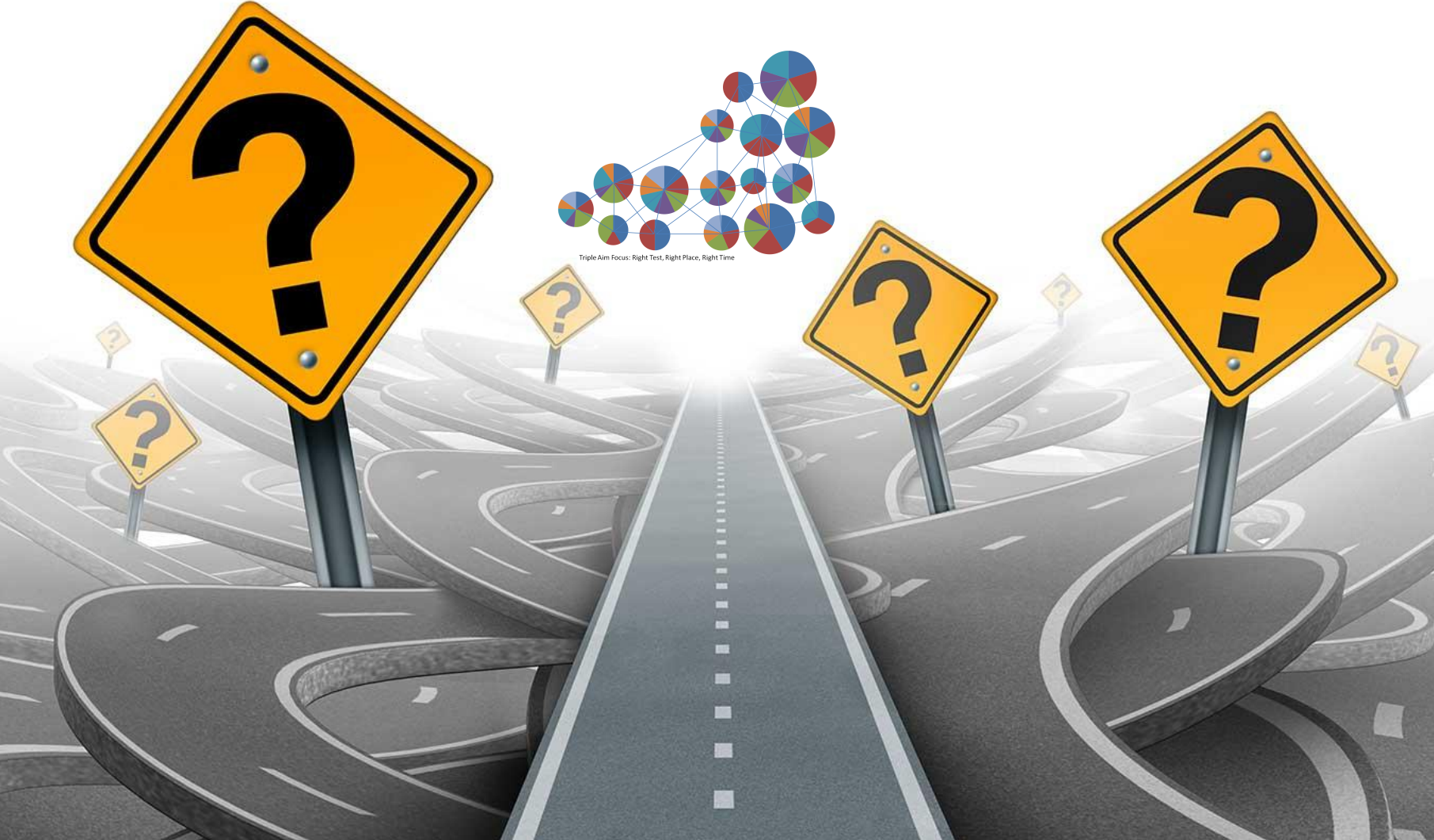
Distributed Services Model
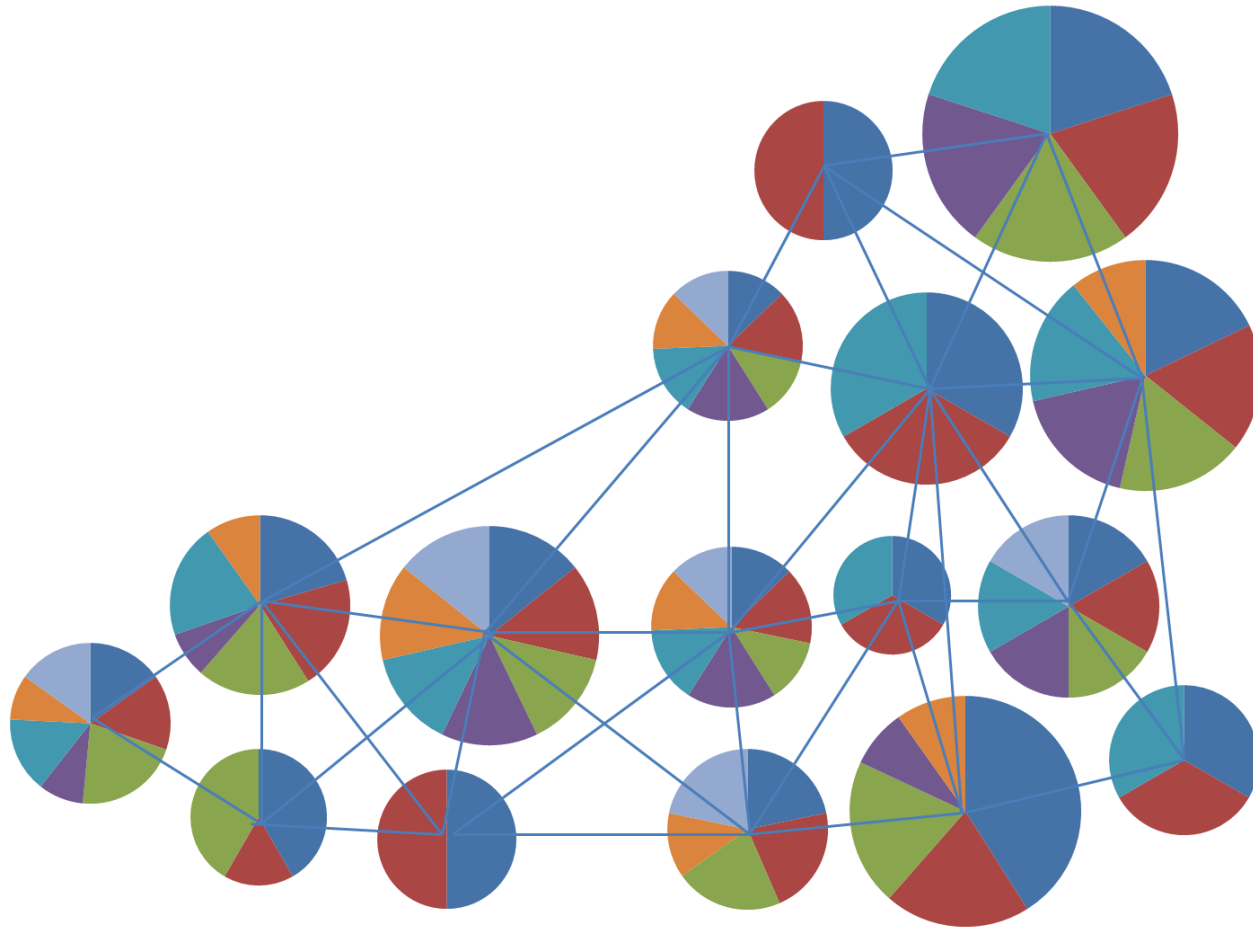
Triple Aim Focus: Right Test, Right Place, Right Time
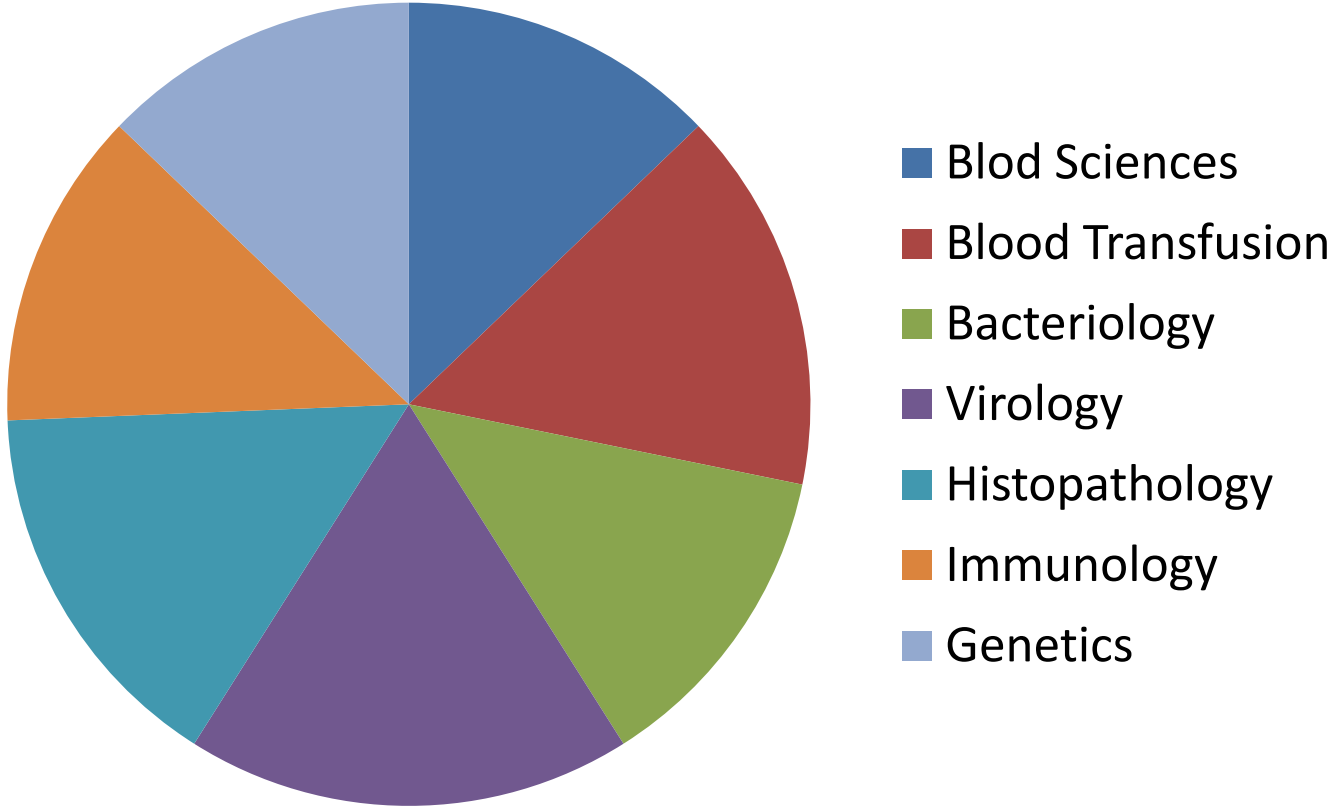
Shared Services
A Distributed Service

Functional distribution NOT centralisation

"Functional distribution of laboratory resource that enables equitable delivery of high quality health care independent of location."
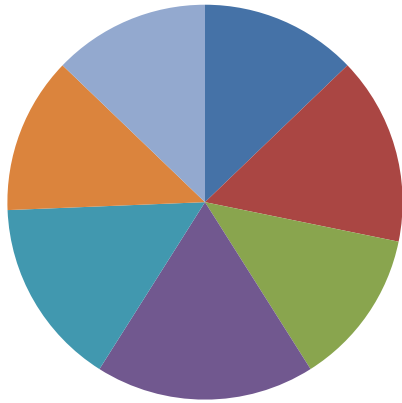
Right test

Right place

Right time

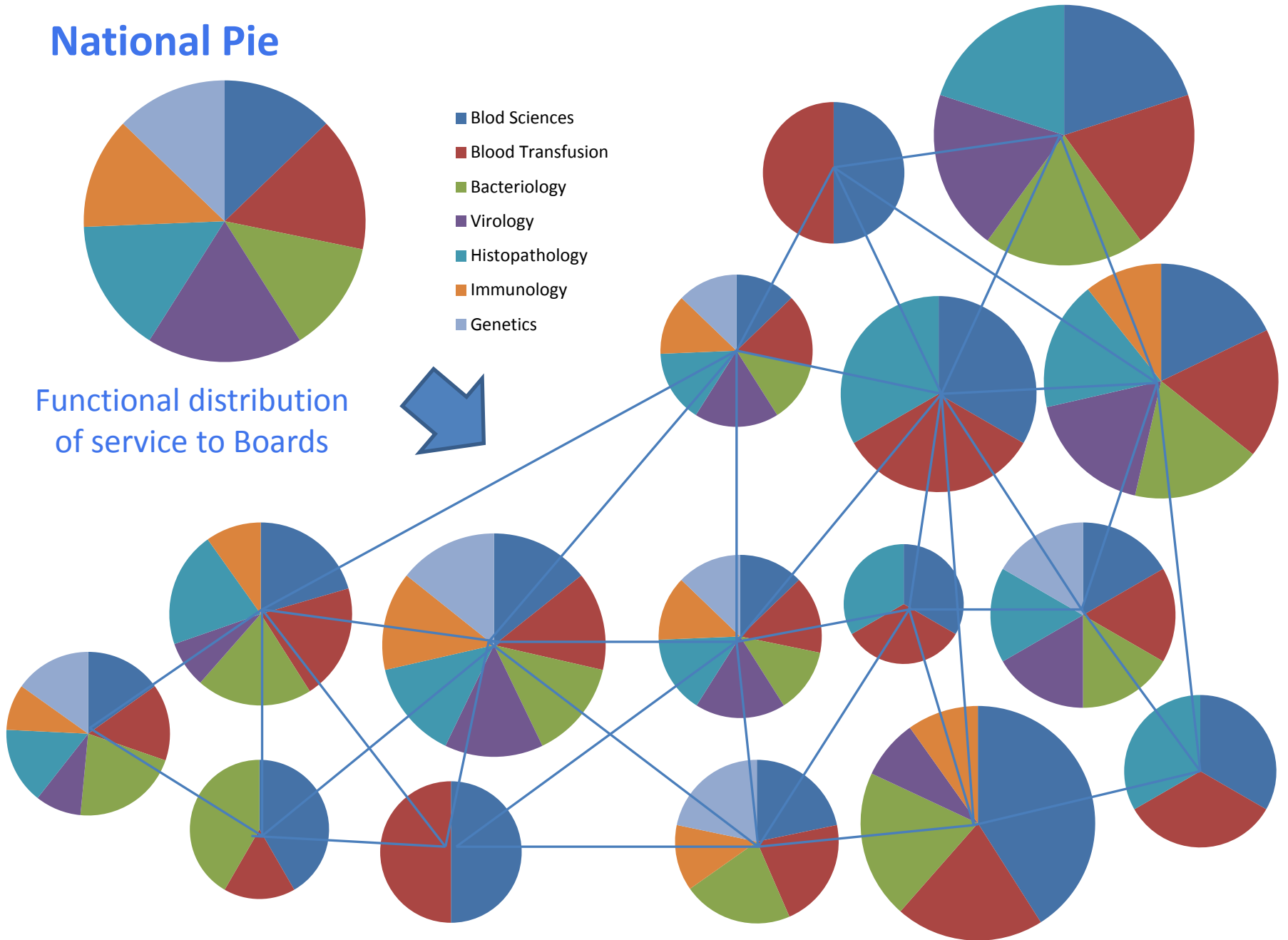Shared Services
National Laboratories Pie

Legend:
- Blod Sciences
- Blood Transfusion
- Bacteriology
- Virology
- Histopathology
- Immunology
- Genetics

Triple Aim Focus: Right Test, Right Place, Right Time

National Pie

Functional distribution of service to Boards

Legend:
- Blod Sciences
- Blood Transfusion
- Bacteriology
- Virology
- Histopathology
- Immunology
- Genetics

Triple Aim Focus: Right Test, Right Place, Right Time

# Distributed service compliant with the shared service agenda will deliver : -

- **sustainability** through a scalable, flexible, innovative service configuration.
- **resilience** through efficient and effective use of
  - workforce knowledge and skills
  - estate and physical resources
- **equity** of service across the country
- **access to latest technologies** at enabled centres accessible to all Boards.
- **increased efficiency and effectiveness** to either realise cost savings/containment or increase capacity through reduced waste and economies of scale.

National Clinical Strategy
Triple Aim   Once for Scotland
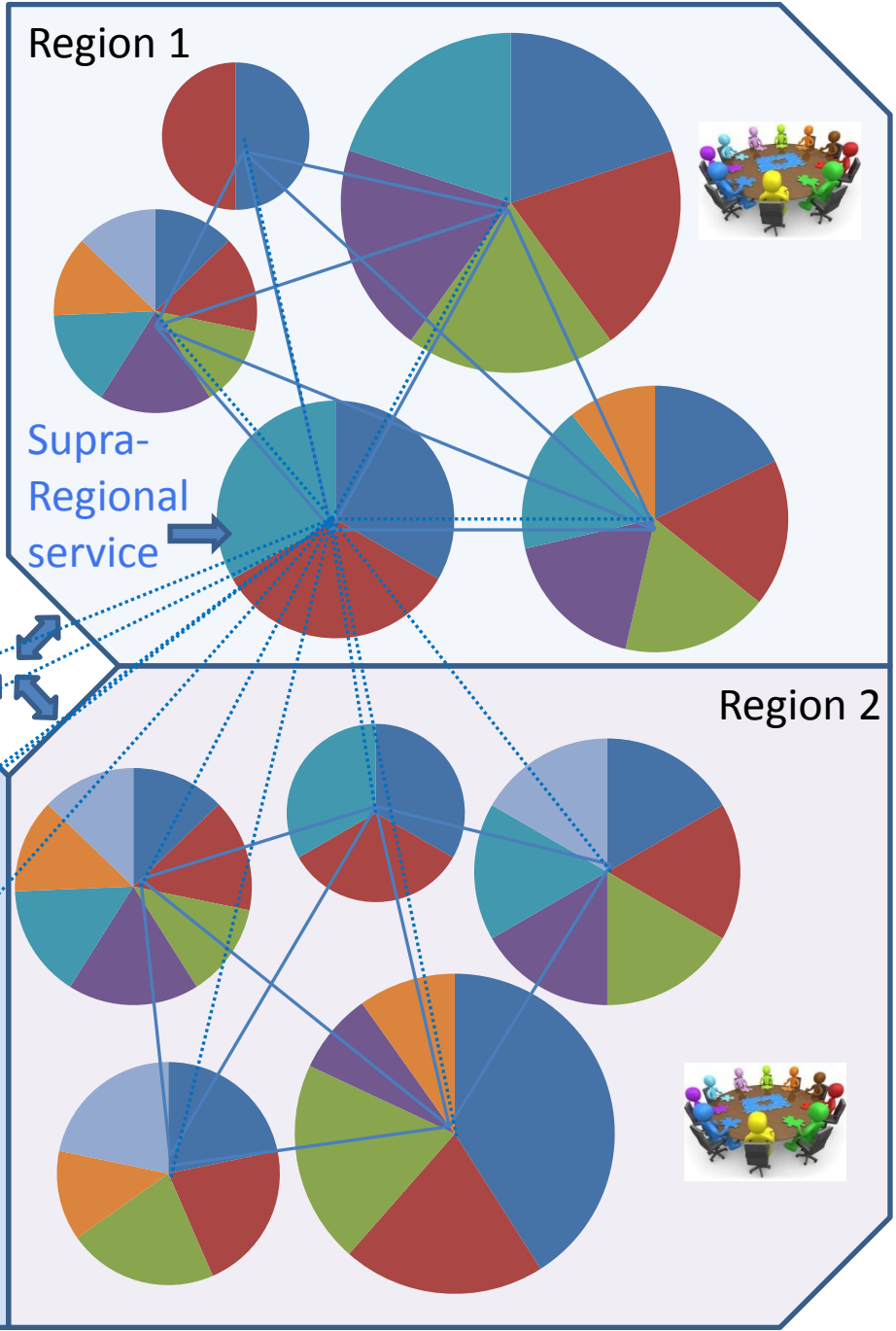
Simplify, standardise and share

-Right test
-Right place
-Right time

Governance: National service structure:
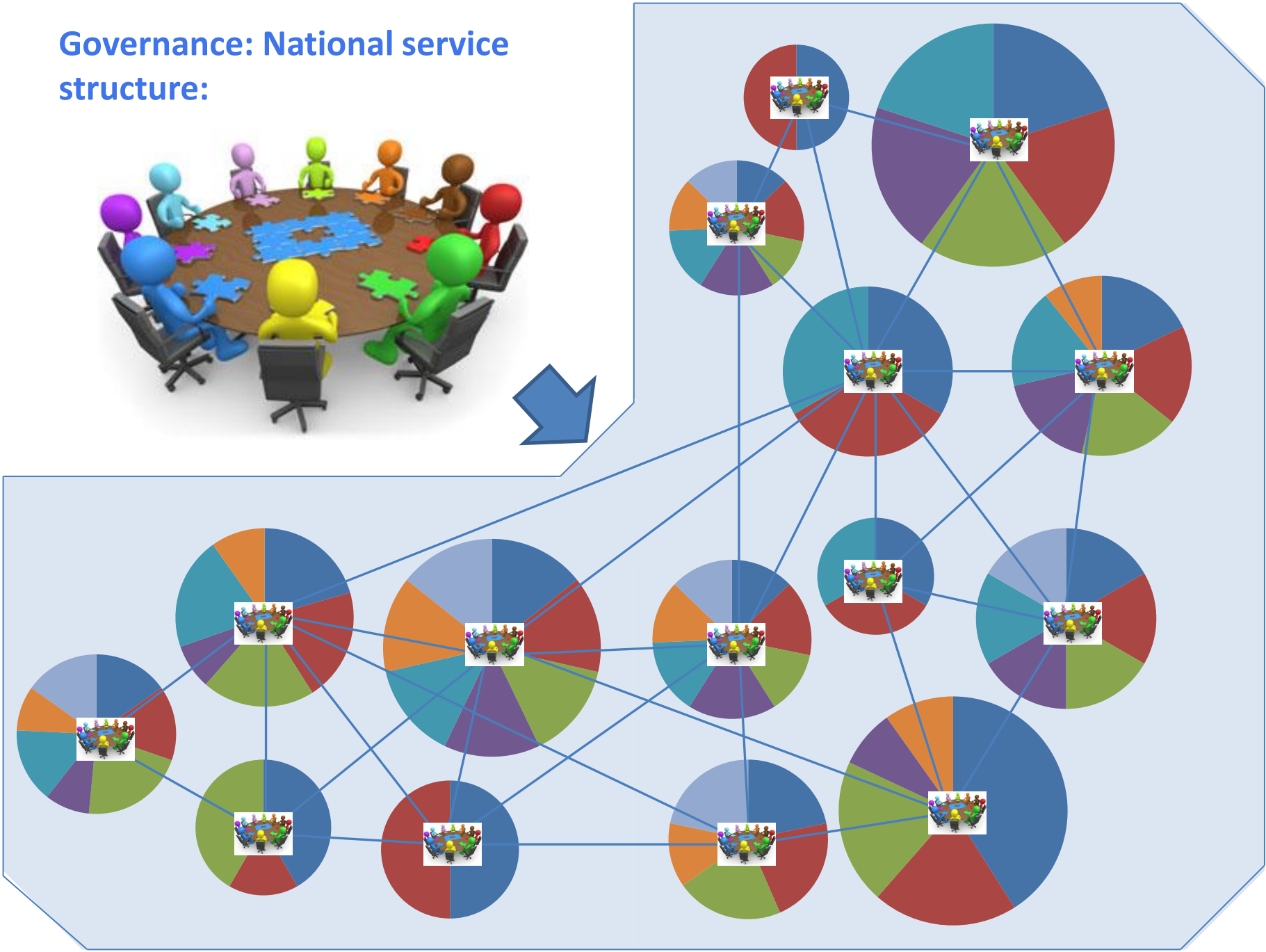
Governance: Regional delivery with national oversight.

Region 1

Supra-Regional service

Region 3

Region 2

Regional service

User/service Interface

NHS SCOTLAND

Interface and infrastructure that: -
- delivers what is needed by the users
- supports efficient, appropriate and effective use and delivery of diagnostics
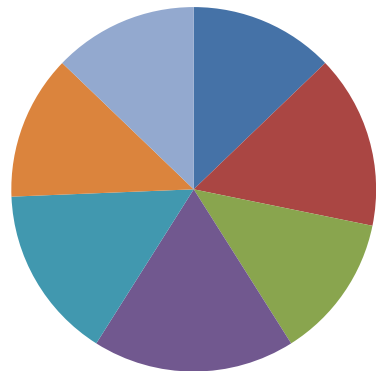- hides from the user the organisational complexity of the provider
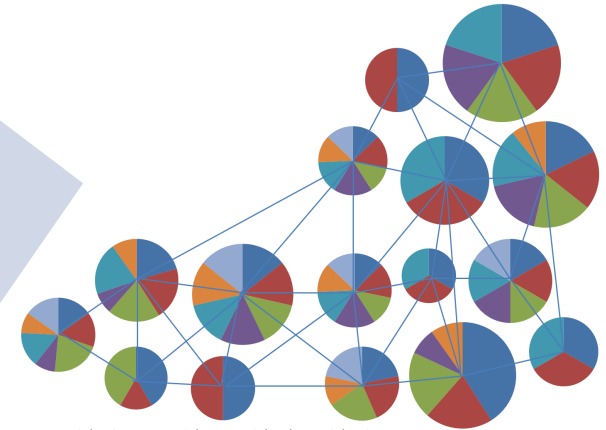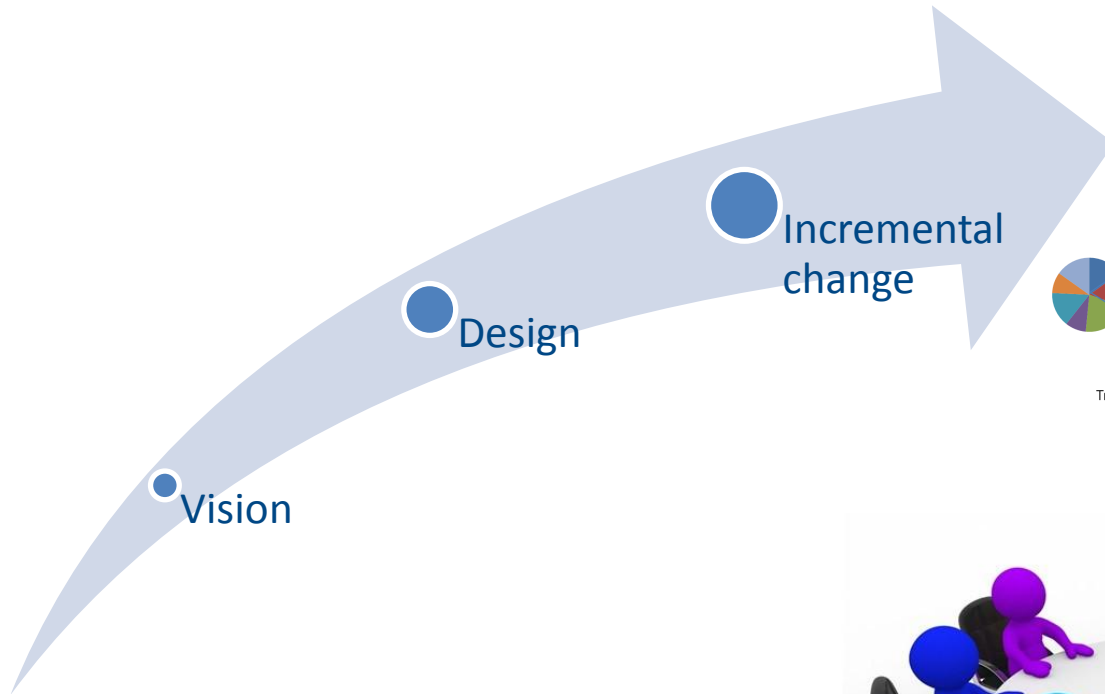
Users

Provider

Users diagram (Clinical services): Efficient, Effective, Equitable, Resilient, Affordable

Provider diagram (Laboratory services): Efficient, Effective, Equitable, Resilient, Affordable

Deliverables

Next Steps

Shared Services
Towards a Distributed Service Model

Vision

Design

Incremental change

Triple Aim Focus: Right Test, Right Place, Right Time

DSMDG

- Blod Sciences
- Blood Transfusion
- Bacteriology
- Virology
- Histopathology
- Immunology
- Genetics

5 Key questions....

How do we design and implement the correct infrastructure for the DSM that meets the needs of an evolving health care system and enables our users?

What workloads can be consolidated?

How do we identify what services must be delivered physically in each locality and ensure that they are delivered resiliently?

How do we deliver national consistency with an appropriate quality and improvement focus?

How do we deliver and demonstrate value from investment?

National Consistency?
Convergence?
Governance?

Region 1

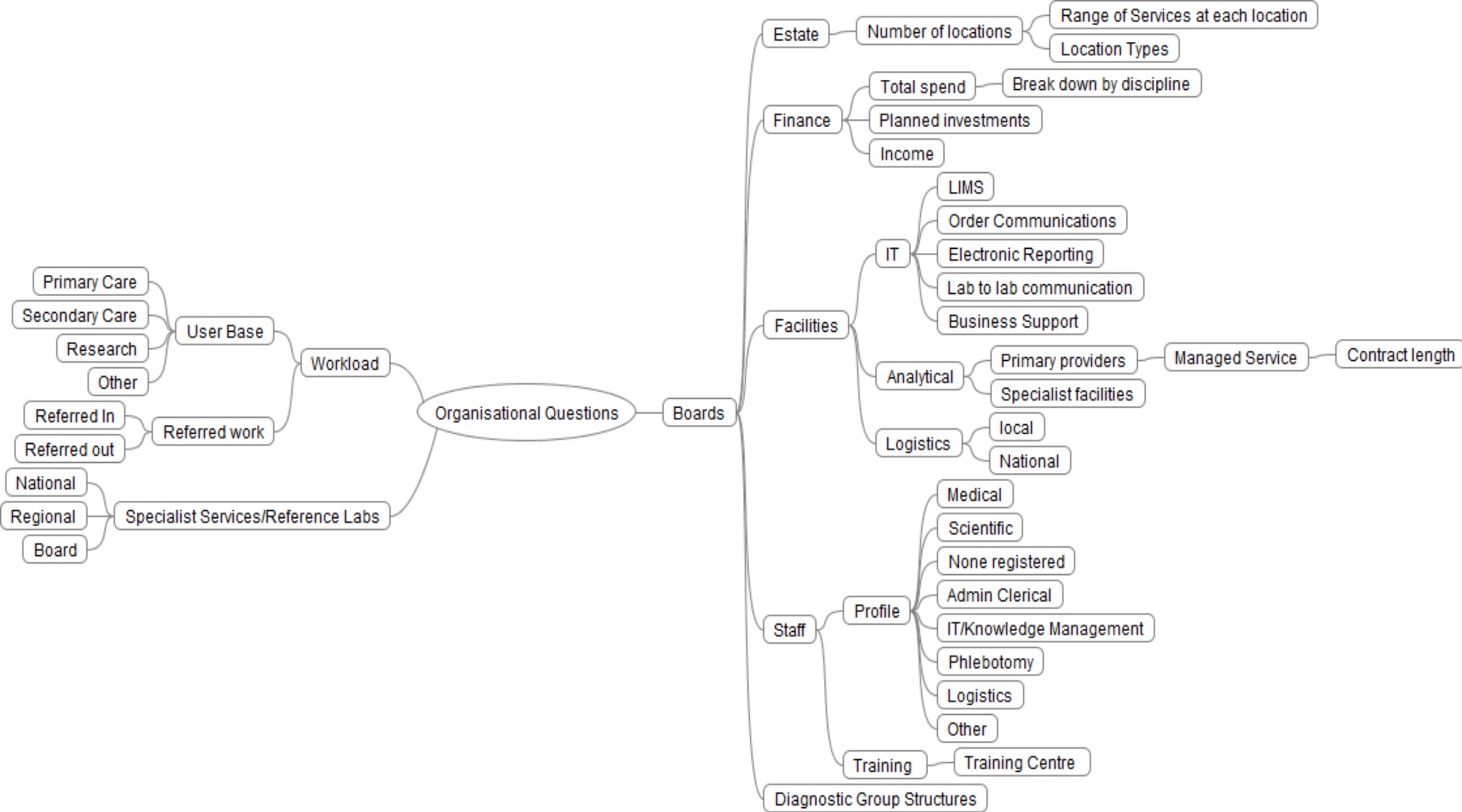Supra-Regional service

Region 3

Regional service

Region 2
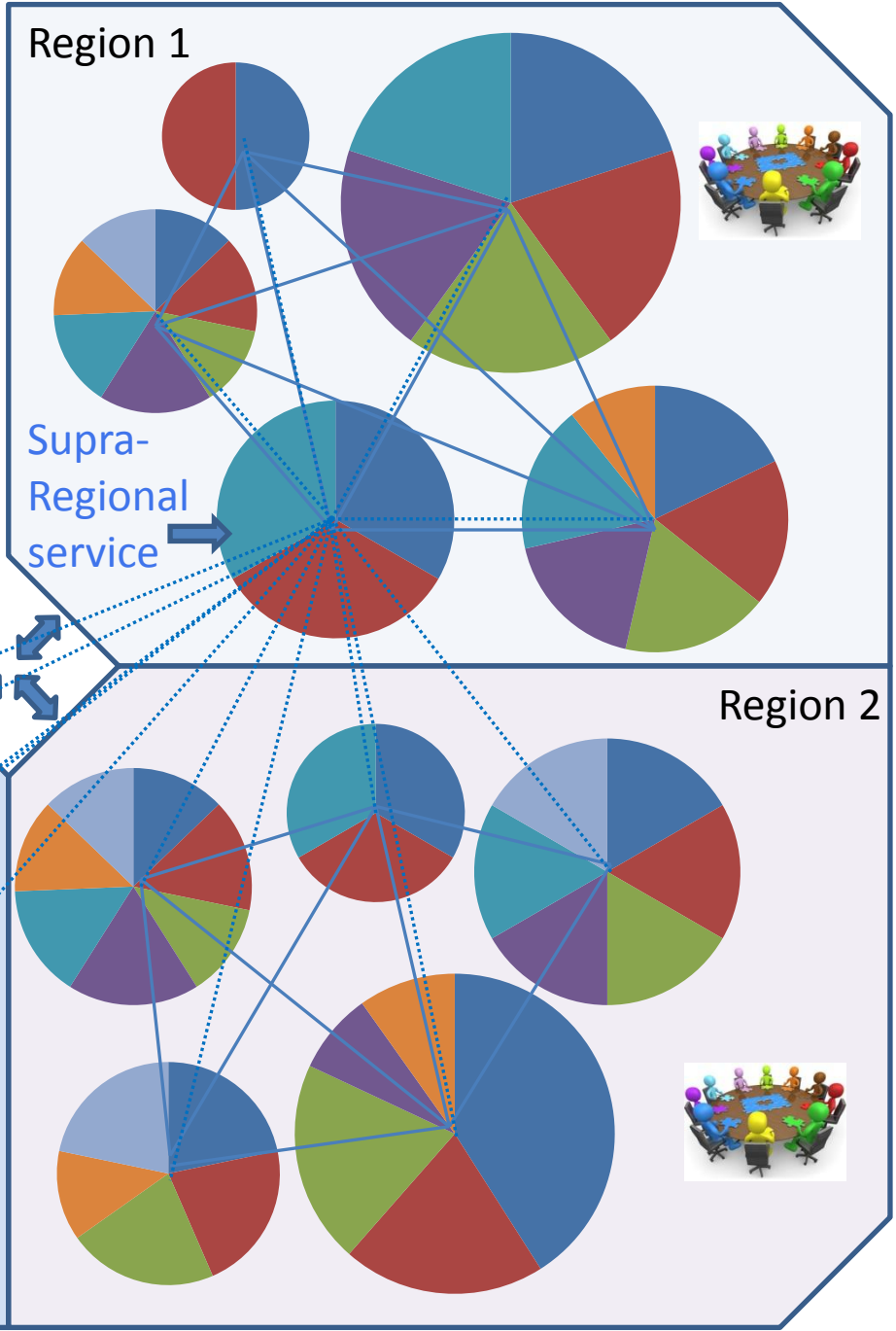
Issues

- Definition of a basic service requirement for health care units of varying size and complexity
- **Form of delivery of specialities may vary**
- Resilience
- Workforce
- **Common IT/inter-operability**
- Governance
- **National finance framework**
- **Innovation and technology**
- Point of care testing
- Demand optimisation
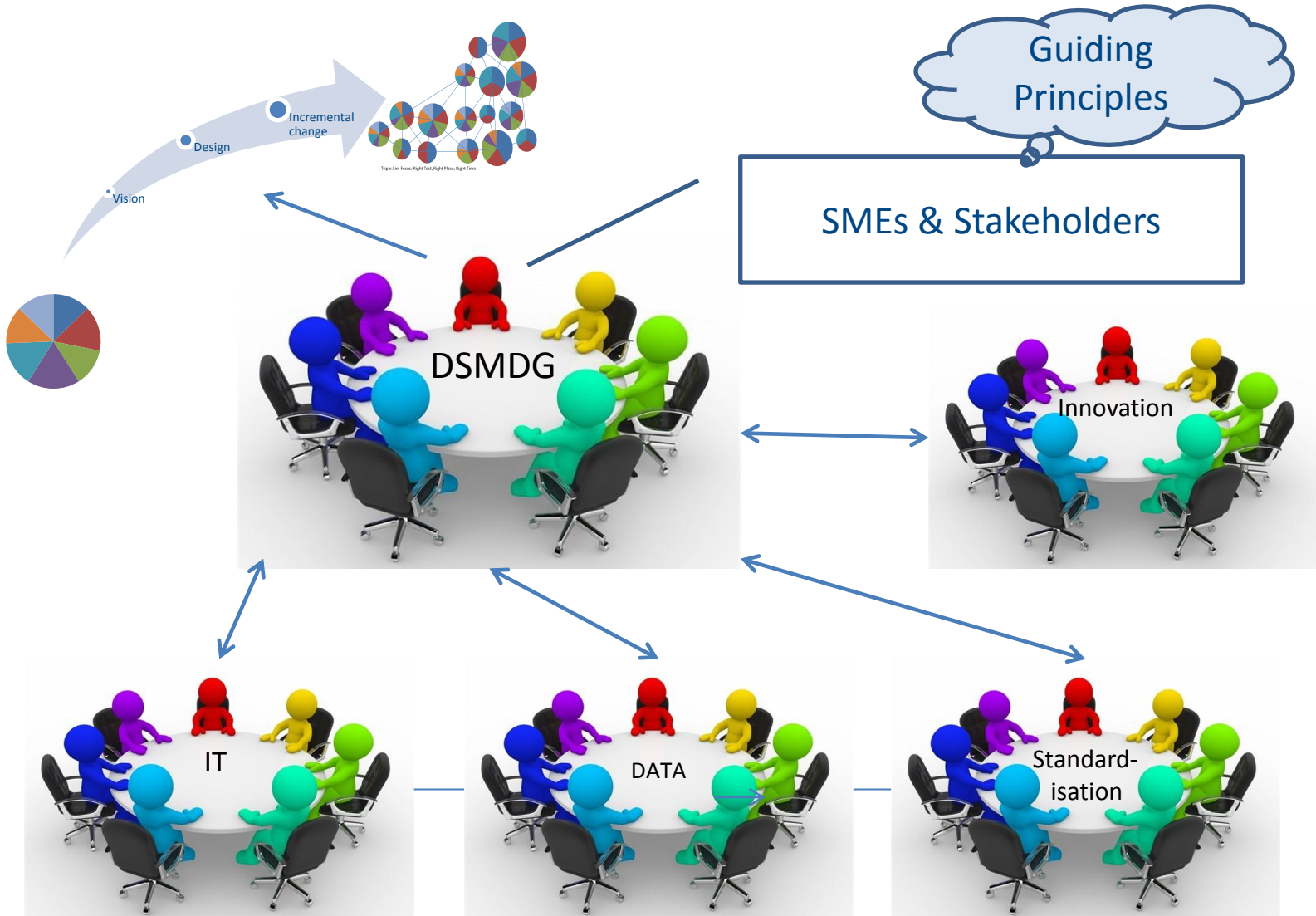- **Reduction of variation**
- Logistics

Information and data requirements

Shared Services
Towards a Distributed Service Model

Guiding Principles

SMEs & Stakeholders

Vision

Design

Incremental change

Triple Aim Focus: Right Test, Right Place, Right Time

DSMDG

Innovation

IT

DATA

Standard-isation

Other Evidence & Lessons Learned

- Similar concepts

- Different language

- Similar processes

- Same enablers

- **Data, Standardisation and IT** core to service development

NHS England Toolkit
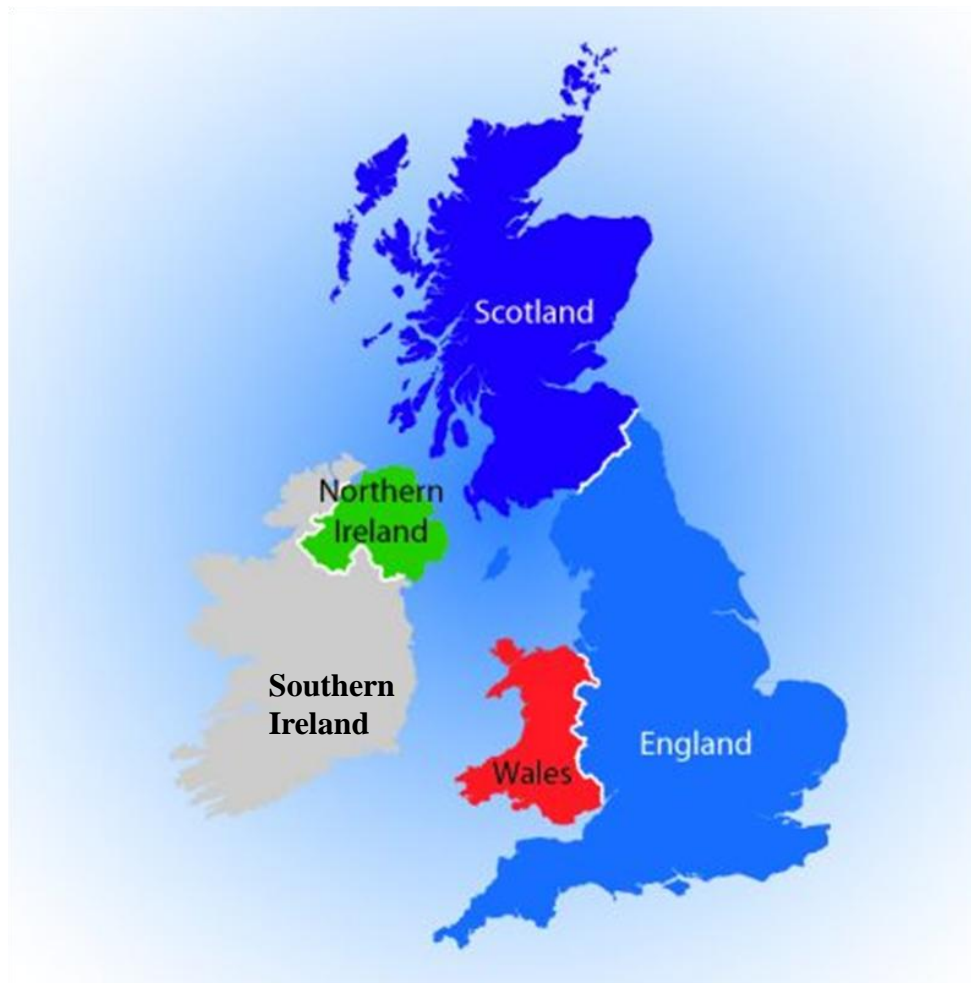
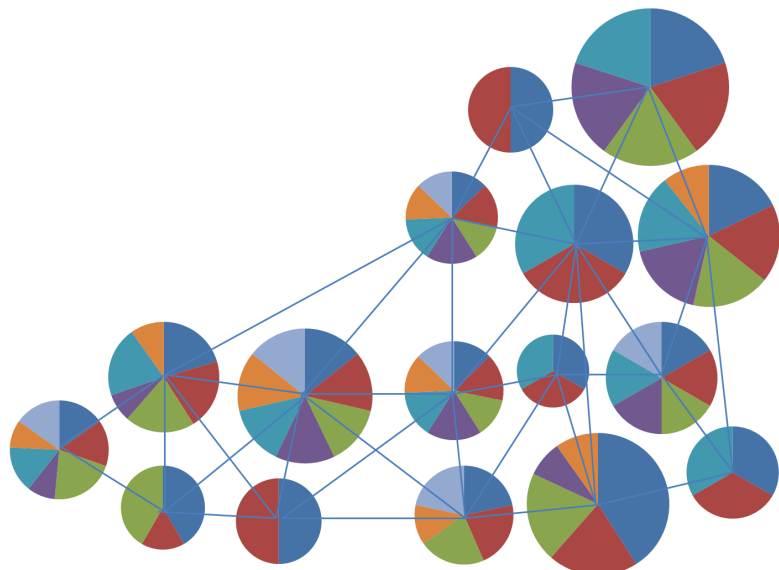| Content |
| --- |
| Project framework for document consultation |
| ESL design |
| Standard procurement template |
| IT procurement guide |
| Operational governance |
| Clinical governance |
| Legal watch points |
| Outsourcing guide |
| Standard templates for SOC & FBC |
| Due diligence guide |
| Case study – worked examples |

Triple Aim Focus: Right Test, Right Place, Right Time

Laboratory services

- Efficient
- Effective
- Equitable
- Resilient
- Affordable