

Response from the Welsh Assembly Government to HM Treasury's consultation on a merged fund to support UK health related research

1 This response has been prepared by the Wales Office of Research and Development for Health and Social Care (WORD), following extensive consultation with policy colleagues within the Welsh Assembly Government, the academic and service communities, and with the Cooksey Review Team.

2 Terms of reference

The terms of reference of the review are to advise on the best design and institutional arrangements for public funding of health research in the UK, taking account of health, science and economic objectives. This response addresses these objectives from the Welsh perspective, but to meet the needs of both Wales and the UK.

3 The Welsh context

3.1 Wales has a population of nearly three million. The economy is mixed, with industrial belts along main arterial routes in the north and the south, and a rural economy in mid and west Wales. There are no major pharmaceutical or biotech companies but many small and medium enterprises, particularly in medical devices. Wales is currently overrepresented in lower value added industries and a lower proportion of individuals with high level skills. R&D expenditure is well below the UK average.

3.2 The Welsh Assembly has devolved powers over health, social care, education and economic development. Science programmes remain reserved but a Welsh Science Strategy is in development, focusing on three main areas: health, sustainable economic and social renewal, and a low carbon economy.

3.3 There are well documented inequalities in both health and wealth throughout the Principality. The highest levels of deprivation, as measured by income and employment rates, are concentrated in West Wales and the South Wales Valleys. Much of West Wales is also deprived in terms of access to services. GDP per head across West Wales and the Valleys is 75% of the European Union and is 66% of the UK average. The lower employment rates of the sub-region can be explained by the higher inactivity rates which are due, in part, to the higher incidence of work limiting health conditions.

4 Health and health policy in Wales

4.1 The Welsh Assembly published its own Social Care and NHS Plans in 1999 and 2001 respectively. In 2003, a review of health and social care in Wales was undertaken by a team advised by Sir Derek Wanless. This found that the health service is unsustainable in its present form and radical change is needed. It emphasised the need for this to be evidence-based, through both research and information. *Designed for Life – A 10-year strategy for change* was published in 2005. This proposes reconfiguration of services, to be based on three regions in the north, south-east, and mid and west Wales. The principles are to

improve health promotion and prevention, rationalise secondary care, and move care from hospitals where this could be better provided in the community setting. Underpinning this strategy is a major investment in the technology to support the movement of care nearer to or within houses, encompassing telecare, telemedicine and ‘smart’ assistive technology housing. The NHS in Wales is committed to focusing on improving the health of the population.

4.2 Health and social care are strongly linked in Wales in policy terms.

Within the Assembly, for both adults and children’s services, policy for health and social care is located within the Health and Social Services Department. This reflects recognition that the Assembly’s objectives for the health and well-being of its citizens cannot be met by health care alone but requires health and social care agencies to work effectively together. *Fulfilled Lives, Supportive Communities*, the 10-year strategy for social care, which will be published later this year, will reinforce this.

4.3 Research is needed to inform and evaluate these developments. They also present an opportunity to assess and compare an approach that is different from the other UK countries.

5 Health-related science

5.1 A strategy for bioscience in Wales was commissioned from Ernst & Young by the Welsh Development Agency and published in 2003. The study found that the bioscience sector is small in Wales in comparison with the rest of the UK.

5.2 The academic infrastructure is focused on partnership between the higher education institutions in Cardiff, Swansea and Bangor / Wrexham, and will be extended to cover Newport in the next two years. The clinical school in Cardiff has been strengthened by the merger of the University of Wales College of Medicine with Cardiff University, and both teaching and research are expanding through collaborative developments in Swansea, Bangor and Gwent. University of Wales Swansea now delivers a distinctive graduate entry scheme. These developments, including new clinical academic appointments, have been funded from the NHS and Education budget in Wales.

5.3 The majority of health-related research is undertaken in Cardiff but Bangor and Swansea are expanding rapidly, based on the expansion of undergraduate medical education. There are significant successes where there is collaboration across Wales, particularly in cancer, neuroscience, genetics, health services and public health research. Biomedical science is strong in cancer, neuroscience and mental health, infection and immunity, stem cells and genetics / genomics. Translational research is strong in genomics and cancer, and clinical research facilities are developing in Cardiff University (funded by HEFCW and Wellcome) and University of Wales Swansea (Institute of Life Sciences, funded by the Welsh Assembly and European Union). The Cardiff Institute for Tissue Engineering and Repair (CITER) has established an international reputation in the science and application of measures to improve tissue healing, and strong collaboration is

developing with University of Wales Swansea and the local NHS. There are also important collaborations in the field of intelligence relating to human:IT interaction, underpinned by the Informing Healthcare and Informing Social Care strategies.

5.4 A research and development strategic framework for health and social care was published, by WORD, as a consultation document in 2002, and implemented in 2005. The first development was the establishment of an All Wales Alliance for Research and Development (AWARD) which plays a major role in developing the evidence base for policy initiatives, through primary and secondary research, and evaluation. AWARD supports both health and social care, including access to expertise in Social Policy and Social Sciences Departments in Cardiff, Swansea and Bangor Universities.

5.5 A major component of the strategy is the Welsh Clinical Research Collaboration, an integral part of the UKCRC. CRC Cymru was formally launched in July 2006. It comprises a Coordinating Centre, nine thematic networks (in addition to cancer), and five supporting collaborations.

5.6 The Co-ordinating Centre is based in Cardiff University. It will manage a network of research professionals, who will support clinical trials and other rigorously designed studies across Wales. Their research support skills will be generic and not confined to specific clinical domains, though appropriately trained staff will support studies on those subjects whose cognitive skills may be under-developed or impaired, such as children, the elderly, and those with mental or

learning disabilities. The Coordinating Centre will also manage a patient and carer network to inform all stages of the research process.

5.7 In addition to cancer, nine new thematic networks have been procured, covering diabetes, neurodegenerative disorders, mental health, children, older people, public health, epilepsy, learning disabilities and emergency care. These are led from Cardiff, Swansea or Bangor and are all-Wales networks of academic, service and policy professionals with an interest in the topic areas. Some are led by academics whose main interest is in social care rather than health. They have been selected through competitive application process, which took into account track record to date and future plans. They do not run their own research professional networks but will use the infrastructure set up by the Coordinating Centre to run large scale studies from the UKCRN, industry, or their own endeavours. Some of these networks map to topic specific networks in the UKCRN in England, while others have the potential to lead in the UK.

5.8 Infrastructure collaborations will ensure health economics input, expedite research governance processes, ensure minority ethnic groups and Welsh language speakers are included, and maximise the use of health data. There are clinical trials units in Cardiff and Bangor, which will be expanded to meet the needs of the thematic research networks. These developments have all been funded from the Health and Social Care R&D budget, and are contract managed by WORD.

5.9 In addition to established strengths in certain areas of health related science, there are also emerging areas of importance and excellence,

particularly in the new clinical school campuses (for example epilepsy; infection; emergency care; social care) and in health services and public health research.

5.10 The size and organisational cohesion of the NHS in Wales has also enabled WORD to establish a Health Information Research Unit in Swansea, prompted by the Welsh Wanless report, a report on public health sciences from the Wellcome Trust in 2004, and the McKinsey report commissioned by the UKCRC in 2005. This Unit has access to an IBM super-computer in the new Institute of Life Sciences, and will pioneer the support for research through innovative use of routinely collected operational data, as well as complex analysis of large and linked datasets from health, social care and other sectors.

5.11 The level of investment in R&D in Wales is small, but there are areas where Wales has considerable strengths and new investment is being made:

5.11.1 Cancer research is strong along the research spectrum from biomedical science to clinical trials. A Wales Cancer Bank is well established and collecting tissue from patients with cancer across Wales (funded by WORD); an experimental cancer medicine collaboration between Cardiff and Swansea has been funded by CRUK, and the Welsh Cancer Trials Network is supported by a CRUK-accredited clinical trials unit. The Wales Cancer Institute coordinates these all-Wales activities.

5.11.2 Collaborative research in neuroscience is now being strengthened by investment in neuro-imaging facilities in Cardiff.

5.11.3 Stem cell research is addressing particularly the treatment of neuro-degenerative disorders, and a major bid for a stem cell research centre is currently being considered by the MRC.

5.11.4 Strengths in genomics underpin research in neurosciences, including mental health and epilepsy, cancer, respiratory disorders and cardiovascular disease.

5.11.5 The establishment of a comprehensive clinical research infrastructure, is intended to strengthen both all-Wales collaboration and the research continuum from bench to bedside.

5.12 A small responsive grants scheme is used to encourage and develop young career researchers. This disburses about £1m per annum, supplemented at present by £500k per annum from the MRC. Proposals must have Welsh Assembly Government policy relevance.

5.13 Wales is participating in the Clinical Academic Careers initiative. The importance of supporting all medical, dental nursing and clinical professions is recognised fully.

5.14 The health-related science base in Wales is thus of high quality, but small in comparison with the rest of the UK, due to funding constraints, with a consequent low level of external income from major funders. There are pockets of excellence but there is insufficient capacity at present to develop and build upon the strengths of the

programmes already in place and underpin the major strategic developments in Wales. In order to take forward the cross cutting agenda in health and social care there is a need to address this.

6 Impact of health related research on economic development

6.1 Health related research makes an important contribution to the Welsh economy. In 2002 there were 9000 people employed in 224 bioscience companies (98 biotech, 10 pharma and 116 medical devices). However, the sector is small, and overall growth has consistently been around 0.6% less than the rest of the UK over the last few years. In 2003 Ernst and Young recommended (on the basis of experience in other countries, including Scotland), that this is addressed through unified leadership, investment in the research base, and attention to innovation and commercialisation. Since then, an intellectual property advisory service has been established to maximise the benefits of research and development in the NHS. Cardiff already has a good track record in this area, through the Medicentre on the University Hospital of Wales campus, and incubator opportunities in the west are being expanded through the Technium programme.

6.2 A Science Strategy which has a strong focus on health will take this further and address leadership issues. Links with the devices industries are fostered through MediWales (which brings together industry, academia and the service), and with the pharmaceutical industry through the Welsh branch of the ABPI. However, the need to invest in

the research base, in biomedical, clinical and health services research, remains a fundamental problem which has not yet been addressed.

7 Principles underpinning the Welsh response

Our wide consultation has crystallised certain principles which underpin our response to this consultation. These are that Wales should:

7.1 Contribute to the UK wide research effort, while addressing the needs of the country which has its own responsibilities for health and health policy, science infrastructure and economic development.

7.2 Build on our strengths by protecting established excellence, nurturing emerging areas, developing collaboration across Wales, and building up the R&D continuum from bench to bedside.

7.3 Build up funding for R&D in Wales. We calculate that an additional £22m per annum is needed to enable Wales to build a competitive, attractive and sustainable health related research infrastructure and to maximise the full potential of the base we have. Of this sum, half will be needed to build capacity in those areas where Wales has the potential to lead, or make a major contribution, on a UK wide basis.

7.4 Take advantage of our opportunities in the expanding medical school infrastructure across Wales, and funding opportunities from Europe.

7.5 Identify and minimise threats, particularly those presented by competitive initiatives which will have an adverse impact on the recruitment and retention of both service and academic staff.

8 Conclusions

On this basis we have reached the following conclusions:

8.1 We support the concept of a single UK research fund for peer-reviewed programmes and grants, provided that this does not further disadvantage Wales. We believe this single fund should support the full spectrum of health related research, and where appropriate, be responsive to the policy needs of Wales. It should be available in its entirety to the whole of the UK. We fully support the principles of competitive application and funding based on research excellence, and would not wish to see the loss of the name or principles of the Medical Research Council.

8.2 We believe this fund should be governed by a strong overarching body, on which the devolved administrations have a significant voice. It should in turn be accountable to a ministerial committee which includes representation from the devolved administrations.

8.3 We wish to maintain independent infrastructure funding while recognising that substantially increased investment is needed if the Welsh Assembly Government is to deliver on its priorities for health, education and economic success.

8.4 We will seek additional funding of £11m per annum from the Welsh block vote and European convergence funds to develop our infrastructure. We will seek incremental growth to achieve this figure over four years from 2007/8 to 2010/11.

8.5 As we build this infrastructure, we will also seek interim support from the MRC to help specifically with capacity building in areas of strength

and relevance to Wales and/or the UK. In this way we wish to ensure research in Wales is competing on a level playing field with the rest of the UK. We believe a modest investment of £11m per annum (or 2% of the MRC budget) will make a big difference to Wales, while having little negative impact in England. This support should be incremental and time limited, reducing as Wales secures more funding through programme and grant schemes.

8.6 We believe that this commitment would enable us to lever in further investment from industry.

8.7 We recognise that we must ensure that we are maximising efficiency; effective collaboration both within and outside Wales; and the impact of our research endeavours. We are already addressing the need for rapid and unified research governance approval through CRC Cymru.