

## How much English health authorities are allocated for mental health care

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The authors of the King's Fund report on London's mental health services (Johnson *et al*, 1997) argued that the formula used by the Department of Health to allocate resources to health authorities fails to meet the needs of inner cities. It is difficult to explore this issue because the principal allocation to district health authorities is set out as a single figure, with no subdivisions for separate clinical areas. This differs from local government finance, where annual allocations are itemised in a report detailing both major components (education, social services and road maintenance), and subdivisions of these (House of Commons, 1998). However, in the process used by the Department of Health to calculate health service allocations, several areas of clinical work, including the care of the mentally ill and learning disabled, receive distinct consideration. An annual publication sets out the detail (NHS Executive, 1998). Slight reworking allows the identification of implied allocations for the following clinical areas: general and acute; mental illness and learning disability; and other community care. This paper outlines the methodology and shows the allocations to health authorities in England for 1990-2000.

### THE RESOURCE ALLOCATION PROCESS

In 1999-2000, £31 287.5m was made available for the overall running of services funded by health authorities. Of this, £2659.6m was allocated to specially funded initiatives, only one of which (drug misuse, £53.2m) is specifically within the domain of mental health care. Of the remaining £28 627.9m, £23 346.2m was distributed on a basis appropriate for hospital and community health services and £5281.7m for primary care. This paper considers only the hospital and community health services component.

The calculation of each district's main or 'recurrent' allocation proceeds in three stages. First, a fair share or 'weighted capitation target' is calculated for each district. Second, how far from this ideal figure the eventual funding for each district in the previous year lay is established after allowance for shifts of authority responsibilities, for example as a result of boundary changes. Finally, a set of rules is defined which allows some growth for all districts but more for those furthest below target. The key stage as far as allocation to clinical areas is concerned is the first. Thereafter, modifications can be seen as blanket adjustments affecting all services equally.

The calculation of weighted capitation targets attempts to establish a distribution of the available funds which will provide what the original Resource Allocation Working Party report (Department of Health and Society Security, 1976) termed "equal access to services for people with equal needs". In 1999-2000, four types of influence were encompassed: age profile; estimated morbidity; geographic variations in costs; and the cost of providing ambulance services. Using a range of indicators in each case, weightings are derived for each type of influence for each district. These values are a little above or below unity, representing how much more or less than the national average are the needs of the districts population as a consequence of that factor.

### Morbidity weighting

The effect of the morbidity level in the population is estimated in three parallel strands, reflecting the types of health care need they imply: general and acute; mental illness and learning disabilities; and other community services. A morbidity weighting method has been devised for each on the basis of observed relationships between socio-demographic characteristics and observed patterns of service use in the populations of small areas (Carr-Hill *et al*, 1994;

Buckingham *et al*, 1996). The range of variation for the mental illness and learning disability need estimates is much greater than that for general and acute or community services. Hence, how much influence is given to each has a significant effect on the overall result. This is determined empirically, not as a policy decision. The figures are derived from the national proportion of funds spent on the corresponding service area in the most recent years for which figures are available. The 1999-2000 distribution is based on figures for the financial years 1994-95 to 1996-97. During this period the average observed allocation was as follows: general and acute, 70.22%; mental illness and learning disability, 17.91%; and other community services, 11.87%.

There were two changes in the structure of this process this year. First, the roughly 9% of the overall budget spent on administrative and other clinical and non-clinical services ceased to be separately identified, the assumption being that its use should simply follow that of the services being administered. Second, the 5% of the budget spent on learning disabilities has been combined with the 11% spent on mental illness services. Neither change made a substantial difference to the allocation of funds this year. The changes merely tidied up the presentation of substantive alterations in distribution introduced the preceding year.

The actual population figure for each district is multiplied by the combined morbidity weight and the other three weights. These figures are finally rescaled so that when summed they equal the actual population of the country. Weighted capitation targets are calculated by dividing the available resources in the proportions of these weighted populations.

Three broad types of modification are subsequently made. First, two cross-cutting influences, namely the numbers of people sleeping rough and the need for translation services, are estimated. For this paper it has been assumed that the impact of these factors on mental illness and learning disability services is just the same as that on other types of hospital and community health services. Second, a re-allocation of money for the care of 'old long-stay' patients is made, reflecting the fact that their distribution arises from the location of old institutions and hence does not necessarily match the patterns of population-based morbidity underlying funding distribution. The sum involved for this is large: £621.8m in 1999-2000. Third, small amounts of money

Table 1 Revenue allocations to health authorities for hospital and community health services for mental illness and learning disability services, 1999–2000

Health authority	Mental illness and learning disability allocation, excluding old long-stay allocation (£000)	Old long-stay allocation (£000)	Drugs misuse grant (£000)	Total (£000)	Total per capita (£)	Total as percentage of health authority revenue allocation (%)
<b>Northern and Yorkshire</b>						
Bradford	£46 279	£5993	£468	£52 741	£108	16.8
Calderdale and Kirklees	£51 625	£3223	£533	£55 381	£96	15.2
County Durham	£51 620	£3839	£639	£56 098	£92	13.8
East Riding	£41 587	£60 12	£597	£48 195	£82	13.4
Gateshead and South Tyneside	£34 820	£5741	£443	£41 004	£114	16.0
Leeds	£65 871	£6726	£891	£73 487	£100	15.7
Newcastle and North Tyneside	£49 449	£6548	£645	£56 642	£120	16.9
North Cumbria	£21 868	£3627	£300	£25 794	£81	13.0
North Yorkshire	£47 132	£6215	£646	£53 992	£73	12.4
Northumberland	£22 705	£6223	£319	£29 247	£95	14.6
Sunderland	£27 001	£2980	£370	£30 351	£105	15.2
Tees	£49 682	£4288	£582	£54 442	£99	14.8
Wakefield	£25 816	£5152	£355	£31 323	£96	14.7
<b>Trent</b>						
Barnsley	£18 118	£1204	£253	£19 574	£84	12.6
Doncaster	£24 068	£4992	£295	£29 355	£99	14.4
Leicestershire	£66 191	£10 367	£857	£77 414	£83	15.0
Lincolnshire	£42 156	£4683	£531	£47 369	£74	12.1
North Derbyshire	£23 663	£0	£332	£23 995	£65	10.7
North Nottinghamshire	£25 715	£2252	£344	£28 311	£74	12.1
Nottingham	£52 305	£1222	£726	£54 254	£84	14.1
Rotherham	£19 194	£145	£322	£19 661	£81	12.5
Sheffield	£50 910	£5971	£678	£57 558	£107	15.7
South Derbyshire	£41 036	£4893	£497	£46 427	£81	13.7
South Humber	£22 620	£884	£302	£23 806	£77	12.1
<b>Eastern</b>						
Bedfordshire	£37 835	£6058	£537	£44 429	£79	14.2
Cambridge and Huntingdon	£24 280	£3574	£564	£28 418	£63	12.2
East and North Herefordshire	£31 109	£5527	£541	£37 177	£71	12.9
East Norfolk	£40 370	£9688	£590	£50 648	£80	13.2
North Essex	£53 882	£14 905	£663	£69 450	£80	11.5
North West Anglia	£28 943	£1507	£396	£30 846	£74	12.5
South Essex	£47 069	£10 369	£537	£57 975	£81	14.9
Suffolk	£40 826	£3579	£626	£45 031	£65	11.4
West Hertfordshire	£37 280	£9955	£416	£47 651	£89	14.8
<b>London</b>						
Barking and Havering	£32 808	£1106	£354	£34 268	£88	14.1
Barnet	£28 685	£7555	£335	£36 575	£111	17.2
Brent and Harrow	£40 253	£4033	£535	£44 821	£106	15.7
Bexley and Greenwich	£46 863	£10 387	£513	£57 763	£125	18.3
Bromley	£21 736	£12 147	£276	£34 158	£114	17.8
Camden and Islington	£61 012	£2318	£1209	£64 538	£172	20.6
Croydon	£28 601	£9427	£322	£38 350	£115	18.5
Ealing, Hammersmith and Hounslow	£76 659	£7572	£1095	£85 326	£125	17.9
East London and the City	£88 960	£4156	£1575	£94 691	£149	20.4
Enfield and Haringey	£51 131	£8929	£560	£60 620	£128	19.0

(continued)

Table 1 (continued)

Health authority	Mental illness and learning disability allocation, excluding old long-stay allocation (£000)	Old long-stay allocation (£000)	Drugs misuse grant (£000)	Total (£000)	Total per capita (£)	Total as percentage of health authority revenue allocation (%)
Hillingdon	£19 645	£3284	£254	£23 183	£94	15.0
Kensington, Chelsea and Westminster	£52 522	£6432	£1196	£60 149	£153	20.8
Kingston and Richmond	£26 721	£8309	£411	£35 441	£106	16.5
Lambeth, Southwark and Lewisham	£105 412	£10 665	£1703	£117 780	£160	20.2
Merton, Sutton and Wandsworth	£64 490	£20 195	£864	£85 548	£135	19.7
Redbridge and Waltham Forest	£43 925	£8893	£419	£53 237	£121	18.6
<b>Southern</b>						
Berkshire	£48 621	£14 032	£802	£63 455	£78	14.5
Buckinghamshire	£39 506	£4691	£644	£44 842	£64	12.2
East Kent	£47 001	£5041	£520	£52 562	£89	13.4
East Surrey	£27 061	£39 993	£297	£67 351	£164	24.2
East Sussex, Brighton and Hove	£64 358	£7147	£670	£72 175	£97	14.3
Isle of Wight	£10 523	£1259	£88	£11 870	£94	12.9
North and Mid Hampshire	£28 816	£2520	£650	£31 987	£58	11.0
Northamptonshire	£38 397	£2297	£594	£41 287	£74	12.8
Oxfordshire	£34 362	£7189	£688	£42 238	£67	12.8
Portsmouth and South East Hampshire	£38 625	£5880	£520	£45 025	£81	14.0
Southampton and South West Hampshire	£37 080	£4072	£469	£41 621	£75	12.7
West Kent	£61 298	£15 525	£880	£77 703	£79	13.7
West Surrey	£39 008	£10 899	£504	£50 412	£78	13.5
West Sussex	£52 651	£9732	£562	£62 944	£84	13.5
<b>South and West</b>						
Avon	£68 484	£32 553	£909	£101 946	£102	16.8
Cornwall and Isles of Scilly	£33 406	£3410	£382	£37 197	£76	11.8
Dorset	£48 278	£1814	£546	£50 638	£73	11.5
Gloucestershire	£36 394	£4880	£537	£41 812	£74	12.5
North and East Devon	£32 389	£6498	£417	£39 304	£82	13.0
Somerset	£29 727	£4400	£405	£34 532	£71	11.9
South and West Devon	£44 283	£5028	£562	£49 873	£84	13.1
Wiltshire	£36 419	£5908	£600	£42 928	£71	12.4
<b>West Midlands</b>						
Birmingham	£104 766	£12 702	£1315	£118 783	£115	17.4
Coventry	£29 440	£1942	£298	£31 680	£99	15.9
Dudley	£20 948	£2751	£292	£23 991	£78	13.1
Herefordshire	£10 064	£860	£153	£11 078	£66	11.3
North Staffordshire	£37 643	£6954	£437	£45 034	£95	14.7
Sandwell	£29 385	£3304	£360	£33 050	£108	16.1
Shropshire	£26 799	£2928	£404	£30 132	£71	12.2
Solihull	£14 019	£1952	£161	£16 132	£77	13.2
South Staffordshire	£33 117	£2403	£497	£36 017	£63	11.3
Walsall	£22 201	£3287	£288	£25 777	£102	15.7
Warwickshire	£32 992	£3972	£424	£37 387	£75	12.8
Wolverhampton	£23 448	£2153	£289	£25 890	£107	16.2
Worcestershire	£31 343	£3933	£462	£35 738	£67	11.8

(continued)

Table 1 (continued)

Health authority	Mental illness and learning disability allocation, excluding old long-stay allocation (£000)	Old long-stay allocation (£000)	Drugs misuse grant (£000)	Total (£000)	Total per capita (£)	Total as percentage of health authority revenue allocation (%)
<b>North and West</b>						
Bury and Rochdale	£35 635	£5388	£364	£41 387	£108	16.6
East Lancashire	£52 127	£5711	£402	£58 240	£114	16.7
Liverpool	£53 485	£6384	£772	£60 642	£129	17.1
Manchester	£62 816	£6760	£1100	£70 677	£153	19.9
Morecambe Bay	£24 316	£4890	£229	£29 435	£94	14.2
North Cheshire	£24 745	£2668	£313	£27 726	£90	13.9
North West Lancashire	£43 522	£8178	£338	£52 038	£112	16.1
Salford and Trafford	£44 332	£8152	£654	£53 138	£119	17.0
Sefton	£23 821	£2836	£370	£27 027	£97	13.9
South Cheshire	£43 924	£7155	£530	£51 609	£76	12.8
South Lancashire	£21 164	£2931	£258	£24 353	£80	13.0
St Helen's and Knowsley	£30 252	£1981	£361	£32 594	£95	13.9
Stockport	£21 467	£4655	£212	£26 334	£91	14.9
West Pennine	£43 713	£5964	£426	£50 103	£111	16.9
Wigan and Bolton	£51 691	£7360	£506	£59 557	£104	15.9
Wirral	£29 068	£3078	£324	£32 471	£100	14.4
<b>Total for England</b>	<b>£3 971 377</b>	<b>£621 751</b>	<b>£53 196</b>	<b>£4 648 345</b>	<b>£94</b>	<b>14.9</b>

are allocated for special concerns. This year these include drug misuse. Allocation procedures are devised for each such special grant. Money allocated for drug misuse is based on patterns of accommodation tenure.

## METHOD AND RESULTS

This study was undertaken using the figures for each district published in the resource allocation book (NHS Executive, 1998) in a spreadsheet format obtained from the Department of Health. The last stage in the calculation of health authority recurrent allocations was undertaken separately for each morbidity element. The sum of these figures is identical to the overall total published in the allocation book. However, it is possible to identify the proportion of this total that can be ascribed to each service element. The hospital and community health services allocation to each health authority has been divided on this basis to produce the figures shown in the first column in Table 1; the funds assigned for old long-stay patients are excluded from these figures (their allocation is shown separately, as is the grant for drug misuse). The total of these three components is shown, along with the per-capita total for

the general population, and the total as a percentage of the health authority's overall revenue allocation for the year.

There is a considerable range in the per-capita allocation – from £58 per capita in North and Mid Hampshire to £172 in Camden and Islington. Two factors underlie this. First, in general, the more deprived areas have high allocations, while prosperous areas have low allocations. This corresponds with morbidity estimates. Second, a few districts, such as East Surrey, with a legacy of substantial numbers of old long-stay patients, have much greater overall allocations for this reason. The allocation for drug misuse services is shown, but it constitutes a very small fraction (1.14%) of the overall resources for mental health care.

As a proportion of district budgets, the psychiatric and learning disability allocations show far greater spread (10.7–24.2% of total district budget) than general and acute services (62.1–76.4%). This reflects the much greater variation in the needs indices used in the former.

## DISCUSSION

The clear intention of the painstaking allocation process outlined above is to divide

available resources between health authorities as equitably as possible. The progressive refinements in the formula seen each year underline this.

Three caveats are needed to the present work. First, the process *only* seeks to achieve the most equitable distribution of the resources available; the issue of whether the total resources are sufficient is a separate question. Second, it is important to stress that while the structure of the Department of Health calculation entails consideration of the three areas of clinical activity mentioned, the local use of the funding allocations is entirely at the discretion of health authorities. Third, special allocations from the new modernisation fund could not be shown in the table because the mental health components of this allocation were not detailed in the resource allocation book.

## Comparison with spending

The figures presented cover not only the actual delivery of the mental health elements of hospital and community health services but also their administration and commissioning. In previous years this administrative element was about 9% of the budget. The decision to stop listing this element separately makes comparisons of the notional

allocation to observed spending more difficult. Two approaches are possible. The harder approach would be to estimate the cost of administrative, commissioning and other health authority functions which relate to mental health care, and include this in the spend estimate. The easier approach would be to deduct 9% as the likely proportion spent on these items (including administration at National Health Service trust level) from the notional allocation.

It is not possible to present contemporary spend figures for each health authority in the relevant clinical areas alongside these allocation figures. This can only be done retrospectively, because these figures only become available about six months after the end of the financial year to which they relate.

While not contemporary, the authors of the King's Fund report (Johnson *et al*, 1997) were able to obtain some details of the proportion of resources spent on mental illness care by health authorities in 1995–96. These figures do not compare directly with those quoted above because they did not include either learning disability spend or the administrative component referred to above. Direct comparisons with the 1999–2000 allocations cannot readily be calculated. Comparative allocation figures with an appropriate scope were however calculated using similar methods from the allocation formula for 1998–99. These suggested that for London authorities the spend was in most cases much greater than the proportion allocated. Urban authorities were classified into three groups. Figures for mental health care spending in inner-city deprived authorities ranged from 17.7% to 19.3% of the total budget (mean 18.6%) while the

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(First received 4 January 1999, final revision 31 March 1999, accepted 31 March 1999)

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allocation was 14.1–14.7% (mean 14.4%); spending in mixed status areas was 12.1–17.7% (mean 15.4%) against an allocation of 12.1–13.0% (mean 12.5%). While high-status authorities showed the same wide range, the mean was closer to the allocation: actual spending range 9.0–18.0% (mean 12.8%); allocation range 10.2–11.6% (mean 11.0%). A group of inner-city deprived areas outside London resembled the high-status London pattern (actual spending range 9.9–20.7% (mean 13.7%); allocation range 11.2–12.7% (mean 12.0%).

Since the proportion of funds allocated through the mental health component of the formula is governed by the national proportion of resources spent on that clinical area (see above), if one identifiable group is spending substantially above its allocation it means that others must be spending below it. This suggests that the allocation formula overall is failing to reflect some significant elements in the national distribution of need.

### Conclusions

All the evidence suggests that the distribution process seeks to be as fair as possible. Clearly, however, no system is perfect. In districts where staff perceive the resources to be inadequate, it is difficult to establish whether this reflects inadequacies in the formula, deficiencies in the total resources

available for distribution or choices made by the health authority about how to spend the total funds it receives. More detailed public scrutiny could only assist this process. The Department of Health could relatively easily restructure the presentation of the results of the allocation process to show the service elements considered in the calculation explicitly. In a period where increasing local accountability for public services is considered important, this would enable a more informed public debate to take place.

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