

Junior Doctor Pay Restoration Costing Analysis Methodology

Summary of analysis

- Pay awards for doctors have been below inflation since 2008. Our calculations show that pay awards for junior doctors in England from 2008/09 to 2021/22 have delivered a real terms (RPI) pay cut of 26.1%¹. To achieve pay restoration by reversing this cut, would require a 35.3% pay uplift.
- The illustrative total gross cost of full pay restoration to the NHS in this financial year (22/23) is **£1.65 billion**. This includes the full cost of wage increases, including additional employer costs of National Insurance and pension contributions.
- However, some of this cost will be directly returned to the Treasury through income tax and National Insurance contributions of the employer and the employee. The actual net cost to the Treasury of full pay restoration for Junior Doctors in England in this financial year is approximately **£1.03 billion**.

Table 1 – Cost of full pay restoration for Junior Doctors in England, 2022/23²

Gross cost of pay restoration	£1.65 bn
Money returned to Treasury	£0.62 bn
Employee taxes (income and NI)	£0.43 bn
Employer tax (NI)	£0.18 bn
Net cost of pay restoration	£1.03 bn

Calculation methodology

The BMA used data on [NHS staff earnings](#) in England in the 12 month period up to March 2022 from NHS Digital – ie. the previous financial year. This provides information on the mean annual basic pay and mean annual earnings per person, broken down by staff group. Headcount earnings are used rather than FTE. Average cost calculations were made for the average doctor in each staff group, then multiplied by the [monthly NHS staff workforce numbers](#)³ in each staff group to give the total figure. For the purposes of this calculation, the following staff groups were used: Specialty Registrar, Core Training, Foundation Doctor Year 2, Foundation Doctor Year 1. The calculations are for this financial year (2022/23). That is because it is not yet clear how much inflation will be for 2023/24, and therefore what uplift would be needed to provide full pay restoration next year. The figures presented above also do not take into account the sub-inflationary 2% uplift already provided by the government to Junior Doctors for 2022/23 as a result of the multi-year pay deal; however, when this is taken into account the net cost to the Treasury is still £1 billion to the nearest £100 million.

Gross cost: To calculate the gross cost of Junior Doctor pay restoration, the full pay restoration percentage was applied to each staff group's mean annual earnings. Mean annual earnings was selected instead of basic pay, in discussion with JDC executives, because many elements of non-basic pay (such as overtime) are relative to basic pay and therefore if basic pay was uplifted, these would

¹ See methodology here: <https://www.bma.org.uk/media/6134/bma-ia-pay-restoration-methodology-13-september-2022.pdf>.

² Figures may not sum exactly due to rounding to the nearest £10 mn.

³ NHS Workforce Statistics May 2022 were used at the time of completing analysis.

need to be too⁴. To this, on-costs to the employer are applied: the additional employer national insurance payment (including the Health and Social Care Levy for the part of the year it was relevant⁵), and pension contribution^{6 7} are applied. The costs for each staff group are then totalled and multiplied by the headcount for each staff group. The sum of these totals provides the final cost figure.

Net cost: Whilst the above methodology considers the overall gross cost to the Treasury of Junior Doctor pay restoration, additional calculations have been considered to understand the portion of that cost that would be returned directly to the Treasury through additional income tax (taking into account tax relief on pension contributions) and employee and employer national insurance. For each Junior Doctor staff group, the amount of tax (income tax and employee national insurance) on the restored salary was calculated. The tax calculations were made in accordance with the Government [income tax rates and personal allowances](#) and [national insurance rates and thresholds for 22/23 \(from July 2022 up to November 6th\)](#). The additional tax contributed by each staff group is calculated as the difference between the income tax and national insurance under current salary and the income tax and national insurance under the restored salary.

Further tax revenue will be returned both indirectly (as a result of increased consumption, leading to higher consumption tax revenue such as VAT), or as a result of additional economic activity induced through that additional consumption (as a result of increased demand). However, strong assumptions would have to be made about how much of any additional earnings are spent in-year on new consumption as opposed to saved or spent paying off debt, and what that new consumption is. Therefore, these are not included in this analysis, and the net cost is a conservative over-estimate of the total net cost to Treasury.⁸

⁴ Since the balance of remuneration between basic and non-basic pay has shifted since 2008/09 towards basic pay, this does mean that overall, the Junior Doctor pay bill with 35.3% pay restoration uplift applied would be slightly higher than scaling the 2008/09 pay bill up by the relative increase in staff and applying the 35.3% pay restoration uplift to the whole amount.

⁵ To incorporate the reversal of 1.25% National Insurance rise from November 6th, 2022 (confirmed by [Jeremy Hunt on 17th October 2022](#)), the levy has been applied to tax calculations for 7 months (from 6th April 2022 to 5th November 2022) and then removed for the remaining 5 months of the 2022-23 year to reflect the reversal of the levy.

⁶ As not all Junior Doctor pay is pensionable ([schedule 2, paragraph 67](#)), pension contribution estimates are calculated based on mean annual basic pay per person.

⁷ Pension contribution rates can be seen [here](#).

⁸ Significant assumptions are required for analysis of indirect and induced effects of pay rises to have a persuasive impact. Key challenges for this analysis are: (1) There is limited data on consumption patterns of doctors. [London Economics analysis](#) utilises household consumption, not individual. (2) Junior Doctors tend to be in the top quintile of earners and therefore less consumption expected as marginal propensity to consume would be lower. (3) Comparative analysis on alternatives, such as tax cuts, which will also have (potentially higher) indirect / induced effects would need to be explored. (4) Timeframe for indirect / induced effects to take place is unknown.