MEMORANDUM FOR THE HEALTH COMMITTEE INQUIRY INTO PUBLIC HEALTH

PUBLIC HEALTH MANCHESTER

NHS MANCHESTER/ MANCHESTER CITY COUNCIL

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This memorandum relates to the following terms of reference:

Arrangements for funding public health services (including the Health Premium).

How the Government is responding to the Marmot Review on health inequalities.

SUMMARY

(i) The weighting for health inequalities in the PCT allocation formulae for 2011/12 has been reduced from 15%, the value for 2009/10 and 2010/11 allocations, to 10%.

(ii) This results, other things being equal, in a shift in both target and actual allocations from poor health PCTs to good health PCTs. The effect on target allocations ranges from a 4.1 % reduction for Tower Hamlets PCT to a 4.2% increase for Surrey PCT.

(iii) The very slow pace of change greatly reduces the effect on actual allocations for 2011/12. However the change implies a long term shift of resources from deprived areas to prosperous areas, compared with retention of the15% weighting.

(iv) The reduction of the health inequalities weighting is a ministerial judgment rather than an evidence based recommendation from the Advisory Committee on Resource Allocation. In fact the decision seems to contradict evidence from the recent DH-commissioned research on the subject.

(v) This change could be interpreted as a reduction in the priority of tackling health inequalities and could be seen as contradicting the aspirations described in the recent White Papers, particularly in view of currently worsening health inequalities.

(vi) This change in allocation policy will be of concern to future GP consortia in areas of poor health, and to all who work in the field of health inequalities.

(vii) Currently PCT spend on public health comes out of general allocations; this change in health inequalities weight will therefore reduce the ability of poorer health PCTs to spend on public health and conversely improve that for better health PCTs. The implications for future public health budgets are unclear.

(viii) It would be helpful to know the reasoning behind this reduction in health inequalities weight in view of the stated commitment to tackle health inequalities.

(ix) It is important to clarify whether or not this change is a signal of an intention to move resources from poor health areas to better health areas.

1. The health inequalities formula is part of the set of formulae used to calculate theoretical target allocations for PCTs which themselves are used to inform actual allocations via a damping process named 'pace of change'. It is a very simple formula consisting of the disability-free life expectancy (DFLE) of a PCT subtracted from 70 which acts as a sort of ideal upper limit not quite achieved by the PCT with the best health. It is a very strongly discriminating formula with a very wide range – from Liverpool with 70-55.8 = 14.2 to Surrey with 70-68.5 = 1.5 giving a range ratio of 9.5. When it first came out the Advisory Committee on Resource Allocation (ACRA) recommended that it be given a weight in the range 10% to 20%, and for 2009/10 and 2010/11 allocations the central figure of 15% was chosen by the previous administration.

2. The PCT allocations for 2011/12, announced on 15 December 2010[1], include a reduced weighting of 10% for the health inequalities formula (also known as the Disability Free Life Expectancy or DFLE adjustment), down from 15%.

3. A reduction in the weighting of the DFLE adjustment entails a commensurate increase in the weighting of the other formulae. The DFLE adjustment distributes to poor health areas in a stronger way than the average of the other formulae. Consequently any reduction in its weight entails a reduced distribution to poor health areas.

4. A quantitative assessment of this reduced target distribution to poor health areas can be made from a sensitivity analysis of the 2011/12 formulae using the Dept of Health exposition book released on 8 March 2011. For 2011/12 the reduction in DFLE weighting from 15% to 10% gives a range of changes in target allocation from -4.1% (Tower Hamlets PCT) and -4.0% (Manchester) to +4.2% (Surrey PCT) and +3.9% (Kensington & Chelsea). The negative changes are generally for poorer health areas and vice versa. Poor health PCTs (the half of PCTs with worst DFLE) lose on average 1.7% (£8.3 million) of target allocation while better health PCTs (the half of PCTs with the best DFLE) gain 1.7%, a 3.4% relative movement. 94% of Spearhead PCTs lose out. The north to south relative movement (five northernmost SHAs vs. five southernmost SHAs) is 2.2%. Manchester's reduction translates into a reduction of £41.7 million. The effect on Greater Manchester PCTs is given in table 1 showing a reduction of 2.0% or £98.4 million for Greater Manchester. Results for all 151 PCTs and ten SHAs are in Appendix 1.

5. The health inequalities or DFLE formula is a measure of both mortality and morbidity so one would expect those PCTs which lose from the weight reduction to have higher mortality in general. This is borne out in the scattergraph of the change in target allocation versus under 65 SMR – a measure of premature mortality - in Figure 1.

Table 1 Effect on 2011/12 Greater Manchester PCT closing target allocations of changing the health inequalities weight from 15% to 10%

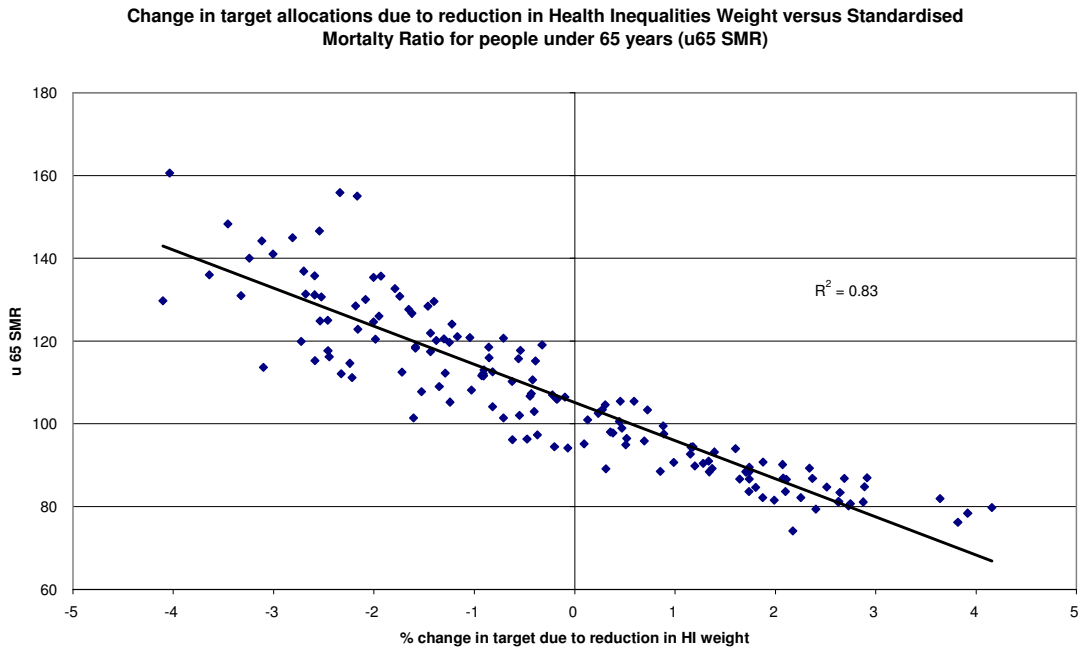
PCT	2011-12 closing target DFLE at 15%	2011-12 closing target DFLE at 10%	change £ 000's	change %	Spearhead = S
Ashton, Leigh and Wigan PCT	574,171	560,130	-14,040	-2.4	S
Bolton PCT	489,187	480,663	-8,524	-1.7	S
Bury PCT	313,930	311,068	-2,862	-0.9	S
Heywood, Middleton and Rochdale PCT	390,103	382,574	-7,529	-1.9	S
Manchester PCT	1,032,222	990,556	-41,666	-4.0	S
Oldham PCT	409,068	400,865	-8,203	-2.0	S
Salford PCT	470,780	458,809	-11,971	-2.5	S
Stockport PCT	452,132	454,813	2,682	0.6	
Tameside and Glossop PCT	420,446	413,495	-6,951	-1.7	S
Trafford PCT	333,460	334,374	914	0.3	
Greater Manchester	4,885,498	4,787,348	-98,151	-2.0	

Source: Public Health Manchester analysis of DH exposition book

6. All the points above relate to target allocations. The rate at which PCTs move towards these targets is determined by ministers under 'pace of change' rules. The current pace of change is very slow leading to a timescale to achievement of target of the order of 20 years. The above comments therefore concern the longer term effect. In the short term the damping is such that the reduction in health inequalities weight has an effect on actual allocations for only a few PCTs and these effects are relatively small. The second of two articles[2, 3] on the issue in the Health Service Journal attempted to highlight such limited effects.

7. The effect on actual allocations for Greater Manchester is small. The calculation has to make the assumption that the pace of change algorithm remains unchanged in going from 15% to 10% health inequalities weight. Only two PCTs are affected. Ashton, Leigh and Wigan PCT loses £0.9 million (0.17%) and Trafford PCT gains £0.35 million (0.08%), giving a net loss for Greater Manchester of £0.55 million (0.011%). This very modest level of change will be replicated in a small number of other PCTs. Thus it can be seen that the concern is not so much with the effect on 2011/12 allocations, though these will be of concern to a small number of PCTs, but with the longer term and the implications for future policy in both public health and consortia allocations.

Figure 1



8. There are new, improved formulae for prescribing and mental health as recommended by ACRA. The new prescribing formula has little redistributive effect but the new mental health formula distributes more strongly to poor health areas than the formula it replaces. In fact it redistributes by a relative amount of 1.6% which is about half of and in the opposite direction to the effect of the reduction in HI weight, though for Greater Manchester the effect is greater and roughly equal and opposite to the HI weight effect.

However this effect has no relevance to the ministerial judgment to reduce the HI weight. The new mental health formula forms part of normal data and formula improvements commissioned and recommended by ACRA, whereas the HI change is purely a ministerial judgment. It is simply fortuitous that the new formula happens to work to some extent in the opposite direction.

9. The reduction in HI weight seems at odds with the conclusions of recent research[4] on the HI weight commissioned by ACRA. The recommendations of this report included an option as follows: '*Allocating 85% of the budget according to the original CARAN models, or variants……..and the remaining 15% using e.g. distance from best DFLE or some derivative of this. This approach is similar to the current* (2009/10 and 2010/11) *health inequalities formula.'* (p154).

The conclusion of the report also included the following paragraph '*We have found some evidence to suggest that the positive effect of funding on health is higher in more deprived PCTs compared with less deprived PCTs . This would suggest that if the same incremental allocation were made to every PCT we would expect Health inequalities to be reduced. It also suggests that if a given amount of resources were redistributed from less deprived to more deprived areas there would be a net health benefit.*' (p147)

In view of these quotes the reduction in HI weight seems strange.

10. The DH paper entitled '*Summary of Target Formula Changes for 2011-12 Primary Care Trusts recurrent allocations*[5]. makes no reference to the fact that 10% is a reduction from the last two years and therefore makes no justification of such a reduction. The relevant paragraphs are:

The DFLE (Disability free life expectancy) adjustment (Public Health Manchester comment – also known as the health inequalities formula) *is retained as part of our commitment to reducing health inequalities. The size of the adjustment determines the weighting of the main formula, which aims to fund equal access for equal need, and funding to support work to reduce health inequalities. The main formula already includes weighting for the additional need for access to healthcare in elderly and/or deprived populations.*

As in the last allocation round, ACRA could find no technical basis for the weighting of the DFLE adjustment and left it to ministerial decision. Until further work on allocations to GP consortia and the Public Health Service has been completed, this is being set at 10% (Public Health Manchester comment – reduced from 15% in previous years) *to ensure that funding for work on health inequalities, including public health, continues and that funding to support access to healthcare and to respond to need for healthcare is sufficient. This is within the range first discussed by ACRA.*

It is not clear what evidence the DH and ministers have to calculate that the reduction of allocations to poor health areas implicit in the DFLE reduction provides them with resources '*sufficient to respond to need for healthcare'* especially as health inequalities continue to worsen.

11. The Secretary of State attempted to explain the reason for the reduction in DFLE adjustment in the following conversation in the 15 December Health Select Committee meeting[6]:

Q559 Andrew George: The advisory committee has been doing that, and it has been looking at disease prevalence, demographic issues and deprivation.

Mr Lansley: Yes, and we are going to help it to go further in that direction. In the overall allocation today, we are devoting more weight to what is, through age and deprivation, reflective of need for health care services. You have asked what is being derated. At the end of the process, the ACRA told Ministers that they could allocate an amount of money, which might be 10, 15 or 20%, on the basis of inequalities in health outcomes. We are very clear that we are moving in due course towards separate allocations for NHS services and for public health. It is clear that the public health allocation will not exceed 10%, although we have not determined what it will be. So we as Ministers have said to the ACRA that we will set the allocation for relative health outcomes at

10% and allow, consequently, additional weight to be given to the factors, such as age and deprivation, that directly relate to health care need. That will impact on the balance of allocations in 2011-12.

The reason given for the reduction in health inequalities weighting seems to rest on the assumption that most or all of that weighting relates to public health. However when the weighting was developed it was seen as relating to the equal access principle in areas where there is unmet need i.e. to the provision of appropriate health care in deprived areas as a means to tackle health inequalities. It was not seen or developed merely as a weighting to pay for more public health in deprived areas. The body responsible for developing the formulae (the Advisory Committee on Resource Allocation - ACRA) is aware of the issue and its Chair's letter[7] to the Secretary of State for Health containing their recommendations for the 2011/12 allocation formulae contains the following relevant section:

I would like to draw your attention to ACRA's position in relation to the health inequalities adjustment. Despite intensive investigation, and because of the lack of previous NHS research on the issue, ACRA has been unable to find sufficient evidence to use to determine the size of the adjustment. We recommend that the current form of the adjustment is retained, however the scale of the adjustment is a matter for your judgment in the context of the persistent gap in health inequalities.

The White paper sets out that your future approach to health inequalities will be based more clearly on public health interventions, funded through a separate allocation. It is worth considering that the current adjustment is intended to allow for unmet health care need as well as health improvement activities. We would be happy to explore estimating the size of any unmet health care need alongside any advice you may seek from us on developing a public health allocation.

It appears that the Secretary of State's assumption is at odds with ACRA's implication that there is no evidence yet on the proportion, if any, of the DFLE weighting which covers public health expenditure. Therefore a judgment on the DFLE weighting should be based on criteria other than any assumed reference for the weighting. The decision also cannot be related to the future possibility that the Public Health budget may be more strongly distributed to poor health areas than the main commissioning budget, because both budgets are included in the latest allocation.

ACRA's recommendation that the decision on the DFLE weighting should be taken *'in the context of the persistent gap in health inequalities'* taken together with the fact that health inequalities are worsening, make this reduction in DFLE weighting even more puzzling.

References

1. Dept of Health. NHS Allocations 8 March 2011
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_124949

2. Gainsbury S. Fair funding change 'threatens' poorer areas. Health Serv. J. 10 February 2011.

3. Dowler C. Funding formula change boosts South. Health Serv. J. 24 March 2011.

4. Morris S. et al. Research on the health inequalities element of the NHS weighted capitation formula: final report October 2010.
http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_122620.pdf

5. Dept of Health Summary of target formula changes for 2011-12 Primary Care Trust recurrent allocations. 15 December 2010
http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_122677.pdf

6. Parliamentary Health Select Committee. Q 559. Minutes of Evidence. 15 December 2010
http://www.publications.parliament.uk/pa/cm201011/cmselect/cmhealth/513/10121502.htm

7. ACRA chair's letter to Secretary of State on NHS Resource Allocation Formula 27 September 2010.
http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_122685.pdf

Appendix 1

Effect on 2011/12 PCT and SHA closing target allocations of changing the health inequalities weight from 15% to 10% in order of size and direction of effect.

PCT	2011-12 closing target DFLE at 15%	2011-12 closing target DFLE at 10%	change £ 000's	change %	Spearhead = S
Tower Hamlets PCT	455,390	436,705	-18,686	-4.1	S
Manchester PCT	1,032,222	990,556	-41,666	-4.0	S
Newham PCT	494,707	476,702	-18,005	-3.6	S
Liverpool PCT	964,224	930,913	-33,311	-3.5	S
City and Hackney Teaching PCT	477,582	461,698	-15,884	-3.3	S
Nottingham City PCT	566,335	547,970	-18,365	-3.2	S
Knowsley PCT	326,808	316,621	-10,187	-3.1	S
Barnsley PCT	473,915	459,219	-14,696	-3.1	S
Hartlepool PCT	181,862	176,393	-5,469	-3.0	S
Middlesbrough PCT	283,946	275,970	-7,976	-2.8	S
Sunderland Teaching PCT	550,752	535,753	-14,999	-2.7	S
Islington PCT	391,822	381,239	-10,583	-2.7	S
Stoke On Trent PCT	528,026	513,873	-14,153	-2.7	S
Hull Teaching PCT	511,249	498,006	-13,243	-2.6	S
Blackburn with Darwen Teaching Care Trust Plus	283,680	276,333	-7,347	-2.6	S
County Durham PCT	1,008,739	982,640	-26,100	-2.6	S
Salford PCT	470,780	458,809	-11,971	-2.5	S
Halton and St Helens PCT	596,778	581,645	-15,133	-2.5	S
Newcastle PCT	490,132	477,756	-12,375	-2.5	S
Leicester City PCT	559,216	545,454	-13,762	-2.5	S
Barking and Dagenham PCT	325,038	317,045	-7,993	-2.5	S
Ashton, Leigh and Wigan PCT	574,171	560,130	-14,040	-2.4	S
Heart of Birmingham Teaching PCT	506,630	494,779	-11,850	-2.3	S
Wakefield District PCT	637,533	622,711	-14,822	-2.3	S
Doncaster PCT	559,051	546,522	-12,529	-2.2	S
Rotherham PCT	457,606	447,457	-10,149	-2.2	S
Gateshead PCT	379,262	370,983	-8,279	-2.2	S
Blackpool PCT	289,123	282,861	-6,262	-2.2	S
South Birmingham PCT	624,444	610,953	-13,491	-2.2	S
Sandwell PCT	582,831	570,683	-12,147	-2.1	S
Oldham PCT	409,068	400,865	-8,203	-2.0	S
Birmingham East and North PCT	729,973	715,352	-14,620	-2.0	S
Redcar and Cleveland PCT	248,879	243,936	-4,943	-2.0	S
South Tyneside PCT	297,044	291,253	-5,792	-1.9	S
Heywood, Middleton and Rochdale PCT[1]	390,103	382,574	-7,529	-1.9	S
Lambeth PCT	578,489	568,128	-10,361	-1.8	S
Bolton PCT	489,187	480,663	-8,524	-1.7	S

Stockton-On-Tees Teaching PCT	324,506	318,915	-5,591	-1.7	S
Tameside and Glossop PCT	420,446	413,495	-6,951	-1.7	S
Wolverhampton City PCT	445,995	438,759	-7,236	-1.6	S
Bassetlaw PCT	196,134	192,986	-3,148	-1.6	S
East Lancashire Teaching PCT	670,273	659,640	-10,633	-1.6	S
Waltham Forest PCT	413,219	406,665	-6,554	-1.6	
Sheffield PCT	934,232	919,990	-14,241	-1.5	
Bradford and Airedale Teaching PCT	875,399	862,603	-12,796	-1.5	S
Camden PCT	419,825	413,793	-6,033	-1.4	
Greenwich Teaching PCT	435,325	429,071	-6,254	-1.4	S
Southwark PCT	531,501	524,054	-7,447	-1.4	S
Haringey Teaching PCT	451,588	445,361	-6,226	-1.4	S
Plymouth Teaching PCT	445,730	439,716	-6,014	-1.3	
Coventry Teaching PCT	557,505	550,240	-7,265	-1.3	S
North Tyneside PCT	368,504	363,754	-4,750	-1.3	S
Walsall Teaching PCT	455,761	450,067	-5,694	-1.2	S
Telford and Wrekin PCT	263,903	260,620	-3,283	-1.2	
Wirral PCT	584,865	577,710	-7,156	-1.2	S
Lewisham PCT	485,923	480,240	-5,684	-1.2	S
Darlington PCT	177,558	175,700	-1,858	-1.0	
Derby City PCT	463,818	459,056	-4,761	-1.0	
Southampton City PCT	402,651	398,917	-3,734	-0.9	
Bury PCT	313,930	311,068	-2,862	-0.9	S
Central Lancashire PCT	747,786	741,012	-6,774	-0.9	S
Bristol PCT	734,214	727,571	-6,643	-0.9	
Sefton PCT	494,331	490,102	-4,229	-0.9	
Leeds PCT	1,268,038	1,257,231	-10,807	-0.9	
Wandsworth PCT	475,586	471,694	-3,893	-0.8	
Kirklees PCT	654,232	648,880	-5,351	-0.8	
Warrington PCT	317,241	314,988	-2,252	-0.7	S
Luton PCT	313,044	310,825	-2,220	-0.7	
Hounslow PCT	379,225	376,860	-2,365	-0.6	
Derbyshire County PCT	1,180,387	1,173,064	-7,323	-0.6	S
North East Lincolnshire Care Trust Plus	273,456	271,926	-1,530	-0.6	S
North Staffordshire PCT	349,456	347,532	-1,924	-0.6	
Portsmouth City Teaching PCT	334,602	332,800	-1,802	-0.5	
Northumberland Care Trust	546,206	543,612	-2,594	-0.5	S
Calderdale PCT	328,324	326,858	-1,466	-0.4	
Ealing PCT	541,063	538,726	-2,337	-0.4	
Hammersmith and Fulham PCT	283,611	282,424	-1,187	-0.4	S
North Lincolnshire PCT	265,585	264,510	-1,075	-0.4	
Peterborough PCT	256,304	255,300	-1,005	-0.4	
Nottinghamshire County Teaching PCT	1,061,627	1,057,660	-3,967	-0.4	
Brighton and Hove City PCT	434,846	433,431	-1,415	-0.3	
Dudley PCT	505,092	503,967	-1,125	-0.2	
Milton Keynes PCT	356,110	355,396	-714	-0.2	
Brent Teaching PCT	461,756	460,931	-824	-0.2	
Medway PCT	420,430	419,699	-731	-0.2	
North Lancashire Teaching PCT	558,876	558,331	-544	-0.1	
Redbridge PCT	403,086	402,814	-272	-0.1	

South Staffordshire PCT	937,099	937,972	873	0.1	S
Cumbria Teaching PCT	848,757	849,863	1,106	0.1	S
Eastern and Coastal Kent PCT	1,220,609	1,223,486	2,877	0.2	
Trafford PCT	333,460	334,374	914	0.3	
Torbay Care Trust	254,069	254,842	773	0.3	
Cornwall and Isles of Scilly PCT	890,382	893,157	2,774	0.3	
Enfield PCT	465,462	467,119	1,657	0.4	
Western Cheshire PCT	383,477	384,935	1,458	0.4	
Great Yarmouth and Waveney PCT	395,295	397,056	1,761	0.4	
Hastings and Rother PCT	315,054	316,482	1,428	0.5	
Lincolnshire Teaching PCT	1,167,262	1,172,760	5,498	0.5	S
South West Essex PCT	651,924	655,234	3,310	0.5	
Swindon PCT	306,200	307,790	1,589	0.5	
Stockport PCT	452,132	454,813	2,682	0.6	
North East Essex PCT	545,308	549,092	3,785	0.7	
Croydon PCT	550,110	554,098	3,987	0.7	
Isle of Wight NHS PCT	249,794	251,924	2,130	0.9	
Hillingdon PCT	387,903	391,328	3,425	0.9	
Northamptonshire Teaching PCT	993,778	1,002,588	8,810	0.9	S
Warwickshire PCT	791,591	799,405	7,814	1.0	
Central and Eastern Cheshire PCT	678,375	686,186	7,811	1.2	
Bournemouth and Poole Teaching PCT	540,122	546,382	6,261	1.2	
Westminster PCT	401,950	406,690	4,739	1.2	
East Riding of Yorkshire PCT	479,118	484,854	5,736	1.2	
Havering PCT	399,134	404,239	5,105	1.3	
Worcestershire PCT	825,802	836,819	11,017	1.3	
Norfolk PCT	1,183,973	1,199,868	15,895	1.3	
Shropshire County PCT	448,556	454,695	6,139	1.4	
South East Essex PCT	541,503	549,050	7,547	1.4	
Sutton and Merton PCT	542,089	550,775	8,687	1.6	
Herefordshire PCT	277,961	282,532	4,571	1.6	
Bexley Care Trust	337,933	343,694	5,760	1.7	
North Yorkshire and York PCT	1,148,405	1,168,061	19,656	1.7	
Somerset PCT	808,322	822,363	14,041	1.7	
Bedfordshire PCT	599,545	609,973	10,429	1.7	
North Somerset PCT	331,603	337,374	5,771	1.7	
Harrow PCT	318,404	323,946	5,542	1.7	
Devon PCT	1,143,276	1,163,880	20,604	1.8	
Leicestershire County and Rutland PCT	909,896	926,923	17,027	1.9	
Solihull Care Trust	308,340	314,131	5,791	1.9	
Barnet PCT	518,400	528,707	10,308	2.0	
Berkshire East PCT	552,695	564,146	11,451	2.1	
Gloucestershire PCT	858,348	876,170	17,822	2.1	
Cambridgeshire PCT	827,760	845,135	17,376	2.1	
West Essex PCT	401,746	410,215	8,469	2.1	
South Gloucestershire PCT	337,127	344,447	7,321	2.2	
Suffolk PCT	894,754	914,905	20,151	2.3	
East Sussex Downs and Weald PCT	523,146	535,373	12,228	2.3	
West Kent PCT	979,855	1,003,072	23,217	2.4	
Mid Essex PCT	504,893	517,027	12,134	2.4	

Hertfordshire PCT	1,580,966	1,620,676	39,710	2.5
Bath and North East Somerset PCT	254,080	260,750	6,670	2.6
Kingston PCT	238,715	244,995	6,280	2.6
Oxfordshire PCT	834,186	856,236	22,050	2.6
West Sussex PCT	1,202,872	1,235,203	32,331	2.7
Dorset PCT	610,886	627,561	16,675	2.7
Wiltshire PCT	641,699	659,332	17,633	2.7
Hampshire PCT	1,811,303	1,863,354	52,050	2.9
Bromley PCT	460,892	474,201	13,309	2.9
Berkshire West PCT	616,447	634,407	17,960	2.9
Buckinghamshire PCT	673,976	698,513	24,537	3.6
Richmond and Twickenham PCT	234,717	243,677	8,960	3.8
Kensington and Chelsea PCT	285,613	296,800	11,187	3.9
Surrey PCT	1,477,334	1,538,711	61,377	4.2
England	84,996,081	84,996,081	0	0.0
SHA				
North East SHA	4,857,390	4,756,665	-100,725	-2.1
North West SHA	12,630,092	12,438,489	-191,603	-1.5
Yorkshire and the Humber SHA	8,866,143	8,778,827	-87,315	-1.0
East Midlands SHA	7,098,452	7,078,462	-19,991	-0.3
West Midlands SHA	9,138,964	9,082,381	-56,582	-0.6
East of England SHA	8,697,015	8,834,356	137,342	1.6
London SHA	13,146,060	13,104,418	-41,642	-0.3
South East Coast SHA	6,574,146	6,705,458	131,312	2.0
South Central SHA	5,831,764	5,955,692	123,928	2.1
South West SHA	8,156,058	8,261,334	105,276	1.3
North	42,591,040	42,134,824	-456,216	-1.1
South	42,405,042	42,861,258	456,216	1.1

Source: Public Health Manchester analysis of DH exposition book