## Description of policy

**Labour would 'double the number of scanners' in the NHS.** Wes Streeting: '*Our 'Fit For The Future Fund' will double the number of scanners in the NHS, so patients are diagnosed earlier, and treated faster'* (Wes Streeting, *Labour Party Conference Speech 2023,* 11 October 2023, link).

**Wes Streeting (Shadow Health Secretary) said Labour would double the number of CT and MRI scanners.** Wes Streeting: 'We're going to ask non-doms who live in this country and earn their living here to pay their fair share of taxes and that will generate enough money for us to ...double the number of CT and MRI scanners so we've not just got more machines, but cutting-edge machines so we can get more people through and diagnose more quickly. Better for them and better value for taxpayers' money' (LBC, 16 November 2023, archived).

Additional policy assumptions

- That each item of equipment is purchased and owned in house by NHS Trusts, and that the upfront purchase cost is incurred in one go.
- That the models used are of the sort most commonly purchased in the NHS.
- That the diagnostic workforce is expanded to the same proportion as the current skills mix to operate these machines to the average % capacity utilisation of an in house owned scanner across the NHS, and that the cost of hiring, training and ongoing pay is incorporated. (*NB. See comment below on how it has not been possible at this stage to quantify the costs of hiring and training additional staff*).
- That any efficiency savings generated by enhanced access to diagnostic equipment are also reflected ie. any savings for the NHS over five years from broader access for this equipment are also quantified. (*NB. See comment below on how it has not been possible at this stage to include and quantify any such financial benefits*).

Additional technical modelling assumptions or judgements required

We have assumed as our baseline the NID Collection 2023 (collected July-August 2023):

- 677 CT scanners (average cost £0.84m)

- 587 MRI scanners (average cost £1.0m)

We have assumed equipment costs of £0.84m per CT scanner and £1.0m per MRI scanner – the average of the 2021 diagnostic transformation programme in 2021/22 prices). We have then applied real terms growth by using GDP deflators published in November 2023.

We have included 5% provision for installation and programme costs.

We have not included:

(a) additional installation costs (over and the above the 5% stated) for structural changes and additions to buildings in order to house new scanners. We have assumed this cost sits with the NHS and comes from operational capital envelopes although, in practice, expansion at this scale would require funding outside that. Any estimate at this stage would be highly subjective as dependent on a more detailed understanding of where machines would be deployed (geographically) and the

flexibility of the NHS estate, including whether this is part of Community Diagnostic Centre (CDC) expansion into eg private/retail space compared to NHS land/buildings;

- (b) ongoing maintenance costs, on the basis that it is NHS Trusts' responsibility to maintain the equipment through their Integrated Care System (ICS) operational capital envelopes. Future Spending Review settlements on operational capital are therefore a dependency, as is the case for all investments such as these in the NHS;
- (c) any reduction in capital costs from bulk purchase. Clearly some level of "discount" could be expected but the level of any savings would depend on a range of factors including the actual mix of scanners, the lead time for negotiation, delivery (because supplier capacity to deliver to shorter times will be constrained and potentially more costly) and installation, as well as the extent to which buying is centralised or delegated to individual organisations;
- (d) potential impact from the improved capability of modern scanners including Artificial Intelligence (AI). This may manifest in a variety of ways, for example better diagnostics waiting times through reduced reporting lags, reduction in unit costs, increased capacity (which might lead to greater scanning volumes) and reduction in the workforce growth requirement through greater scan accuracy and reporting which would support transformation in the skill-mix and reporting models;
- (e) any assumptions on the wider benefits, savings or implications of increased diagnostic capacity, for example any impact on cancer waiting times and survival rates, supply-induced demand (eg increased scan rates per referral). Increased diagnostic capacity would certainly be expected to improve waiting times for cancer and elective services (especially where treatment capacity is not also a bottle neck) but, as with other assumptions, quantification at this point is difficult and would ultimately depend on the wider cancer and elective recovery ambitions and investment – as would any value for money argument.

We have assumed this ambition is achieved on a flat profile over four years (equivalent to 316 scanners per year) between 2024/25 and 2027/28.

Inclusive of the 5% provision, the total base CDEL cost is £1.26bn (in 2021/22 prices) and £1.49bn once GDP deflators have been applied to the profile.

£m	2024/25	2025/26	2026/27	2027/28	Total
(2021-22 prices)	300	300	300	300	1,200
(with 5% provision)	315	315	315	315	1,260
(real terms)	362	369	375	381	1,487

We have also assumed a uniform profile of roll-out for the scanners within each year meaning that the inyear revenue cost for (year 1 of each set of scanners) reflects 50% of the full-year capacity delivered. The full increase in activity from all additional equipment would not come on stream until 2028/29, and the RDEL cost associated with it would then be £1.4bn (in 28/29 prices).

We have assumed that doubling the equipment numbers would deliver (on top of baseline) the number of MRI and CT scans in the 12 months to October 2023 – 12.1 million. This assumes a fixed number of scans per machine based on current productivity. No estimate of additional growth in scans (or reduction in unit cost) in future years has been made.

We have similarly assumed that the new equipment would be operated in addition to existing equipment, rather than used to replace old equipment.

Aggregated weighted unit prices for CT and MRI are derived by applying NHS Payment Scheme prices (2023/24) at individual Healthcare Resource Group (HRG) level to activity levels from the National Cost Collection (2021/22), then grouping.

				Full year	Full year
	Estimated			revenue	revenue
	Full Year	Ur	nit Cost	cost	cost
	Activity	(2	023/24	(2023/24	(2028/29
Activity Type	(m)	p	orices)	prices, £m)	prices, £m)
MRI scans	4.2	£	140	588	
CT scans	7.9	£	89	707	
	12.1			1,295	1,414

Base capital costs are in 2021/22 prices, revenue costs are in 2023/24 prices – both have then been uplifted using GDP deflators published in November 2023.

The cost approach could be strengthened by:

- Validation of unit prices for diagnostic tests.
- Number of MRI and CT Scans in the 12 months to January 24. This would allow us to use the 12-month period around the equipment numbers data point in July-August. Using 12 months to October 23 is likely to give an underestimate of activity from July-August equipment numbers as numbers will have grown over the 12 months. We use 12 month activity numbers to account for seasonality.
- Robust, evidence-based assumptions on the impact of modern scanners including AI (as set out above)

We have not been able to make an assessment of the costs of training and hiring additional staff. Such an assessment would need to take account of the following:

- The Long-Term Workforce Plan provides for growth in training places for Allied Health Professionals (which includes key diagnostics professional groups) of 8% compared to a 2022/23 baseline by 2024/25 and 13% by 2028/29. There be for example be 400 additional training places for radiographers each year by 2028/9. This would go some way to providing the additional diagnostic staff required.
- The Long-Term Workforce Plans sets the expectation that AI has the potential to free up clinical time and improve accuracy and efficiency of diagnostics. By the end of the Parliament we would expect this to offset some of the additional diagnostic workforce requirement.
- Some of the staffing requirement is likely to need to be filled through international recruitment, with no training costs therefore needing to be provided for.

The territorial extent of these policies is England only so Barnett consequentials are presented in the costing tables.

Cost/Revenue to the Exchequer over five years

	DEL (£m)				
	2024-25	2025-26	2026-27	2027-28	2028-29
Resource	165	503	852	1,215	1,414
Capital	362	369	375	381	0
Total England	527	872	1,227	1,596	1,414
Total Barnett	99	163	230	299	265
Total Cost	626	1,035	1,457	1,895	1,679

Comparison with current system (if applicable):

Other comments (including other Departments consulted):

This note sets out the costs of the delivery of the policy, it does not include estimates of any benefits or potential cost savings that may flow from it.

This costing was produced by DHSC.

<i>To be completed by Permanent Secretary's Office</i> Date costing signed off:	02/02/2024
[If applicable] Date revised costing signed off:	