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**The Resource Allocation Consequences
of the New NHS Needs Formula**

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DISCUSSION PAPER 134

**THE RESOURCE ALLOCATION CONSEQUENCES OF
THE NEW NHS NEEDS FORMULA**

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Abstract

The NHS Executive has recently implemented modifications to the weighted capitation formula for distributing Hospital and Community Health Service funds to health authorities in England. A major contribution to the changes was an analysis of the relative needs of geographical areas undertaken by a team of researchers from the University of York. That work investigated the link between social and economic circumstances and the use of NHS inpatient facilities, and resulted in the development of separate needs indices for acute and psychiatric inpatient services. This report first documents the resource allocation consequences of each of these indices, and finds that the acute index is slightly more redistributive than the previous formula, and that the psychiatric index is very much more redistributive, in particular redirecting resources into the inner cities.

In implementing the work, the Department of Health had to make a judgement about which needs index to use for distributing funds not relating to inpatient use. In the event, they have chosen to allocate 64% of the total budget according to the acute index, 12% according to the psychiatric index, and 24% according to no needs index. The report notes that the use of no needs weighting for such a large block of services, which includes community and mental handicap services, can be challenged. It illustrates the importance of the issue by comparing the Department's preferred formula with an alternative, in which the 24% is allocated using the York acute index. It is found that this option would redirect amounts of up to 5% away from the home counties towards the inner cities.

While not necessarily advocating this change, the report argues that the large sums involved highlight the urgent necessity for research on the relative need for health care in non-inpatient services.

Introduction

The NHS Executive has recently implemented modifications to the weighted capitation formula for distributing Hospital and Community Health Service funds in England (NHS Executive, 1994a). A major contribution to the changes was some technical work commissioned by the Executive from a team of statisticians and health economists at the University of York (Carr-Hill *et al*, 1994). The purpose of this report is to examine the resource allocation implications of the needs weighting implicit in the new formula. It starts with the background to the work, and describes the resource allocation models developed at the University of York. The report then examines the method in which the work has been implemented by the Department of Health, and the geographical resource allocations arising from the chosen implementation. The report ends with some concluding comments.

A little background

The Hospital and Community Health Services (HCHS) accounts for about 77% of total NHS expenditure in England (£21.4 billion in 1992/93). About £18 billion of the HCHS budget is distributed to Health Authorities by means of various formulae (Mays and Bevan, 1987). From 1976 to 1990 this total was distributed to the 14 Regional Health Authorities by means of the formula devised by the Resource Allocation Working Party (RAWP). The RAWP formula allocated funds on the basis of population, adjusted for variations in age structure, health needs and costs (Department of Health and Social Security, 1976). The most debated aspect of the RAWP formula was the use of condition-specific standardized mortality ratios (SMRs) as the basis for the health needs adjustment. A variety of methods was used to distribute funds to District Health Authorities within Regions, but most were variants of the RAWP model.

In 1990 the RAWP formula was replaced by a simpler formula, based on an empirical analysis of hospital utilization data (Royston *et al*, 1992). The principal change was the use of the square root of the all causes SMR for those aged under 75 as the basis for the needs adjustment for allocations to Regions. This empirically based formula was the

subject of considerable criticism (Sheldon and Carr-Hill, 1992). Again, a variety of methods were used at the subregional level, in some cases quite different to the national model.

In April 1995 the national formula was again changed. The health needs component of the new formula is based on a new empirical analysis by a team from the University of York, the details of which are reported elsewhere (Carr-Hill *et al*, 1994). This report offers a brief summary of the new system, and examines the geographical distribution of HCHS funds arising from the use of the York needs index.

The principles of resource allocation

None of the principles underlying NHS resource allocation has been changed by the revised system. These remain that the basis for a health authority's allocation should be its population, weighted for three factors: the age structure of the population; its health "needs", over and above any age considerations; and the local costs of delivering services. The weighted population WP of an authority is calculated as

$$WP = POP*(1 + a)*(1 + n)*(1 + c)$$

where POP is the authority's unweighted population (as estimated by OPCS), *a* is the authority's age adjustment, *n* is its needs adjustment, and *c* its relative cost adjustment. The national average levels of *a*, *n* and *c* are zero.

The first thing to note is that each of the three adjustments is treated independently. An area can have a relatively young population, leading to a negative value of *a*. At the same time - given its young population - it might nevertheless have high morbidity, leading to a positive value of *n*. Finally, depending on local labour and capital costs, it might have either a negative or a positive cost adjustment factor *c*. Therefore, any one authority can have some parts of the formula working to increase its revenue share, while other parts serve to depress it.

For example, consider an authority with a relatively young population, for which per capita health care needs are estimated to be 4% below the national average. This leads to an age weighting of 0.96. However - given its age structure - the authority has a relatively needy population, with morbidity 11% above the national average. This leads to a needs weighting of 1.11. Finally, the authority is in a part of the country where the purchase of a given package of health care is estimated to be 15% above the national average. This leads to a cost weighting of 1.15. The approximate net effect of these three considerations is to give each person in the authority a *weighting* of $0.96 \times 1.11 \times 1.15 = 1.225$. That is, for every person in the population, the authority will receive about 22.5% more than the national average *per capita* allocation. Hence the expression, *weighted capitation*.

Finally - a point we return to at the end of the report - it is important to keep in mind that the weighted populations only indicate *targets* towards which revenue shares might be expected to converge over the years. Actual allocations will move towards targets at a speed determined by the Government.

The NHS Executive report gives details of the three adjustments. This report concentrates on the needs adjustment, and examines the extent to which the new needs indices affect resource allocations to individual District Health Authorities.

The needs adjustment

The needs adjustment was the part of the new system examined by the York team. Until April 1995, allocations to Regions used the square root of the under-75 SMR as the basis for calculating a needs adjustment for all specialties. The York study has resulted in major alterations to this system. It sought to identify the link between a set of needs indicators and NHS inpatient utilization, using the best available data and addressing some of the statistical limitations of the work on which the previous formula was based.

The basis of the York study was a large set of data measuring NHS utilization, health care supply, health status, and socio-economic conditions in about 5,000 small areas covering

the whole of England. The first purpose of our work was to identify indicators of health status and social factors which appeared to be correlated with inpatient utilization. To do this, we needed to control for the possible confounding effect of the *supply* of health care facilities on NHS utilization. Having identified unambiguous needs indicators, we then estimated the link between them and NHS inpatient utilization.

One of the most important steps was the decision to consider acute and non-acute specialties separately. This was done because we believed that the determinants of utilization in these very different groups of specialties might themselves be different (and this was confirmed in the subsequent empirical analysis). The outcome was two models, one for acute services and one for psychiatric services, containing the variables shown in Tables 1 and 2. We found it impossible to develop a satisfactory model for mental handicap. The model we developed for geriatrics was also rather feeble, and the inclusion of geriatrics in the acute sector was found to affect the acute model very little.

| |
|--|
| Acute needs variables |
| Standardized limiting long standing illness ratio (under 75) |
| Standardized mortality ratio (under 75) |
| Proportion of economically active who are unemployed |
| Proportion of pensionable age living alone |
| Proportion of dependants in single carer households |

Table 1: The York acute model (source: Carr-Hill *et al*, 1994)

| Psychiatric needs variables |
|---|
| Proportion born in New Commonwealth |
| Proportion of pensionable age living alone |
| Proportion of persons in lone parent families |
| Proportion of dependants with no carer |
| Proportion of adult population permanently sick |
| Standardized mortality ratio (under 75) |

Table 2: The York psychiatric model (source: Carr-Hill *et al*, 1994)

As can be seen from the Tables, the models contain a range of health and social variables which appear to be plausible determinants of utilization. The most noteworthy features are the strong importance of self reported illness amongst those aged under 75 in the acute model, and the continued presence of the under 75 standardized mortality ratio (SMR) in both models. The proportion of elderly people living alone was also found to be a strong determinant of utilization, and appears in both models.

We considered many alternative measures of health status and social conditions. It is important to recognize that just because they were not explicitly included in our recommended models does not mean that they are ignored. It is likely that they are - to a greater or lesser extent - correlated with the chosen factors, and so their impact may well be accounted for in the model. So, for example, although substandard housing conditions do not appear in either index, these might be highly correlated with (say) the "elderly living alone" variable, and so their impact will - to the extent of that correlation - be captured in the models. In practice we consider it unlikely that our models fail to capture any major dimension of measured needs.

The chosen models represent national average links between needs indicators and utilization, and can therefore be used to *predict* the level of inpatient utilization that would

occur in an area if it had a national average level of supply, and responded to needs - in the form of inpatient utilization - in the national average manner. It is these predictions that are used as the basis for the needs adjustments *n*.

The implementation

Our work was based on utilization of NHS inpatient facilities, which comprise about 45% of the Hospital and Community Health Services. In implementing our work, the Department of Health had to decide which needs model to apply to the various other programmes which make up the remainder of HCHS - for example, outpatient and day case services, mental handicap services, community services and maternity services.

In the event, the Department has chosen to disaggregate total HCHS activity into three categories: an *acute* sector, which includes acute inpatients and outpatients, geriatrics, ambulance services and maternity, and represents 64% of expenditure; a *psychiatric* sector (including psychiatric inpatients and outpatients and community services) which represents 12% of expenditure; and an *other* sector, representing 24% of expenditure. The acute model is used to distribute the acute block of funds and the psychiatric model is used to distribute the psychiatric block. The Department has chosen to apply no needs weighting at all to the "other" block, which is comprised of mental handicap, general community services, other hospital and administrative services, and a miscellany of smaller items. The details of the three blocks are shown in Table 3. The decision to disaggregate the HCHS budget in this way should be seen in the light of the previous system, in which the "square root of under-75 SMR" was applied to the entire HCHS budget.

| Health programme | 1992/93 Expenditure | |
|--|------------------------|---------------|
| | £ per head | % |
| Acute inpatients | 150.87 | 35.79 |
| Acute outpatients | 52.06 | 12.35 |
| Obstetric | 18.09 | 4.29 |
| Geriatric inpatients | 31.67 | 7.51 |
| Geriatric and YD outpatients | 0.92 | 0.22 |
| Non-psychiatric daypatients | 2.26 | 0.54 |
| Ambulance | 10.15 | 2.41 |
| Community maternity | 2.86 | 0.68 |
| Total general & acute weight | 268.88 | 63.78 |
| Mental illness inpatients | 36.81 | 8.73 |
| Mental illness outpatients | 3.21 | 0.76 |
| Psychiatric day patients | 4.07 | 0.97 |
| Community mental illness | 5.27 | 1.25 |
| Total psychiatric weight | 49.36 | 11.71 |
| Chiropody | 1.79 | 0.42 |
| Mental handicap IP & OP | 18.21 | 4.32 |
| Family planning | 1.17 | 0.28 |
| Immunization & surveillance | 5.50 | 1.30 |
| Screening | 1.48 | 0.35 |
| Professional advices and support | 5.91 | 1.40 |
| General community patient care | 16.58 | 3.93 |
| Community mental handicap | 3.94 | 0.93 |
| Health promotion | 1.76 | 0.42 |
| Community dental | 2.07 | 0.49 |
| Services to GPs under open access | 5.33 | 1.26 |
| Other community health | 6.59 | 1.56 |
| Other hospital | 17.75 | 4.21 |
| Administrative | 15.26 | 3.62 |
| Total no need weight | 103.34 | 24.51 |
| All Hospital & Community Health | 421.59 | 100.00 |

Table 3: HCHS expenditure disaggregated by programme

(source: NHS Executive, 1994a)

The implications

Assessing the impact on District allocations of the new needs indices is complicated by two factors. First, the previous system allocated funds to Regions, who adopted a variety of methods for allocating to Districts. And second, Districts' actual allocations may have been different to the targets implied by the Regional allocation formulae. Consequently, it is necessary to make some judgement as to the most appropriate benchmark against which to assess the impact of the new needs indices.

We choose to ignore the Regional tier, and assess the impact of the new arrangements on Districts directly, compared with the use of the square root of the SMR (under 75). There is no suggestion that previous allocations were in accordance with this use of the SMR. Therefore, our results are intended simply to highlight the geographical implications of the new formula compared to the old, without considering actual previous allocations. Thus we compare the impact of the York indices applied direct to Districts with the previous formula applied direct to Districts. We consider only the impact of the needs element of the new formula, and do not consider the other aspects of the allocation mechanism: age and market forces. It is important to bear in mind that these further considerations will also have important bearings on Districts' targets under the new arrangements.

In doing so, we have chosen to use the data on which our original study was based, rather than the District level data made available by the NHS Executive (1994b). This decision has two benefits. First, it provides an independent check of the NHS data. And second, it allows us to examine the new needs indices at a more disaggregated level. In practice, we found little difference between the two datasets. The major ones were the updated population and SMR data used by the NHS Executive. However, use of our dataset enables us to present results for the 186 District Health Authorities as constituted in April 1992. Since that time, a number of Districts have merged. The implications for the new larger Districts can be estimated by taking an average of the constituent previous Districts, weighted by population.

Throughout, we show the impact of the various needs indices as a percentage of the

national average *per capita*. Thus the national per capita average is 100, and a figure of (say) 113.7 implies that the District would get 13.7% more than the national average if the associated needs index were used. The full results of our analysis are shown in the Appendix, where we emphasize that the figures given here must be treated as illustrative rather than definitive. Our discussion focuses on the most extreme Districts.

The use of the square root of SMR (under 75) implied needs ranging from 123% of the national average in Central Manchester to 87% of the national average in South West Surrey. The lowest and highest needs areas under this index are shown in Table 4.

| Top ten | Value | Bottom 10 | Value |
|--------------------|--------------|------------------------|--------------|
| Central Manchester | 122.7 | East Hertfordshire | 89.9 |
| North Manchester | 121.3 | Mid Surrey | 89.9 |
| Salford | 115.8 | W. Surrey & N.E. Hants | 89.9 |
| Liverpool | 114.7 | East Dorset | 89.6 |
| Sunderland | 113.4 | Cambridge | 89.6 |
| Camberwell | 113.1 | Eastbourne | 89.6 |
| City and Hackney | 112.5 | Wycombe | 89.2 |
| Tower Hamlets | 112.3 | Huntingdon | 89.0 |
| South Tees | 112.2 | North West Surrey | 89.0 |
| Hartlepool | 112.2 | South West Surrey | 86.8 |

Table 4: Relative need using the square root of the SMR (under 75)

Table 5 shows that the York acute model identifies similar Districts as being most and least needy. However, it is slightly more redistributive, in the sense that the index for Central Manchester has increased to 130%, while that for South West Surrey has declined to 84%. The lowest needs District is now Mid Surrey. Use of the new acute index in preference to the previous SMR index therefore results in modest swings in allocations from low needs to high needs areas.

| Top ten | Value | Bottom 10 | Value |
|----------------------|--------------|------------------------|--------------|
| Central Manchester | 129.7 | Tunbridge Wells | 86.3 |
| North Manchester | 128.4 | East Hertfordshire | 86.3 |
| Liverpool | 121.8 | Basingstoke | 86.0 |
| City and Hackney | 121.0 | West Berkshire | 85.6 |
| Sunderland | 120.3 | East Surrey | 84.9 |
| Salford | 118.7 | W. Surrey & N.E. Hants | 84.7 |
| Durham | 118.4 | North West Surrey | 84.5 |
| Barnsley | 118.0 | South West Surrey | 83.6 |
| St Helens & Knowsley | 117.9 | Wycombe | 83.2 |
| Tower Hamlets | 117.9 | Mid Surrey | 82.2 |

Table 5: Relative need using the York acute index

In contrast, Table 6 shows that the psychiatric model is strongly redistributive, drawing a very sharp distinction between areas with high needs (predominantly the inner cities) and the shire areas. Central Manchester has more than double the national average level of psychiatric need, and three times that of the lowest need District (Huntingdon).

| Top ten | Value | Bottom 10 | Value |
|------------------------|--------------|------------------------|--------------|
| Central Manchester | 208.1 | West Suffolk | 69.7 |
| North Manchester | 192.4 | Tunbridge Wells | 69.0 |
| City and Hackney | 181.3 | East Hertfordshire | 68.7 |
| Bloomsbury & Islington | 181.0 | Winchester | 68.4 |
| Camberwell | 174.3 | Mid Essex | 67.1 |
| West Lambeth | 168.8 | South West Surrey | 67.1 |
| Tower Hamlets | 168.0 | Wycombe | 65.9 |
| West Birmingham | 159.9 | Basingstoke | 63.9 |
| Newham | 159.8 | W. Surrey & N.E. Hants | 63.7 |
| Lewisham / N Southwark | 158.8 | Huntingdon | 63.4 |

Table 6: Relative need using the York psychiatric index

As noted above, in implementing the York indices, the Department of Health has chosen to apply a weight of 0.64 to the acute index, 0.12 to the psychiatric index, and 0.24 to no needs index (effectively an index of 100 for every District in England). For example, in Central Manchester, the Department formula results in a combined index of

$$129.7 \times 0.64 + 208.1 \times 0.12 + 100.0 \times 0.24 = 132.0.$$

Full details of the needs weights implied by this composite formula are shown in the Appendix. From the perspective of this report, the principal interest is in the gainers and losers relative to the previous SMR index. The most extreme Districts are shown in Table

7, which confirms that use of the new formula results in substantial gains for inner city areas (in particular inner London) at the expense of shire areas. Loosely speaking, gaining areas experience an SMR which is low relative to its health care needs, while losing areas experience an SMR which overstates their health care needs.

| Top ten | Gain % | Bottom 10 | Gain % |
|------------------------|---------------|-------------------|---------------|
| Haringey | 10.96 | East Surrey | -4.73 |
| City and Hackney | 9.51 | Northallerton | -4.95 |
| Bloomsbury & Islington | 8.73 | Mid Surrey | -4.96 |
| Central Manchester | 7.56 | Basingstoke | -5.03 |
| Newham | 6.70 | Scunthorpe | -5.09 |
| North Manchester | 6.57 | Aylesbury | -5.21 |
| West Lambeth | 6.52 | East Cumbria | -5.29 |
| Tower Hamlets | 6.51 | Mid Staffordshire | -5.53 |
| Parkside | 6.45 | Northampton | -5.91 |
| Hampstead | 6.15 | West Cumbria | -6.63 |

Table 7: Gains from chosen DoH formula relative to SMR formula

The decision by the Department of Health to apply no needs weighting to 24% of HCHS expenditure is likely to be a controversial feature of the new formula. For example, it can be argued that the "community", "other hospital" and "administrative" categories of expenditure in Table 3 are likely to be proportional to hospital use - as indicated by our needs indices - rather than proportional to crude population. In the absence of any more persuasive evidence, therefore, it can be argued that use of the one or both of the York needs indices may be preferable to using no needs weighting for these categories. Similarly, although there is no evidence that the prevalence of mental handicap is associated with social conditions, it is plausible to suggest that the resource implications of mental handicap for the NHS are highest in areas with high levels of poverty. For example, carers in more affluent areas may be able to make greater use of private provision.

Clearly there is room for debate about how to weight the 24% (and indeed about how to weight services such as geriatrics and maternity which are currently given the acute weight). In order to illustrate the importance of this issue, we have chosen to present revised estimates of needs, in which the Department of Health formula has been amended so that the 24% of expenditure allocated with no needs weighting is instead weighted by the York acute index. That is, 88% of HCHS expenditure is now allocated according to the York acute model and 12% according to the psychiatric model. We call this the "full" needs formula. To return to our previous example, the Central Manchester needs index becomes:

$$129.7 \times 0.88 + 208.1 \times 0.12 = 139.1.$$

This calculation allows us to estimate the impact of the policy decision to apply zero needs weighting to 24% of expenditure. The Department of Health index gives a needs score of 132.0 to Greater Manchester, 5.1% lower than the full needs index. The most extreme gainers and losers from the policy are shown in Table 8.

| Top ten | Gain % | Bottom 10 | Gain % |
|----------------------|---------------|----------------------|---------------|
| Mid Surrey | 5.26 | North West Durham | -3.55 |
| Wycombe | 4.97 | St Helens & Knowsley | -3.66 |
| South West Surrey | 4.82 | Salford | -3.70 |
| W Surrey & N E Hants | 4.47 | Barnsley | -3.71 |
| North West Surrey | 4.46 | Durham | -3.74 |
| East Surrey | 4.34 | City and Hackney | -3.93 |
| West Berkshire | 4.13 | Sunderland | -4.02 |
| Basingstoke | 4.03 | Liverpool | -4.20 |
| East Hertfordshire | 3.91 | North Manchester | -5.01 |
| Tunbridge Wells | 3.90 | Central Manchester | -5.12 |

Table 8: Gains from chosen Department of Health formula relative to "full" needs formula

Conclusions

This report has sought to shed light on the redistributive effects of the new formula for distributing HCHS funds to health authorities. It has shown that the new acute model is slightly more redistributive than the previous formula, and that the new psychiatric model is very much more redistributive. The decision of the Department of Health to apply a zero needs weight to 24% of expenditure considerably dilutes the redistributive impact of the new formula. The treatment of this "other" block of services is therefore of crucial importance. We would not suggest that use of the acute model to allocate the problematic 24% is necessarily appropriate. For example, some of the services may be better allocated using the psychiatric model, which would result in even larger swings to those shown in Table 8. Or the zero weighting may indeed be more suitable for some services. However, the large swings shown in the Table do highlight the sensitivity of allocations to how the 24% is treated. There is clearly an urgent need for research on determinants of need in this large block of services.

As noted above, all this analysis refers to targets to which Districts will be expected to converge over a number of years. Much depends on the speed at which Ministers choose to phase in the new formula. In fact, they can hardly be said to be implementing the new arrangements zealously. The new Regional allocations are simply a 3.55% cash increase on the previous year's, and therefore make no acknowledgement of the new formula (NHS Executive, 1994b). At the subregional level, however, the new Regions do appear to be adopting the new needs formula, and there is widespread evidence that Districts are using the implied targets in strategic planning.

The new arrangements can therefore be seen to be driven very much by policy choices, such as the percentage of the cake to allocate with our needs indices, the decision to move towards allocations direct to Districts, and the speed at which the new system is phased in. The role of the York study was to inform just a part of this process with what we consider to be the best scientific evidence available. However, it must be recognized that - in the end - the resource allocation process is inevitably highly political. What matters is that the basis of the political choices is completely understood so that it can be debated in an

informed manner. In this respect, we welcome the decision of the NHS Executive to make the data underlying the new arrangements readily available.

The resource allocation issue is highly important to the National Health Service for a number of reasons. The most obvious consideration is simply that a good mechanism will secure a fair allocation of resources, in line with the founding principles of the NHS. Quite apart from fairness, however, it is also inefficient to misdirect resources towards areas that can make less good use of the funds than areas deprived of funds. And it is important for the NHS as a whole that all areas suffer equal pain from cash limits applied to the service. In that way, all Members of Parliament can expect to get their fair share of complaints from constituents, and the government of the day may therefore receive accurate messages about the electorate's preferred level of overall funding for the NHS.

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APPENDIX

Resource allocations to 1992 District Health Authorities

This appendix lists our estimates of the resource consequences of various models of health care needs, as described in the main text. The units of analysis are the 186 District Health Authorities as at April 1992. The Tables show the impact of the various indices as a percentage of the national average per capita. Thus the national per capita average is 100, and a figure of (say) 113.7 implies that the District would get 13.7% more than the national average if the associated needs index were used.

For each needs index, the total mid-1991 population for a District, as estimated by the Office of Population Censuses and Surveys (OPCS), is multiplied by the index for that District. The resultant numbers are rescaled so that across the country they sum to the total population of England. This gives a needs-adjusted population for each District. The data reported here are the needs-adjusted populations as a percentage of the unadjusted populations.

We should emphasize that our data may be slightly different to those used by the NHS Executive (1995). These differences are not substantial. However, it is important to treat the figures reported here as illustrative of the broad order of magnitude of various choices rather than as definitive.

The definition of the columns is as follows.

- (a) This column gives the per capita allocations if resources were allocated according to the square root of the Standardized Mortality Ratio (SMR) for those aged under 75. The SMR used is that for the three years 1990-1992, as supplied by OPCS.
- (b) This column gives the per capita allocations if resources were allocated according to the York acute index, described in Table 1 of the main text. The SMR used is that described above. The remaining items were derived from the 1991 Census of

Population, as detailed in Carr-Hill *et al* (1994).

- (c) This column gives the per capita allocations if resources were allocated according to the York psychiatric model, described in Table 2 of the main text. Data sources are as for (b).
- (d) This column gives the per capita allocations if resources were allocated according to the Department of Health methods. These entailed a weighted average of the York acute model (64%), the York psychiatric model (12%), and no needs adjustment (24%). It is therefore calculated as [0.64 times column (b)] plus [0.12 times column (c)] plus 24.
- (e) This column gives the percentage gain to the District implied by the new Department of Health methods compared to the use of the square root of SMR (under 75). It is calculated as the percentage increase from (a) to (d).
- (f) This column gives the per capita allocations if resources were allocated according to a variant of the Department of Health methods in which the 24% of funds currently not weighted for need were instead weighted according to the York acute model. It has the effect of yielding a weighted average of the York acute model (88%) and the York psychiatric model (12%). It is therefore calculated as [0.88 times column (b)] plus [0.12 times column (c)].
- (g) This column gives the percentage gain to the District implied by the "full" needs weighting, compared to the use of the square root of SMR (under 75). It is calculated as the percentage increase from (a) to (f).
- (h) This column gives the percentage gain to the District implied by the Department of Health choice of method compared to the "full" needs formula. It is calculated as the percentage increase from column (f) to column (d).

| Health Authority | Square root SMR under75 | York acute model | York mental illness model | DoH formula | Gain from (a)to (d) % | "Full" needs form -ula | Gain from (a)to (f) % | Gain from DoH choice % |
|------------------------------|-------------------------|------------------|---------------------------|-------------|-----------------------|------------------------|-----------------------|------------------------|
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| A01 Hartlepool | 112.2 | 117.3 | 117.3 | 113.1 | 0.84 | 117.3 | 4.55 | -3.54 |
| A02 North Tees | 110.3 | 111.9 | 111.2 | 109.0 | -1.21 | 111.8 | 1.37 | -2.55 |
| A03 South Tees | 112.2 | 117.0 | 128.4 | 114.3 | 1.86 | 118.4 | 5.50 | -3.45 |
| A04 East Cumbria | 101.6 | 97.5 | 81.9 | 96.2 | -5.29 | 95.6 | -5.88 | 0.63 |
| A05 South Cumbria | 100.4 | 97.8 | 83.1 | 96.6 | -3.82 | 96.0 | -4.35 | 0.55 |
| A06 West Cumbria | 109.8 | 105.7 | 90.6 | 102.5 | -6.63 | 103.9 | -5.38 | -1.32 |
| A07 Darlington | 106.1 | 105.7 | 103.8 | 104.1 | -1.88 | 105.5 | -0.59 | -1.30 |
| A08 Durham | 109.0 | 118.4 | 115.9 | 113.7 | 4.30 | 118.1 | 8.35 | -3.74 |
| A09 North West Durham | 110.6 | 117.2 | 110.1 | 112.2 | 1.46 | 116.3 | 5.20 | -3.55 |
| A10 South West Durham | 111.4 | 117.1 | 112.4 | 112.4 | 0.93 | 116.5 | 4.61 | -3.52 |
| A11 Northumberland | 102.5 | 103.1 | 92.9 | 101.1 | -1.33 | 101.9 | -0.61 | -0.73 |
| A12 Gateshead | 111.6 | 116.6 | 122.3 | 113.3 | 1.52 | 117.3 | 5.09 | -3.40 |
| A13 Newcastle Upon Tyne | 111.9 | 115.6 | 145.6 | 115.5 | 3.18 | 119.2 | 6.52 | -3.14 |
| A14 North Tyneside | 107.8 | 110.9 | 114.0 | 108.7 | 0.79 | 111.3 | 3.22 | -2.35 |
| A15 South Tyneside | 110.0 | 116.0 | 127.1 | 113.5 | 3.17 | 117.3 | 6.67 | -3.27 |
| A16 Sunderland | 113.4 | 120.3 | 126.5 | 116.2 | 2.44 | 121.0 | 6.74 | -4.02 |
| B12 Hull | 105.8 | 109.9 | 106.4 | 107.1 | 1.23 | 109.5 | 3.48 | -2.17 |
| B13 East Yorkshire | 94.0 | 91.4 | 70.8 | 91.0 | -3.20 | 88.9 | -5.40 | 2.32 |
| B14 Grimsby | 105.5 | 104.5 | 91.8 | 101.9 | -3.42 | 103.0 | -2.39 | -1.05 |
| B15 Scunthorpe | 104.5 | 101.4 | 85.7 | 99.2 | -5.09 | 99.5 | -4.77 | -0.34 |
| B22 Northallerton | 95.5 | 91.1 | 70.6 | 90.8 | -4.95 | 88.6 | -7.18 | 2.41 |
| B23 York | 96.6 | 94.2 | 80.4 | 93.9 | -2.76 | 92.5 | -4.20 | 1.50 |
| B24 Scarborough | 95.4 | 95.8 | 81.1 | 95.0 | -0.37 | 94.0 | -1.43 | 1.07 |
| B25 Harrogate | 96.2 | 91.1 | 80.1 | 91.9 | -4.45 | 89.8 | -6.67 | 2.38 |
| B32 Bradford | 111.3 | 111.5 | 139.0 | 112.0 | 0.66 | 114.8 | 3.14 | -2.40 |
| B33 Airedale | 98.3 | 96.0 | 95.0 | 96.8 | -1.49 | 95.9 | -2.46 | 1.00 |
| B42 Calderdale | 106.9 | 105.4 | 114.8 | 105.2 | -1.56 | 106.5 | -0.35 | -1.22 |
| B52 Huddersfield | 102.9 | 102.4 | 115.6 | 103.4 | 0.49 | 104.0 | 1.05 | -0.55 |
| B53 Dewsbury | 106.1 | 105.2 | 117.3 | 105.4 | -0.66 | 106.7 | 0.52 | -1.17 |
| B61 Leeds | 104.2 | 105.0 | 118.2 | 105.4 | 1.14 | 106.6 | 2.29 | -1.13 |
| B72 Wakefield | 106.8 | 104.7 | 103.2 | 103.4 | -3.19 | 104.5 | -2.13 | -1.08 |
| B73 Pontefract | 109.3 | 116.2 | 105.7 | 111.1 | 1.60 | 114.9 | 5.16 | -3.38 |
| C01 North Derbyshire | 100.9 | 102.5 | 82.3 | 99.5 | -1.41 | 100.1 | -0.82 | -0.60 |
| C02 South Derbyshire | 101.9 | 100.2 | 95.6 | 99.6 | -2.26 | 99.6 | -2.21 | -0.05 |
| C03 Leicestershire | 96.2 | 94.6 | 97.2 | 96.2 | 0.01 | 94.9 | -1.34 | 1.37 |
| C04 North Lincolnshire | 99.1 | 99.5 | 86.3 | 98.0 | -1.07 | 97.9 | -1.19 | 0.12 |
| C05 South Lincolnshire | 98.0 | 95.7 | 78.2 | 94.6 | -3.44 | 93.6 | -4.49 | 1.10 |
| C06 Bassetlaw | 103.4 | 104.8 | 90.1 | 101.9 | -1.47 | 103.0 | -0.35 | -1.12 |
| C07 Central Notts | 101.4 | 106.3 | 89.8 | 102.8 | 1.39 | 104.3 | 2.88 | -1.45 |
| C08 Nottingham | 100.6 | 102.6 | 107.9 | 102.6 | 2.00 | 103.2 | 2.62 | -0.60 |
| C09 Barnsley | 108.5 | 118.0 | 106.3 | 112.3 | 3.48 | 116.6 | 7.46 | -3.71 |
| C10 Doncaster | 105.0 | 112.9 | 108.1 | 109.2 | 4.03 | 112.3 | 6.98 | -2.76 |
| C11 Rotherham | 105.1 | 112.5 | 105.6 | 108.7 | 3.40 | 111.7 | 6.25 | -2.69 |
| C12 Sheffield | 104.0 | 109.5 | 120.9 | 108.6 | 4.41 | 110.9 | 6.60 | -2.06 |
| D01 Cambridge | 89.6 | 87.9 | 73.6 | 89.1 | -0.57 | 86.2 | -3.81 | 3.37 |
| D02 Peterborough | 98.6 | 98.6 | 96.1 | 98.6 | 0.04 | 98.3 | -0.30 | 0.34 |
| D03 West Suffolk | 94.6 | 90.3 | 69.7 | 90.2 | -4.70 | 87.8 | -7.16 | 2.65 |
| D04 East Suffolk | 90.3 | 89.9 | 74.2 | 90.4 | 0.16 | 88.0 | -2.53 | 2.75 |
| D06 Norwich | 90.3 | 91.4 | 75.6 | 91.6 | 1.40 | 89.5 | -0.88 | 2.31 |
| D07 Great Yarmouth | 96.4 | 97.8 | 84.5 | 96.7 | 0.34 | 96.2 | -0.20 | 0.55 |
| D08 W Norfolk & Wisbech | 94.1 | 94.9 | 76.3 | 93.9 | -0.22 | 92.7 | -1.52 | 1.32 |
| D09 Huntingdon | 89.0 | 86.7 | 63.4 | 87.1 | -2.14 | 83.9 | -5.73 | 3.80 |
| E01 North Bedfordshire | 95.9 | 90.2 | 82.3 | 91.6 | -4.48 | 89.3 | -6.93 | 2.64 |
| E02 South Bedfordshire | 100.5 | 96.5 | 94.2 | 97.1 | -3.42 | 96.2 | -4.25 | 0.87 |
| E03 North Hertfordshire | 93.3 | 90.5 | 81.4 | 91.7 | -1.73 | 89.4 | -4.17 | 2.55 |
| E04 East Hertfordshire | 89.9 | 86.3 | 68.7 | 87.5 | -2.70 | 84.2 | -6.35 | 3.91 |
| E05 North West Hertfordshire | 91.2 | 86.7 | 78.0 | 88.8 | -2.58 | 85.7 | -6.08 | 3.73 |
| E06 South West Hertfordshire | 93.9 | 88.6 | 84.6 | 90.9 | -3.24 | 88.1 | -6.16 | 3.10 |
| E07 Barnet | 93.1 | 91.1 | 98.6 | 94.1 | 1.11 | 92.0 | -1.18 | 2.32 |
| E08 Harrow | 90.1 | 89.8 | 93.4 | 92.7 | 2.86 | 90.2 | 0.15 | 2.71 |
| E09 Hillingdon | 96.5 | 92.7 | 92.7 | 94.5 | -2.12 | 92.7 | -3.94 | 1.89 |
| E10 Hounslow & Spelthorne | 98.1 | 95.0 | 104.3 | 97.3 | -0.80 | 96.1 | -2.02 | 1.25 |
| E11 Ealing | 103.0 | 102.9 | 128.5 | 105.3 | 2.21 | 106.0 | 2.89 | -0.66 |
| E14 Riverside | 105.2 | 104.6 | 146.3 | 108.5 | 3.14 | 109.6 | 4.19 | -1.01 |
| E17 Parkside | 103.1 | 105.8 | 150.3 | 109.7 | 6.45 | 111.1 | 7.80 | -1.25 |

| Health Authority | Square root SMR under75 | York acute model | York mental illness model | DoH form -ula | Gain from (a)to (d) % | "Full" needs form -ula | Gain from (a)to (f) % | Gain from DoH choice % |
|-------------------------------|----------------------------------|------------------------|------------------------------------|---------------------|-----------------------------------|---------------------------------|-----------------------------------|------------------------------------|
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| F01 Basildon & Thurrock | 100.3 | 99.2 | 87.6 | 98.0 | -2.29 | 97.8 | -2.48 | 0.20 |
| F02 Mid Essex | 90.6 | 87.8 | 67.1 | 88.2 | -2.60 | 85.3 | -5.83 | 3.43 |
| F03 North East Essex | 94.7 | 94.2 | 85.1 | 94.5 | -0.21 | 93.1 | -1.68 | 1.50 |
| F04 West Essex | 93.8 | 90.7 | 75.0 | 91.0 | -2.93 | 88.8 | -5.31 | 2.51 |
| F05 Southend | 95.1 | 94.7 | 82.6 | 94.5 | -0.61 | 93.2 | -1.95 | 1.36 |
| F06 Barking, Havering & Brent | 98.6 | 97.0 | 93.6 | 97.3 | -1.31 | 96.6 | -2.04 | 0.75 |
| F07 Hampstead | 103.1 | 105.2 | 150.9 | 109.4 | 6.15 | 110.7 | 7.36 | -1.13 |
| F10 City and Hackney | 112.5 | 121.0 | 181.3 | 123.2 | 9.51 | 128.2 | 13.99 | -3.93 |
| F11 Newham | 109.8 | 115.6 | 159.8 | 117.2 | 6.70 | 120.9 | 10.11 | -3.10 |
| F12 Tower Hamlets | 112.3 | 117.9 | 168.0 | 119.6 | 6.51 | 123.9 | 10.34 | -3.47 |
| F13 Enfield | 96.0 | 96.3 | 108.9 | 98.7 | 2.81 | 97.8 | 1.89 | 0.91 |
| F14 Haringey | 101.3 | 109.4 | 153.2 | 112.4 | 10.96 | 114.7 | 13.18 | -1.97 |
| F15 Redbridge | 97.1 | 96.4 | 106.7 | 98.5 | 1.44 | 97.6 | 0.55 | 0.88 |
| F16 Waltham Forest | 102.6 | 105.4 | 133.1 | 107.4 | 4.71 | 108.7 | 5.97 | -1.19 |
| F22 Bloomsbury & Islington | 110.8 | 116.8 | 181.0 | 120.5 | 8.73 | 124.5 | 12.37 | -3.24 |
| G01 Brighton | 97.4 | 99.5 | 107.5 | 100.6 | 3.26 | 100.5 | 3.14 | 0.12 |
| G02 Eastbourne | 89.6 | 89.6 | 80.8 | 91.0 | 1.61 | 88.5 | -1.18 | 2.82 |
| G03 Hastings | 94.6 | 97.1 | 99.4 | 98.1 | 3.67 | 97.4 | 2.93 | 0.71 |
| G04 South East Kent | 95.0 | 96.3 | 86.4 | 96.0 | 1.05 | 95.1 | 0.12 | 0.93 |
| G05 Canterbury & Thanet | 96.9 | 98.1 | 93.0 | 97.9 | 1.08 | 97.5 | 0.61 | 0.47 |
| G06 Dartford & Gravesham | 99.3 | 94.4 | 85.2 | 94.6 | -4.69 | 93.3 | -6.05 | 1.44 |
| G07 Maidstone | 93.0 | 88.9 | 70.7 | 89.4 | -3.89 | 86.7 | -6.76 | 3.07 |
| G08 Medway | 101.3 | 98.0 | 84.8 | 96.9 | -4.35 | 96.4 | -4.82 | 0.50 |
| G09 Tunbridge Wells | 91.1 | 86.3 | 69.0 | 87.5 | -3.94 | 84.2 | -7.55 | 3.90 |
| G10 Bexley | 95.5 | 93.3 | 86.2 | 94.1 | -1.51 | 92.4 | -3.20 | 1.74 |
| G11 Greenwich | 104.1 | 107.4 | 133.5 | 108.8 | 4.47 | 110.5 | 6.18 | -1.61 |
| G12 Bromley | 91.3 | 89.8 | 84.5 | 91.6 | 0.34 | 89.2 | -2.34 | 2.75 |
| G13 West Lambeth | 109.8 | 113.6 | 168.8 | 117.0 | 6.52 | 120.2 | 9.49 | -2.71 |
| G14 Camberwell | 113.1 | 116.4 | 174.3 | 119.4 | 5.58 | 123.3 | 9.06 | -3.19 |
| G15 Lewisham & N Southwark | 109.1 | 112.2 | 158.8 | 114.9 | 5.28 | 117.8 | 7.97 | -2.49 |
| H01 North West Surrey | 89.0 | 84.5 | 74.9 | 87.1 | -2.17 | 83.3 | -6.35 | 4.46 |
| H02 West Surrey & North East | 89.9 | 84.7 | 63.7 | 85.9 | -4.50 | 82.2 | -8.59 | 4.47 |
| H03 South West Surrey | 86.8 | 83.6 | 67.1 | 85.6 | -1.43 | 81.6 | -5.97 | 4.82 |
| H04 Mid Surrey | 89.9 | 82.2 | 73.6 | 85.4 | -4.96 | 81.2 | -9.71 | 5.26 |
| H05 East Surrey | 91.5 | 84.9 | 73.6 | 87.2 | -4.73 | 83.5 | -8.70 | 4.34 |
| H06 Chichester | 90.2 | 88.9 | 78.4 | 90.3 | 0.12 | 87.6 | -2.84 | 3.04 |
| H07 Mid Downs | 92.3 | 86.6 | 72.5 | 88.1 | -4.52 | 84.9 | -8.01 | 3.79 |
| H08 Worthing | 92.0 | 91.9 | 84.7 | 93.0 | 1.07 | 91.0 | -1.05 | 2.14 |
| H09 Croydon | 97.0 | 95.2 | 105.9 | 97.6 | 0.66 | 96.5 | -0.53 | 1.19 |
| H10 Kingston and Esher | 93.0 | 87.5 | 81.3 | 89.8 | -3.49 | 86.8 | -6.71 | 3.46 |
| H11 Richmond, Twickenham & Ro | 95.9 | 93.5 | 104.0 | 96.3 | 0.44 | 94.8 | -1.19 | 1.65 |
| H12 Wandsworth | 108.6 | 107.4 | 146.4 | 110.3 | 1.57 | 112.1 | 3.20 | -1.58 |
| H13 Merton and Sutton | 95.3 | 93.5 | 99.5 | 95.8 | 0.50 | 94.2 | -1.13 | 1.66 |
| J11 East Dorset | 89.6 | 92.1 | 79.0 | 92.4 | 3.15 | 90.5 | 1.04 | 2.09 |
| J12 West Dorset | 92.8 | 91.3 | 77.0 | 91.7 | -1.22 | 89.6 | -3.47 | 2.33 |
| J21 Portsmouth | 97.0 | 96.0 | 88.0 | 96.0 | -1.03 | 95.0 | -2.02 | 1.01 |
| J22 South West Hampshire | 95.8 | 94.2 | 86.1 | 94.6 | -1.23 | 93.2 | -2.68 | 1.49 |
| J23 Winchester | 91.4 | 86.8 | 68.4 | 87.8 | -3.98 | 84.6 | -7.45 | 3.75 |
| J24 Basingstoke | 91.3 | 86.0 | 63.9 | 86.7 | -5.03 | 83.3 | -8.71 | 4.03 |
| J31 Salisbury | 91.7 | 88.8 | 71.9 | 89.5 | -2.44 | 86.8 | -5.37 | 3.10 |
| J32 Swindon | 96.7 | 93.6 | 79.2 | 93.4 | -3.40 | 91.9 | -4.99 | 1.67 |
| J33 Bath | 91.7 | 88.9 | 73.2 | 89.7 | -2.20 | 87.0 | -5.11 | 3.06 |
| J41 Isle of Wight | 95.6 | 97.1 | 86.8 | 96.6 | 1.00 | 95.9 | 0.28 | 0.73 |
| K11 East Berkshire | 95.8 | 90.1 | 84.2 | 91.8 | -4.21 | 89.4 | -6.69 | 2.66 |
| K12 West Berkshire | 91.4 | 85.6 | 70.0 | 87.2 | -4.61 | 83.7 | -8.39 | 4.13 |
| K21 Aylesbury | 93.6 | 87.7 | 71.6 | 88.7 | -5.21 | 85.8 | -8.37 | 3.44 |
| K22 Wycombe | 89.2 | 83.2 | 65.9 | 85.2 | -4.53 | 81.1 | -9.05 | 4.97 |
| K23 Milton Keynes | 100.2 | 97.7 | 87.9 | 97.1 | -3.12 | 96.5 | -3.67 | 0.57 |
| K31 Kettering | 99.8 | 95.7 | 86.7 | 95.7 | -4.16 | 94.6 | -5.19 | 1.09 |
| K32 Northampton | 99.2 | 92.8 | 82.9 | 93.3 | -5.91 | 91.6 | -7.65 | 1.89 |
| K41 Oxfordshire | 91.0 | 88.2 | 71.5 | 89.0 | -2.17 | 86.2 | -5.28 | 3.29 |

| Health Authority | Square root SMR under75 | York acute model | York mental illness model | DoH form -ula | Gain from (a)to (d) % | "Full" needs form -ula | Gain from (a)to (f) % | Gain from DoH choice % |
|-------------------------------|-------------------------|------------------|---------------------------|---------------|-----------------------|------------------------|-----------------------|------------------------|
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| L11 Bristol and Weston | 97.9 | 98.6 | 98.0 | 98.9 | 0.98 | 98.5 | 0.64 | 0.34 |
| L12 Frenchay | 94.0 | 92.2 | 79.9 | 92.6 | -1.49 | 90.7 | -3.49 | 2.06 |
| L13 Southmead | 94.5 | 92.5 | 81.7 | 93.0 | -1.58 | 91.2 | -3.49 | 1.97 |
| L21 Cornwall | 94.2 | 97.9 | 81.5 | 96.4 | 2.37 | 95.9 | 1.84 | 0.53 |
| L31 Exeter | 92.8 | 92.8 | 81.2 | 93.1 | 0.36 | 91.4 | -1.50 | 1.89 |
| L32 North Devon | 91.5 | 92.9 | 74.0 | 92.3 | 0.91 | 90.6 | -0.95 | 1.88 |
| L33 Plymouth | 98.2 | 100.0 | 90.6 | 98.9 | 0.68 | 98.9 | 0.68 | 0.00 |
| L34 Torbay | 92.1 | 95.4 | 85.3 | 95.3 | 3.47 | 94.2 | 2.27 | 1.17 |
| L41 Cheltenham | 92.5 | 89.1 | 76.9 | 90.3 | -2.43 | 87.6 | -5.26 | 2.99 |
| L42 Gloucester | 94.6 | 92.7 | 78.2 | 92.7 | -2.00 | 91.0 | -3.85 | 1.93 |
| L51 Somerset | 90.6 | 91.1 | 74.1 | 91.2 | 0.66 | 89.1 | -1.70 | 2.40 |
| M01 Bromsgrove & Redditch | 94.7 | 93.3 | 76.7 | 92.9 | -1.88 | 91.3 | -3.58 | 1.76 |
| M02 Hereford | 93.1 | 91.5 | 72.7 | 91.3 | -1.95 | 89.2 | -4.14 | 2.29 |
| M03 Kidderminster | 97.9 | 95.6 | 77.6 | 94.5 | -3.48 | 93.4 | -4.56 | 1.13 |
| M04 Worcester | 93.9 | 91.0 | 73.7 | 91.1 | -3.00 | 88.9 | -5.30 | 2.43 |
| M05 Shropshire | 97.1 | 96.9 | 82.1 | 95.9 | -1.27 | 95.1 | -2.04 | 0.78 |
| M06 Mid Staffordshire | 99.9 | 96.1 | 73.9 | 94.4 | -5.53 | 93.4 | -6.47 | 1.00 |
| M07 North Staffordshire | 108.0 | 109.6 | 107.6 | 107.1 | -0.87 | 109.4 | 1.26 | -2.11 |
| M08 South East Staffordshire | 100.2 | 97.0 | 79.5 | 95.6 | -4.57 | 94.9 | -5.29 | 0.76 |
| M11 South Warwickshire | 94.9 | 89.9 | 79.8 | 91.1 | -3.99 | 88.7 | -6.55 | 2.73 |
| M13 East Birmingham | 109.3 | 113.1 | 140.7 | 113.3 | 3.63 | 116.4 | 6.51 | -2.70 |
| M14 North Birmingham | 100.5 | 99.4 | 103.0 | 100.0 | -0.52 | 99.8 | -0.66 | 0.14 |
| M16 West Birmingham | 111.7 | 115.5 | 159.9 | 117.1 | 4.84 | 120.8 | 8.17 | -3.08 |
| M17 Coventry | 106.3 | 105.9 | 125.6 | 106.8 | 0.52 | 108.3 | 1.85 | -1.31 |
| M18 Dudley | 99.9 | 99.3 | 89.9 | 98.3 | -1.56 | 98.2 | -1.73 | 0.17 |
| M19 Sandwell | 108.5 | 109.7 | 126.8 | 109.4 | 0.85 | 111.8 | 3.00 | -2.08 |
| M20 Solihull | 94.3 | 92.4 | 81.4 | 92.9 | -1.48 | 91.1 | -3.41 | 2.00 |
| M21 Walsall | 107.2 | 107.1 | 115.7 | 106.4 | -0.72 | 108.1 | 0.87 | -1.58 |
| M22 Wolverhampton | 106.8 | 109.2 | 131.1 | 109.6 | 2.64 | 111.8 | 4.71 | -1.97 |
| M24 North East Warwickshire | 99.8 | 99.0 | 89.0 | 98.0 | -1.76 | 97.8 | -2.00 | 0.25 |
| M25 South Birmingham | 107.3 | 108.3 | 133.8 | 109.4 | 1.93 | 111.4 | 3.78 | -1.79 |
| N11 Chester | 100.8 | 99.8 | 88.8 | 98.5 | -2.25 | 98.5 | -2.30 | 0.05 |
| N12 Crewe | 100.9 | 98.9 | 80.9 | 97.0 | -3.86 | 96.7 | -4.12 | 0.27 |
| N13 Halton | 107.1 | 111.7 | 100.8 | 107.6 | 0.45 | 110.4 | 3.07 | -2.54 |
| N14 Macclesfield | 95.1 | 91.5 | 77.9 | 91.9 | -3.36 | 89.9 | -5.50 | 2.27 |
| N15 Warrington | 103.5 | 103.4 | 98.2 | 102.0 | -1.49 | 102.8 | -0.70 | -0.79 |
| N21 Liverpool | 114.7 | 121.8 | 146.0 | 119.5 | 4.16 | 124.7 | 8.72 | -4.20 |
| N31 St Helens & Knowsley | 110.3 | 117.9 | 114.5 | 113.2 | 2.63 | 117.5 | 6.52 | -3.66 |
| N41 Southport & Formby | 97.1 | 96.9 | 86.4 | 96.4 | -0.74 | 95.6 | -1.50 | 0.78 |
| N42 South Sefton | 106.8 | 111.2 | 109.9 | 108.4 | 1.46 | 111.0 | 3.97 | -2.42 |
| N51 Wirral | 106.6 | 108.3 | 106.6 | 106.1 | -0.47 | 108.1 | 1.40 | -1.84 |
| P01 Lancaster | 104.0 | 103.8 | 105.5 | 103.1 | -0.87 | 104.0 | 0.00 | -0.88 |
| P02 Blackpool, Wyre & Fylde | 103.8 | 105.4 | 102.0 | 103.7 | -0.10 | 105.0 | 1.15 | -1.23 |
| P03 Preston | 111.0 | 110.7 | 136.4 | 111.2 | 0.19 | 113.8 | 2.51 | -2.26 |
| P04 Blackburn, Hyndburn & Rib | 108.2 | 110.3 | 133.8 | 110.6 | 2.26 | 113.1 | 4.55 | -2.19 |
| P05 Burnley, Pendle & Rossend | 108.3 | 112.4 | 135.9 | 112.2 | 3.64 | 115.2 | 6.39 | -2.58 |
| P06 West Lancashire | 100.2 | 103.4 | 91.7 | 101.2 | 0.98 | 102.0 | 1.79 | -0.80 |
| P07 Chorley & South Ribble | 99.3 | 98.5 | 82.8 | 97.0 | -2.34 | 96.6 | -2.70 | 0.37 |
| P08 Bolton | 108.7 | 111.1 | 130.9 | 110.8 | 1.94 | 113.5 | 4.39 | -2.35 |
| P09 Bury | 105.0 | 104.2 | 108.9 | 103.8 | -1.18 | 104.8 | -0.22 | -0.96 |
| P10 North Manchester | 121.3 | 128.4 | 192.4 | 129.3 | 6.57 | 136.1 | 12.18 | -5.01 |
| P11 Central Manchester | 122.7 | 129.7 | 208.1 | 132.0 | 7.56 | 139.1 | 13.37 | -5.12 |
| P12 South Manchester | 111.3 | 117.5 | 156.4 | 118.0 | 5.99 | 122.2 | 9.76 | -3.44 |
| P13 Oldham | 111.7 | 111.9 | 137.1 | 112.1 | 0.33 | 114.9 | 2.89 | -2.49 |
| P14 Rochdale | 111.1 | 113.0 | 137.4 | 112.8 | 1.54 | 115.9 | 4.35 | -2.69 |
| P15 Salford | 115.8 | 118.7 | 140.3 | 116.8 | 0.87 | 121.3 | 4.74 | -3.70 |
| P16 Stockport | 101.1 | 98.3 | 93.9 | 98.2 | -2.89 | 97.8 | -3.29 | 0.42 |
| P17 Tameside & Glossop | 109.6 | 109.4 | 120.8 | 108.5 | -0.99 | 110.8 | 1.07 | -2.04 |
| P18 Trafford | 100.7 | 100.4 | 104.8 | 100.8 | 0.13 | 100.9 | 0.23 | -0.10 |
| P19 Wigan | 109.4 | 115.1 | 108.3 | 110.7 | 1.15 | 114.3 | 4.46 | -3.17 |