

## Lancashire & South Cumbria Diagnostic Programme Board

Title of Paper	<b>5-year Radiologist recruitment plan for Lancashire &amp; South Cumbria</b>		
Date of Meeting		Agenda Item	XX

Lead Author	Janet Fletcher, Workforce Project Manager, L&SC Diagnostic Imaging Network (DIN)		
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Paper endorsed by	Jack Smith, Director, L&SC Diagnostic Imaging Network		
Purpose of the Report	Please tick as appropriate		
	For Information		
	For Discussion		
	For Decision		X
Executive Summary	<p>This paper presents a 5-year plan for recruiting NHS radiologists in readiness to meet growing demand for quality image acquisition, and reporting positively impacting timely diagnosis of health conditions in Lancashire and South Cumbria (L&amp;SC).</p> <p>Application of an agreed set of imaging workforce assumptions utilising the latest L&amp;SC demand and capacity modelling has informed this plan.</p> <p>An indicative amount £1.43 million additional revenue is required per year for five years. A combined funding route through National Diagnostics Transformation, Community Diagnostic Centres and Health Education England revenue funding streams is to be explored, alongside predicted decrease in additional activity through overtime/insourcing etc that could be achieved through improved levels of substantive contracts.</p> <p>A proportionate increase in Assistant Practitioners, Support Workers and clerical and administrative will follow separately.</p> <p>This paper has been reviewed and endorsed by both the L&amp;SC Radiology Working Group and the L&amp;SC Diagnostic Imaging Network Workforce workstream.</p>		
Recommendations	L&SC Diagnostics Programme Board is requested to: <ol style="list-style-type: none"> <li>1. Note the content of this report</li> <li>2. Support the request for the revenue funding to secure the recruitment</li> <li>3. Advise on potential funding source(s) for the revenue required.</li> </ol>		

	4. Support engagement with the Trust Directors of Finance and Directors of HR to support progression of the proposed approach
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### 1. Background

- 1.1 At L&SC Diagnostic Programme Board (DPB) meeting of 24<sup>th</sup> February 2022, the 5 year recruitment plan for Radiographers was endorsed. An action from the Chair of DPB for the Diagnostic Imaging Network to provide similar papers for the requirements for Radiologists, Assistant Practitioners, Support Workers and Clerical and Admin. was noted. This paper sets out the requirements for Radiologists.
- 1.2 The Prof Mike Richards Report, Diagnostics: Recovery and Renewal (Oct 2020) was an independent review commissioned by NHS England because ‘*The need for radical investment and reform of diagnostic services was recognised at the time the NHS Long Term Plan was published in 2019.*’
- 1.3 Recommendations from the report were categorised under five key pillars; New service delivery models; Equipment and facilities; Workforce; Digitisation and connectivity; Delivery the change.
- 1.4 Clear and unambiguous recommendations from the report for workforce include

*Recommendation 12: There should be a major expansion in the imaging workforce – an additional 2,000 radiologists and 4,000 radiographers (including advanced practitioner radiographers, who undertake reporting) as well as other support staff and key ‘navigator’ roles. Additional training places should be provided for radiologists and radiographers and initiatives will be needed to meet demand, as well as expansion in assistant practitioner and support staff roles.*

*Recommendation 18: Alongside the necessary expansion of key professional groups, all relevant organisations should work together to deliver changes in the diagnostics workforce. Particular emphasis should be given to driving skill-mix initiatives across the whole country. This will require concerted action at team, NHS trust and network levels*

- 1.5 Other recommendations from the report that affect workforce include

*Recommendation 4: Community diagnostic hubs should be rapidly established to provide Covid-19 minimal, highly productive elective diagnostic centres for cancer, cardiac, respiratory and other conditions. For patients with suspected cancer, these should incorporate the rapid diagnostic centre service model.*

*Recommendation 8: CT scanning capacity should be expanded by 100% over the next five years to meet increasing demand and to match other developed countries. In the Covid-19 recovery phase, priority should be given to ensuring each acute site with an A&E has access to a minimum of two CT scanners so that patients known to be Covid-19 negative can be kept separate from those who are Covid-19 uncertain or Covid-19 positive. Other additional scanners should be deployed to community diagnostic hubs.*

1.6 The Royal College of Radiologists (RCR) UK Workforce census 2020 report demonstrated that supply forecast for Radiology Trainees, due to finish in 2025, balanced with current trends in less than full time working, alongside predicted retirements, will still leave a shortfall of clinical Radiology Consultants in the UK of 3613 or 44% of predicted post, up from a 33% shortfall seen in 2020.

1.7 The WPI Economics report for the Royal College of Radiologists; Understanding the impacts in training for clinical radiology and clinical oncology (Oct 2021) states

*To meet existing and growing demand, it is estimated that there is a shortfall of 1,939 whole time equivalent (WTE) consultant clinical radiologists across the UK (a 33% shortfall). For clinical oncology, this figure stands at 189 WTE consultants (a 19% shortfall). • If trends in demand and workforce entries and exits continued to 2030, there would be shortages of close to 6,000 consultant clinical radiologists and 700 consultant clinical oncologists*

It also states

*A range of different approaches can contribute to reducing the shortage. However, this report shows that even if overseas recruitment were increased by 50%, outsourcing doubled (for clinical radiologists) and improved working practices led to very significant efficiency gains, just 56% (clinical radiologists) and 18% (clinical oncologists) of the WTE shortfall would be met by 2030. It is also clear that none of these strategies are feasible and sustainable without a significant increase in training numbers.*

## **2. Case for additional recruiting**

2.1 National Imaging Data Collection (NIDC) shows that in 2020/21 93.48WTE Consultant Radiologists, 6.78 WTE career grade Radiologists were employed across L&SC, with 10.37, and 3.28WTE vacancies respectively. This equates to a 10.4% vacancy rate for this staff group.

2.2 Appendix 1 provides data extrapolated from the Prof Mike Richards report recommendation 12 as it relates to L&SC ICS based on population size. In order to meet the future capacity demands, an extra 57WTE Radiologists would need to be employed within the next five years.

2.3 Appendix 2 shows workforce modelling assumptions based on the provision of capital bids to establish one CDC per trust (ie 1xMRI, 2xCT, 2 x US and 2 x Plain film running 12/7). If these were established to full assets as outlined, 48.28WTE Radiologists would be required to staff these centres. This assumption is based on reporting activity for the activity at the CDCs (equivalent to 3PAs). Further modelling would need to be utilised to understand the impact of increased activity within the acute trusts.

2.4 Appendix 3 and Appendix 4 show activity increase for CT. The growth in CT activity is mimicking predicted increases as highlighted in the Richards Report (6.8% per annum)

2.5 Capacity and demand modelling will continually be refreshed as future activity data is captured, and staffing requirements flexed/adjusted accordingly.

2.6 Should L&SC fail to secure additional recruitment over the next 5 years as the activity increases, then reporting activity to meet the demand will need to be outsourced. NIDC 2020/21, showed that approx. £5.8 million was spent on outsourcing, £2.15 million on agency, overtime and bank Radiologists and £1.04 million on insourcing. Outsourcing can be of benefit, particularly for out-of-hours reporting, where it is not always economically viable to provide shift cover or on-call with its potential impact due to compensatory rest. The use of locum, agency and overtime can also provide specific activities within

specialist area, providing value for money. Whilst enhanced pay for additional activity can be an attractive benefit for the workforce, it must be balanced with acceptable numbers of substantive Consultant Radiologists posts otherwise the workforce can become demoralised and exhausted.

2.7 There are a number of risks contributing to the case for recruiting additional consultants

- Risk of escalating outsourcing costs
- Ongoing increased annual demand for CT (6.8%), MRI (5.6%), NOUS (3.8%), Plain film (1%) with associated increase in reporting activities
- There is a national shortage of Radiologists, which remains on the government shortage occupation list.
- There will be too few radiologists to cover face to face patient contact time, required on site presence (for supervision, training, clinical advice, consultation, and on-call)
- Reliance on retire and return consultant posts 'diluting' NHS substantive contracts because they are providing less out of hours, managerial, R&D.

2.8 To note, trainee radiologist numbers have remained steady across the L&SC ICS over the last few years. Further expansion of the training places is commencing; the North West School of Radiology, NWSOR, is predicting expanding from an intake of 33 to 39 from August 2022.

2.9 Capital investment bids having been secured to provide additional/adapted estate and additional reporting workstations to accommodate this planned expansion, specifically with ELHT hosting a satellite site of the NWSOR allowing enhanced training, and LTH estates development to allow for increased reporting workstations to accommodate increases in training places.

2.10 To note, trainee places in the L&SC are increasing in 2022, from 25 (2021 NIDC data) to 29 (by August 2022) to 32 (by August 2023). This is inclusive of current trainees who will still be in the training programme. Commitment is required for further expansion of training beyond 2023.

2.11 To note, RCR 2020 workforce census data for the NW region, showed a 2% annual workforce growth rate forecast (to 2025).

### **3. Proposed approach to recruitment**

3.1 In order to meet current and future demand, the Radiology Workforce (consultant and career grade) needs to raise to between 162-171. This is a 30%-35% rise on current funded posts (if current vacancies were filled) and equates to around 11 posts per year.

3.2 It is clear that this is an aspirational level within a 5 year plan, thus a multi-faceted approach to recruitment is required including; increased training; attractive job planning; complimentary retire and return packages; international recruitment and development of sustainable models for additional activities (insourcing) that are consistent across the system, utilising skill mix where possible.

3.3 Recruitment for consultant radiologists out of the cohort of trainees is often tailored to specific requirements of services. Every effort should be made to recruit trainees, utilising recruitment and retention premia where appropriate, ensuring job plans meet current gaps in the service alongside personal preferences /areas of developing expertise during training. The use of staff passports/job plans across more than one employer needs to be explored. This should be done even if this is above current business case

3.4 Engagement should take place at national, regional or system level to explore International Recruitment options. Additional costs to secure recruits should be supported by trusts.

3.5 For Trust to commit to increasing the revenue required to support increased training expansion programme currently being prime pumped by Health Education England, and delivered by the North West School of Radiology. Additional trust estates should be made available to accommodate trainees.

3.6 In summary, there are a number of benefits to increasing recruitment

- To support the RTT (reporting turnaround times) including cancer targets
- To provide resilience within the workforce
- To provide safe patient-centred pathways
- To have safe staffing to deliver the forecasted increase in diagnostic imaging activity
- To deliver required reforms in diagnostic imaging services including delivery of CDCs with sufficient suitably qualified and skilled staff to deliver in these out of hospitals settings
- Reduce expenditure across all modalities on OT, agency, outsourcing costs
- Reduce litigation through delayed diagnostics

#### **4. Costs and additional terms to consider**

4.1 The indicative additional revenue required is £1.43million per year for 5 years. This is based on recruitment of an additional 11 Consultant radiologists. Any additional recruitment deliverable through recruitment drives should be funded from subsequent years

4.2 Increasing the substantive posts will decrease reliance on overtime, bank, agency, insourcing and outsourcing.

4.3 Trusts across L&SC are increasing radiology trainees. This revenue and capital investment needs to continue as the trainee places expand.

4.4 Service expansion in other directorates needs to factor in the impact it will have on diagnostic services including Radiology, and appropriate revenue funding apportioned.

#### **5. Recommendations**

5.1 The L&SC Diagnostics Programme Board is requested to:

- Note the content of this report
- Support the request for the revenue funding to secure the recruitment
- Advise on potential funding source(s) for the revenue required.
- Support engagement with Trust Directors of Finance and Directors of HR to support progression of the proposed approach.

**Appendix 1 – Data for Workforce extrapolated from the Prof Mike Richards Report  
based on population for the North West**

	Over next 5 years					Yearly Additional Requirement			
	Additional requirement	North West	GM	CM	L&SC	North West	GM	CM	L&SC
<b>Imaging workforce</b>									
Radiologists	2,000	268	112	100	<u>57</u>	54	22	20	<u>11</u>
Advanced practitioner/reporting radiographers	500	67	28	25	<u>14</u>	13	6	5	<u>3</u>
Radiographers	3,500	469	195	174	<u>100</u>	94	39	35	<u>20</u>
Assistant practitioners	2,500	335	140	125	<u>71</u>	67	28	25	<u>14</u>
Admin and support staff	2,670	358	149	133	<u>76</u>	72	30	27	<u>15</u>
Physicists	220	29	12	11	<u>6</u>	6	2	2	<u>1</u>
	<b>11,390</b>	<b>1527</b>	<b>636</b>	<b>567</b>	<b><u>324</u></b>	<b>305</b>	<b>127</b>	<b>113</b>	<b><u>65</u></b>

**Weighted pop proportions :**

<b>North - West</b>	7,964,158	13.41%
<b>Lancashire and South Cumbria</b>	1,689,821	21.22%
<b>Greater Manchester</b>	3,315,292	41.63%
<b>Cheshire and Merseyside</b>	2,959,044	37.15%
<b>England</b>	59,402,338	100.00%

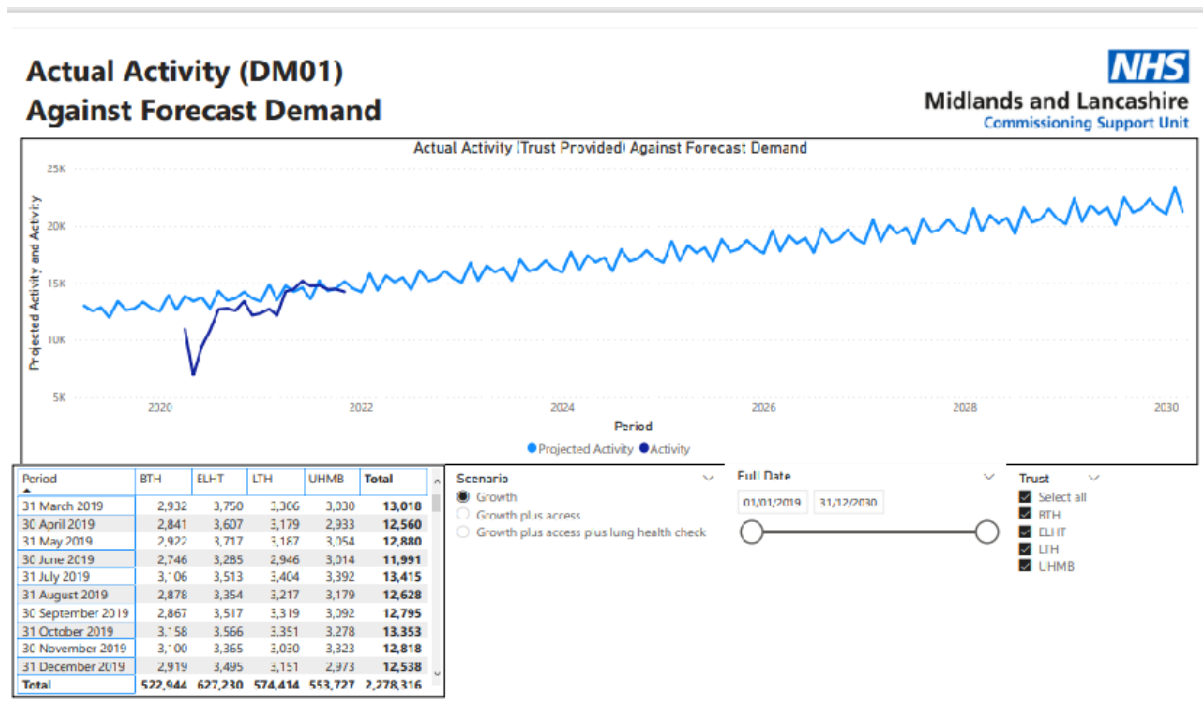
**Appendix 2 – Community Diagnostic Centres Modelling Staffing Assumptions (7 day/12 hour)**

<b>MRI x 1</b>	<b>Staff Per Scanner 2022/23 WTE</b>	<b>Equipment per CDH</b>	<b>WTE per CDH</b>	<b>Estimated Staff Cost per WTE</b>	<b>Staffing Cost per CDH</b>
Band 7 Radiographer WTE	2.73	1	2.73	£55,000	£150,304
Band 6 Radiographer	2.73	1	2.73	£48,000	£131,174
Imaging Support Worker	2.73	1	2.73	£28,000	£76,518
Band 8a Service Management	0.55	1	0.55	£65,000	£35,526
Admin Support	1.37	1	1.37	£28,000	£38,259
Assistant Practitioner	0.00	1	0.00	£32,000	£0
Consultant Radiologist - Reporting	3.02	1	3.02	£130,000	£392,796
<b>Total MRI Workforce</b>	<b>13.13</b>		<b>13.13</b>		<b>£824,578</b>

<b>CT x 2</b>	<b>Staff Per Scanner</b>	<b>Equipment per CDH</b>	<b>WTE per CDH</b>	<b>Estimated per WTE</b>	<b>Staffing Cost per CDH</b>
Band 7 Radiographer	2.73	2	5.47	£55,000	£300,608
Band 6 Radiographer	2.73	2	5.47	£48,000	£262,349
Imaging Support Worker	2.73	2	5.47	£28,000	£153,037
Band 8a Service Management	0.55	2	1.09	£65,000	£71,053
Admin Support	1.37	2	2.73	£28,000	£76,518
Assistant Practitioner	0.00	2	0.00	£32,000	£0
Consultant Radiologist - Reporting	4.53	2	9.05	£130,000	£1,176,989
<b>Total CT Workforce</b>	<b>14.64</b>		<b>29.28</b>		<b>£2,040,554</b>



### Appendix 3 – Actual Activity in CT v Forecast Demand captured



### Appendix 4- Forecast Capacity against CT assets L&SC

