

NHS Improvement pathology networking in England: the state of the nation

September 2018

We support providers to give patients safe, high quality, compassionate care within local health systems that are financially sustainable.

Contents

Foreword	3
Introduction	5
Case for change: unwarranted variation	7
The state of the nation: our work so far	9
Next steps for the sector: timelines and requirements.....	11
Map keys and principles	12
London 1	13
London 2.....	14
London 3.....	15
London 4.....	16
London 5.....	17
Midlands and East 1	18
Midlands and East 2	19
Midlands and East 3	20
Midlands and East 4	21
Midlands and East 5	22
Midlands and East 6	23
Midlands and East 7	24
Midlands and East 8	25

North 1: North East	26
North 2: West Yorkshire	27
North 3: Lancashire and South Cumbria Pathology partnership ..	28
North 4: Cheshire and Merseyside	29
North 5: Greater Manchester	30
North 6: South Yorkshire	31
North 7 (formerly North Midlands 2): Hull York Pathology Services	32
North 8 (formerly Midlands and East 9)	33
South 1: Peninsular Pathology	34
South 2: South West Pathology Services.....	35
South 3: West of England Pathology Services	36
South 4	37
South 5: Surrey and Berkshire Pathology Services	38
South 6: Southern Counties Pathology Services	39
South 7	40
South 8: Kent Pathology Services	41
Appendix 1: Grip and control: actions	42
Appendix 2: Essential services laboratory.....	43

Foreword

Unprecedented improvement is underway for pathology services across England. The vast majority of NHS pathology services are now actively working in the new network configurations, and there will be full implementation across the country by the deadline of 2021. Since we wrote to trusts in September 2017, the pace of change has been impressive.

The ambition to establish pathology networks, providing more responsive, high quality and efficient services, has existed for a decade. The clinical leadership and professional guidance of Professor Tim Evans over the past three years has helped make sure that this is now a reality for the NHS.

Consolidating pathology services allows for most consistent, clinically appropriate turnaround times ensuring the right test is available at the right time. It makes better use of our highly skilled workforce to deliver improved, earlier diagnostic services supporting better patient outcomes. Taking a hub and spoke approach to this consolidation can ensure an appropriate critical mass to support specialist diagnostics, so that patients have equal access to key tests and services are sustainable.

Since the publication of our 29 pathology networks proposal, we have been progressing workstreams to support providers in delivering the changes essential for consolidation of pathology services for England. To date, over 80% of all trusts are making progress towards networking their pathology services, while others are going through the processes to enable the networking. In 2017/18, trusts self-reported £33.6 million of pathology cost improvements – this is thought to be an underestimate of the total in-year efficiency gain. A further £30 million of savings have been identified in trust plans for 2018/19. Networks that are making progress are finding that the estimated savings NHS Improvement identified are conservative and are reporting higher opportunities are possible through a networked approach.

We continue to work with trusts, collecting and validating data, making some changes to the original networks or confirming the proposed configuration. We will continue to do so as trusts undertake the steps required to finalise their network partners where they are at variance from our proposal. We have completed our

series of chief executive workshops for most regions – these have been very useful for everyone involved and have helped us move quickly in carrying out the work of modelling and forming networks.

The NHS Improvement National Pathology Implementation Optimisation Delivery Group works to ensure creation of clinically safe and sustainable pathology services for the future and is attended by representatives of the professional organisations of the Pathology Alliance, arm's length bodies and system leaders. It is satisfied with the configuration of the proposed networks and the support being given by NHS Improvement, but it is essential we maintain a high level of transparency in our system engagement and proposed change to ensure success. We expect individual trusts and networks to maintain a similar level of transparency as they progress networks with all stakeholders, including staff.

I note that other devolved nations are following our progress carefully and have begun similar programmes of change.

Thank you to the NPIODG, chief executives, leaders from the professions, Professor Tim Evans and others for ongoing commitment to delivering high quality, efficient pathology services for patients.

Professor Adrian Newland

Specialist Clinical Advisor and Chair of the National Pathology Implementation and Optimisation Delivery Group

Introduction

In September 2017 we signalled to all acute hospital trusts in England that they would need to change how they work and collaborate to drive out unwarranted variation in pathology services. Today, the first tranche of pathology networks is fully operational, and we expect a third of all the networks to be fully operational by the end of this financial year, with the rest to follow by 2021.

To meet this deadline, there is much to do. We need to scale up from the one in five pathology networks that are operational today, to at least a third by the end of 2018/19. The formation of pathology networks is a core part of implementing national policy on improving quality and productivity. 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.

The 29 pathology networks will work collegiately with other trusts locally and on a supra-regional or national level to ensure patients have access to expert clinical diagnostic services. We want to support the sustainability of these services, recognising the challenges they face in training, recruitment, retention and adoption of new technologies.

The announcement in the spring by the Secretary of State for Health and Social Care awarding £68 million to organisations progressing projects networking their pathology service demonstrates the commitment to delivering this change to the sector. We have also been working closely with the Office for Life Sciences to support the speedy adoption of the [Life Sciences: industrial strategy](https://www.gov.uk/government/publications/life-sciences-industrial-strategy)¹ for the benefit of our patients and the NHS.

This report presents the network maps, an assessment of progress to date and the next steps to meet the 2021 deadline.

¹ www.gov.uk/government/publications/life-sciences-industrial-strategy

This work is an important example of how the NHS can collectively act on national policy, drawing on clinical leadership, data and a clear strategy, to deliver clear service improvements for patients. While not yet fully implemented, this nevertheless stands as evidence that the whole NHS can work collaboratively in the interests of patients and taxpayers, and sets a clear precedent for how future clinical and operational improvements can be delivered in future.

Dr Jeremy Marlow
Executive Director,
Operational Productivity

Professor Tim Evans
National Director for Clinical
Productivity

Case for change: unwarranted variation

Pathology data collected from providers, and now available on the Model Hospital, shows considerable variation in terms of pay and non-pay cost. This variation is not linked to size or type of hospital but does seem to be linked to the desire to adopt best practice and innovative ways of working.

We are aware, for example, that advanced roles enable services to deliver faster turnaround times at a lower pay cost. As a first step trusts should seek to adopt advanced roles and undertake skill-mix reviews. A saving of approximately £50 million can be achieved in the short term by trusts with below average work rate efficiencies, achieving a staff saving of up to 10% through a more efficient use of their workforce. A further saving of approximately £29 million can be realised if all trusts achieve staff efficiency in line with the top 25% and this can be completed in advance of networking.

The data collected so far also demonstrates that maximum overarching efficiency for blood sciences requires a hub where direct access activity is more than 50% of the total pathology workload and which is located in the centre with the highest overall activity. This takes advantage of the higher concentration of workforce providing a more efficient test per full-time equivalent (FTE) seen in these centres.

We plan to release the pathology quality assurance dashboard (PQAD) to demonstrate the current variation in quality of services. However, all services must be accredited to ISO 15189 standards where these apply and an equivalent recognised accreditation standard in other settings.

Figures 1 to 3 below give examples of the pay cost variation and non-pay cost variation shown by the pathology data for acute trusts.

Figures 1 2: Ratio of medical laboratory assistant (MLA) and biomedical scientist (BMS) staff to total laboratory staff in acute teaching trusts

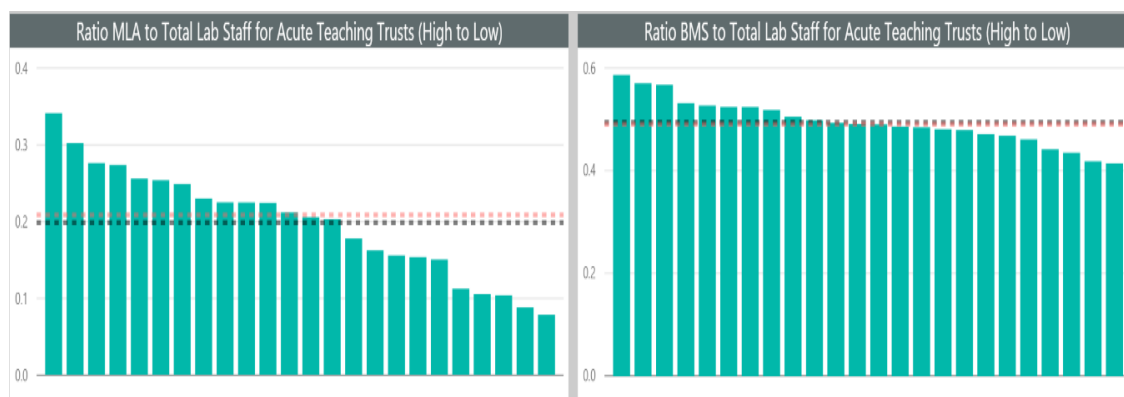
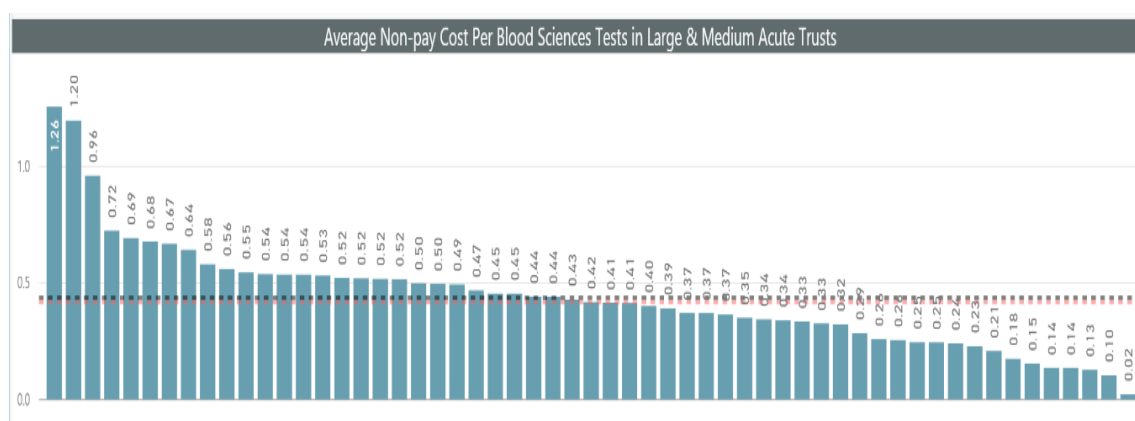


Figure 3 Average non-pay cost per blood sciences test in large and medium acute trusts



The state of the nation: our work so far

Figure 4: Current state of engagement across pathology networks

Level of engagement	Agreement on local partnership operating model	Agreement on specialist testing supra-networks
91%	80%	87%

We have developed and are continuing to develop the following forms of support.

- **Twenty-nine pathology networks:** All the networks are making progress, and many are appointing programme directors. We expect trusts to move promptly to consolidate services.
- **Toolkits:** We have created and continue to develop a range of tools and advice on clinical and corporate structures including key documents on due diligence and governance models. These are available on our [Improvement Hub](https://improvement.nhs.uk/resources/pathology-networks-toolkit/)² and include:
 - business case template
 - due diligence guide
 - operational governance guide
 - consolidation framework
 - essential services laboratory design: blood sciences
 - legal watchpoints guide
 - clinical governance toolkit.
- **Specialist testing:** We identified a small subset of high complexity services – paediatric pathology services across England – and are seeking to form a single collaborative network to share expertise, training, protocols and maximise efficiency. We have also identified, for example, electron

² <https://improvement.nhs.uk/resources/pathology-networks-toolkit/>

microscopy as a specialist service at risk and are developing a network to drive sustainability of this key service.

- **Intensive support:** We are working closely with the most challenged trusts to ensure opportunities are realised. See Appendix 1 for our advice on realising year-on-year savings aligned to networking.
- **Procurement advice:** We are working closely with the Department of Health and Social Care (DHSC) category tower provider³ to develop framework specifications that meet the clinical requirement of services and drive networking.
- **Alignment of pathology networking with national programmes:** The specifications of the national programmes for genomics, antimicrobial resistance, sepsis, digital pathology and artificial intelligence funding and specifications are aligned to work as an enabler of networking.

³ Category towers are the procurement function of the DHSC 'Future Operating Model'.

Next steps for the sector: timelines and requirements

Using the data on the [Model Hospital portal](#) trusts can identify areas to prioritise. Services must demonstrate adequate grip and control as cost efficiency savings can be realised in year as networks are formed (see Appendix 1). We are reassured by progress and level of engagement to date, but networks now need to act immediately to support realisation of available efficiencies.

Centres identified as essential services laboratories (ESLs) should begin to model and to start the transition to delivering this service model, including putting in place training, recruitment, operating and procurement strategies.

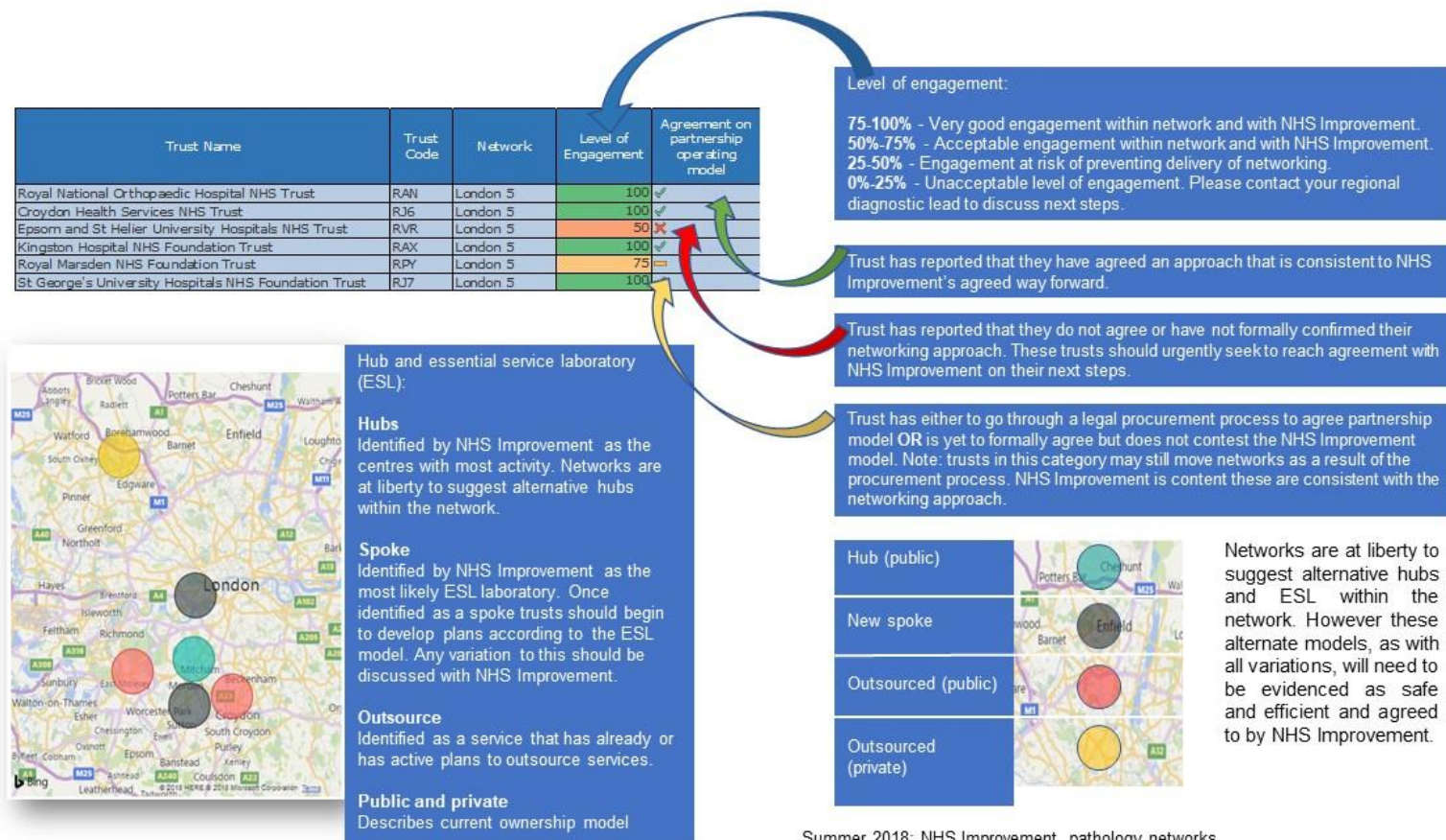
Centres identified as hubs should support the preparatory work to consolidate any testing activity that can be moved in advance of further networking (see Appendix 2).

It is vital that staff and subject matter experts are engaged at all stages of the process. Executive commitment is also essential in the next phase of developing networks.

As mentioned, we will shortly be writing individually to trust about our proposed next steps and timelines for progress.

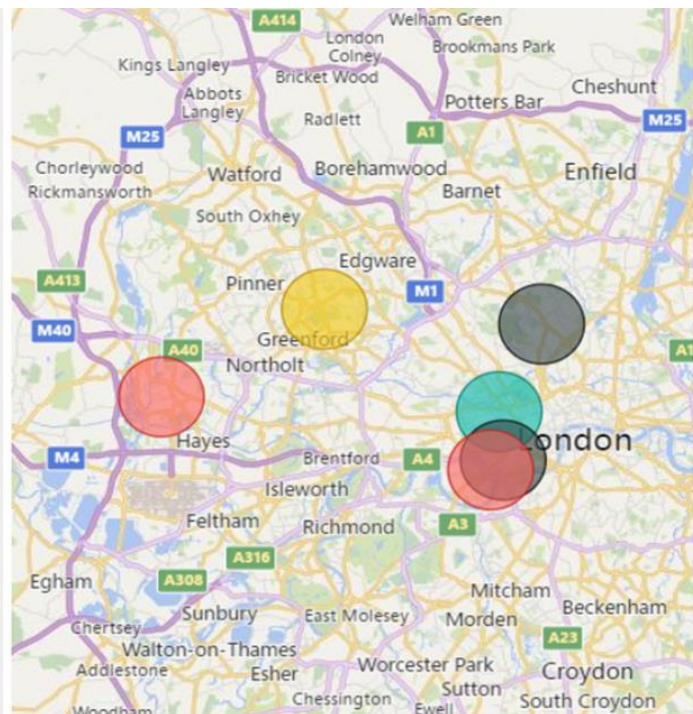
The data on the following pages is taken directly from the dashboard for the 29 pathology networks in England and reflects NHS Improvement's assessment of data at 1 September 2018.

Map keys and principles



Summer 2018: NHS Improvement pathology networks

London 1



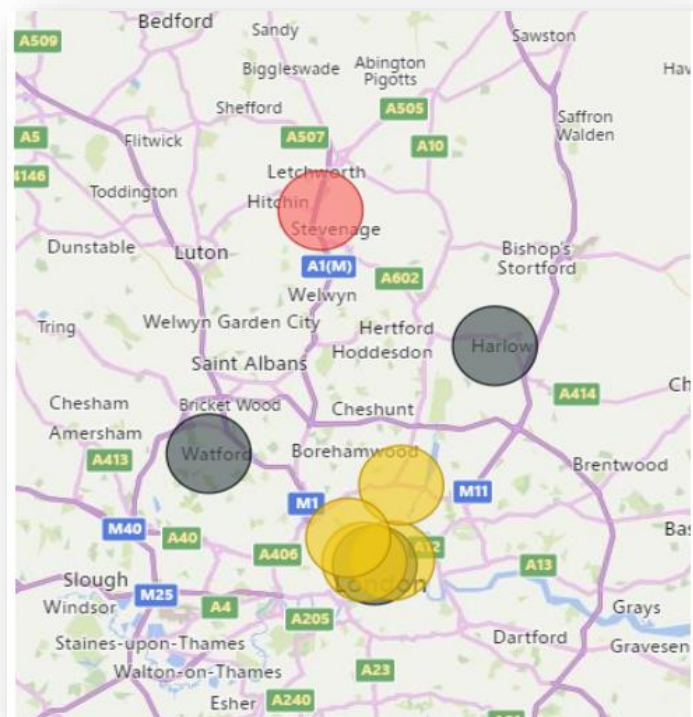
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Chelsea and Westminster Hospital NHS Foundation Trust	RQM	London 1	100	✓
Hillingdon Hospitals NHS Foundation Trust	RAS	London 1	100	✓
Imperial College Healthcare NHS Trust	RYJ	London 1	100	✓
Royal Brompton & Harefield NHS Foundation Trust	RT3	London 1	100	—
Whittington Hospital NHS Trust	RKE	London 1	100	—
London North West Healthcare NHS Trust	R1K	London 1	100	—



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
London 1	73,943,000.00	57,151,409.00	6,696,249.28	5,832,398.08	69,680,056.36	4,262,943.64

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

London 2



Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Great Ormond Street Hospital for Children NHS Foundation Trust	RP4	London 2	100	✓
Moorfields Eye Hospital NHS Foundation Trust	RP6	London 2	100	✓
North Middlesex University Hospital NHS Trust	RAP	London 2	100	✓
Princess Alexandra Hospital NHS Trust	RQW	London 2	100	—
East and North Hertfordshire NHS Trust	RWH	London 2	100	—
Royal Free London NHS Foundation Trust	RAL	London 2	100	✓
University College London Hospitals NHS Foundation Trust	RRV	London 2	100	✓
West Hertfordshire Hospitals NHS Trust	RWG	London 2	100	—

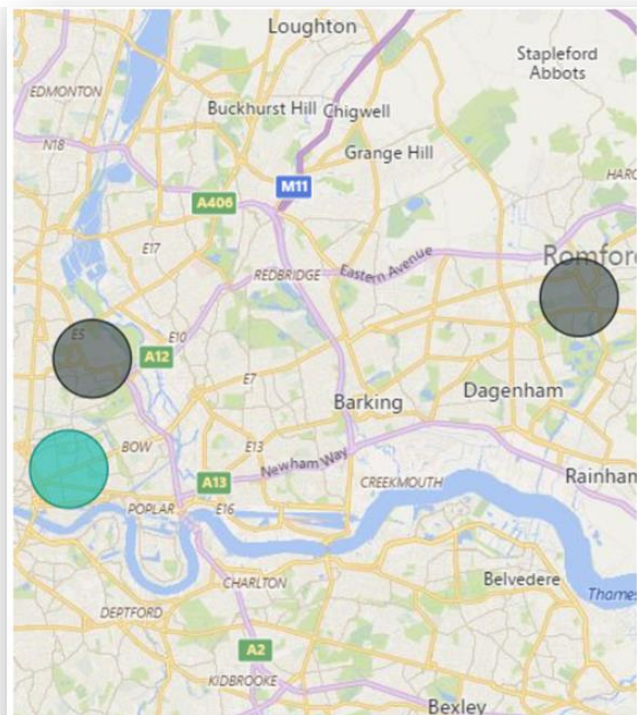


Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
London 2	31,295,000.00		12,914,132.14	10,568,003.35	23,482,135.49	7,812,864.51

Please note, this network is missing 2016/17 pathology data for Royal Free London NHS Foundation Trust.

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

London 3



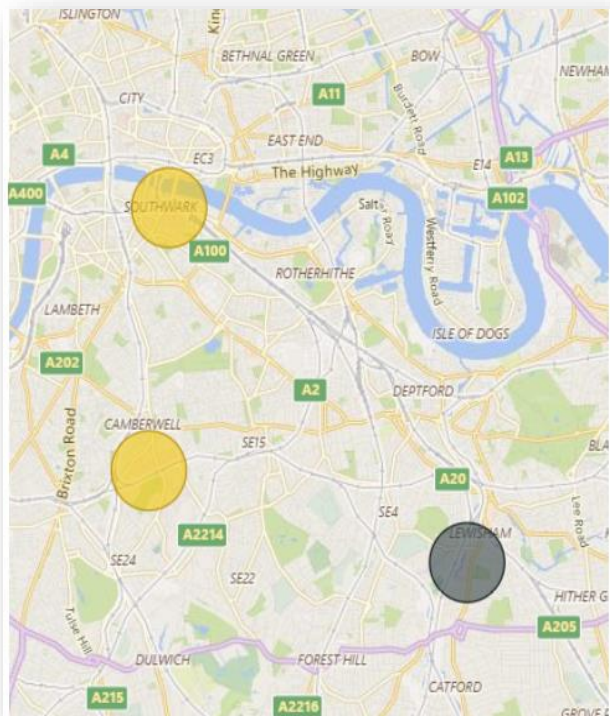
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Barking, Havering and Redbridge University Hospitals NHS	RF4	London 3	75	
Barts Health NHS Trust	R1H	London 3	75	
Homerton University Hospital NHS Foundation Trust	RQX	London 3	75	



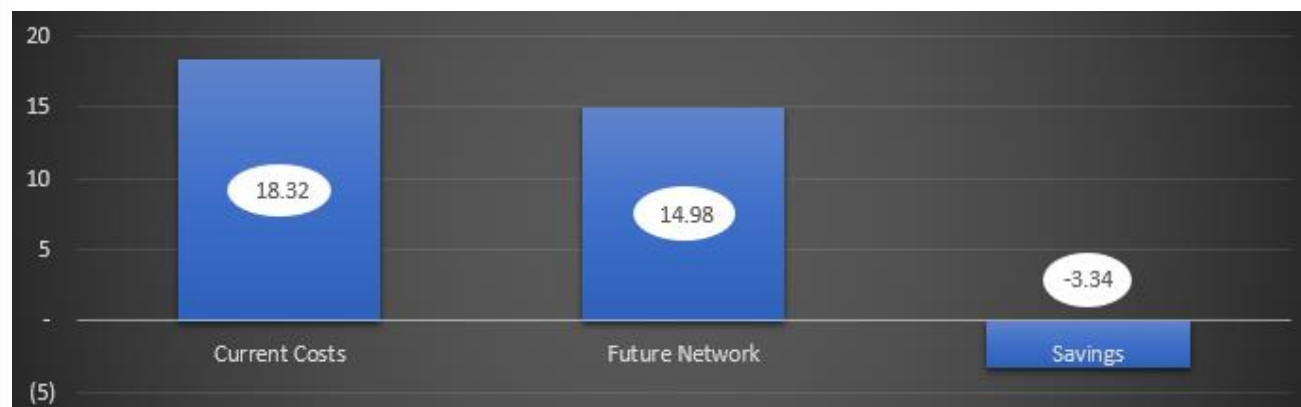
Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
London 3	62,382,677.00	36,719,954.00	14,179,481.64	5,494,270.02	56,393,705.66	5,988,971.34

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

London 4



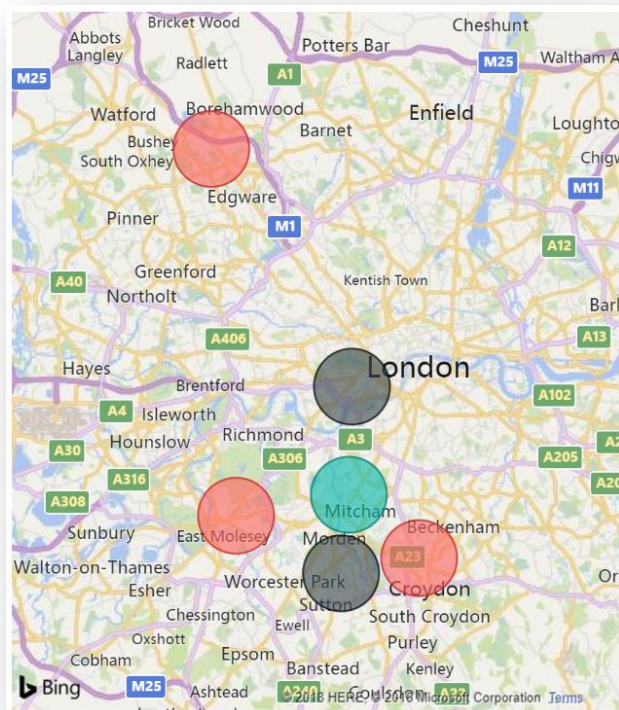
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Guy's and St Thomas' NHS Foundation Trust	RJ1	London 4	100	✓
King's College Hospital NHS Foundation Trust	RJZ	London 4	100	✓
Lewisham and Greenwich NHS Trust	RJ2	London 4	100	✗



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
London 4	18,321,000.00		11,747,981.93	3,231,028.68	14,979,010.61	3,341,989.39

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

London 5



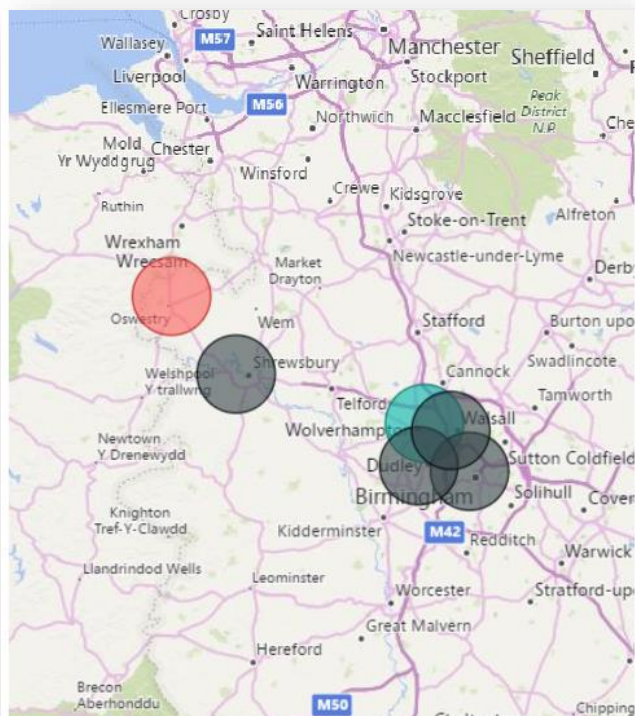
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Royal National Orthopaedic Hospital NHS Trust	RAN	London 5	100	✓
Croydon Health Services NHS Trust	RJ6	London 5	100	✓
Epsom and St Helier University Hospitals NHS Trust	RVR	London 5	60	✗
Kingston Hospital NHS Foundation Trust	RAX	London 5	100	✓
Royal Marsden NHS Foundation Trust	RPY	London 5	75	⚠
St George's University Hospitals NHS Foundation Trust	RJ7	London 5	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
London 5	48,279,748.00	28,894,000.00	10,714,950.48	6,531,431.23	46,140,381.72	2,139,366.28

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

Midlands and East 1



Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Dudley Group NHS Foundation Trust	RNA	Mid 1	100	✓
Robert Jones & Agnes Hunt Orthopaedic Hospital NHS Foundation Trust	RL1	Mid 1	100	✓
Royal Wolverhampton NHS Trust	RL4	Mid 1	100	✓
Sandwell and West Birmingham Hospitals NHS Trust	RXK	Mid 1	100	✓
Shrewsbury and Telford Hospital NHS Trust	RXW	Mid 1	80	⚠
Walsall Healthcare NHS Trust	RBK	Mid 1	100	✓



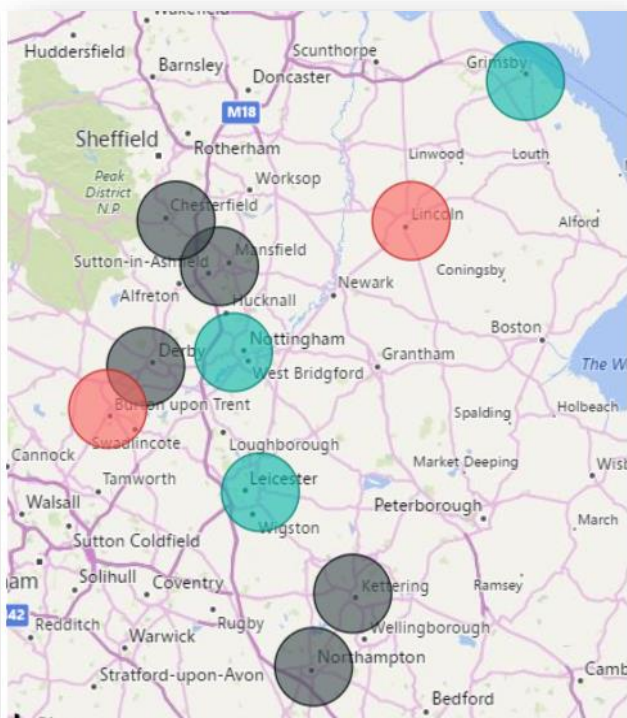
Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
Mid 1	43,022,000.00	10,402,481.00	17,839,265.14	9,955,785.94	38,197,532.09	4,824,467.91

Please note, one trust has been excluded from the calculated figures for this network due to validation issues with their 2016/17 pathology data: Walsall Healthcare NHS Trust.

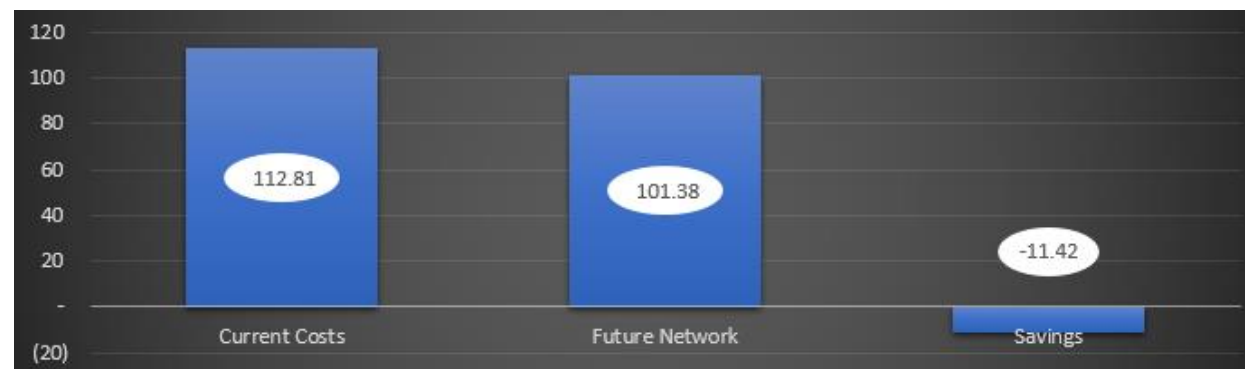
Networks are at liberty to suggest alternative hubs and spokes within the network

Summer 2018: NHS Improvement pathology networks

Midlands and East 2



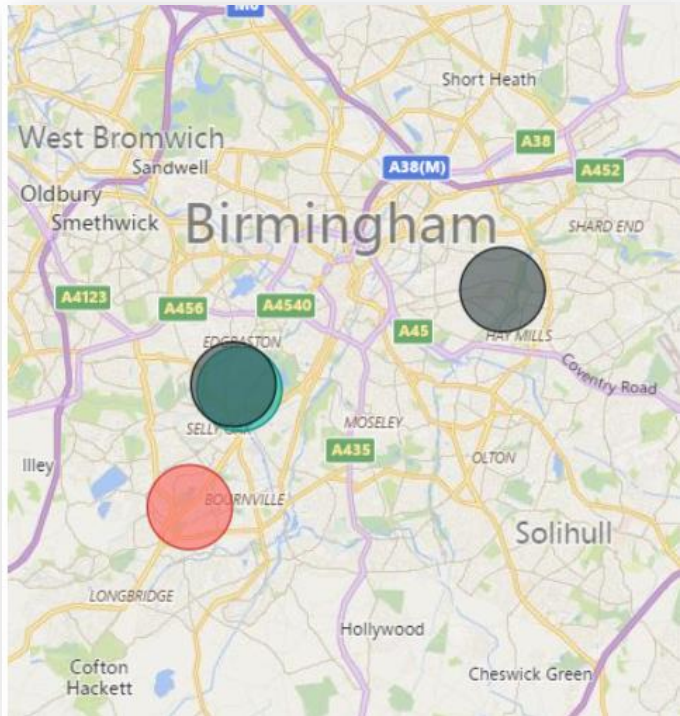
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Chesterfield Royal Hospital NHS Foundation Trust	RFS	Mid 2	60	
University Hospitals of Derby and Burton NHS Foundation Trust	RTG	Mid 2	50	
Kettering General Hospital NHS Foundation Trust	RNQ	Mid 2	60	
Northampton General Hospital NHS Trust	RNS	Mid 2	30	
Nottingham University Hospitals NHS Trust	RX1	Mid 2	75	
Sherwood Forest Hospitals NHS Foundation Trust	RK5	Mid 2	75	
United Lincolnshire Hospitals NHS Trust	RWD	Mid 2	85	✓
North Lincolnshire and Goole NHS Foundation Trust		Mid 2	85	✓
University Hospitals of Leicester NHS Trust	RWE	Mid 2	75	



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
Mid 2	112,807,586.74	64,711,254.74	27,489,860.10	9,182,491.29	101,383,606.13	11,423,980.61

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

Midlands and East 3



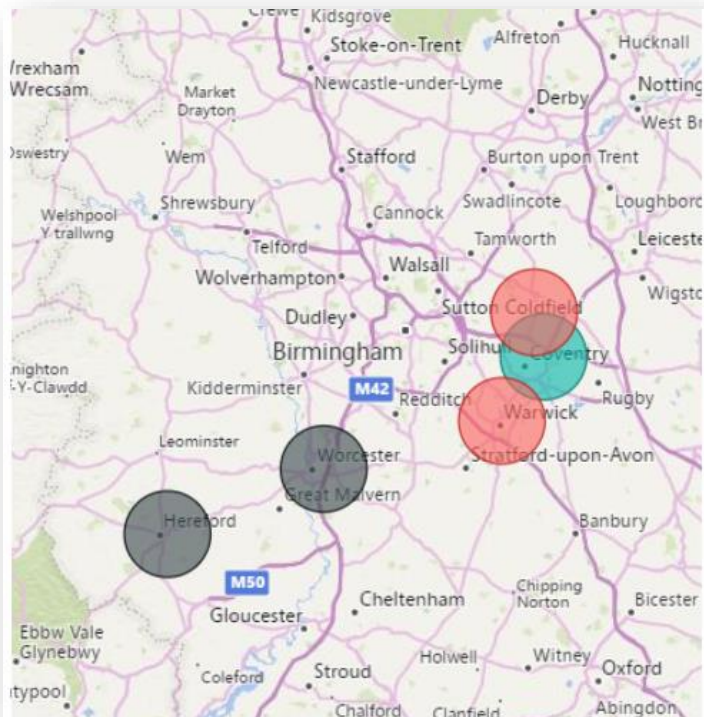
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Birmingham Womens & Childrens NHS Foundation Trust	RLU	Mid 3	25	0
Royal Orthopaedic Hospital NHS Foundation Trust	RRJ	Mid 3	25	0
University Hospitals Birmingham NHS Foundation Trust	RRK	Mid 3	25	0



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
Mid 3	52,143,000.00	27,633,133.00	12,560,135.68	7,830,020.02	48,023,288.70	4,119,711.30

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

Midlands and East 4



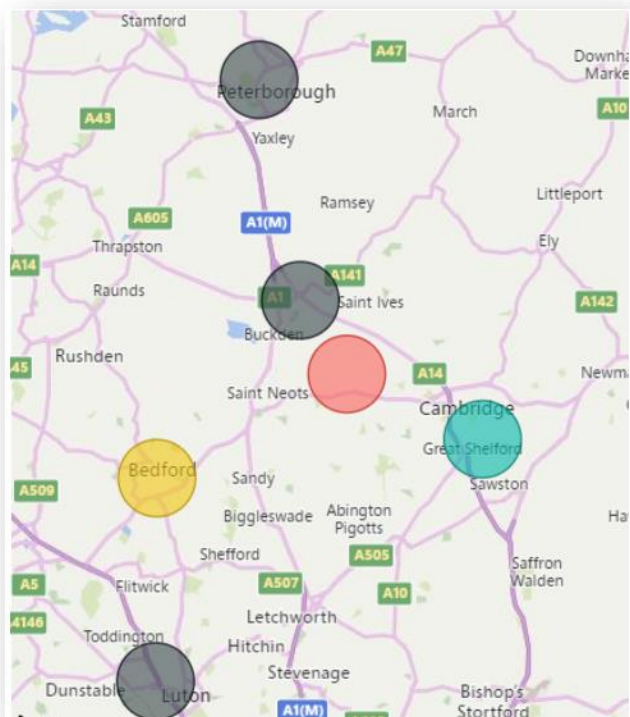
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
George Eliot Hospital NHS Trust	RLT	Mid 4	100	✓
South Warwickshire NHS Foundation Trust	RJC	Mid 4	100	✓
University Hospitals Coventry and Warwickshire NHS Trust	RKB	Mid 4	100	✓
Worcestershire Acute Hospitals NHS Trust	RWP	Mid 4	100	✓
Wye Valley NHS Trust	RLQ	Mid 4	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
Mid 4	38,639,203.00	24,149,000.00	9,671,152.52	3,999,773.77	37,819,926.30	819,276.71

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

Midlands and East 5



Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Bedford Hospital NHS Trust	RC1	Mid 5	60	—
Cambridge University Hospitals NHS Foundation Trust	RGT	Mid 5	50	✗
Papworth Hospital NHS Foundation Trust	RGM	Mid 5	50	✗
Luton and Dunstable University Hospital NHS Foundation Trust	RC9	Mid 5	60	—
North West Anglia NHS Foundation Trust	RGN	Mid 5	50	✗



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
Mid 5	18,588,000.00		9,728,852.32	4,683,829.68	14,412,682.00	4,175,317.99

Please note, this network is missing 2016/17 pathology data for one trust: Cambridge University Hospitals NHS Foundation Trust, which was in the former The Pathology Partnership network which dissolved in 2016/17.

Networks are at liberty to suggest alternative hubs and spokes within the network
Summer 2018: NHS Improvement pathology networks

Midlands and East 6

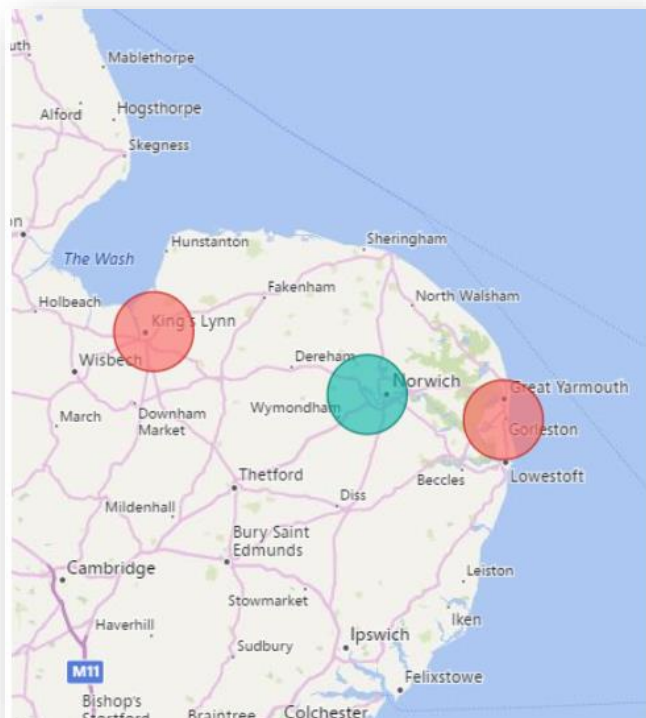


Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
East Suffolk and North Essex NHS Foundation Trust	RDE	Mid 6	100	✓
West Suffolk NHS Foundation Trust	RGR	Mid 6	100	✓

All the proposed trusts in this network were part of The Pathology Partnership (TPP) which has now dissolved, therefore data is not available for modelling purposes.

Networks are at liberty to suggest alternative hubs and spokes within the network
Summer 2018: NHS Improvement pathology networks

Midlands and East 7



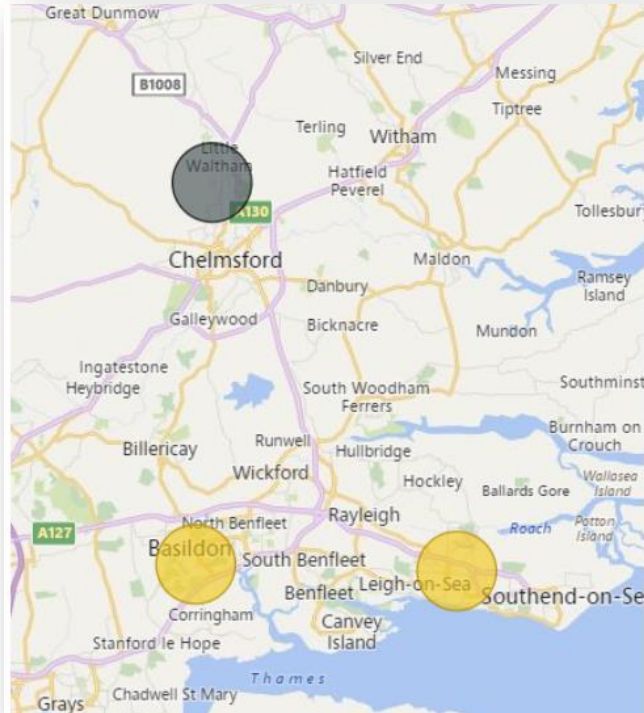
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
James Paget University Hospitals NHS Foundation Trust	RGP	Mid 7	100	✓
Norfolk and Norwich University Hospitals NHS Foundation Trust	RM1	Mid 7	100	✓
Queen Elizabeth Hospital King's Lynn NHS Foundation Trust	RCX	Mid 7	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
Mid 7	26,184,222.44	26,184,222.44			26,184,222.44	0.00

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

Midlands and East 8



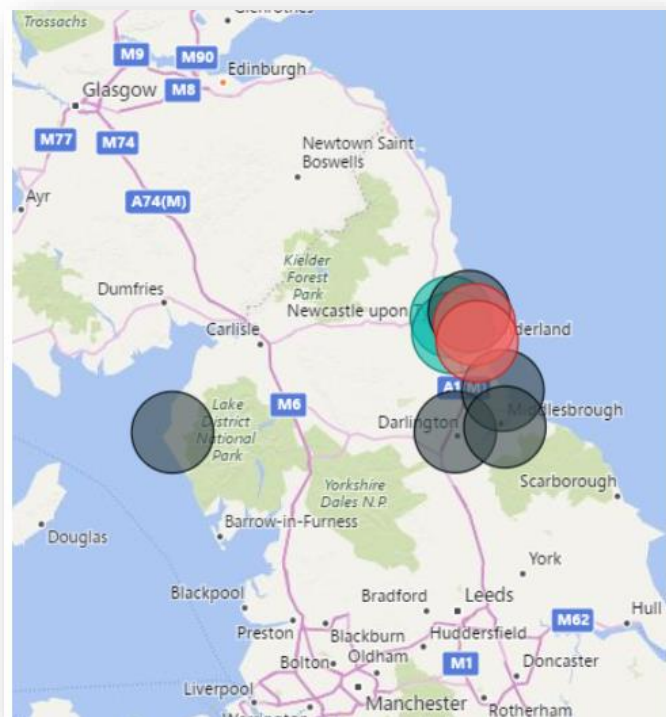
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Basildon and Thurrock University Hospitals NHS Foundation Trust	RDD	Mid 8	85	✓
Mid Essex Hospital Services NHS Trust	RQ8	Mid 8	100	—
Southend University Hospital NHS Foundation Trust	RAJ	Mid 8	85	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
Mid 8	8,159,000.00		4,936,090.48	1,650,574.97	6,586,665.46	1,572,334.54

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

North 1: North East



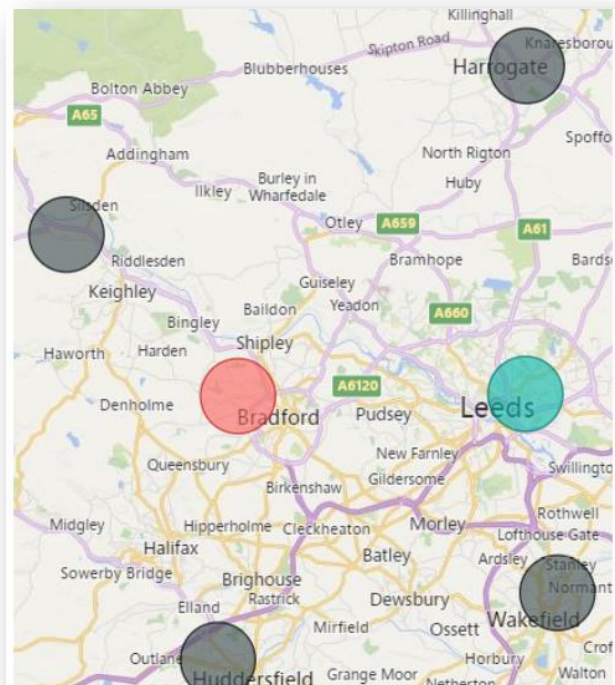
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
City Hospitals Sunderland NHS Foundation Trust	RLN	North 1	100	✓
County Durham and Darlington NHS Foundation Trust	RXP	North 1	100	✓
Gateshead Health NHS Foundation Trust	RR7	North 1	100	✓
Newcastle Upon Tyne Hospitals NHS Foundation Trust	RTD	North 1	100	✓
North Cumbria University Hospitals NHS Trust	RNL	North 1	100	✓
North Tyneside and Hartlepool NHS Foundation Trust	RVW	North 1	100	✓
Northumbria Healthcare NHS Foundation Trust	RTF	North 1	100	✓
South Tyneside Hospitals NHS Foundation Trust	RTR	North 1	100	✓
South Tyneside NHS Foundation Trust	RE9	North 1	100	✓



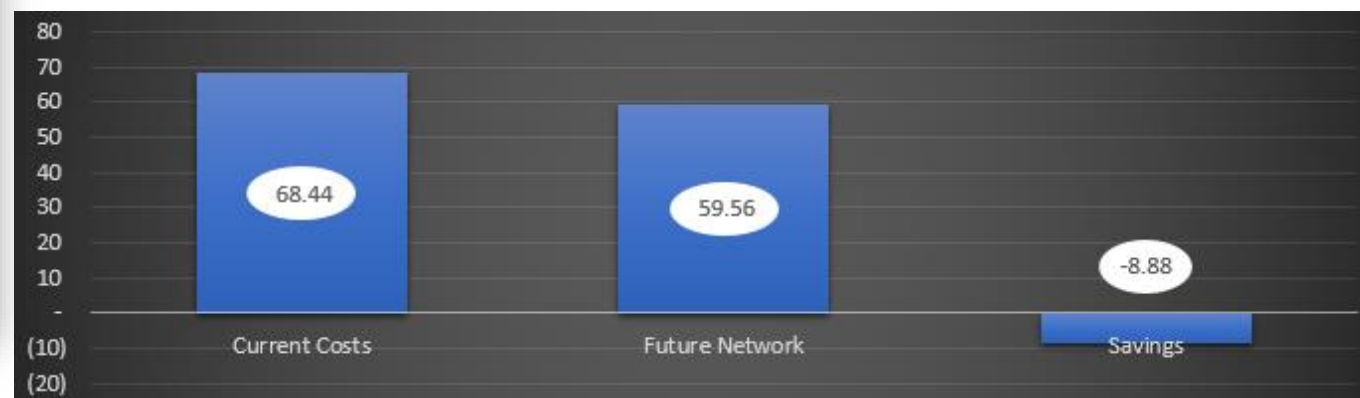
Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
North 1	96,559,000.00	42,738,434.00	32,097,302.15	11,966,910.22	86,802,646.37	9,756,353.63

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

North 2: West Yorkshire



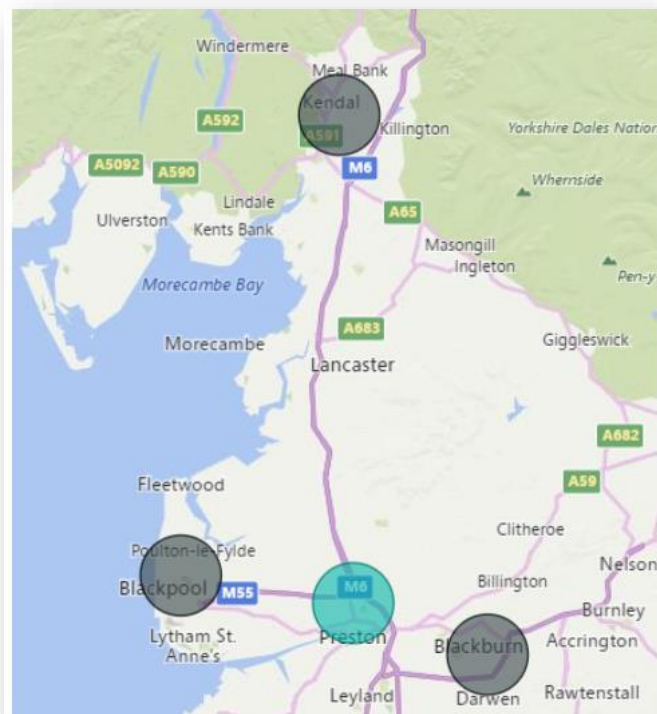
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Airedale NHS Foundation Trust	RCF	North 2	75	✗
Bradford Teaching Hospitals NHS Foundation Trust	RAE	North 2	75	✗
Calderdale and Huddersfield NHS Foundation Trust	RWY	North 2	75	✗
Harrogate and District NHS Foundation Trust	RCD	North 2	75	✗
Leeds Teaching Hospitals NHS Trust	RR8	North 2	75	✗
Mid Yorkshire Hospitals NHS Trust	RXF	North 2	75	✗



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
North 2	68,438,000.00	36,410,883.00	15,420,736.54	7,727,990.37	59,559,609.91	8,878,390.09

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

North 3: Lancashire and South Cumbria Pathology partnership



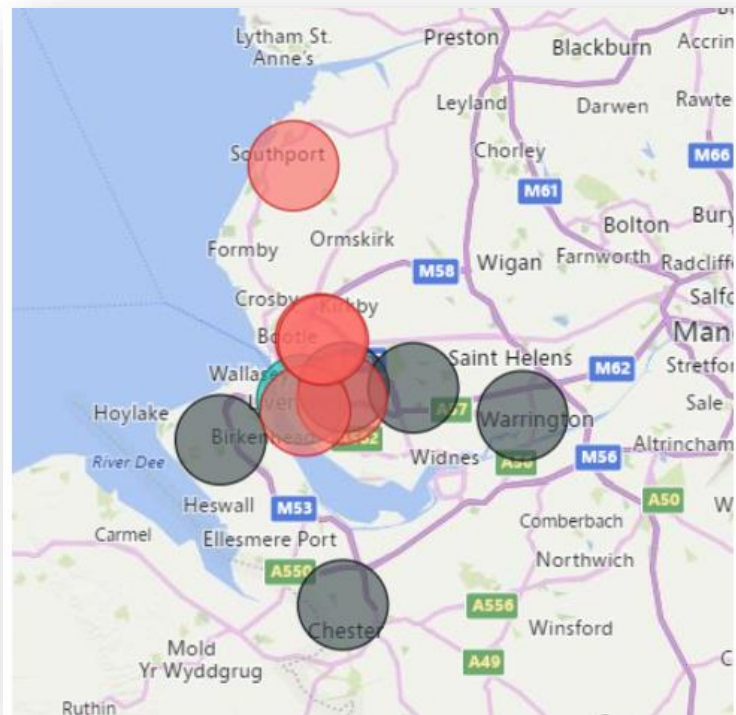
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Blackpool Teaching Hospitals NHS Foundation Trust	RXL	North 3	100	✓
East Lancashire Hospitals NHS Trust	RXR	North 3	100	✓
Lancashire Teaching Hospitals NHS Foundation Trust	RXN	North 3	100	✓
University Hospitals of Morecambe Bay NHS Foundation Trust	RTX	North 3	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
North 3	42,952,000.00	13,517,454.00	15,864,540.25	7,089,025.13	36,471,019.38	6,480,980.63

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

North 4: Cheshire and Merseyside



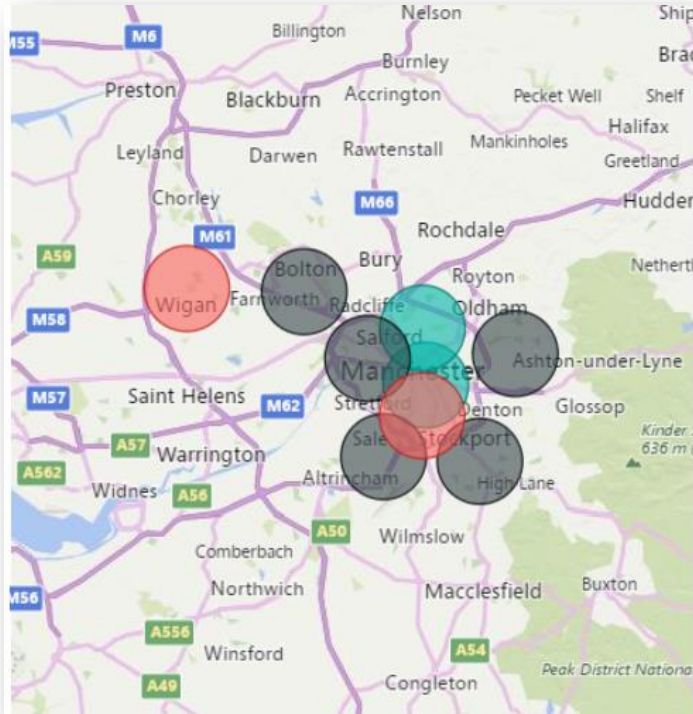
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Aintree University Hospital NHS Foundation Trust	REM	North 4	100	✓
Alder Hey Childrens NHS Foundation Trust	RBS	North 4	85	—
Countess of Chester Hospital NHS Foundation Trust	RJR	North 4	85	—
Clatterbridge Cancer Centre NHS FT		North 4	100	✓
Liverpool Heart & Chest Hospital NHS Foundation Trust	RBQ	North 4	100	✓
Liverpool Womens NHS Foundation Trust	REP	North 4	100	✓
Royal Liverpool and Broadgreen University Hospitals NHS T	RQ6	North 4	100	—
Southport and Ormskirk Hospital NHS Trust	RVY	North 4	100	✓
St Helens & Knowsley Hospital Services NHS Trust	RBN	North 4	85	—
Walton Centre NHS Foundation Trust	RET	North 4	85	✓
Warrington and Halton Hospitals NHS Foundation Trust	RWW	North 4	85	✓
Wirral University Teaching Hospital NHS Foundation Trust	RBL	North 4	85	—



Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
North 4	75,400,074.00	30,045,066.00	26,177,574.56	9,102,939.90	65,325,580.46	10,074,493.53

North 5: Greater Manchester



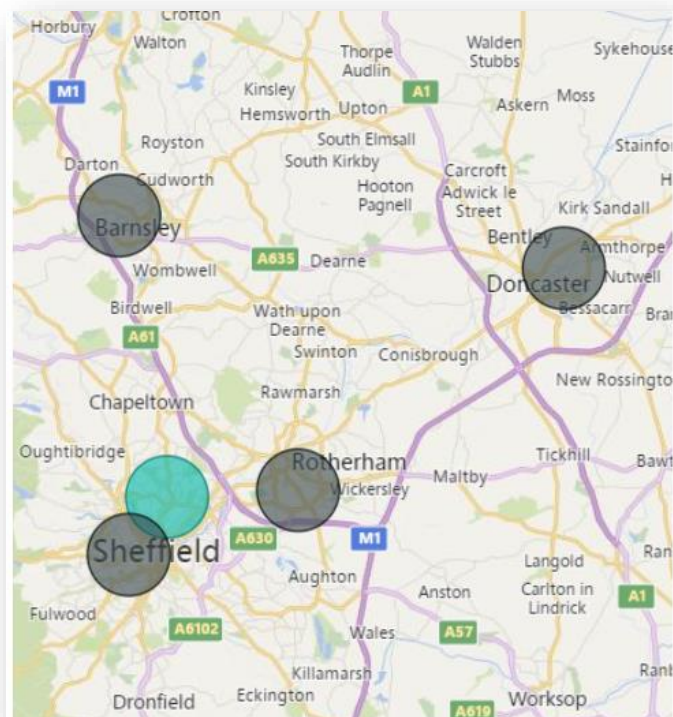
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Bolton NHS Foundation Trust	RMC	North 5	100	✓
Manchester University NHS Foundation Trust	RW3	North 5	100	✓
Christie NHS Foundation Trust	RBV	North 5	100	✓
Pennine Acute Hospitals NHS Trust	RW6	North 5	100	✓
Salford Royal NHS Foundation Trust	RM3	North 5	100	✓
Stockport NHS Foundation Trust	RWJ	North 5	100	✓
Tameside and Glossop Integrated Care NHS Foundation Trust	RMP	North 5	100	✓
Wrightington, Wigan and Leigh NHS Foundation Trust	RRF	North 5	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
North 5	96,772,820.00	44,974,417.00	23,669,283.00	10,812,035.65	79,455,735.65	17,317,084.35

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

North 6: South Yorkshire



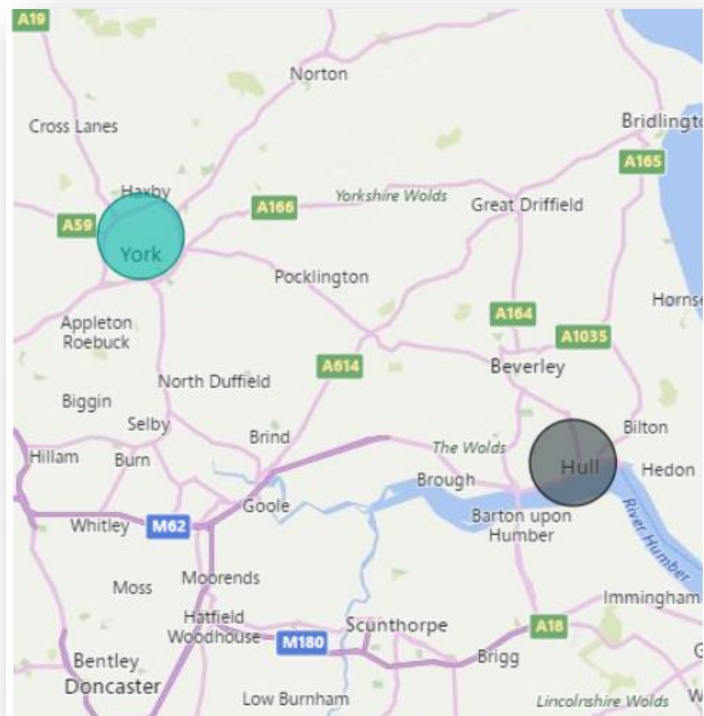
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Barnsley Hospital NHS Foundation Trust	RFF	North 6	100	✓
Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust	RP5	North 6	100	✓
Rotherham NHS Foundation Trust	RFR	North 6	100	✓
Sheffield Childrens NHS Foundation Trust	RCU	North 6	100	✓
Sheffield Teaching Hospitals NHS Foundation Trust	RHQ	North 6	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
North 6	57,845,000.00	30,063,741.00	14,096,136.25	7,338,334.08	51,498,211.33	6,346,788.66

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

North 7 (formerly North Midlands 2: Hull York Pathology Services)



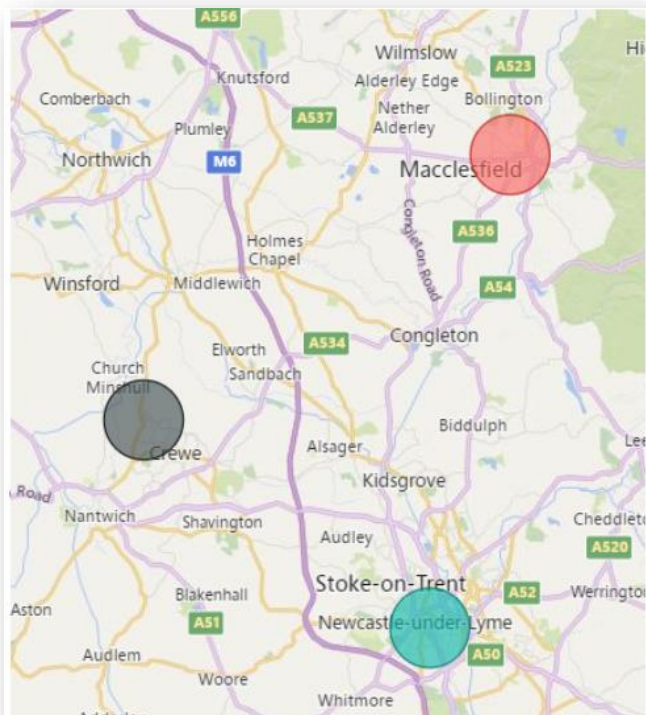
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Hull and East Yorkshire Hospitals NHS Trust	RWA	North 7	75	
York Teaching Hospital NHS Foundation Trust	RCB	North 7	75	



Networks are at liberty to suggest alternative hubs and spokes within the network
Summer 2018: NHS Improvement pathology networks

Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
North 7	26,802,000.00	13,145,690.00	8,313,034.52	2,304,091.99	23,762,816.51	3,039,183.49

North 8 (formerly Midlands and East 9)



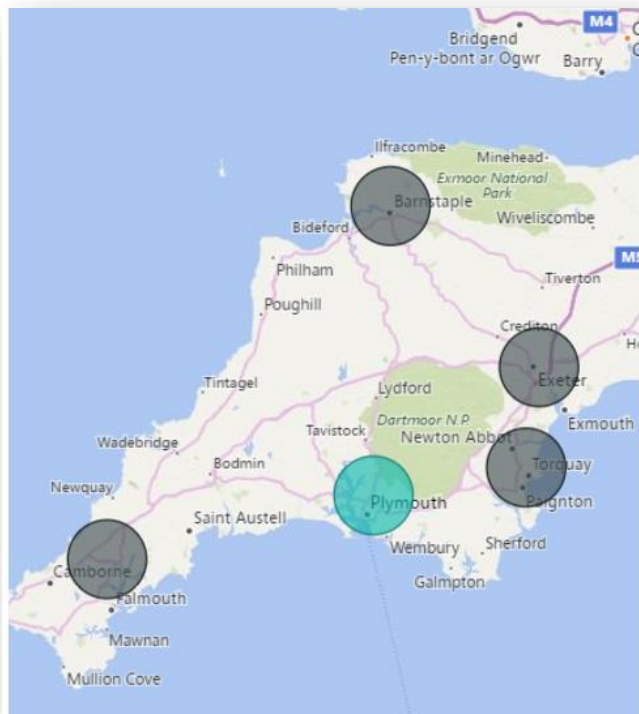
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
East Cheshire NHS Trust	RJN	Mid 9	100	✓
Mid Cheshire Hospitals NHS Foundation Trust	RBT	Mid 9	100	✓
University Hospitals of North Midlands NHS Trust	RJE	Mid 9	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
Mid 9	27,242,000.00	16,867,822.00	6,113,866.19	2,714,425.66	25,696,113.85	1,545,886.15

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

South 1: Peninsular Pathology



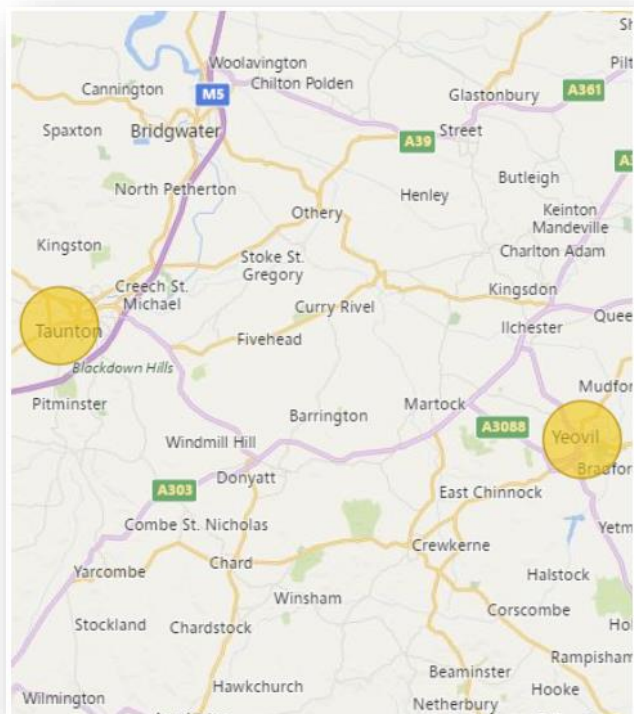
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Northern Devon Healthcare NHS Trust	RBZ	South 1	100	✓
Plymouth Hospitals NHS Trust	RK9	South 1	100	✓
Royal Cornwall Hospitals NHS Trust	REF	South 1	100	✓
Royal Devon and Exeter NHS Foundation Trust	RH8	South 1	100	✓
Torbay and South Devon NHS Foundation Trust	RA9	South 1	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
South 1	40,446,780.00	10,806,789.00	18,973,526.20	6,282,737.51	36,063,052.70	4,383,727.30

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

South 2: South West Pathology Services

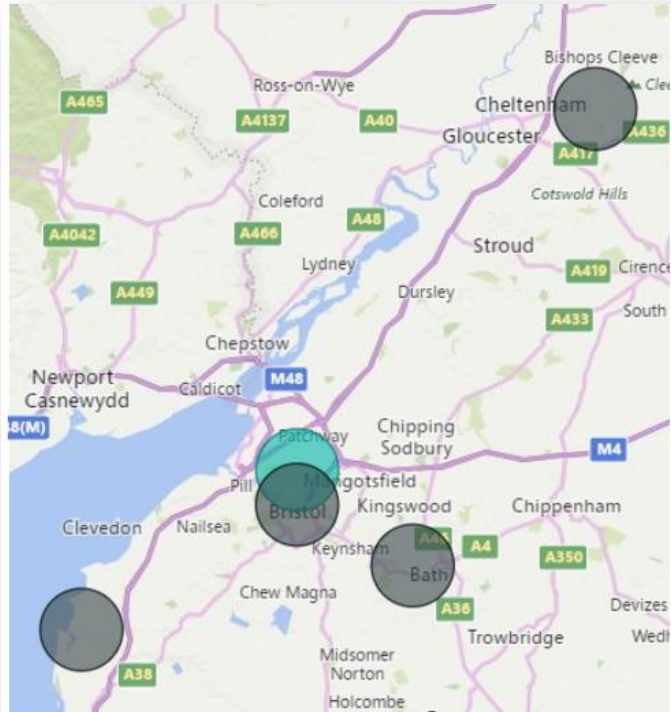


Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Taunton and Somerset NHS Foundation Trust	RBA	South 2	100	✓
Yeovil District Hospital NHS Foundation Trust	RA4	South 2	100	✓

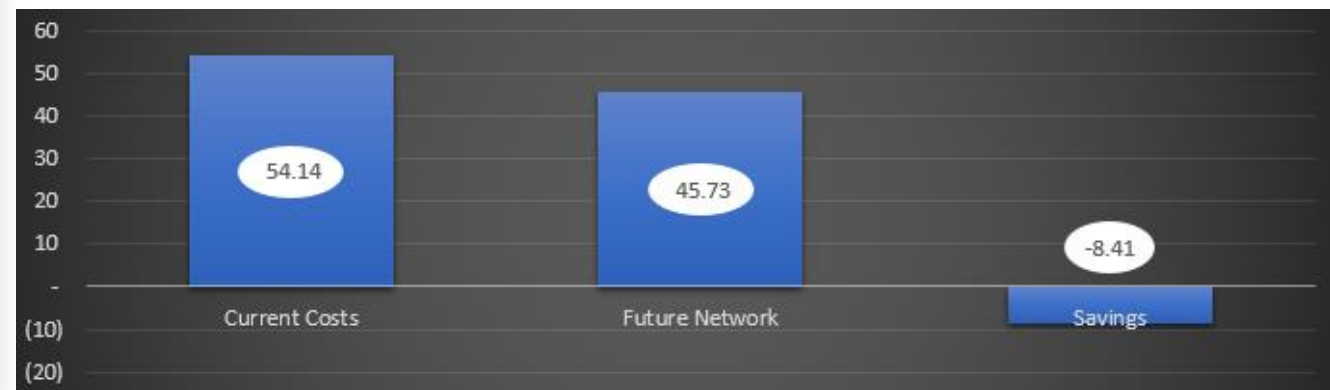
Savings figures cannot be calculated for this network as operations are outsourced to a public-private joint venture.

Networks are at liberty to suggest alternative hubs and spokes within the network
Summer 2018: NHS Improvement pathology networks.

South 3: West of England Pathology Services



Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Gloucestershire Hospitals NHS Foundation Trust	RTE	South 3	90	✓
North Bristol NHS Trust	RVJ	South 3	90	✓
Royal United Hospitals Bath NHS Foundation Trust	RD1	South 3	90	✓
University Hospitals Bristol NHS Foundation Trust	RA7	South 3	90	✓
Weston Area Health NHS Trust	RA3	South 3	90	✓

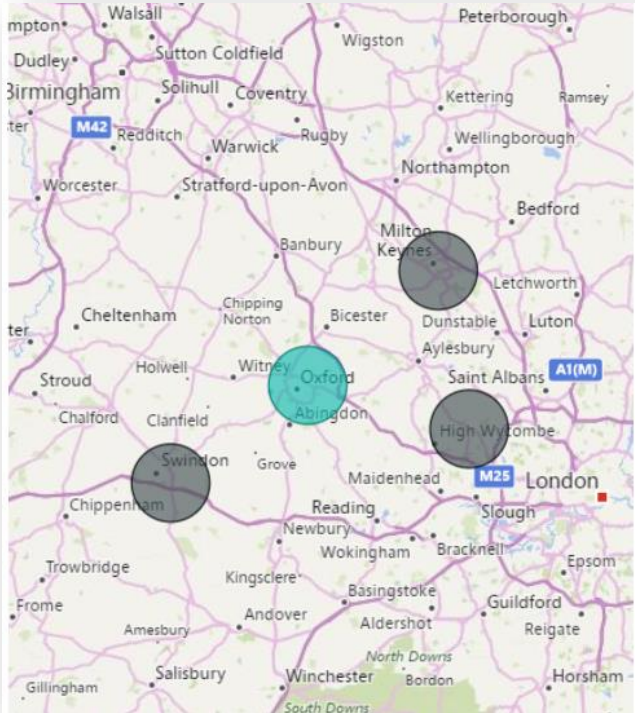


Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
South 3	54,139,620.00	24,578,733.00	14,715,028.51	6,433,243.86	45,727,005.37	8,412,614.63

Please note, this network is missing 2016/17 pathology data for one trust: Weston Area Health NHS Trust.

Networks are at liberty to suggest alternative hubs and spokes within the network
Summer 2018: NHS Improvement pathology networks

South 4



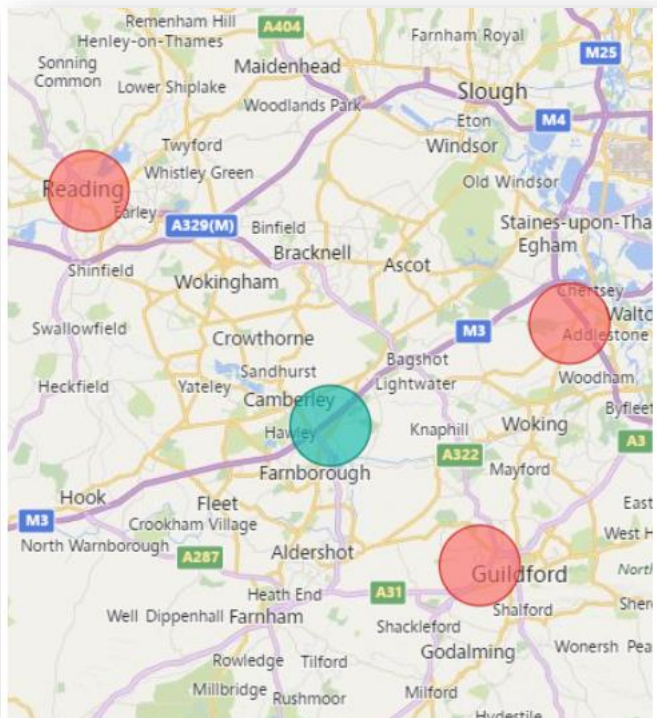
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Buckinghamshire Healthcare NHS Trust	RXQ	South 4	100	✓
Great Western Hospitals NHS Foundation Trust	RN3	South 4	100	✓
Milton Keynes University Hospital NHS Foundation Trust	RD8	South 4	75	✓
Oxford University Hospitals NHS Foundation Trust	RTH	South 4	75	⚡



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
South 4	50,235,050.00	25,962,476.00	13,137,489.23	5,827,260.10	44,927,225.33	5,307,824.67

Networks are at liberty to suggest alternative hubs and spokes within the network
Summer 2018: NHS Improvement pathology networks

South 5: Surrey and Berkshire Pathology Services



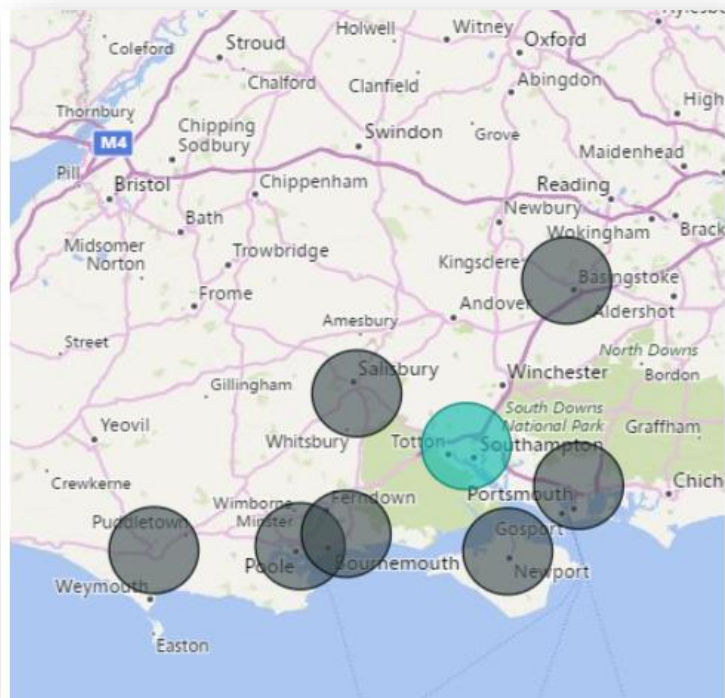
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Ashford and St Peter's Hospitals NHS Foundation Trust	RTK	South 5	100	✓
Frimley Health NHS Foundation Trust	RDU	South 5	100	✓
Royal Berkshire NHS Foundation Trust	RHW	South 5	100	✓
Royal Surrey County Hospital NHS Foundation Trust	RA2	South 5	100	✓



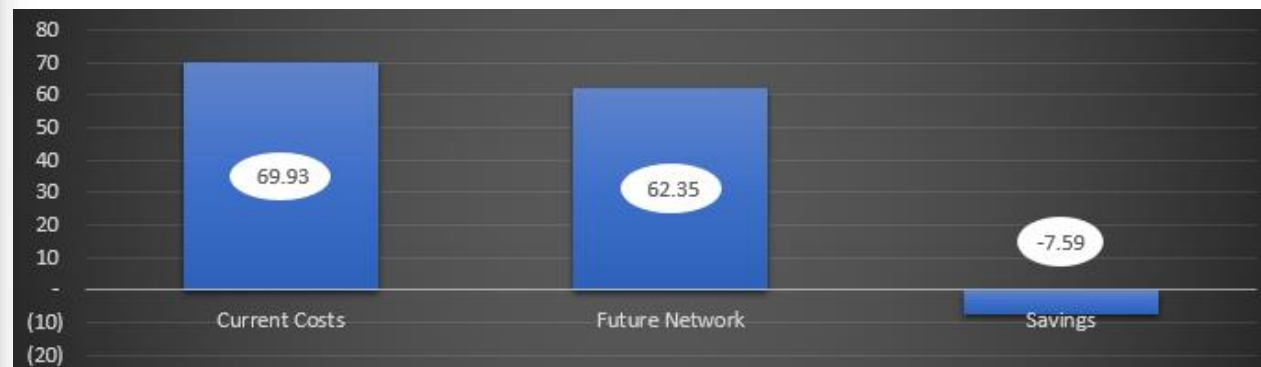
Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
South 5	48,333,000.00	47,356,625.00			47,356,625.00	976,375.00

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

South 6: Southern Counties Pathology Services



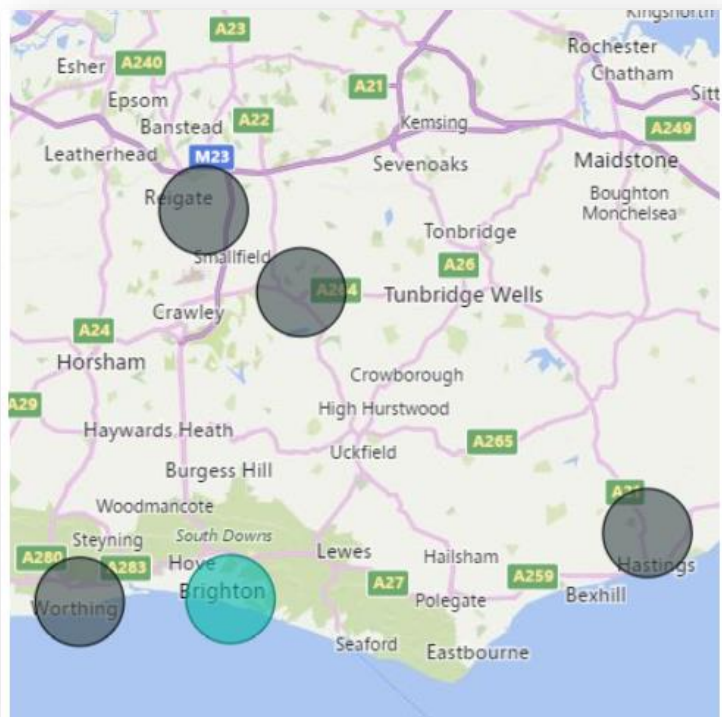
Dorset County Hospital NHS Foundation Trust	RBD	South 6	100	✓
Hampshire Hospitals NHS Foundation Trust	RN5	South 6	100	✓
Isle of Wight NHS Trust	R1F	South 6	100	✓
Poole Hospital NHS Foundation Trust	RD3	South 6	100	✓
Portsmouth Hospitals NHS Trust	RHU	South 6	100	✓
Royal Bournemouth & Christchurch Hospitals NHS Foundation Trust	RDZ	South 6	100	✓
Salisbury NHS Foundation Trust	RNZ	South 6	100	✓
University Hospital Southampton NHS Foundation Trust	RHM	South 6	100	✓



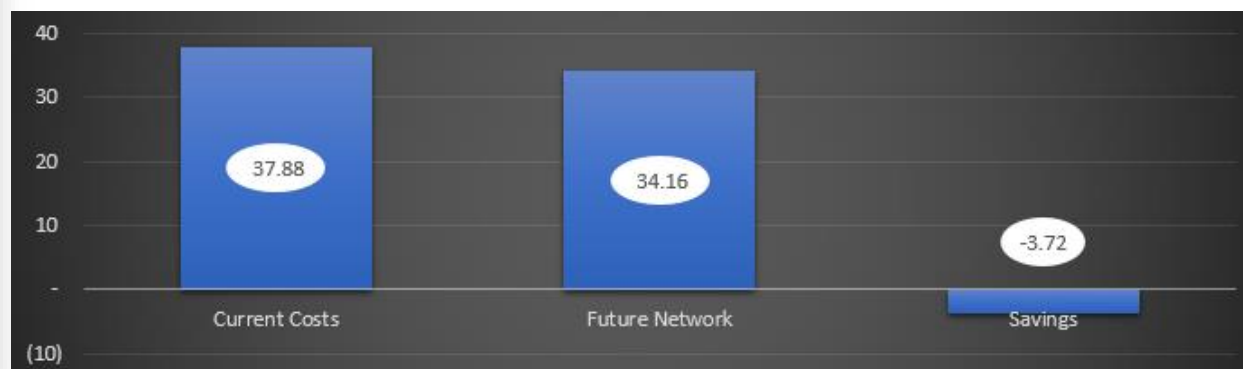
Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
South 6	69,932,000.00	14,191,000.00	34,780,116.42	13,374,515.51	62,345,631.93	7,586,368.07

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

South 7



Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Brighton and Sussex University Hospitals NHS Trust	RXH	South 7	75	✓
East Sussex Healthcare NHS Trust	RXC	South 7	30	✗
Queen Victoria Hospital NHS Foundation Trust	RPC	South 7	75	✓
Surrey and Sussex Healthcare NHS Trust	RTP	South 7	75	✓
Western Sussex Hospitals NHS Foundation Trust	RYR	South 7	75	✓

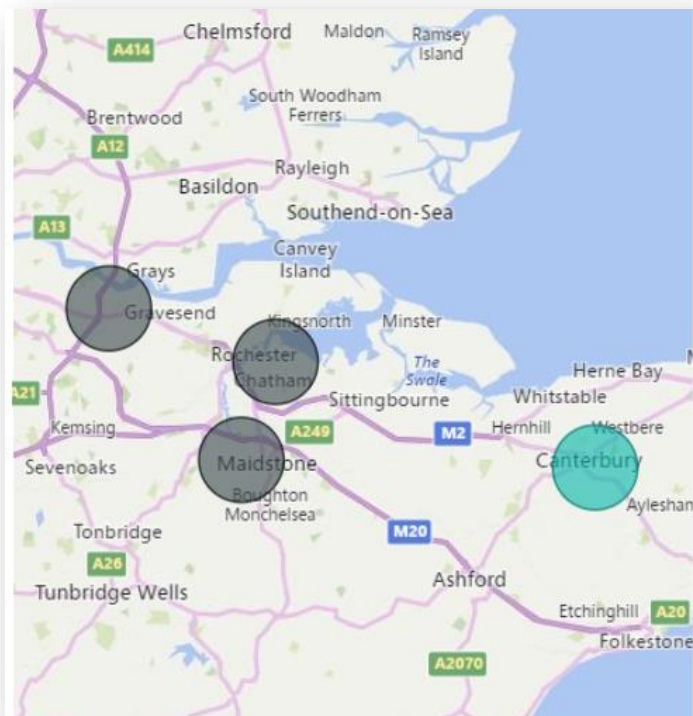


Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
South 7	37,879,000.00	18,399,602.00	10,996,285.12	4,763,585.90	34,159,473.02	3,719,526.98

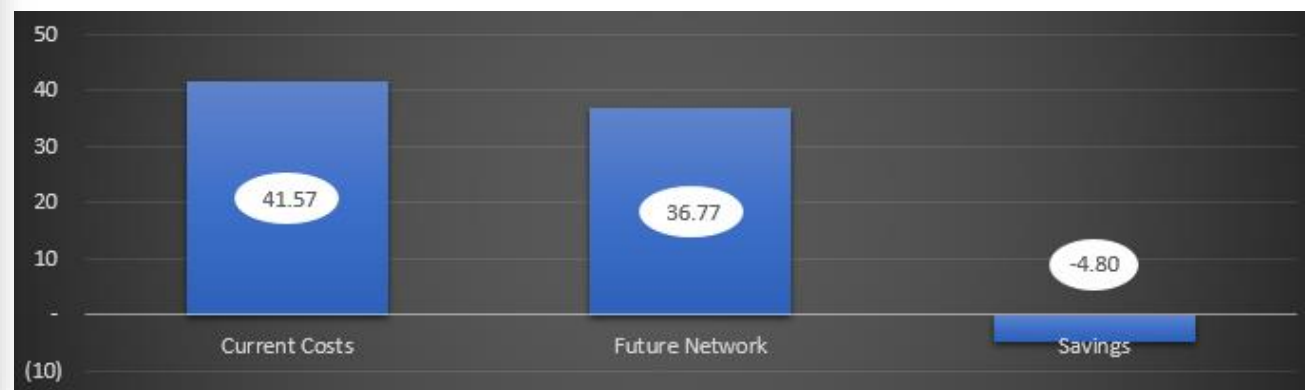
Please note, one trust has been excluded from the calculated figures for this network due to validation issues with their 2016/17 Pathology Data: Western Sussex Hospitals NHS Foundation Trust.

Networks are at liberty to suggest alternative hubs and spokes within the network
Summer 2018: NHS Improvement pathology networks

South 8: Kent Pathology Services



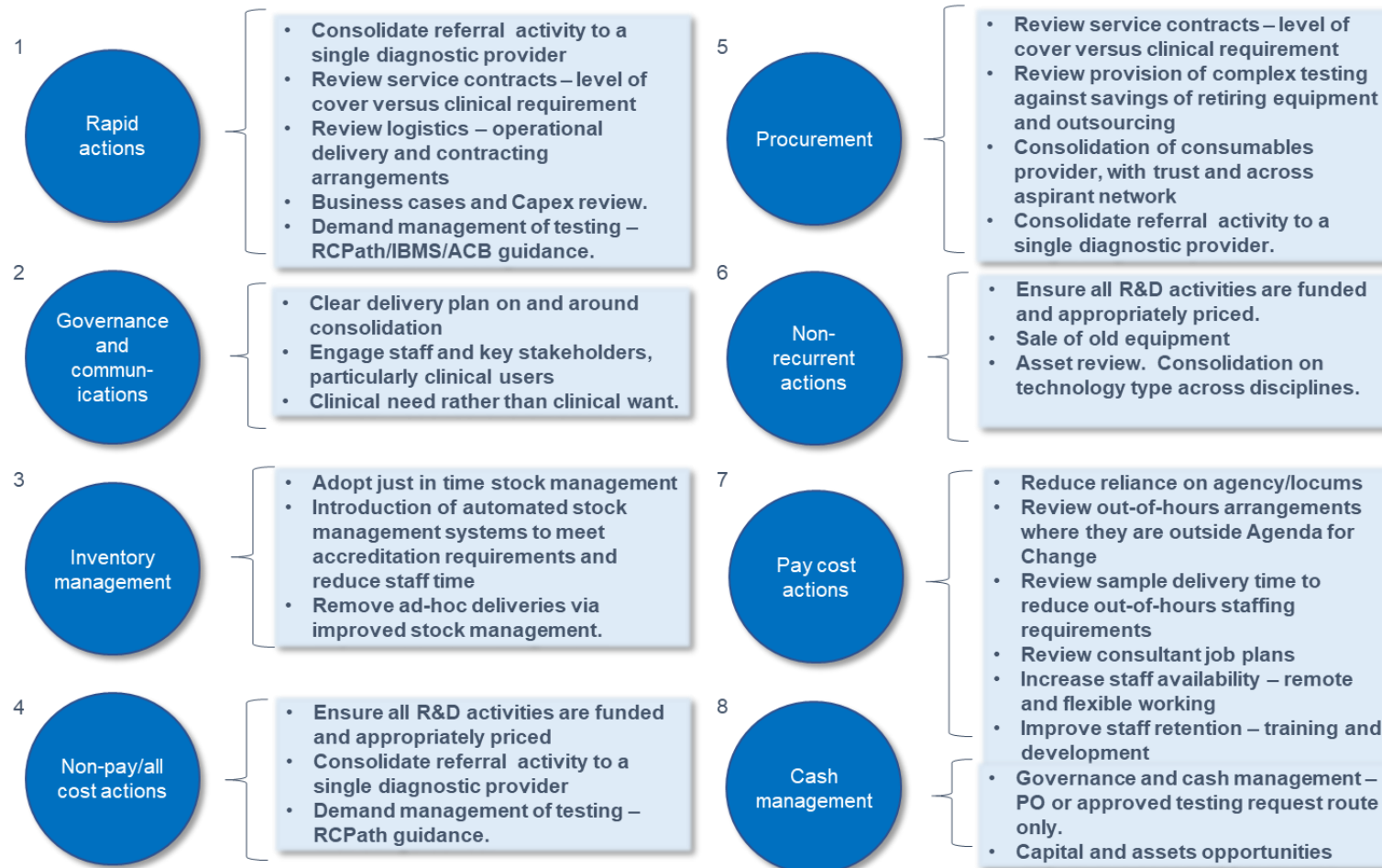
Trust Name	Trust Code	Network	Level of Engagement	Agreement on partnership operating model
Dartford and Gravesham NHS Trust	RN7	South 8	100	✓
East Kent Hospitals University NHS Foundation Trust	RVV	South 8	100	✓
Maidstone and Tunbridge Wells NHS Trust	RWF	South 8	100	✓
Medway NHS Foundation Trust	RPA	South 8	100	✓



Network	Cost of Current Ops	Cost of Hub Future	Cost of Referrals to Hub	Cost of Spoke Labs	Cost of Consolidated Service	Consolidation Saving
South 8	41,565,703.00	15,326,251.00	15,175,120.25	6,268,566.22	36,769,937.47	4,795,765.53

Networks are at liberty to suggest alternative hubs and spokes within the network
 Summer 2018: NHS Improvement pathology networks

Appendix 1: Grip and control: actions



Appendix 2: Essential services laboratory

Principles: The provision of laboratory services for the acute setting is vital to ensure safe patient care. We have developed a toolkit that describes the minimum service that should be available. ESL that vary from this toolkit should be justified using clinical evidence, or robust data to demonstrate efficient use of resources. (See improvement.nhs.uk/resources/pathology-networks-toolkit/)

The ESL

- **Only the services needed to provide acute pathology provision, including appropriate blood transfusion services, should be commissioned in an ESL.** All other work should be performed in the hub laboratory.
- The ESL should:
 - meet all regulatory and accreditation standards (Blood Safety and Quality Regulations (Medicines and Healthcare products Regulatory Agency), United Kingdom Accreditation Service, Health and Safety Executive)
 - have a **clear clinical and operational governance** link to the hub
 - have a clear management structure
 - have true interoperability with the hub, with a single laboratory information management system or full IT integration, common platforms and procedures
 - have a full 24/7 rota of multidisciplinary assistant grades, with aspiration towards multidisciplinary biomedical scientists
 - have clear training and succession strategy harmonised with the hub laboratory, provided by staff supernumerary to the ESL.
 - Have agreed performance metrics, service specification. **Variation only where it is warranted.**

What does good look like	
Clinical Governance	<ul style="list-style-type: none">• Clear leadership• Clear escalation points for local issues
LIMS	<ul style="list-style-type: none">• Integration and full interoperability
Logistics	<ul style="list-style-type: none">• Harmonised with Hub• Timely
Quality	<ul style="list-style-type: none">• Provided by Hub• ISO 15189• MHRA
Training	<ul style="list-style-type: none">• Supported by the Hub, delivered across the network• Full rotation of staff
Business continuity	<ul style="list-style-type: none">• Clear robust, tested plans.• POC and emergency procedures.
Implementation	<ul style="list-style-type: none">• Step change implementation, involving quality assessments and review

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