



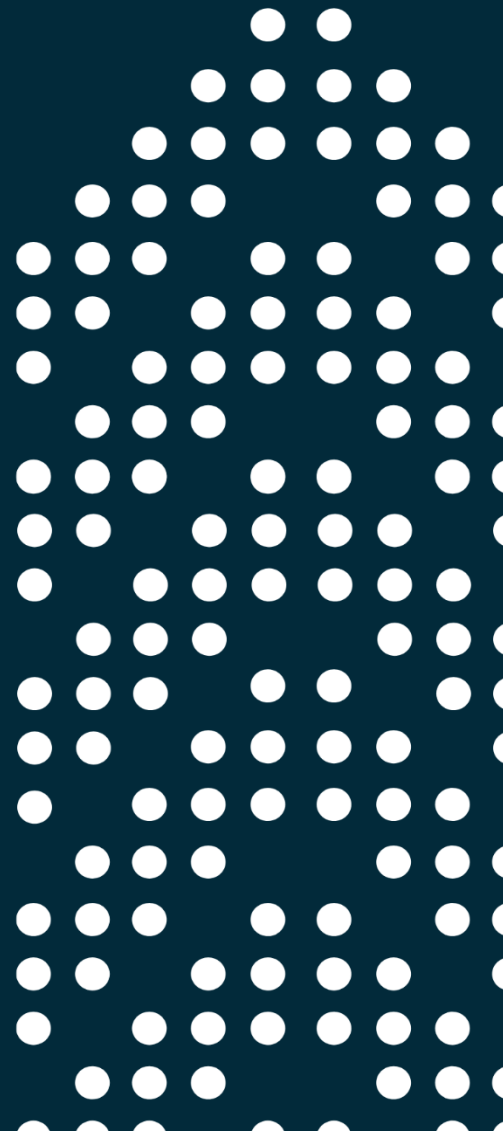
Hwb Gwyddorau Bywyd Cymru
Life Sciences Hub Wales

A Guide to Health and Social Care Innovation Policy: a review of Welsh Government policy on innovation

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Introduction

The Welsh Government influences the nature of health and social care innovation in Wales through its direct responsibility for policy and legislation in these fields. A comprehensive understanding of the Welsh Government's approach to innovation is therefore essential for innovators wanting to tap into this dynamic landscape.

This report aims to enable those wishing to innovate within Wales and beyond with useful information to make sense of the complex and often overlapping policies shaping and influencing innovation in Wales.

We have used a range of questions to guide this summary review of key policies that relate to innovation in health and social care in Wales today:

- What common needs are driving policy?
- What are the aims and success factors informing innovation policy?
- How is innovation policy typically monitored and measured?
- What policy is guiding innovation after European exit?

We have carried out a review of relevant policies for the purposes of this report. Many of the policies referenced here relate to innovation in both health and social care. Where our findings draw from policy relating to innovation in healthcare, these are likely to be relevant social care settings owing to the integrated nature of health and social care in Wales.



Policy Timeline

A quick look at recent, pivotal Welsh Government policies that are guiding innovation in health and social care

2012

Science for Wales, a strategic agenda for science and innovation in Wales: Executive Summary (Welsh Government, 2012)

The strategy detailed the Welsh Government's goal to develop a strong and dynamic science foundation that supports the economic and national development of Wales. It acknowledged how government could play a role in supporting the processes but the research, business and education communities would be critical in achieving in any aims.

2014

Innovation Wales (Welsh Government, 2014)

This strategy document builds on the commitments laid out in 'Science for Wales' (Welsh Government, 2012) and results from a wide-ranging call for evidence to representatives from small and large businesses, universities and UK innovation organisations.

2015

Digital First (Welsh Government, 2015a)

A strategy document outlining the strategic first steps of the Welsh Government in creating the environment necessary for the public sector to provide excellent digital services to the people and businesses of Wales.

Informed Health and Care: a digital health and social care strategy for Wales (Welsh Government, 2015b)

A strategy paper outlining how Welsh Government intends to use technology and greater access to information to help improve the health and well-being of the people of Wales. It set the direction for a five-year period and made clear a range of ambitions and expectations.



2017

Prosperity for All: the national strategy (Welsh Government, 2017)

Wales' national strategy for improving quality of life and well-being. Focusing on five priority areas: early years, housing, social care, mental health and skills and employability.

2018

Social Care Research and Development Strategy for Wales (Social Care Wales, 2018)

A strategy document setting out Welsh Government's vision for a five-year period: for Wales to be internationally renowned for its excellent social care research that supports the people of Wales, by informing and improving social care policy and practice.

2019

A Healthier Wales: our plan for health and social care (Welsh Government, 2019a)

This policy document was commissioned by the Welsh Government in response to the 'Parliamentary Review of the Long Term Future of Health and Social Care' (Welsh Government, 2018) to help drive the changes to meet the future needs in the health and social care system.

Research and Innovation: The Vision for Wales (HEFCW, 2019)

A Welsh Government-sponsored strategy document produced by the Higher Education Funding Council for Wales (HEFCW), setting out four thematic pillars underpinning the vision for research and innovation (excellence, place, innovation and collaboration), and a 'roadmap' for success.



Policy Drivers

What common needs are driving innovation policy?

Health and social care services in Wales face similar challenges to those found in other developed nations: an ageing population, lifestyle changes, public expectations, increasing demand for services and advancing medical technologies (Welsh Government, 2018). These challenges have been amplified due to the impact of the initial Covid-19 pandemic. Health and social care services face significant service backlogs following in addition to pressures on operational budgets. ‘A Healthier Wales: our plan for health and social care’ recommended the move to a more integrated and prevention-based system – with driving innovation across health and social care in Wales as a key enabler for this (Welsh Government, 2018).

Our health and social care policy consistently identifies ‘innovation’ as an important part of meeting people’s needs. The ‘Innovation Wales’ report states that where there is a common consensus that innovation means “...the successful exploitation of new ideas” (Welsh Government, 2014, p7).

The value of coordinating and harnessing innovation to meet the needs of the population and promote prosperity in Wales is made clear in the Welsh Government’s landmark piece of policy – ‘A Healthier Wales: our plan for health and social care’ (Welsh Government, 2019a).

“Services will be more resilient if we [...] encourage innovation, and enable diversification. This will strengthen the prosperity of local economies, which will have a longer term positive impact on health and well-being.”

‘A Healthier Wales: our plan for health and social care’, p10 (Welsh Government, 2019a)



Innovation-related aims of ‘A Healthier Wales: our plan for health and social care’

- Establish a nationally coordinated network of hubs that bring together research, innovation and improvement activity within each regional partnership board footprint, by March 2019.
- Adopt national standards for rapid evaluation of all innovation and improvement activity, using a value-based approach to measuring quality and outcomes, from 2019.
- Invest in a small number of priority areas that offer opportunities to drive higher value health and social care, through new approaches, emerging technologies, and strategic partnership opportunities, from 2019.

The Welsh Government seeks to foster a culture of innovation in Wales. This starts with the education of young people, helping to develop innovation as part of the country’s identity and national narrative so that “research and innovation [may] contribute more widely to the image, culture and national identity of Wales” (Reid, 2018). Part of this strategy involves encouraging relationships with external partners in the private and third sectors (Welsh Government, 2014) to encourage successful of new ideas.

Background to the ‘Review of Government Funded Research and Innovation in Wales’

The ‘Review of Government Funded Research and Innovation in Wales’, known as the ‘Reid Review’, is an independent report commissioned by the Welsh Government to explore and recommend ways in which Welsh Government investment may “sustain research and innovation competitiveness in Wales”.

The report looks at Welsh Government investment in research and innovation, how it is making a difference and what needs to change to deliver maximum benefits for the people of Wales, in line with the aims of ‘Prosperity for All: the national strategy’ (Welsh Government, 2017b). Its findings have informed and contributed to budget considerations in this area.

As a major sector of the Welsh economy, manufacturing and services in health and social care are major drivers for job creation and economic development. Collaboration between industry, higher education, universities, and public services is a key driver shaping policy (Welsh Assembly Government, 2010; HEFCW, 2019; The Academy of Medical Sciences, 2020).



As a major sector of the Welsh economy, health and social care is hugely important, with innovation in the sector a contributing factor to the nation's economic growth. There is a shared acknowledgement of the need to support the infrastructure and facilities, research and skills, which allow innovation to flourish (Welsh Assembly Government, 2017). This is in keeping with the internationally recognised goal of the United Nations (2015) to “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”.

“[Our] strategy aims to achieve a shift from treatment to prevention, and from hospitals to communities. In working towards these goals, the importance of research is emphasised, both as a force for innovation and adaptation in social care and health services, as well as a driver of economic growth.”

‘Social care research and development strategy for Wales’, p10 (Social Care Wales, 2018)

Digital innovation is seen as having the potential to revolutionise care “so that it empowers individuals to take decisions, tailors care to the individual's expressed needs and preferences, is far more proactive and preventative [...] as close as possible to people's homes.” (Welsh Government, 2018, p6). It is perceived to be a key enabler of progress and improvement – creating public value (Public Service Management Wales, 2016). The NHS has a significant role to play in supporting innovation to drive medical advances and “expand the frontiers of medical science and innovation” (UK National Health Service, 2019, p9).

Within Welsh health and social care policy relating to innovation, there are further emergent themes and trends. There is a movement towards co-design or co-production of innovations with clinicians and patient populations, with a focus on human behaviour (Welsh Assembly Government, 2016).

There is also a growing recognition of the need for evidence-based national processes and frameworks that enable scale and spread of innovation. ‘Informed Health and Care: A Digital Health and Social Care Strategy for Wales’ states that “learning from what works elsewhere and adopting these solutions in an agile, rapid and responsive way” (Welsh Government, 2015b).

Other common drivers shaping the policy landscape include the financial challenges facing public services (National Assembly for Wales, 2010), the need to deliver greater efficiencies and to accelerate the development of successful innovations (Welsh Government, 2015c).



UK-wide investment in research and innovation is 1.7% of GDP (Parkes, 2019), compared with an average of 2.4% across the OECD. Welsh Government has outlined its vision to make a vital contribution to the delivery of the UK Government's target of 2.4% of GDP expenditure on research and development by 2027 in its policy paper 'Research and Innovation: The Vision for Wales' (HEFCW, 2019), which outlines key aims and objectives driving its strategy for innovation.

The “Four Pillars” of ‘Research and Innovation: The Vision for Wales’ (HEFCW, 2019)

- **Excellence:** a research base recognised for its outstanding quality; internationally excellent in identified areas of focus; robust, resilient and sustainable.
- **Place:** a clear focus on partnership and clusters; a confident contribution to the regions of Wales; a strong sense of civic responsibility; visibility, involvement and active engagement with local communities.
- **Innovation:** innovation, enterprise, entrepreneurship and skills development activity that can transform Wales' productivity; new ways of working that support innovative approaches to applied research and partnership funding.
- **Collaboration:** collaborations that link expertise in universities with key anchor companies, SMEs, the public and third sectors and with further education institution partners; collaborations that grow critical mass within Wales and build new partnerships across the UK; collaboration with international researchers and organisations.

The purpose of policy

What are the aims and success factors informing innovation policy?

There are a great many policies that make reference to innovation as an important factor in achieving successful health and social care outcomes in Wales. 'A Healthier Wales: our plan for health and social care' (Welsh Government, 2019a), is the principal policy that provides guidance and direction. It establishes the general ambitions for health and social care in Wales, within four defining, unifying areas known as the 'Quadruple Aim'.

The Quadruple Aim

- Improved population health and wellbeing.
- Better quality and more accessible health and social care services.
- Higher value health and social care.
- A motivated and sustainable health and social care workforce.

'A Healthier Wales: our plan for health and social care' (Welsh Government, 2019a) was commissioned by the Welsh Government in response to the 'Parliamentary Review of the Long Term Future of Health and Social Care' (Welsh Government, 2018) to help drive the changes to meet the future needs in the health and social care system. The ambition for innovation, as set out in the Parliamentary Review, is that it will help maximise the value of investment in health and social care.

'A Healthier Wales: our plan for health and social care' takes this further, outlining a strategic aim to encourage innovations that support seamless integration of health and social care: "to develop and evaluate better tools" and new models of care (Welsh Government, 2019a, p7).

From an economic standpoint, 'Prosperity for All: the national strategy' emphasises the ambition for innovation to be a force for economic resilience, adaptation and sustainability, stating that it is "driven by people with broad horizons and a global outlook" (Welsh Government, 2017b, p15). This echoes earlier policy set out in 'Innovation Wales' that positions innovation in healthcare at the intersections between sectors, for example "where ICT looks likely to have an increased impact on personalised medicine" (Welsh Government, 2014, p7). It advocates a broad-minded, multi-disciplinary approach.



Wales' strategy for social care research also emphasises the power of innovation to shape and enhance the workforce:

“A dynamic and innovative research and development culture can also create a better environment for social care and health professionals to work and develop, with more potential to attract and retain high calibre staff and attract investment from industry.”

‘Social care research and development strategy for Wales’, p5 (Social Care Wales, 2018)

Welsh Government policy sets out how it will measure the success of its policies in general terms, rather than offering specific measures for innovation. These general factors include measuring the outcomes that matter to people, using feedback from patients and staff, and comparing outcomes with international benchmarking, for example the International Consortium for Health Outcomes Measurement (Welsh Government, 2019a).

‘Innovation Wales’ attempts to define success in innovation in clearer terms. It notes that where indicators of research and development activity were previously accepted as the best measure of accomplishment and instead proposes that the “exploitation and commercialisation phases of innovation are as important and are very often the longest and most difficult parts” (Welsh Government, 2014, p6). Sector-specific policy offers differing aims and measures of success, which are outlined in summary below.

Research and development

Policy relating to research and development aims to guide innovation activity in Wales to “raise levels of productivity, build a stronger and more resilient economy, protect the environment and ensure the well-being of future generations” (Reid, 2018).

The objective is for Wales to be recognised as a leader in innovation, enabling collaboration between industry and academia, and access to funding. The strategic and economic success factors include increased collaboration between industry and higher education, strengthened participation in national, European and international research programmes, and increased numbers of researchers (HEFCW, 2019).

As it relates to health and social care integration, research is identified as a driver of innovation, where both have the shared general aim to:



“...enhance the well-being of the people of Wales by creating a country that is prosperous and secure, healthy and active, ambitious and learning, and united and connected [...] emphasising the importance of social care, housing, early years, mental health, and skills and employability.”

‘Social care research and development strategy for Wales’, p10 (Social Care Wales, 2018)

Digital

Digital policy relating to innovation outlines how digital innovation may contribute to the long-term transformation of the Welsh economy and wider society, rather than delivering positive outcomes in the short term (Welsh Government, 2019b).

The use of sophisticated measures of success is recommended, building on indicators linked with the ‘Well-being of Future Generations (Wales) Act’. For example, well-being goals that can be “expressed as a value or characteristic that can be measured quantitatively or qualitatively against a particular outcome” (Welsh Government, 2015d, section 10).

Welsh Government policy makes clear that the driving force for digital transformation is the benefit to people and society, rather than cost saving (Welsh Government, 2015a). As such, the success of digital innovations is measured by its capacity to support wider transformation work taking place in local government and broader public services.

Industry

The ‘Life Sciences Industrial Strategy Update’ positions the UK as a driving force for innovation, housing world-leading academic institutions and “maximising benefit from its world-leading research” (Bell, 2020, p4).

More specifically in medical technologies and science, the ‘Strength and Opportunity: The landscape of the medical technology and biopharmaceutical sectors in the UK’ report, covering UK-wide biopharma and medical technologies, measures employment, turnover and the number of businesses as indicators of the economic contribution of life sciences. Successes are listed retrospectively in concrete terms, for example launch of the UK-wide Digital Innovation Hub Programme, and the implementation of a new national approach to costing and contracting for commercial contract research (HM Government, (2017).



In Wales, the 'Access to Medical Technologies in Wales' report advised that the success of medical technologies in Wales should not be measurable only by the rate of uptake of new medical technologies, "but rather by the appropriate and timely adoption of effective, evidence-based technologies that are relevant to Welsh needs" (National Assembly for Wales, 2014a, p35).

The level of investment in research and innovation is also a key measure of success, where Wales is not currently accessing a proportionate share of the funding available.

"The low level of [...] un-hypothecated funding relative to the rest of the UK has been a structural weakness in Wales for around two decades [...] This funding shortage can only be addressed by the Welsh Government: no other funding source is available."

'Review of Government Funded Research and Innovation in Wales', p3 (Reid, 2018)

The recommendations of the 'Review of Government Funded Research and Innovation in Wales' (Reid, 2018) state that the complex debate about research and innovation funding is not an area where Government should be making detailed decisions, rather by bodies made up of individuals immersed in those debates. The subsequent 'Research and Innovation: the Vision for Wales' (HEFCW, 2019) policy addresses this question in terms of Wales' contribution to UK Government targets:

"Wales will make a vital contribution to the delivery of the UK Government's target of 2.4% of GDP expenditure on research and development by 2027."

Research and Innovation: the Vision for Wales, p5 (HEFCW, 2019)

Monitoring and measuring policy

How is innovation policy typically monitored and measured?

Most major Welsh Government policies contain within them provision for monitoring, measuring and reporting on progress.

An important measure of progress for Welsh Government's landmark policy 'A Healthier Wales: our plan for health and social care' is evaluation of the allocation and use of a £100m transformation fund that was launched in September 2018 (Welsh Government, 2019a). The purpose of the fund is to support the scaling up of new models of seamless health and social care across Wales.

The fund was launched in summer 2018, and all seven regional partnership boards in Wales were invited to submit proposals for funding. They were encouraged to focus on models that would make early progress on:

- seamless alignment of health and social care services
- local primary and community-based health and social care delivery, and
- new integrated prevention services and activities.

As of January 2020, £89 million had been awarded to support 14 proposals, with at least one in each region, for example:

"...technology-enabled care in west Wales is bringing communities together and reducing social isolation. In Gwent, services are being reconfigured to provide specialist expertise to staff on the front line in order to support some of our most vulnerable children. Community Connectors in the most rural parts of Wales are helping people to access local well-being services. Over 1,000 expressions of interest have been received for the I CAN mental health support training that is now being rolled out across north Wales."

Vaughan Gething AM, Statement by the Minister for Health and Social Services: A Healthier Wales Transformation Fund Progress Report, 14 January 2020, point 291

Due to slower than expected progress, the funding period in support of new models of care has been extended from December 2020 to March 2021. (Statement by the Minister for Health



and Social Services: A Healthier Wales Transformation Fund Progress Report, 14 January 2020).

The 'Well-being of Future Generations (Wales) Act' (Welsh Government, 2015d) sets out seven key aims and 46 national indicators (see Appendix 1). The Act established the office of Future Generations Commissioner for Wales and a public services board for each local authority area in Wales. The Commissioner and boards are responsible for setting and monitoring well-being objectives, using statistical modelling to ensure indicators are being met. Boards are responsible for publishing local well-being plans setting out their local objectives and how they propose to take steps to meet them.

Progress is monitored via the 'Wellbeing of Wales' report, which is published annually (see Appendix 1). It considers progress against the seven well-being goals and 46 national indicators, alongside a range of other relevant data. The national indicators pages include data for all of the national indicators, alongside links to the data sources and, where available, statistical publications where the indicators are analysed in more detail. The 2020 report primarily analyses the progress towards well-being goals during the financial year 2019-20, up to the very start of the pandemic (Welsh Government, 2020a).

A national indicator must be expressed as a value or characteristic that can be measured quantitatively or qualitatively against a particular outcome. It may be measured over such period as the Welsh Ministers consider appropriate and may be measurable in relation to Wales or any part of it.

Aims of the Well-being of Future Generations (Wales) Act (Welsh Government, 2015b)

1. A prosperous Wales. An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.
2. A resilient Wales. A nation that maintains and enhances a biodiverse natural environment with healthy functioning ecosystems which support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).
3. A healthier Wales. A society where people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.
4. A more equal Wales. A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio-economic background and circumstances).
5. A Wales of cohesive communities. Attractive, viable, safe and well-connected communities. A Wales of vibrant culture and thriving Welsh language. A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation
6. A Wales of vibrant culture and thriving Welsh language
7. A globally responsible Wales. A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being

The 'Review of Government Funded Research and Innovation in Wales' independent examination of Welsh Government investment in research and innovation (Reid, 2018) makes a series of recommendations – which it believes, if followed, will affect the necessary change in the research and innovation landscape to sustain competitiveness.

Recommendation 1: increase the visibility and influence of Welsh research by creating a new Welsh Research and Innovation London Office (WRILO).

Recommendation 2: strengthen the Welsh research base and enable Welsh researchers to attract a greater share of UK-wide funding by implementing Diamond's recommendation for QR funding and creating an additional Future of Wales Fund specifically to incentivise Welsh researchers to win funding from outside Wales.



Recommendation 3: increase the visibility, coherence and impact of research and innovation in Wales by creating a single overarching brand for its innovation activities: the St David's Investment Fund. This should be worth some £35m yearly in the first instance but with the potential to grow to £100m yearly or more, post-Brexit.

The Welsh Government accepted the recommendations of the Reid Review and many of these have already been acted upon by the Welsh Government and HEFCW, such as establishing a research office in London, increasing the number of Welsh representatives in UK research funding agencies, and re-establishing Knowledge Exchange funding to Welsh universities.

However, Professor Reid has stated that Wales is still struggling to keep pace with increases to UK research budgets, whereby it has not managed to capture the amount it could have expected to.

"This is occurring at the same time as the UK will lose access to European Union Structural and Investment Funds (on which Wales has been particularly reliant) and the future of the UK's involvement in EU research programmes faces great uncertainty."

Professor Graeme Reid, The Learned Society of Wales 2020, opening remarks (Learned Society of Wales, 2020)

'Research and Innovation: the vision for Wales' (HEFCW, 2019) sets out a range of activities and initiatives that aim to push forward the competitiveness of Welsh innovation. This strategy outlines a number of short, medium and long-term goals, against which success will be monitored. For example, establishing Research Wales – a fit-for-purpose Committee which will be recognised as the voice of Welsh R&I and enterprise; introducing a new funding model; and increasing research capacity (i.e. the number of researchers).

Against these objectives, as reported in the 'Annual Report and Accounts for the Year Ended 31 March 2020' (Higher Education Funding Council for Wales, 2020), the Research Wales Committee has now been set up to advise the HEFCW on strategies for innovation, engagement and research activities, and the policies and principles underpinning them, including funding arrangements.

HEFCW established and now provides £71 million a year through a formula-based innovation and engagement fund for research, QR. It administers annual funding for nine Welsh higher education institutions to further knowledge exchange through the Research Wales innovation



Fund. HEFCW has also set up a new funding stream “Strengthening the Research Base”, allocating an additional £6.6m research funding to support higher education research in Wales, based on the recommendations of the ‘Review of Government Funded Research and Innovation in Wales’ (Higher Education Funding Council for Wales, 2020).

It offers Sêr Cymru as an example of a successful multi-million pound funding programme to bring scientific talent into research posts in Wales, focusing on three grand challenge areas: life sciences and health; low carbon, energy and environment; and advanced engineering and materials. In addition, funding from EU Structural Funds and Horizon 2020, with match funding provided by Welsh universities, Welsh Government and HEFCW for Research Chairs, National Research Networks and early to mid-career researchers has attracted talent into Wales (Welsh Government, 2020b).

Where policy informs on-the-ground planning in the NHS Wales Integrated Medium Term Plans, success is measured against the aims of ‘A Healthier Wales: our plan for health and social care’ (Welsh Government, 2019a) and ‘The Well-Being of Future Generations (Wales) Act’ (Welsh Government, 2015d) national indicators. NHS organisations must demonstrate they fully understand the extent to which they are applying the Quadruple Aim and Ten Design Principles (see appendix 2) aspects of ‘A Healthier Wales: our plan for health and social care’ (Welsh Government, 2019a) in their plans.

Progress is collated in the NHS Wales National IMTP plan, which brings together the 15 regional IMTPs and annual plans from across NHS to provide a stocktake of where NHS organisations are in their delivery against key ministerial priorities (Welsh Government, 2019c). The 2019 National IMTP includes examples of good practice in this area, such as:

- A Healthy, Caring Powys (Powys regional partnership board): The North Powys Well-being Programme focusses on a rural regional centre, health and care community hub, children’s and family centre and school provision on a single campus in Newtown; the community connector service has been expanded and rolled out - there are now 13 connectors.
- The extensive and innovative engagement undertaken by Hywel Dda University Health Board to inform, influence and shape the development of its Transforming Clinical Services Strategy.

Planning care services in Wales

What guides planning care services in Wales?

Health care policy is incorporated into service delivery through the extensive planning frameworks which connect Welsh Government with Local Authorities, Health Boards and Trusts and other agencies. For Health and Social Care in Wales, these arrangements are set out in the NHS Wales Planning Framework. The framework for 2020-23 defines innovation as:

“...a purposeful approach to finding and applying new and better ways of delivering health and care services, increasing healthcare value through improved patient outcomes, improved patient experience and increased resource efficiency.”

‘NHS Wales Planning Framework’, 2020, p27 (Welsh Government, 2020c)

The aim of the Framework is to set out the ministerial directions for the next NHS planning cycle 2020-23, providing guidance to inform production of Integrated Medium Term Plans (IMTP). Ministerial priorities are:

- Prevention
- Reducing health inequalities
- Primary care model for Wales
- Timely access to care
- Mental health

The First Minister’s priorities require particular attention. These are: biodiversity; decarbonisation, in response to the recent declaration of a climate change emergency; social partnerships, including for example how procurement in the NHS can achieve ethical employment practices and achieve better socio-economic outcomes; and tackling poverty. IMTPs must demonstrate how organisations are:

- Implementing and assessing the impact of the priorities set out in A Healthier Wales: our plan for health and social care’ (2019a).
- Delivering their well-being objectives and contributing to the overarching Well-being Goals from the Well-being and Future Generations (Wales) Act (2015b); fully reflecting the Quadruple Aim.



- Ensuring quality and safety across all services.
- Embracing Value-Based and Prudent Health Care.
- Supporting integration and seamless models of care in line with the duties under the ‘Social Services & Well-being (Wales) Act’ (National Assembly for Wales, 2014b) and in ‘A Healthier Wales: our plan for health and social care’ (Welsh Government, 2019a) expectations adopting maturity of planning, engagement and continued improvement across all service areas.
- Working regionally across sectors through collective and collaborative approaches; and implementation of more than just words and complying with the Welsh language standards for the health sector to further improve Welsh language services in the care provided to patients.
- “Wales will make a vital contribution to the delivery of the UK Government’s target of 2.4% of GDP expenditure on research and development by 2027.” ‘Research and Innovation: the Vision for Wales’ p5 (HEFCW, 2019)

NHS Wales Planning Framework’ 2020-23, p19 (Welsh Government, 2020c)

Innovation has a pivotal role in helping to safeguard the NHS in Wales and its responsibility to improve health, and its pace must be increased (Welsh Government, 2017b). The UK-wide ‘The NHS Long Term Plan’ (UK National Health Service, 2019) recognises the value of innovation in driving medical advances, introducing new treatment possibilities and helping to address health inequalities. The aim is that innovation will help to enable prevention, earlier diagnosis and better outcomes, as well as providing jobs within the research industry.

A Royal College of Physicians report states that: “Research and innovation should be [...] understood to be a key indicator of improving patient care” (Royal College of Physicians Wales, 2019, p1). ‘The NHS Long Term Plan’ (UK National Health Service, 2019) sets ambitious goals around this – for example, “to increase the number of people registering to participate in health research to one million by 2023/24” (p75).

There is a strong commitment to provide funding that speeds up the innovation pipeline, encourages scale and spread, and global export (UK National Health Service, 2019). In Welsh policy, NHS measures of success are broadly in keeping with ‘A Healthier Wales: our plan for health and social care; (2019), where outcomes that matter to individuals – improving quality of life – and patient-reported outcomes are as important as efficiency measures (Welsh Government, 2020c).

Policy post-Europe

What policy is guiding innovation after European exit?

“...the historic dependence on EU funding can be replaced not only with Welsh Government money but also by even more success in UK-wide funding competitions and by attracting higher levels of business investment.”

‘Review of Government Funded Research and Innovation in Wales’ (Reid, 2018)

This report is published shortly prior to the UK’s exit from the European Union. Specific post-exit policies related to Welsh innovation in health and social care are yet to be released.

A Welsh Government report exploring regional investment in Wales after Brexit, ‘Regional Investment in Wales after Brexit’, states that its commitment to supporting innovation will continue (Welsh Government 2017c).

“We need a sustained, collective approach to enhance infrastructure, raise skill levels, boost entrepreneurship and promote innovation to support growth across all parts of Wales.”

Carwyn Jones, ‘Regional Investment in Wales after Brexit’, p4, (Welsh Government, 2017)

The report identifies improving connectivity as a priority, and describes ‘innovation strengths’ as an ‘asset’ to be invested in (p12). Regarding international collaboration, the report references the Horizon 2020 programme as an example of successful collaboration – attracting £83 million for 174 projects – where EU funding contributed to this success.

It highlights the important networks Wales will remain a part of post exit, for example the Vanguard Initiative on Advanced Manufacturing and Bio-based Industries and the European Regions Research and Innovation Network (ERRIN). It states the Welsh Government’s intention for continued investment in its relationship with the Republic of Ireland through the European Territorial Cooperation (ETC) programmes, worth £7.3 to Wales.

“The exit of the UK from the EU is likely to have a profound impact on Welsh university research and innovation funding [...] the sector has relied disproportionately on EU structural funds rather than competitive external research funding.”

‘Research and Innovation: The Vision for Wales’, p12 (HEFCW, 2019)



Innovate UK Strategy is developing an innovation strategy for the UK setting out a vision for the next 5 years. In addition, the UK's R&D Roadmap sets out the UK's vision for science, research and innovation. Welsh Government have responded to and are continuing to engage with this consultation process (Welsh Government, 2020d).

The need for consistent support for innovation in health and social care identified in Welsh Government policies that extend past 2021 (for example, 'A Healthier Wales: our plan for health and social care' (Welsh Government, 2019a); 'NHS Long Term Plan and Research and Innovation: the vision for Wales' (UK National Health Service, 2019) will continue to shape and inform how innovation is supported after the UK's departure from the European Union.

New and revised policy is expected to develop in response to the changing nature of the UK's position internationally, which will undoubtedly impact innovation investment, activities, priorities and planning.

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Appendix 1

The 'Well-being of Future Generations (Wales) Act' national indicators (Welsh Government, 2015b)

1. Percentage of live single births with a birth weight of under 2,500g.
2. Healthy life expectancy at birth including the gap between the least and most deprived.
3. Percentage of adults who have fewer than two healthy lifestyle behaviours (not smoking, healthy weight, eat five fruit or vegetables a day, not drinking above guidelines and meet the physical activity guidelines).
4. Levels of nitrogen dioxide (NO₂) pollution in the air.
5. Percentage of children who have fewer than two healthy lifestyle behaviours (not smoking, eat fruit/vegetables daily, never/rarely drink and meet the physical activity guidelines).
6. Measurement of development of young children.
7. Percentage of pupils who have achieved the "Level 2 threshold" including English or Welsh first language and Mathematics, including the gap between those who are eligible or are not eligible for free school meals. (To be replaced from 2017 by the average capped points score of pupils).
8. Percentage of adults with qualifications at the different levels of the National Qualifications Framework.
9. Gross Value Added (GVA) per hour worked (relative to UK average).
10. Gross Disposable Household Income per head.
11. Percentage of businesses which are innovation-active.
12. Capacity (in MW) of renewable energy equipment installed.
13. Concentration of carbon and organic matter in soil.
14. The Ecological Footprint of Wales.
15. Amount of waste generated that is not recycled, per person.
16. Percentage of people in employment, who are on permanent contracts (or on temporary contracts, and not seeking permanent employment) and who earn more than 2/3 of the UK median wage.
17. Gender pay difference.
18. Percentage of people living in households in income poverty relative to the UK median: measured for children, working age and those of pension age.
19. Percentage of people living in households in material deprivation.



20. Percentage of people moderately or very satisfied with their jobs.
21. Percentage of people in employment.
22. Percentage of people in education, employment or training, measured for different age groups.
23. Percentage who feel able to influence decisions affecting their local area.
24. Percentage of people satisfied with their ability to get to/ access the facilities and services they need.
25. Percentage of people feeling safe at home, walking in the local area, and when travelling.
26. Percentage of people satisfied with local area as a place to live.
27. Percentage of people agreeing that they belong to the area; that people from different backgrounds get on well together; and that people treat each other with respect.
28. Percentage of people who volunteer.
29. Mean mental well-being score for people.
30. Percentage of people who are lonely.
31. Percentage of dwellings which are free from hazards.
32. Number of properties (homes and businesses) at medium or high risk of flooding from rivers and the sea.
33. Percentage of dwellings with adequate energy performance.
34. Number of households successfully prevented from becoming homeless per 10,000 households.
35. Percentage of people attending or participating in arts, culture or heritage activities at least three times a year.
36. Percentage of people who speak Welsh daily and can speak more than just a few words of Welsh.
37. Percentage of people who can speak Welsh.
38. Percentage of people participating in sporting activities three or more times a week.
39. Percentage of museums and archives holding archival/heritage collections meeting UK accreditation standards.
40. Percentage of designated historic environment assets that are in stable or improved conditions.
41. Emissions of greenhouse gases within Wales.
42. Emissions of greenhouse gases attributed to the consumption of global goods and services in Wales.
43. Areas of healthy ecosystems in Wales.
44. Status of Biological diversity in Wales.



45. Percentage of surface water bodies, and groundwater bodies, achieving good or high overall status.

46. The social return on investment of Welsh partnerships within Wales and outside of the UK that are working towards the United Nations Sustainable Development Goals.

How to measure a nation's progress? National Indicators for Wales, p1 (Welsh Government, 2016)

Appendix 2

‘A Healthier Wales’ (Welsh Government, 2019a) Ten Design Principles

1. Prevention and early intervention – acting to enable and encourage good health and wellbeing throughout life; anticipating and predicting poor health and wellbeing.
2. Safety – not only healthcare that does no harm, but enabling people to live safely within families and communities, safeguarding people from becoming at risk of abuse, neglect or other kinds of harm.
3. Independence – supporting people to manage their own health and wellbeing, be resilient and independent for longer, in their own homes and localities, including speeding up recovery after treatment and care, and supporting self-management of long term conditions.
4. Voice – empowering people with the information and support they need to understand and to manage their health and wellbeing, to make decisions about care and treatment based on ‘what matters’ to them, and to contribute to improving our whole system approach to health and care; simple clear timely communication and co-ordinated engagement appropriate to age and level of understanding.
5. Personalised – health and care services which are tailored to individual needs and preferences including in the language of their choice; precision medicine; involving people in decisions about their care and treatment; supporting people to manage their own care and outcomes.
6. Seamless – services and information which are less complex and better co-ordinated for the individual; close professional integration, joint working, and information sharing between services and providers to avoid transitions between services which create uncertainty for the individual.
7. Higher value – achieving better outcomes and a better experience for people at reduced cost; care and treatment which is designed to achieve ‘what matters’ and which is delivered by the right person at the right time; less variation and no harm.
8. Evidence driven – using research, knowledge and information to understand what works; learning from and working with others; using innovation and improvement to develop and evaluate better tools and ways of working.
9. Scalable – ensuring that good practice scales up from local to regional and national level, and out to other teams and organisations.



10. Transformative – ensuring that new ways of working are affordable and sustainable, that they change and replace existing approaches, rather than add an extra permanent service layer to what we do now.

'A Healthier Wales', p17 (Welsh Government, 2019a)