04th May 2018

Dear [Name],

Freedom of Information request: Health Spend - ref UKRI – 2018/0008

Thank you for your Freedom of Information/Environmental Information Regulations request submitted on the 05th April 2018 in which you requested the following:

Your Request:

I would like to know how much UKRI spends on health research. Please use the following headings.


Public health

If you could provide this for each of the last 5 years and budgeted spending for the next 3 years please. If not all future spending is allocated but you know what your total health spend will be please note as yet unallocated spend and what total spend will be. For each year mark: which body (which Ukrc, innovate, HEFCE, other?) provided the funding, stating your year end
The amount paid out in the year
New funding awarded in the year
For mental health, cancer, blood cardio stroke and public health please send me a list of all projects, centres, units etc funded using the format above including title and abstract where applicable.
All figures should be like for like comparable. Please also state what % of your total research spend is made up of health research in each year.

Do you use a database with global health expenditure in order to assist your investments in UK health research? If so please could you state what database(s) you use and provide global statistics as outlined above that are comparable with the UK ones you are providing me with.

Our response:

I can confirm that UKRI does hold information relevant to your request. Our response is detailed below:

From 1st April 2018 the seven UK Research Councils (AHRC, BBSRC, EPSRC, ESRC, MRC, NERC and STFC) Innovate UK and Research England became part of UK Research and Innovation, a non-departmental public body funded by a grant-in-aid from the UK Government.

MRC UKRI have provided a response they have sent previously that covers, in part, your current request for information, please see attached on Annex 1.

STFC UKRI have provided a link to their Challenge Led Applied Systems Programme programme (CLASP) 2017 – Healthcare: https://stfc.ukri.org/funding/research-grants/funding-opportunities/closing-calls/stfc-challenge-led-applied-systems-programme-2017/. However applicants and applications do not provide the level of detail required to break the funding down to the categories requested.

With regards to the remaining component parts to UKRI, the information is not available in the level of detail, and format, you have requested and to undertake an analysis would exceed the 18 hour appropriate limit pursuant to Section 12 of the Freedom of Information (FOIA).

I hope this answers your questions.

If you have any queries about this response please contact me, or if you are unhappy with the service you have received in relation to your request and wish to request a review of our decision, please write to:

Complaints Officer
UK Research and Innovation
Polaris House
North Star Avenue
Swindon
SN2 1FL
Email: foi@ukri.org

Please quote the reference number above in any future communications.

If you are still not content with the outcome of the review, you may apply to refer the matter to the Information Commissioner for a decision. Generally, the ICO cannot make a decision unless you have exhausted the review procedure provided by UKRI. The Information Commissioner can be contacted at:
Information Commissioner
Wycliffe House,
Water Lane
Wilmslow
Cheshire
SK9 5AF

Enquiry/Information Line: Between 9am and 5pm Monday to Friday 0303 123 1113 or 01625 545745

Further information about the Office of the Information Commissioner can be found at
http://www.ico.gov.uk/

Yours sincerely,

UK Research and Innovation, Information Governance Team

Email: foi@ukri.org
FOIA 2017-027: Latest clarification questions

1. Please could you confirm that the red text is correct and matches the data in the cells below it.

   Table A:

   a. MRC MeSH an analysis based on 100% of research programme spend using the Medical Subject Headings (MeSH) system to identify relevant research.

      This is correct. As per our response to you on 14 February 2018, the MeSH analysis that the MRC uses when answering questions about spend on specific questions is based on 100% of the research programme spend.

      In the portfolio we provided spend reported on a financial year basis.

   b. Cancer is only the % of funding for cancer. Everyone else is 100% of the project irrespective of what else is being researched. Calendar year not financial year

      This is correct. As per our response to you on 21 September 2017, the MRC reports cancer research spend using the analysis undertaken by the National Cancer Research Institute (NCRI) which is based on the percentage of the research project that is relevant to the condition of interest.

      I can see from your table that you have entered the research spend for cancer alongside spend from portfolios that were generated following the MRC’s MeSH methodology. While the data may be used to provide an indication of levels of funding in different areas it is not appropriate to combine the data in this way to make detailed assessments. As we indicated in our response of 11 January 2018 these data are not directly comparable for the following reasons:

      • The MeSH analysis is based on 100% of the research programme spend within a financial year.
      • The NCRI analysis is based on the percentage of the research programme spend that is relevant to the specific condition within a calendar year.

   Table B:

   c. MRC From Audited Accounts (see line 44 and below). This uses HRCS calculation. The spend by category is conducted by allocating the percentage of spend on a research programme by the different HRCS codes that have been allocated to that research.

      This note is correct and is the information that we provided to you in our response on 14 February 2018.

2. Please could you fill in the greyed cells.

   Table A:

   We note that this table relates to HRCS categories but is for data that has been analysed using MeSH (with the exception of cancer). The MRC does not have a MeSH analysis of our spend on
cancer research. To undertake an analysis would exceed the 18 hour appropriate limit of the Freedom of Information Act (FOIA).

Table B:
The data for 2014/15 is available from the 2014/15 Annual Report and Accounts.

a. Table C I thought would just be a calculation from Table B, ie Cell Q23 should be K23*E41 (7.6%*736.8). If this is not the case please explain and calculate Table C.

b. But when I calculated (Q24+Q25)/E41 I got 14.5% when I was expecting to get 21.3% from the Audited Accounts, see cell A119. What is happening here?

Information in Table B is based on Annual Report and Accounts, which is profiled grant and fellowship spend for the reporting year (e.g. 2014/15), and the unit spend for the previous year (e.g. 2013/14). These notes are available in the publications.

The data that we provided on 14 February 2018 was based on all spend in-year for grants, fellowships and unit programmes. This data was also based on the coding held within the systems on 06 February 2018. There is some variation in the coding of research programmes over time. This is due to late coding, recoding and the evolution of unit programmes.

As you seek to compare financial information, we are providing you with an up to date HRCS analysis, so that you have comparable data for Table C. This information can be found in the table on the next page.

You will observe that there are some differences in the total research expenditure compared to the data provided to you on 21 September 2017. The data for the total research expenditure provided previously was based on the MRC’s Annual Report and Accounts and includes all in-year expenditure. The data that we use for reporting research spend (whether this is based on the HRCS or MeSH analyses) is taken from the spend profile confirmed in our grant administration system at the point of award. There can be variations between the original profile and actual spend for a number of reasons, for example changes to start and/or end dates may impact on spend across financial years or funding may be returned to the MRC where the total award amount is not fully utilised. An analysis of the impact of this approach on individual MeSH research portfolios has been undertaken and there is a minimal impact on the level of funding reported, but on a gross level, could be a contributory factor to there being differences.
Table: Medical research Council spend by Health Research Classification System, by Health Category, 2011/12 to 2016/17, £m

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>£607.62 m</td>
<td>£772.04 m</td>
<td>£825.35 m</td>
<td>£761.60 m</td>
<td>£833.19 m</td>
</tr>
<tr>
<td>Blood, cardiovascular, stroke</td>
<td>£35.81 m</td>
<td>£33.81 m</td>
<td>£33.39 m</td>
<td>£25.45 m</td>
<td>£28.60 m</td>
</tr>
<tr>
<td>Cancer</td>
<td>£43.58 m</td>
<td>£38.78 m</td>
<td>£41.85 m</td>
<td>£47.02 m</td>
<td>£70.65 m</td>
</tr>
<tr>
<td>Congenital Disorders</td>
<td>£3.29 m</td>
<td>£6.06 m</td>
<td>£7.06 m</td>
<td>£4.30 m</td>
<td>£3.99 m</td>
</tr>
<tr>
<td>Ear, Eye</td>
<td>£10.39 m</td>
<td>£11.62 m</td>
<td>£12.45 m</td>
<td>£10.88 m</td>
<td>£12.21 m</td>
</tr>
<tr>
<td>Generic Health Relevance</td>
<td>£132.76 m</td>
<td>£153.81 m</td>
<td>£191.69 m</td>
<td>£201.00 m</td>
<td>£222.96 m</td>
</tr>
<tr>
<td>Infection</td>
<td>£96.24 m</td>
<td>£88.65 m</td>
<td>£97.35 m</td>
<td>£104.67 m</td>
<td>£85.10 m</td>
</tr>
<tr>
<td>Inflammatory and Immune System</td>
<td>£34.39 m</td>
<td>£33.63 m</td>
<td>£34.37 m</td>
<td>£33.41 m</td>
<td>£30.62 m</td>
</tr>
<tr>
<td>Injuries and Accidents</td>
<td>£0.14 m</td>
<td>£0.20 m</td>
<td>£0.27 m</td>
<td>£0.61 m</td>
<td>£1.01 m</td>
</tr>
<tr>
<td>Metabolic and Endocrine</td>
<td>£14.96 m</td>
<td>£14.85 m</td>
<td>£23.03 m</td>
<td>£22.05 m</td>
<td>£20.91 m</td>
</tr>
<tr>
<td>Mental Health</td>
<td>£27.30 m</td>
<td>£28.45 m</td>
<td>£30.05 m</td>
<td>£31.01 m</td>
<td>£30.11 m</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>£11.42 m</td>
<td>£13.14 m</td>
<td>£14.24 m</td>
<td>£13.90 m</td>
<td>£13.40 m</td>
</tr>
<tr>
<td>Neurological</td>
<td>£79.72 m</td>
<td>£79.74 m</td>
<td>£79.90 m</td>
<td>£79.83 m</td>
<td>£105.92 m</td>
</tr>
<tr>
<td>Oral and Gastrointestinal</td>
<td>£13.27 m</td>
<td>£10.76 m</td>
<td>£9.36 m</td>
<td>£9.93 m</td>
<td>£11.00 m</td>
</tr>
<tr>
<td>Other</td>
<td>£5.53 m</td>
<td>£4.63 m</td>
<td>£4.32 m</td>
<td>£4.42 m</td>
<td>£4.34 m</td>
</tr>
<tr>
<td>Renal and Urogenital</td>
<td>£4.96 m</td>
<td>£3.92 m</td>
<td>£4.47 m</td>
<td>£5.12 m</td>
<td>£5.08 m</td>
</tr>
<tr>
<td>Reproductive Health and Childbirth</td>
<td>£13.19 m</td>
<td>£17.43 m</td>
<td>£17.70 m</td>
<td>£18.80 m</td>
<td>£16.08 m</td>
</tr>
<tr>
<td>Respiratory</td>
<td>£11.22 m</td>
<td>£14.79 m</td>
<td>£14.26 m</td>
<td>£10.66 m</td>
<td>£16.35 m</td>
</tr>
<tr>
<td>Skin</td>
<td>£2.02 m</td>
<td>£2.09 m</td>
<td>£1.51 m</td>
<td>£2.65 m</td>
<td>£3.90 m</td>
</tr>
<tr>
<td>HRCS Uncodeable</td>
<td>£0.06 m</td>
<td>£0.24 m</td>
<td>£0.46 m</td>
<td>£0.58 m</td>
<td>£0.69 m</td>
</tr>
<tr>
<td>UNCODED</td>
<td>£67.38 m</td>
<td>£215.47 m</td>
<td>£207.61 m</td>
<td>£135.31 m</td>
<td>£150.28 m</td>
</tr>
</tbody>
</table>

Notes:

- This information is correct as at 05 March 2018. You will notice that there has been a small change in the data that was previously provided to you – this is due to recoding of the underlying data.
- HRCS Uncodeable relates to awards that have insufficient information available for coding, for example no descriptive title, summary information or additional detail explaining specific research aims.
- Uncoded relates to awards that may be within the scope of coding by the HRCS, but have yet to be coded.

3. The HRCS classification method would seem more accurate than your MeSH of portfolio methods. Is this correct? What are the benefits of the MeSH and portfolio methods? Am I correct in thinking that you end up ‘double counting’ the £ amount of research that you do using this methodology?

In our correspondence of 21 June 2017 that the MeSH and HRCS analyses serve different purposes. The HRCS analysis allows for an overview of spend against broad categories but does not contain information on specific conditions or illnesses. In comparison, the MeSH analysis allows the MRC to assess our research spend against specific conditions or illnesses. Therefore, neither analysis is more accurate than the other as they serve different purposes.

For example by using the HRCS approach the MRC would report spend relating to diabetes under the heading of “metabolic and endocrine” which also includes disorders of the thyroid gland, other disorders of glucose regulation and pancreatic internal secretion, disorders of other endocrine glands, malnutrition, other nutritional deficiencies, obesity and other hyperalimentation, and metabolic disorders. Use of the HRCS does not allow us to report anything within the health categories at the level that would indicate a specific condition or illness, whereas the MeSH system does.
You may have already observed that the 2011/12 to 2015/16 five year total spend on research relating to mental health is similar when reported using the HRCS (£146.60m) and MeSH (£145.33m) analyses.

There is no double counting of spend as the analyses are separate.

4. "Generic health relevance – this covers research, often looking at the control and/or dysfunction of fundamental cellular and physiological processes, which contributes to research in multiple disease areas. In particular, this domain provides a significant underpinning for more focused research on cancer" MRC Audited Accounts. If you know enough to make this statement I would like you to quantify the % of this spend that "provides a significant underpinning for more focused research on cancer". Call it a management estimate if you wish and provide a range if this is easier but I would like an quantifiable amount.

This information is included to indicate the broad type of activity that falls into this category, but it is not possible to quantify this any further than we have already. When HRCS coding is assigned to a research programme two codes are allocated, one for the Research Activity and the other for the Health Category. The data that we are discussing here is the Health Category. However, the two can be linked, especially when the Research Activity is coded as “underpinning” often the Health Category is coded as “generic health relevance”. For example, MRC funded research classified as underpinning (research activity) and generic health relevance (health category) may be exploring basic cellular mechanisms and function, which may be relevant to specific areas in futures, such as improving understanding of processes that get hijacked by mutations causing cancers.

Further information on the research activity and health category classification can be found at https://hrcsonline.net/research-activities/ and https://hrcsonline.net/health-categories/ respectively.

5. Mental health expenditure would seem to be c.4% of total expenditure. This is half what NIHR spend on mental health and less than half the Disability Adjusted Life Years weighting of mental health in the WHO UK burden of disease calculation. Please could you explain why the expenditure is so low.

As outlined in the response of 21 September 2017, and restated on 15 January 2018, the MRC funds research on a competitive basis. This means that applications for MRC funding are generally submitted by the research community and the primary considerations in funding decisions are research excellence and importance to health. While high-quality applications are welcomed into any aspect of human health, those in areas of particular strategic importance may be given priority in competition for funds. We do not normally ring-fence funds for specific diseases or conditions.

a. Previously you stated "the MRC also supports training and capacity building and important underpinning resources for this research community. This includes support for population cohorts...imaging facilities such as a 7Tesla MRI scanners...and support for brain banking resources which provide researchers with access to well preserved human brain tissue." But you could not quantify this benefit. Do you have any reason to believe that mental health benefits from these unquantifiable factors any more than any other HRCS illness?
Although neuroimaging through MRI and PET scanners is important in other fields, it is a key technology for mental health research. Longitudinal cohorts enable a lifecourse perspective and capture social and environmental drivers and risk factors for mental health problems over time. Therefore, longitudinal cohorts, and MRI and PET scanners are important resources for mental health research.

6. I would like to know what your decision making process is. You have previously sent me information on this and I attach your Scoring Matrix. Please could you send me any other literature related to the decision making process, starting from any application forms for researchers until the final Board/panel or other decision is made.

All information relating to the MRC’s funding process can be found online at: https://www.mrc.ac.uk/funding/how-we-fund-research/

7. Just looking over my notes in April 2017 the MRC launched a new strategy for Lifelong Mental Health Research. Building on strengths of the UK research base. Can you give any up to date indication of how much you are likely to spend on mental health in 2017/2018?

a. When is your year end?

The MRC reports by financial year. As per our response on 15 January 2018 the MRC does not usually ring-fence funds for specific diseases or conditions. The mental health (MeSH) research portfolio will be updated to include data for 2017/18 following the MRC’s Annual Report and Accounts for 2017/18. (Publication is usually in late summer).

Since the publication of the MRC Strategy for Lifelong Mental Health in April 2017 there have been a number of initiatives that have been taken forward to help to realise the aspirations of the strategy. As there is a lag between when decisions are taken, awards confirmed and projects starting there will be a delay before we start to see any increase in spending in this area. In addition, the MRC is engaging widely with stakeholders on mental health research, including through membership on the steering group for the Department of Health Mental Health Research Framework, the UK Research Councils Cross-disciplinary mental health research agenda, regular networking with UK and international funders of mental health research, such as through the International Alliance of Mental Health Research Funders, and participating in parliamentary events. Full details of the initiatives can be found in the attached Word document “MRC Mental Health 2018 summary”.

8. Relative to a measure of health in the population like the WHO’s Disability Adjusted Life Years you are spending a disproportionately large amount on

- Neurological, Infection and Metabolic and Endocrine/Inflammatory and Immune System
- and amongst others you are relatively under funding cancer, mental health, blood/Cardiovascular/ Stroke, muscular skeletal and injuries and accidents.

Please can you explain why this is the case. I appreciate your previous comments that you do not fund by illness I just wondered if there was any other reason? For example you have a very different funding profile to NIHR.
As per our response on 15 January 2018 we are unable to provide any commentary on your analysis. In the same correspondence, we also outlined the relationship and roles of the MRC and the National Institute for Health Research (NIHR).

Both organisations are funders of health research in general, but each focus on different, but complementary, parts of the research spectrum.

- The MRC funds basic and discovery research and early phase translation and trials.
- The NIHR funds later phase research to bring basic discoveries through to application, especially within the context of research carried out within or to the benefit of the NHS. The MRC does not have a sole UK health focus and funds later phase Global Health Trials where the NIHR has not traditionally had a role. Because of these differences we would expect there to be a difference in the funding profiles of the MRC and the NIHR.

The reports on the HRCS website provides a helpful illustration of the differences in the MRC and NIHR funding profile, for example see the analysis by Research Activity tables for DH (p39) and MRC (p40) of the 2014 HRCS report: http://hrcsonline.net/wp-content/uploads/2017/09/UK_Health_Research_Analysis_Report_2014_WEB.pdf

9. On your website here, https://www.mrc.ac.uk/funding/how-we-fund-research/programme-grant/#howtoapply, you list different criteria to the attached matrix. I would like to understand your decision making mechanisms. Please can you explain them to me. (Is the matrix used for every research project? Are there different matrices for your different funding streams. If so what are they??

In our response of 21 September 2017 we outlined that we have a two stage review process for applications. In the first stage, external peer reviewers provide an expert assessment of the proposal, using a 1-6 scoring matrix. In the second stage, the board or panel make their assessment and a funding decision using a 1-10 matrix. However, it is important to note that at both stages a greater emphasis is placed on the reviewer’s or board/panel member’s detailed critique than the scores given. The scores act as a guide, only offering an ability to discriminate between strong and weak proposals, and not able to discern small differences between groups of strong proposals.

The MRC’s institutes, units and centres are reviewed every five years. Information about this process can be found at: https://www.mrc.ac.uk/documents/pdf/summary-of-mrc-unit-and-institute-quinquennial-reviews/

I hope that you find this information useful.

Yours sincerely,