

REVIEW OF UK HEALTH RESEARCH: THE COOKSEY REVIEW

**RESPONSE FROM THE MANCHESTER JOINT HEALTH UNIT,
MANCHESTER CITY COUNCIL.**

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Dear Sir David

We would like to take this opportunity to respond to your request for key issues which are not in your list of questions. The important issue which we wish to raise in this category is that of the GEOGRAPHICAL IMBALANCE OF MRC AND NHS R&D FUNDING IN ENGLAND. The question of possible merger of the two serves to highlight severe imbalances in the funding outcomes of both bodies. We believe this is an opportune time to critically examine whether these imbalances compromise the benefits of medical research, both narrowly and broadly defined, and whether they represent the best and fairest use of tax-payers' money. The structure of this account of the issue is as follows:

1. The recent geography of funding in England – a remarkable imbalance.
2. The importance of balance in the geography of funding -local health and economic benefits and geographical health inequalities. Government targets in health and economic inequalities.
3. The way forward / Possible solutions.
4. Conclusion.

Yours Sincerely

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1. The recent geography of funding in England – a remarkable imbalance

This section consists largely of numbers which are rarely publicised. They speak for themselves in showing the geographical imbalance.

For consistency with NHS R&D, the MRC analysis is confined to England.

1.1 NHS R&D

The current geographical spread of NHS R&D funding for providers (total c.£500 million in 2005/6) is very heavily biased (67%) to the Greater London Region. The other eight regions have only the remaining 33% allocated to them in total. Three London trusts each receive more than any other single region. Eight large trusts in Greater Manchester share about £20 million allocation, but there are seven individual trusts in London which are each allocated more than this total, some more than twice this amount.

The following two tables illustrate the bias:

Table 1.1.1 2005/6 NHS R&D support to providers, Regional Overview

REGION	£MILLION	% OF TOTAL	£ PER CAPITA
NORTH EAST	10.0	2.0	4.0
NORTH WEST	31.0	6.2	4.5
YORKS & HUMBER	22.5	4.5	4.5
EAST MIDLANDS	21.1	4.2	4.9
WEST MIDLANDS	18.2	3.6	3.4
EASTERN	17.6	3.5	3.2
LONDON	332.9	66.7	44.5
SOUTH EAST	27.9	5.6	3.4
SOUTH WEST	17.8	3.6	3.5
ENGLAND	498.9	100	9.9
SOUTH	396.2	79.4	15.1
NORTH/MIDLANDS	102.7	20.6	4.3

Source: MJHU analysis of DH data

Table 1.1.2 2005/6 NHS R&D support to providers, top 20 recipients.

RANK	PROVIDER	£MILLION	% OF TOTAL
1	HAMMERSMITH HOSPITALS	55.2	12.4
2	UCL HOSPITALS	42.2	9.5
3	GREAT ORMOND ST HOSPITAL	32.1	7.3
4	BARTS AND THE LONDON	30.0	6.8
5	ROYAL BROMPTON/ HAREFIELD	27.8	6.3
6	S LONDON & MAUDSLEY	25.4	5.7
7	ROYAL MARSDEN	32.4	5.0
8	GUYS & ST THOMAS	17.7	4.0
9	CAMBRIDGE CONSORTIUM	15.3	3.5
10	ROYAL FREE HAMPSTEAD	11.9	2.7
11	KINGS CONSORTIUM	10.2	2.3
12	LEEDS HOSPITALS	10.0	2.3
13	OXFORD CONSORTIUM	9.3	2.1
14	CENTRAL MANCHESTER	8.7	2.0
15	ST MARYS LONDON	8.2	1.8
16	LEICESTER HOSPITALS	8.1	1.8
17	SOUTHAMPTON HOSPITALS	8.0	1.8
18	NEWCASTLE-UPON-TYNE HOSP.	7.9	1.8
19	ST GEORGES LONDON	7.4	1.7
20	SHEFFIELD HOSPITALS	7.3	1.6

Source: DH

Although the new strategy replaces this fixed support with a combination of competitive bids and designated biomedical centres, the historical funding imbalance inevitably means that London (and also Oxford and Cambridge mainly due to funding from MRC and other sources) start off the new process with the huge advantage of many more strong research teams than other cities. This is borne out in the short list for the biomedical centres:

Table 1.1.3 Location of short-listed biomedical centres:

City	Comprehensive centre	Specialist centre
London	3	6
Oxford	1	
Cambridge	1	
Manchester	1	
Liverpool		1
Newcastle		1

Source: DH

London dominates the shortlist with 9 out of 14 (64%). The Golden Triangle (London, Oxford and Cambridge) contains 11 out of 14 (79%). We can conclude that NHS R&D funding is monopolised by London and the South of England, and it is difficult to see this changing much with the new strategy.

This situation of serious geographical imbalance in NHS R&D contrasts both with NHS service funds, which are distributed on a weighted capitation basis, and with medical training which is roughly equally balanced between South and North/Midlands.

1.2 MRC

MRC funding for England goes mainly to universities and divides into two roughly equal parts – (i) Grants, fellowships and Studentships and (ii) MRC centres and teams,. Both are very highly skewed to the Golden Triangle and the South of England as illustrated in the following tables:

Table 1.2.1 Grants, fellowships and studentships in England 2001/5
Overview

	Percent funds
GOLDEN TRIANGLE	61
OTHERS	39
SOUTH	72
NORTH/MIDLANDS	28

Source: MJHU analysis of MRC data

Table 1.2.2 Grants, fellowships and studentships in England 2001/5 Top 20
institutions (Universities unless otherwise stated)

RANK	INSTITUTION	£million
1	OXFORD	71.6
2	CAMBRIDGE	60.9
3	UNIVERSITY COLLEGE LONDON	47.5
4	IMPERIAL COLEGE LONDON	40.1
5	MANCHESTER	33.6
6	KINGS COLLEGE LONDON	33.4
7	BRISTOL	21.8
8	BIRMINGHAM	19.6
9	LONDON SCHOOL OF HYGIENE & TROP MED	13.5
10	INSTITUTE OF PSYCHIATRY	12.0
11	NOTTINGHAM	11.6
12	LEICESTER	11.4
13	LEEDS	11.4

14	NEWCASTLE-UPON-TYNE	9.8
15	QUEEN MARY & WESTFIELD LONDON	9.6
16	SOUTHAMPTON	8.1
17	INSTITUTE OF CHILD HEALTH LONDON	8.1
18	SUSSEX	7.3
19	LIVERPOOL	6.5
20	SHEFFIELD	5.5

Source: MJHU analysis of MRC data.

MRC Research centres and teams are even more highly skewed than the Grants etc above. This is shown in the following tables:

Table 1.2.3 MRC Research centres in England: Overview

	NUMBER	PERCENTAGE
GOLDEN TRIANGLE	28	80
OTHERS	7	20
SOUTH	32	91
NORTH/MIDLANDS	3	9

Source: MJHU analysis of MRC data

Table 1.2.4. MRC Research centres in England: Regional distribution

REGION	NO OF CENTRES	% OF CENTRES
NORTH EAST	0	0
NORTH WEST	0	0
YORKSHIRE & HUMBER	1	3
EAST MIDLANDS	1	3
WEST MIDLANDS	1	3
EASTERN	10	29
LONDON	10	29
SOUTH EAST	10	29
SOUTH WEST	2	6
ENGLAND TOTAL	35	100

Source: MJHU analysis of MRC data

It is also noteworthy that the MRC Board membership parallels this skewed distribution, being drawn mainly from the Golden Triangle or elsewhere in the South:

Table 1.2.5 MRC Council members 2006/7 location (excl Scotland (2))

	NUMBER	PERCENTAGE
LONDON	8	50
OXFORD	2	13
BERKSHIRE	1	6
BIRMINGHAM	1	6
NOTTINGHAM	1	6
SHEFFIELD	1	6
SURREY	1	6
WILTSHIRE	1	6
SOUTH	13	81
NORTH/MIDLANDS	3	19
TOTAL(Excl Scotland)	16	100

Source: MRC

Thus although funds are essentially from taxpayers throughout England, the MRC appears to be a South of England monopoly.

Poorer regions subsidise richer ones

Using the above tables, assuming very approximately £500 million funding from both NHS and MRC and using a simple capitation basis, the five poorer regions of the North and Midlands subsidise the richer southern regions to the tune of c. £150 million (MRC) and c. £140 million (NHS), giving a total annual subsidy of c. £290 million. This is an unsatisfactory situation from the point of view of tax-payers from the North and Midlands. It is also unsatisfactory from the point of view of Government policy regarding geographical health and economic inequalities, as discussed in the next section.

2. The importance of balance in the geography of funding -local health and economic benefits and geographical health inequalities. Government targets in health and economic inequalities.

The imbalance described in Section 1 contributes to geographical economic and health inequalities in England today. It may also be uneconomic because costs are higher in London and the South East. The contribution to geographical health inequalities is via employment/economy, better outcomes from participation in clinical trials, improvement in the status and quality of a Trust and encouragement for innovation and cutting-edge practice in local healthcare.

The main challenge is to spread research more equitably throughout England, especially to major cities in the North and Midlands which enjoy poorer health than the South. This is illustrated in the following table:

Table 2.1 Health and deprivation in England by Region

REGION	MORTALITY	LLSI	ID2004
NORTH EAST	97.0	30.3	21.9
NORTH WEST	94.7	27.9	21.0
YORKSHIRE & HUMBER	89.0	28.0	15.9
EAST MIDLANDS	86.5	28.3	8.7
WEST MIDLANDS	89.4	26.5	13.7
EASTERN	77.3	22.8	2.1
LONDON	85.1	24.0	9.6
SOUTH EAST	76.9	22.8	1.6
SOUTH WEST	76.6	22.0	3.0
NORTH/MIDLANDS	91.1	27.9	16.2
SOUTH	79.3	23.0	4.3
ENGLAND	84.7	25.4	10.0

Notes on Table 2.1

Mortality: age standardised rate per 10,000. 2003 ONS.

LLSI: age-standardised limiting long-standing illness 2000-2002. Health Survey for England.

ID2004: Percentage of lower layer SOAs in highest decile of Index of Deprivation. Association of Public Health Observatories.

It is DH policy to highlight the fifth worst health areas as 'Spearhead' PCTs or local authorities. There is a national health inequalities target to reduce the (currently growing) gap in life expectancy between this worst fifth and the England average. Because of the worsening situation the target is regarded as challenging (see 'Tackling Health Inequalities: Status report on the Programme for Action' DH 2005). Consequently there will be growing pressure on the Spearhead areas to improve the health of their populations, and the allocation of NHS and MRC R&D funds can play a significant role in this endeavour. However from the point of view of health inequalities most of the allocation is currently in the 'wrong place'.

The most striking way to illustrate this initially is to divide England into two roughly equal populations as North/Midlands and South, and again assume £500 million each for the NHS and MRC. The North/Midlands contains 77 (87%) of the total 88 Spearhead PCTs but receives only c. £200 million (20%) of the combined NHS and MRC funds. By contrast the South has only 11 (12%) of Spearhead PCTs but receives c. £800 million (80%) of the provider R&D allocations. There can be few such astonishing gross inequities in public funding still in existence.

A more detailed look at the geography illustrates the theme. This is restricted to NHS R&D funds for the purposes of illustration because the equivalent information for the MRC is not currently available in sufficient detail. Greater London which takes 67% of the provider allocations has only 11 (12%) of the 88 spearhead PCTs; 57 (65%) of the Spearhead PCTs are in the North and 20 (23%) in the Midlands. Yet the North and Midlands take only 13% and 8% respectively of the allocations. Closer to home, the North West with 28 (32%) of Spearhead PCTs has only 6% of the allocations, and Greater Manchester, the economic centre of the North West has 14 (16%) of Spearhead PCTs, but only 4% of the NHS R&D allocation.

Clearly there is both an opportunity and a challenge here since a better geographical balance in R&D funding will contribute to Government policy on health inequalities.

It is also mandatory for any policy proposal to have a regulatory impact assessment on health and health inequalities (see 'tackling health inequalities: Status report on the Programme for Action' DH 2005). The current geographical imbalance has an impact which works to worsen geographical health inequalities, and any R&D policy which maintains that will work against government and DH policy. Conversely a policy to improve R&D share in the North and Midlands, particularly in major cities where health and employment problems are greatest, will impact to improve health inequalities by helping to provide better healthcare and greater prosperity.

Furthermore there is a national PSA target (Treasury target 6) to 'reduce the persistent gap in economic growth rates between the Regions' which is held jointly by the Treasury, Dept of Communities and Local Govt and the DTI.

The following table illustrates the gap in the economies between the Regions

Table 2.2 Gross value added per head by English Region

REGION	GVA (£) PER HEAD 2004
NORTH EAST	13,433
NORTH WEST	14,940
YORKSHIRE & HUMBER	14,928
EAST MIDLANDS	15,368
WEST MIDLANDS	15,325
EASTERN	18,267
LONDON	22,204
SOUTH EAST	19,505
SOUTH WEST	15,611
NORTH/MIDLANDS	14,941
SOUTH	19,311
ENGLAND TOTAL	17,188

Source: HMT

A policy to reduce the current concentration of medical funds in London and the South East (the richest regions) and increase funds in poorer regions should have a significant long term impact in reducing regional disparities in economic growth. Research funds in health are particularly important in this area because of multiplier effects via spin-off biotechnology and health-related companies. And because health is related to employment and wealth, (this association is well documented e.g. 'Health Inequalities and New Labour: how the promises compare with the real progress' BMJ 2005; 330:1016-21.) improved local economy will feed back into better local health in poor health areas and hence contribute to reducing health inequalities.

There is a large bibliography on the importance of the location of publicly funded research in influencing local prosperity, and hence the importance of such location on regional economic disparities in England. Examples abound in the ODPM select committee report 'Reducing regional disparities in prosperity' (Volume 1 of 9th report of 2002/3 session, 4 July 2003) and the associated memoranda (Volumes 2 and 3). In the summary of that report it was stated that *'the Government needs to ensure that the fundamentals for growth – transport, research and development investment, and universities are put in place now in the less prosperous Regions'*. In the Conclusions and recommendations section of the same report, paragraph 25 states that *'All Government departments should therefore be required to consider regional impacts before making new R&D investment decisions and to publish regional impact assessments'*. One of the memoranda by the London Development Agency (RRD 19) expressed a desire for the nine regional development agencies to work together on the *'issue related to health research*

concentrated in London, Oxford and Cambridge, with a view to establish new centres of excellence elsewhere in the country'. This sounded promising in 2003, but we are not aware that anything has come of it.

Examples of other relevant publications are the ODPM Report 'Cities, Regions and Competitiveness' second report from the working group of Government Departments, the Core Cities and the RDAs. June 2003, and 'A new regional policy for the UK' John Adams et al. IPPR, 2003. Subsequent to the latter publication, the IPPR issued a 10 point plan to reduce regional economic disparities which included the following '*All Whitehall departments need to mainstream the regional dimension into their spending decisions.*' ('Closing the Gap' conference, 14 June 2004, Newcastle-upon-Tyne).

A further point concerns value-for-money. Concentration of R&D in the richest and most expensive Region (typically 20% higher staff costs and greater land and building costs) does not appear cost-effective. Clearly this question requires independent audit, but seems likely to provide a further argument for allocating more R&D to poorer Regions.

3. The way forward/possible solutions

This section presents a sample of suggestions as to how the imbalance, described above, might be improved. Clearly the main problem is the 'chicken and egg' nature of the problem. Historical accident has endowed the South East with most of the research money and hence most of the researchers. The Golden Triangle attracts many of the best researchers because of the tradition of funding and the resulting quality and quantity of research. Unless their funding is increased significantly, other cities cannot readily gain research share by submitting more and higher quality bids. And the funding will not be increased under the current system without more and better quality bids. And so the circle continues and the status quo remains in place. There can always be exceptional initiatives outside the South East and judicious 'head-hunting' but it will always be difficult to maintain these without greater funding. It is therefore unlikely that the imbalance will improve significantly without specific initiatives being taken by the funding bodies themselves. The following represent some example of such possible initiatives:

1. A portion of NHS R&D funds is ring-fenced for distribution to all Regions on a per capita basis, and typically this is used by Regions for research support. The MRC has no such stream. It would therefore be helpful for the MRC to develop one (or if the two bodies combine, to enhance the current fund). Example of the uses of such a fund would be Studentships, Fellowships and support e.g. support to develop quality grant bids.
2. When geographical inequity and privilege is built into the system through historical accident, it seems to us that some form of positive discrimination is justified. The NHS and MRC could initiate a North/Midlands fund or a non-Golden Triangle fund which would be open to competitive bids from the under-funded areas only.
3. MRC research centres and teams represent perhaps the most astonishing example of geographical imbalance - out of a total of 35, only 3 are in the top half of England. Initiatives could be taken to encourage bids for new MRC centres from the top half of England. Also re-location of existing centres could be encouraged.
4. The MRC board is very skewed towards a membership which has affiliations with the Golden Triangle, or the South of England generally. Such a Board may not be likely to encourage initiatives to try to redress the geographical funding imbalance. A more geographically balanced Board would better represent the population of England whose taxes fund the MRC. It might also be more concerned to take initiatives to improve the imbalance.
5. The MRC and NHS or combined body could work with the DH and the Prime Ministers' Delivery Unit on initiatives concerning the Government priority of geographical health inequalities in England. The current situation acts to worsen such inequalities. Initiatives to improve the balance would contribute towards achieving the national health inequalities targets.

6. The MRC and NHS or combined body could work with the Treasury and DTI on the PSA6 target to reduce the rate of divergence of regional economies. The current situation is one where poorer Regions very substantially subsidise richer ones in medical research; this clearly works against the target because of the large direct and indirect economic benefits of the location of medical research.

4. Conclusion

In conclusion we welcome this opportunity to contribute to your review. There are some severe inequities in the distribution of Government spend on medical R&D across England. These inequities do not appear to be significantly lessening with time. We are concerned that this situation acts against current government regional policy, and exacerbates health inequalities. We would be grateful for your consideration of this matter in your review.