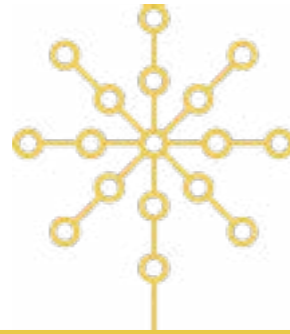


Annual Report 2021



Technoleg Iechyd Cymru
Health Technology Wales

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Foreword

“ Welcome to the Health Technology Wales (HTW) Annual Report, which describes the work that we have done during the last year to improve health and social care in Wales.

This has been another challenging but successful year during which we have had to balance our commitments to supporting Welsh Government in their response to the COVID-19 pandemic with maintaining our normal core functions of selecting, appraising and promoting the adoption of novel evidence-based technologies in Wales. We were pleased that HTW was appointed in 2021 as a collaborating partner of the Welsh COVID-19 Evidence Centre enabling us to continue to add methodological and research expertise to the publication of rapid evidence reviews and summaries on important COVID-19 related topics.

During 2021, we considered more than 80 new topic referrals from across the health and care communities and published six new HTW guidance documents, including our first social care guidance, as well as nine new evidence appraisal reports. Since 2017, HTW have now published 23 pieces of guidance and it is estimated that, if implemented, these have the potential to impact 188,680 individuals each year in Wales.

An important remit of HTW is to promote and also audit the adoption of HTW and NICE medical technology guidance in Wales. During the last year, we have worked with Local and Specialist Health Boards to establish a process to support this work. We have initiated a pilot that has selected eight pieces of previously published HTW guidance, for which individual monitoring plans have been agreed and local adoption data acquired, to assess their impact on local services. The intention is that this pilot project will inform the establishment of a prospective, embedded and rolling process of adoption audit during the coming years.

Engaging with local, national and international stakeholders has remained an important cornerstone of our success and during 2021, the HTW Stakeholder Forum was established. This group comprises senior representatives from across the health and social care systems and will help to support and guide the work of HTW to ensure that it is of most value to the communities it serves. We have worked closely with colleagues in Social Care Wales to develop a better understanding of how our health technology assessment (HTA) processes need to be adapted to support our work in developing and promoting the adoption of social care guidance. We have continued to build on already established links with the life sciences industry through the work of our Industry User Group and through strengthening our collaborations with the Life Sciences Hub Wales.

We have continued our commitment to establishing innovative approaches to Patient and Public Involvement (PPI) in all aspects of the work of HTW and much attention in 2021 has been focussed on understanding how these might best be applied to considering social care topics. The last year has seen us continue to develop our collaborations with other international HTA bodies. We were honoured to be invited to join the Local Organising Committee of the 2021 annual meeting of Health Technology Assessment international (HTAi) which brought together representatives from more than 60 countries in a virtual event in June 2021. HTW was also awarded a prestigious international award - the David Hailey Award - voted on by the members of the International Network of Agencies for Health Technology Assessment (INAHTA) for the best example of impact and learning from a health technology assessment agency.

During 2021, we published the HTW Strategic Plan 2021-2025, that sets out our immediate, medium and longer term strategic goals. This plan was developed through wide engagement with our stakeholders and was supported by Eluned Morgan, Minister for Health and Social Services. Our vision is to continue to develop a world class HTA organisation that ensures that health technologies that have the most promise to improve the health and care of people and offer the greatest value are recognised and adopted in Wales. We look forward to working with you in realising this vision. ”



Peter Groves
Professor Peter Groves
Chair
Health Technology Wales

Susan Myles
Dr Susan Myles
Director
Health Technology Wales



Introduction

HTW was established by Ministerial recommendation in 2017 following the National Assembly for Wales' inquiry into [Access to Medical Technologies in Wales](#). As a national health technology assessment (HTA) organisation we're funded by the Welsh Government and hosted by Velindre University NHS Trust but remain independent of both. Our remit covers any technology or model of care and support in health and social care that is not a medicine. For health, this could include medical devices, diagnostics, procedures and psychological therapies. For social care, this could include equipment or different models for supporting families, children, adults and the workforce. Since its launch HTW has collaborated with partners in the health, social care and technology sectors to optimise the use of non-medicine health technologies in Wales and to raise awareness of their value.

This annual report explores the areas we've worked on during 2021 and reflects our health technology assessment work, engagement activity with key stakeholders and industry and the support we have provided to partner organisations through the COVID-19 pandemic.

COVID-19

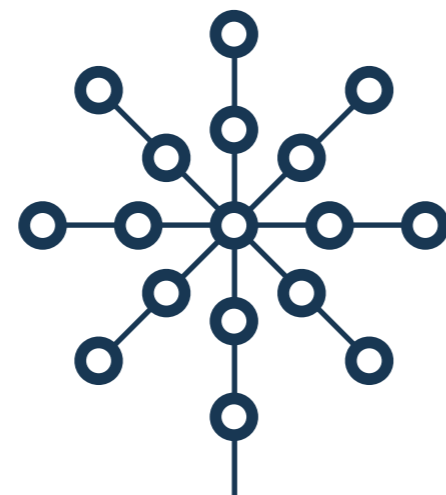
Our team has continued to support Welsh decision makers throughout the pandemic. This has enabled them to respond swiftly to new research on the pandemic and its impact on society. In 2021 HTW was appointed a Collaborating Partner of the [Wales COVID-19 Evidence Centre](#) enabling HTW to provide methodological and research synthesis expertise to the dedicated centre for COVID-19 topics. HTW has also contributed to key Welsh Government committees, co-authoring three pan-European collaborative reviews and providing scientific advice to industry.

IDENTIFICATION

We respond to the needs of care providers, service users and technology developers by proactively identifying upcoming technologies expected to have a major impact on health and social care in Wales. Anyone can [suggest a topic](#) for appraisal by filling in a form on our website. Throughout the year we run campaigns and hold workshop and webinar events to raise awareness of our work. These campaigns are aimed at those working within the health and social care sectors, people using those services and health technology developers. We also signpost technology developers to sources of advice and support on the HTA process.

APPRAISAL

We produce appraisal reports to summarise the evidence that is available on a health technology. These reports, which include input from experts in the respective field, are used by our multi-disciplinary groups to produce HTW guidance. Care commissioners and other decision makers use our authoritative and evidence-based guidance to decide whether to adopt a health technology. It is essential that this guidance is available to these decision makers, to ensure that high quality health and social care services are based on the best available evidence.



ADOPTION

The national guidance provided by HTW has an 'adopt or justify' status. This means that care services in Wales should adopt this advice or justify why it has not been followed. An important part of our remit is to evaluate the impact of our advice by monitoring the uptake of non-medicine health technology guidance across Wales. HTW also encourages disinvestment of technologies that are no longer effective. In 2021 our Adoption Audit function was established to monitor the uptake of HTW guidance and medtech guidance produced by the National Institute for Health and Care Excellence (NICE).

ENGAGEMENT

HTW collaborates with people and organisations across the health and social care sectors in Wales, sharing expertise and gathering insight. In 2021 we established a strong working partnership with Social Care Wales (SCW) to improve our understanding of the social care sector. Throughout the year we have hosted meetings of the HTW Industry User Group to better understand the needs of technology developers. We ensure that the views of those accessing health and social care in Wales are represented through the HTW Patient and Public Involvement (PPI) Standing Group. HTW also works closely with our international counterparts including the International Network of Agencies for Health Technology Assessment (INAHTA), Health Technology Assessment International (HTAi) and the European Network for Health Technology Assessment (EUnetHTA).

Guidance impact

We want our work to make a real, positive difference to health and care in Wales. Working with [Matter of Focus](#), an evaluation organisation, we've been developing our own evaluation and impact processes so that we can capture how we are making a difference in Wales, as well as how we can continuously improve on our work.

The core aim of HTW appraisals are to:

- Encourage adoption of clinically and cost-effective technologies
- Discourage adoption of technologies that are unsupported by evidence
- Improve quality of care and patient or service user outcomes

308
Topics proposed to HTW

45
Topics progressed to evidence appraisal

23
Pieces of Guidance published

Our recommendations

Our national guidance recommendations fall into three main categories:

Routine adoption:

The evidence supports the adoption of that technology for a general population.

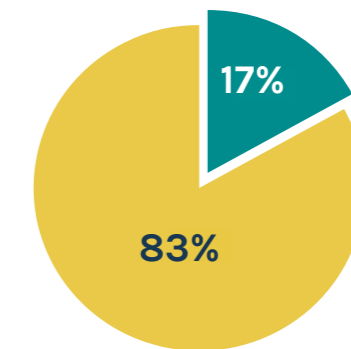
Selective adoption:

The evidence supports the adoption of that technology in a specific subset of the general population.

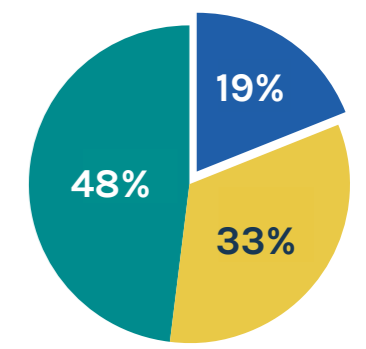
Insufficient evidence to support adoption:

There is not enough evidence to support the adoption of that technology.

Type of recommendation made in HTW guidance (2021)



Type of recommendation made in HTW guidance (2018-2021)



- Selective adoption
- Routine adoption
- Insufficient evidence to adopt

How HTW assesses the value of health technologies

We are aware that care services face a limited budget. Spending more money in one area necessitates spending less elsewhere. We carefully review the evidence on clinical and cost effectiveness for each technology that we appraise to inform difficult spending decisions across multiple disease areas. The approach we take to estimating cost effectiveness reflects this ambition with an aim to maximise the benefits that can be attained from available resources rather than to minimise costs.

HTW guidance published in 2021

Recommendation: Routine adoption
Corneal crosslinking to treat adults and children with keratoconus (GUI002-02)
Antimicrobial barrier caps for use with haemodialysis catheter hubs (GUI030)
FreeStyle Libre flash glucose monitoring for the management of diabetes (GUI004-02)
Natriuretic peptides to rule-in and rule-out a diagnosis of acute heart failure in adults in the emergency department setting (GUI026)
Strategies for Relatives (START) intervention to improve the mental health of carers of people with dementia (GUI031)
Recommendation: Insufficient evidence to adopt
Point-of-care ultrasound to diagnose gallstone disease (GUI029)

Strategic Plan 2021-2025

Better Health | Evidence Driven

The HTW Strategic Plan 2021-2025 sets out the organisation's immediate, medium and long-term strategic goals and objectives.

It was developed in consultation with key stakeholders including:

- Welsh Government
- Opinion leaders within the Welsh health and social care system
- Members of HTW decision making groups including the Executive Group, Appraisal Panel, Assessment Group, Patient and Public Involvement Standing Group, Industry User Group Collaboration and Stakeholder Forum

The plan was created as a living document that will be continually refined to reflect changing health and social care priorities and demands on HTW resources.



Technoleg Iechyd Cymru
Health Technology Wales

VISION

To develop a world-class HTA organisation that facilitates the identification, appraisal and adoption of health technologies that offer most promise to deliver improved health outcomes and value for the people of Wales.

MISSION

To drive improvements in population health and care services by applying the best available evidence to inform decisions on the appropriate use of health technologies Wales.

HTW VALUES

QUALITY

HTW produces authoritative, independent guidance, developed applying rigorous and transparent evidence synthesis methods, to promote use of health technologies that offer the most benefit and value for Wales.

RESPONSIVENESS

HTW offers timely input to support the decision needs of services users, policy makers, health and care providers and technology developers across Wales.

COLLABORATION

HTW works in partnerships engaging with stakeholders across Welsh health, social care and technology sectors to support evidence-informed decision making.

STRATEGIC GOALS

IDENTIFICATION

Identify the health technologies that are expected to have major impact on care services and confer most benefit for the people of Wales

APPRAISAL

Deliver step change in the volume of HTW evidence outputs, promoting a coordinated national approach to evidence-informed decision making on non-medicine technologies across Wales.

ADOPTION

Improve the quality of health and social care by disseminating evidence-based national guidance that encourages adoption of technologies expected to have a major impact in Wales.

ENGAGEMENT

Promote greater understanding and use of HTW Health Technology Assessment (HTA) outputs with key Welsh care system stakeholders.

Our 2021 priority objectives

Within our first Strategic Plan, HTW outlined its top five priority objectives for 2021-2022.

Key achievements in delivering these objectives are set out below. More detail on each can be found via the hyperlinks provided.

Expand HTW topic identification, prioritisation and selection efforts:

- Increased from one to two annual [topic calls](#)
- Received 88 topic referrals for consideration
- Refined the HTW topic selection and prioritisation method

Significantly increase the HTW evidence appraisal and guidance output:

- Produced 49 topic [exploration reports](#)
- Produced 9 [evidence appraisals](#)
- Issued 6 pieces of national guidance including first piece of social care guidance

Target social and digital care innovations for appraisal:

- Established a [collaborative partnership](#) with Social Care Wales
- Planned the first HTW [social care](#) open topic call
- Established an expert group to co-ordinate the forthcoming HTW digital topic call

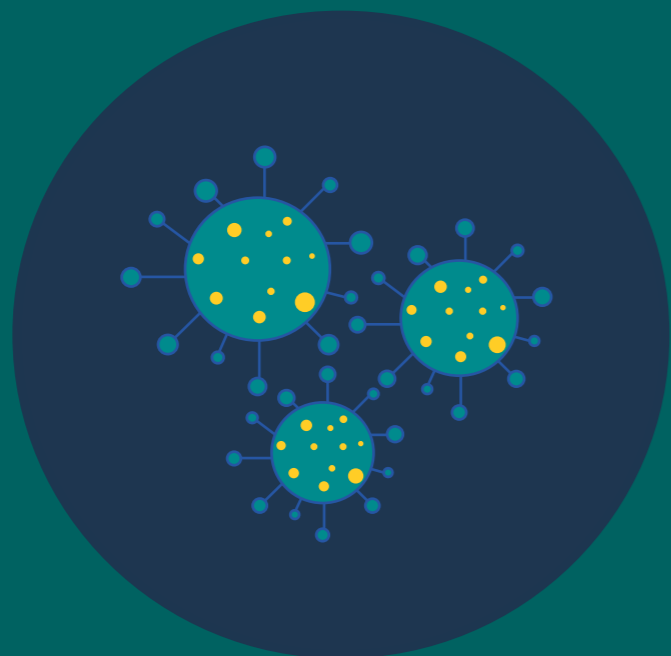
Support time-critical COVID-19 care and policy decision making:

- Became a [collaborating partner](#) in the new Wales COVID-19 Evidence Centre
- Produced [evidence syntheses](#) to inform pandemic decision making
- Supported key Welsh Government pandemic expert groups

Pilot and roll-out the HTW technology adoption audit function:

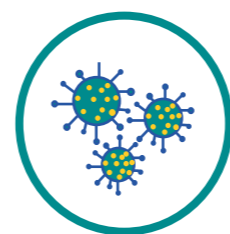
- Co-produced the HTW adoption audit infrastructure
- Piloted the first annual adoption audit of HTW and NICE guidance
- Submitted the first annual adoption audit report to Welsh Government





COVID-19

Supporting health and social care partners in the response to the pandemic



Responding to COVID-19

Since the start of the COVID-19 pandemic, our team has repurposed their diverse skill sets to support the response of Welsh Government and care services to the virus.

Since becoming a Collaborating Partner of the Wales COVID-19 Evidence Centre we have carried out a series of rapid evidence reviews and summaries on topics ranging from transmission among the vaccinated population to the effectiveness of face coverings.

Work carried out in 2021

Rapid evidence reviews

[What is the risk of SARS-CoV-2 transmission in vaccinated populations?](#)

[Face coverings to reduce transmission of SARS-CoV-2.](#)

[Convalescent Plasma Therapy for the Treatment of COVID-19](#)

Rapid evidence summaries

[The effectiveness of home monitoring using pulse oximetry in people with COVID-19 symptoms to guide future management.](#)

[COVID-19 transmission in semi-outdoor or partially covered settings.](#)

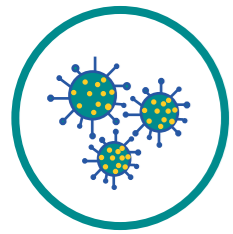
[Effectiveness of tests to detect the presence of SARS-CoV-2 virus, and antibodies to SARS-CoV-2, to inform COVID-19 diagnosis: a rapid systematic review](#)

Collaborating partners

The core team of the Wales COVID-19 Evidence Centre works closely with collaborating partners including: Health Technology Wales, Wales Centre for Evidence-Based Care, Specialist Unit for Review Evidence centre, SAIL Databank, Bangor Institute for Health & Medical Research, Health and Care Economics Cymru, and the Public Health Wales Observatory.

We also engaged with Welsh Government, NHS Wales and the UK Health Security Agency.





Supporting Welsh decision makers

Working in collaboration with the Wales COVID-19 Evidence Centre

In March 2021 HTW was appointed as a Collaborating Partner in the £3million Wales COVID-19 Evidence Centre.

The centre, which is funded by Welsh Government through Health and Care Research Wales and is hosted by Cardiff University, has played a major role in enabling key decision makers in Wales to respond to emerging evidence about COVID-19.

It was set up with the aim of ensuring that the most up-to-date and relevant evidence is readily available to stakeholders involved in health and social care in Wales to inform their decision making.

The centre's key purpose is to rapidly review and synthesise UK-wide and international research evidence to support COVID-19 policy and practice decision making by stakeholders involved in health and social care policy and practice in Wales.

It works with multiple stakeholder groups across Wales including representatives from Welsh Government and policy groups, social care, the Academy of Medical Royal Colleges (Wales), public and patient involvement organisations, Health and Care Research Wales, NHS Wales service delivery groups, NHS Wales University Health Boards and Trusts and Third Sector Support Wales.



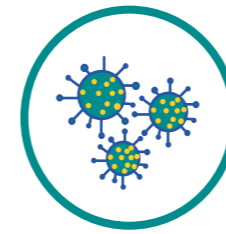
The role of HTW as a Collaborating Partner

As a Collaborating Partner in the Wales COVID-19 Evidence Centre, HTW carries out evidence reviews and research into different COVID-19 related topics. Based on this research it produces Rapid Evidence Reviews and Rapid Evidence Summaries of the evidence available.

Before joining the Wales COVID-19 Evidence Centre as Collaborating Partner HTW supported the response to the pandemic by contributing to Welsh Government committees and task forces. It co-authored three pan-European collaborative reviews and provided scientific advice to industry.

What else is HTW doing to support efforts to tackle COVID-19?

HTW has collaborated on several externally published reports in partnership with EUnetHTA. It produces an [Evidence Digest](#) of links to websites which collate or synthesise evidence relating to COVID-19 and updates it regularly as required. HTW also offers a free Scientific Advice Service to technology developers who are developing therapeutics and diagnostics related to COVID-19. Our advice can help developers with many different aspects of health technology assessments including evidence generation and economic modelling.



A rapid review of existing research on the effectiveness of Face Coverings to reduce transmission of SARS-CoV-2

What did we do?

In July 2021 we carried out a rapid review of existing research on the effectiveness of face coverings to reduce transmission of SARS-CoV-2 by containing droplets and preventing them reaching susceptible people and/or by preventing inhalation of droplets present in the air.

The aim of the rapid review was to answer the following questions:

1. What is the effectiveness of face coverings to reduce the spread of transmission of SARS-CoV-2 in the community (i.e. non healthcare settings)?
2. What is the efficacy of different types of face coverings designed for use in community settings?

Who with?

The rapid review was shared with key Welsh health and social care decision makers. We also shared our report with other national and international HTA organisations including the Scottish Health Technologies Group (SHTG), Health Information and Quality Authority (HIQA), the National Institute for Health and Care Excellence (NICE), the International Network of Agencies for HTA (INAHTA) and the European Network for HTA (EUnetHTA).



What did we learn?

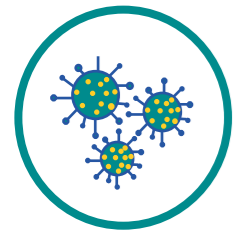
HTW research showed that evidence remains limited on the effectiveness of face covering to reduce the spread of transmission of SARS-CoV-2 in the community, that the efficacy of different types of face coverings remains limited and that conclusions rely on low quality sources of evidence with a high risk of bias. The key findings were:

- Evidence suggests that face coverings may provide benefits in preventing transmission of SARS-CoV-2 but higher quality studies suggest these benefits may be modest.
- There was no evidence about face coverings to prevent transmission of SARS-CoV-2 specific to individual community settings (e.g., schools, public transport); for children and adolescents; about seasonality; or the extent of protection for wearers and others.
- Evidence suggests that commonly used face coverings have some efficacy in filtering droplets. Medical masks appear to have a higher efficacy than fabric masks although some studies suggested equivalent efficacy.
- The quality of observational studies could be improved by methods that better address confounding factors.

What difference has this made?

Our findings contributed directly to the Welsh Government 21-day COVID review cycle.

[The research was included in Welsh Government's Technical Advisory Cell \(TAC\) summary of advice 4 February 2022.](#)



SARS-CoV-2: A rapid review of the transmission risk from vaccinated populations

What did we do?

Vaccination aims to prevent onward transmission by at least two mechanisms, firstly by reducing symptomatic and asymptomatic infections and therefore the number of infectious individuals, and secondly via reduced onward spread from people infected despite vaccination.

As part of our ongoing work with the Wales COVID-19 Evidence Centre we conducted a systematic literature search for the evidence on transmissibility of SARS-CoV-2 in the vaccinated population in any setting.

What did we learn?

In total, 36 studies were included in this review: one randomised controlled trial (RCT), one analysis of an RCT, 15 prospective cohort studies, 15 retrospective cohort studies and four case control studies. These findings directly contributed to the Welsh Government 21-day COVID review cycle.

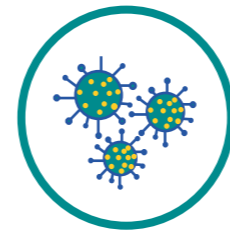
The key findings were:

- Earlier findings showed a reduction in transmission from vaccinated people; however, this may have been due to the variant of concern being investigated.
- More recent evidence is uncertain on the effects of vaccination on transmission, which may be due to the replacement of the Alpha variant with the Delta.
- Further research is needed on variants of concerns, in particular the Delta variant.

What difference has this made?

The findings from our rapid review of the transmission risk from vaccinated populations directly contributed to the Welsh Government 21-day COVID review cycle.

[The research was included in Welsh Government's Technical Advisory Cell \(TAC\) summary of advice 21 January 2022.](#)



What our stakeholders say

“The Wales COVID-19 Evidence Centre is delighted to be working with HTW as one of its Collaborating Partners. HTW’s prior expertise in reviewing technologies, and in particular with a COVID focus already in their workstreams even before the Wales COVID-19 Evidence Centre was established, has been invaluable. It enabled us to start our work and quickly deliver outputs early in 2021 that address key issues for dealing with the pandemic.”

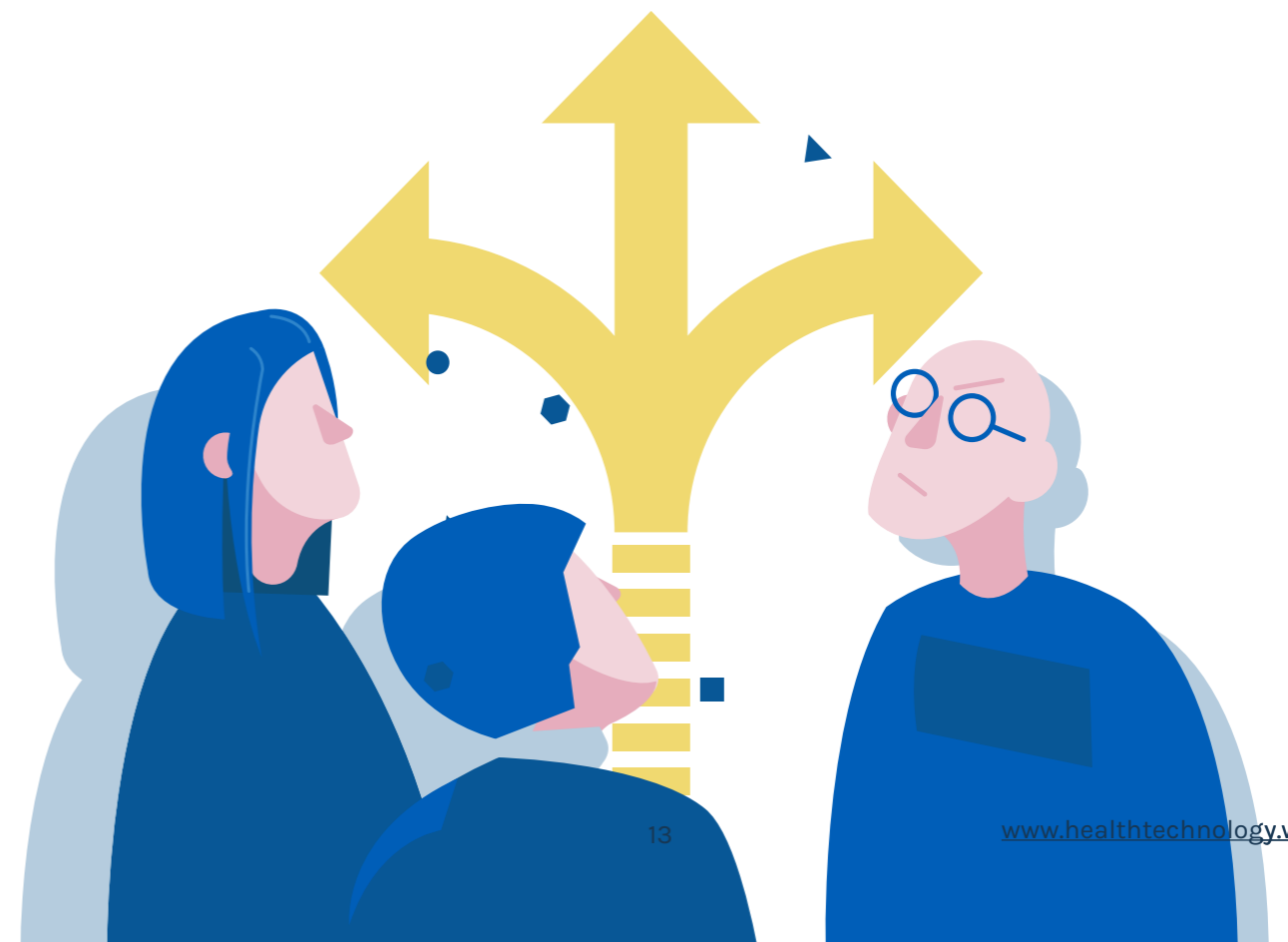
Professor Adrian Edwards, Director, Wales COVID-19 Evidence Centre

“It is fantastic to work with Health Technology Wales, who are instrumental as a collaborating partner with the Wales COVID-19 Evidence Centre. Their rapid evidence synthesis work has directly informed advice from the COVID-19 Technical Advisory Cell and Group, as well as wider decision-making within Welsh Government on the emergency response, consideration of direct and indirect harms and recovery.”

Dr Rebecca-Jane Law, COVID-19 Technical Advisory Cell, Welsh Government

“Being able to draw on HTW’s experience of setting up their process for conducting rapid technology appraisals was invaluable for developing our own methods. It is also an honour to work collaboratively in continuing to improve our methods, in particular as part of the Wales COVID-19 Evidence Centre rapid reviewing methods subgroup, and the production of the COVID-19 digest by the information scientists at HTW.”

Dr Ruth Lewis, Methodology Lead, Wales COVID-19 Evidence Centre



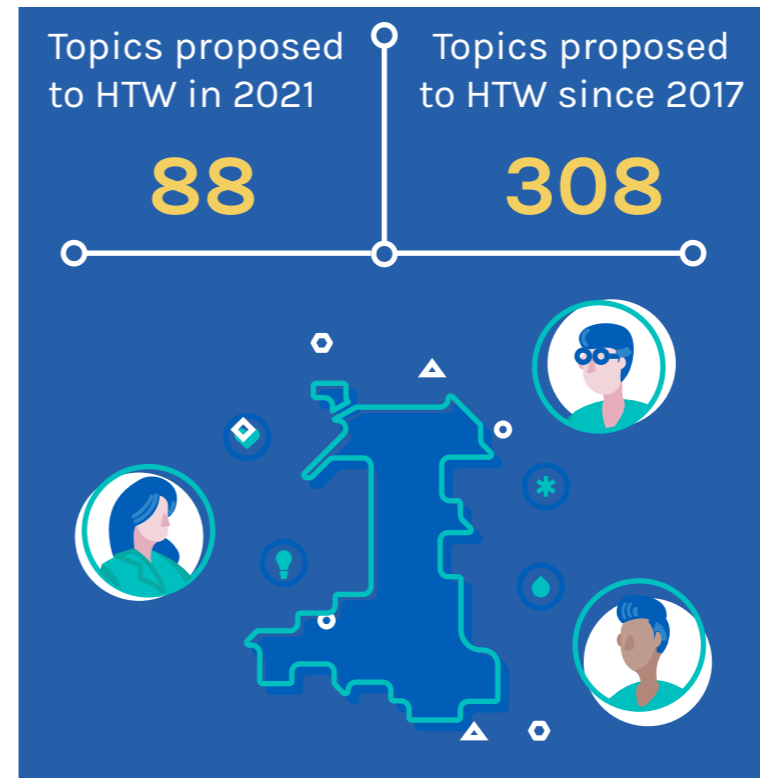


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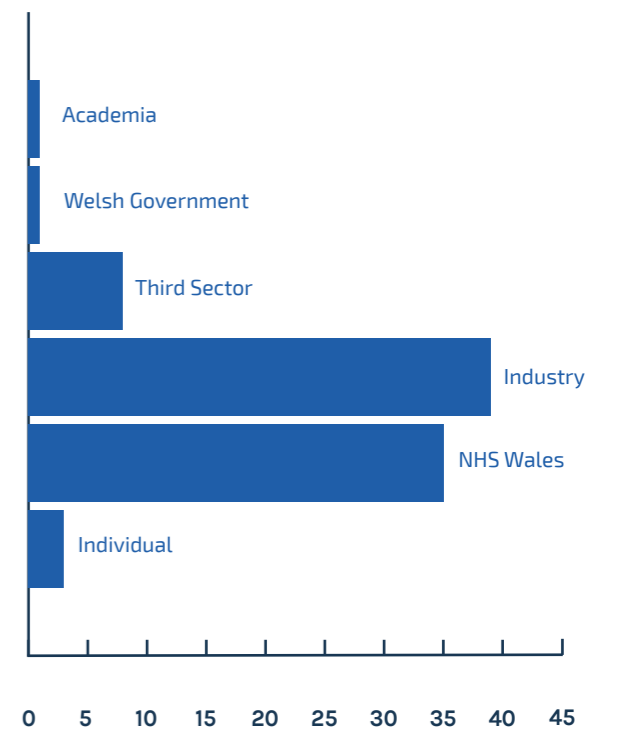
Responsive to the needs of services users, care providers and technology developers



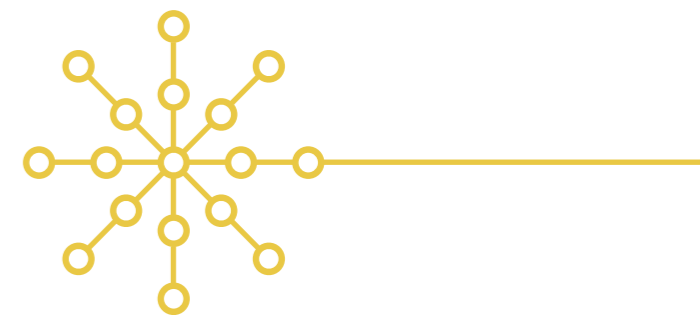
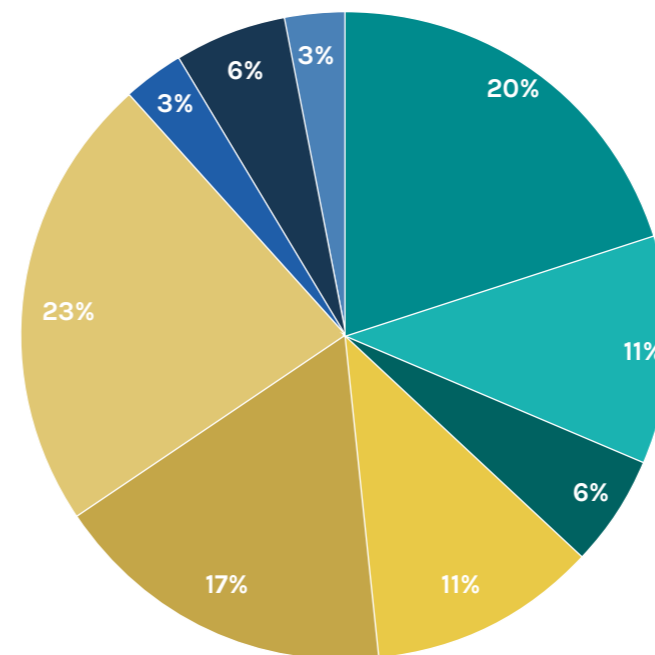
Identification



Source of topic referrals in 2021



Breakdown of topics referred from the NHS in 2021



- Nationwide NHS Wales organisations
- Betsi Cadwaladr University Health Board
- Cardiff and Vale University Health Board
- Cwm Taf Morgannwg University Health Board
- Hywel Dda University Health Board
- Swansea Bay University Health Board
- Powys Teaching Health Board
- Velindre University NHS Trust
- Welsh Ambulance Service NHS Trust



HealthTech Connect and the Innovation Service

What did we do?

HTW are data accessors to [HealthTech Connect](#). We have used the resource for the early identification of technologies that will be of potential benefit to Welsh health and care systems and people.

HealthTech Connect is a secure online database that was developed by a range of partner organisations in the health technologies field. It supports new health technologies that offer measurable benefits as they move from inception to adoption in the UK health and care systems.

Companies can register their health technology on HealthTech Connect for free. By signing up, companies can learn what information is needed by decision makers and clarify possible routes to market access. UK health technology assessment (HTA) organisations like HTW can use the information provided by companies to identify whether the technology is suitable for evaluation.

Our research team regularly review the HealthTech Connect database and discuss potentially relevant technologies with our Assessment Group, who quality assure our work and ensure scientific rigour in our processes, as part of our topic identification process.

Since the beginning of 2020, we've identified 43 technologies from HealthTech Connect. All of these have had topic exploration reports published, with input from the company and other stakeholders. We have also produced guidance for two of the technologies.

In 2022, the Innovation Service is scheduled to launch. This service aims to make it easier and faster for companies to develop their innovations and bring them to the NHS and prepare the NHS to adopt new innovations.

“Our collaboration with HTW on HealthTech Connect has ensured that our resources are optimised to minimise duplication in the technologies we both appraise. Through regular meetings our organisations coordinate our priorities and strategic ambitions. This means patients in England and Wales are able to access medical devices, diagnostic and digital health technologies faster than ever before.”

Professor Gillian Leng CBE, NICE Chief Executive



Who with?



Since HealthTech Connect launched in 2018, we've contributed to the HealthTech Connect User Group, which oversees usage and development of the database with input from data accessors and technology developers.

The Innovation Service will replace HealthTech Connect, and HTW are now members of the Innovation Service User Group. Through this group, we have contributed to the development and launch of the site, ensuring it meets the needs of HTA bodies like us, and the stakeholders we work with.

In 2020, we helped set up an HTA User Group with other HealthTech Connect users who evaluate or commission non-medicine health technologies. This group was set up to share work plans on technologies selected from HealthTech Connect by each organisation, with the aim of sharing resources and minimising duplication. This group continues to meet to discuss technologies selected from the new Innovation Service and from our wider work programmes.

What difference did this make?

Since setting up the HTA User Group, we have met regularly with the National Institute for Health and Care Excellence (NICE) and the Scottish Health Technologies Group (SHTG). This has fostered closer collaboration and allowed us to share early workplans.

In 2022, we plan to build on this work and explore how this collaboration can be applied across all topic selection and identification processes at each organisation. The group has enabled HTW to learn about opportunities for closer collaboration and to increase the profile of the guidance we produce.



Evidence appraisal on haemodialysis antimicrobial barrier caps (ClearGuard)

What did we do?

We used [HealthTech Connect](#) to identify this topic proposed by a technology developer for appraisal by HTW. The topic considered antimicrobial barrier caps for use with haemodialysis catheter hubs to reduce catheter-related bloodstream infections (BSI). We appraised the clinical and economic evidence on the topic, published an Evidence Appraisal Report in March 2021 and issued [HTW guidance](#) in May 2021.

Who with?

We engaged with several different stakeholder groups during the development of this appraisal. During the consultation period, we received feedback from consultant nephrologists, a renal consultant, a laboratory director and a representative from ClearGuard, the manufacturer of haemodialysis antimicrobial barrier caps.



“It was a pleasure to work with Health Technology Wales (HTW) to examine the clinical benefits and cost-effectiveness of antimicrobial barrier caps in reducing catheter-related bloodstream infections in haemodialysis catheter hubs. The HTW Evidence Appraisal Report is comprehensive and the resulting HTW Guidance is well supported. The inclusion of ClearGuard HD as a case study is a bonus, and we're delighted to see yet another endorsement of how its routine adoption can reduce the rate of bloodstream infections while potentially leading to overall cost savings.”

Douglas Killion, Vice President
ClearGuard Commercial
Operations at ICU Medical

What did we learn?

Clinical evidence shows that the use of haemodialysis antimicrobial barrier caps reduces the rate of blood stream infections (BSI) compared to standard caps and this could lead to lower rates of hospital admissions. Economic modelling suggests that the use of ClearGuard HD has the potential to lead to overall cost savings as the additional upfront costs for ClearGuard HD caps may be outweighed by savings accrued through a reduction in BSI events.

What difference did this make?

The HTW Appraisal Panel recommended that the evidence supports the routine adoption of ClearGuard HD antimicrobial barrier caps for use with haemodialysis catheter hubs. The adoption of the technology in NHS Wales could lead to a reduction in the number of catheter-related blood stream infections.



Supporting innovation with the Small Business Research Initiative

What did we do?

We have provided support to the Small Business Research Initiative (SBRI) by joining project boards for several of the SBRI's challenge driven competitions. As project board members, our role was to question and assess the proposed solutions to the challenges, make decisions on project progression and provide advice and support to the winning applicants.

Who with?

We worked with the SBRI, an organisation which aims to connect public sector challenges with innovative ideas from industry. The project boards considered the solutions that industry proposed for specific challenges posed by the SBRI. We joined the Better Lives Closer to Home and Dentistry Face Mask challenges. We are also providing ongoing support to the Simulation Technology Training and Outpatient Transformation challenges.

What did we learn?

We learned about the novel and innovative solutions from industry, which aimed to address the challenges. In the Dentistry Face Mask challenge, we saw solutions which aimed to supply clinical staff with more appropriately fitting, safe and economical respiratory protection. In the Better Lives Closer to Home challenge we heard solutions from industry which aimed to help businesses and communities cope with the long-term impact of COVID-19.



What were the reactions?

"The team from HTW have been very supportive of the SBRI Centre of Excellence over 2021. They have been members of several project boards and their knowledge, expertise and guidance has been helpful in progressing developments and solutions. In particular, we have also used the META (Medtech Early Technical Assessment) tool that is used to provide guidance on non-medical technology to the NHS which has helped businesses identify their solutions' value proposition using clinical and economic evidence. We look forward to continue to work with Susan, Matthew and the team in 2022."

Lynda Jones, Centre Manager, SBRI

What difference did this make?

Our contribution to the project boards has helped the SBRI to achieve the aims set out in the challenges as well as its wider aim to enable companies to use new solutions to tackle societal problems while supporting business to develop and grow.

HTW Scientific Advice Service: Overcoming barriers to market access

The HTW Scientific Advice Service (SAS) launched in October 2020 to provide expert advice to health technology developers and innovators on how to optimise their route to market.

It aims to enable developers to overcome barriers to market access by developing evidence and demonstrating value that meets the needs of care commissioners, care providers, patients and service users. The fee-based service can be tailored to meet the needs of technology developers of all sizes and stages of development.

In order to help companies to identify gaps in their existing evidence HTW makes use of the National Institute for Health and Care Excellence (NICE) Medtech Early Technical Assessment (META) Tool, an online structured framework, to deliver the SAS.



APPRAISAL

Using the best available evidence and expertise to independently appraise health and care technologies



Appraisal

12

Topics progressed to evidence appraisals in 2021

6

Pieces of HTW guidance published in 2021

23

Pieces of HTW guidance published since 2017

[Visit our website to read HTW reports and Guidance](#)



Our guidance

We evaluate the best available evidence to determine the clinical and cost effectiveness of health and social care technologies. Based on the evidence and the input of experts, we produce national guidance.

HTW guidance summarises the key evidence and implications for care services in Wales. The table below details the topics that have been through our appraisal process and received HTW guidance in 2021.

May 2021	Corneal cross-linking to treat adults and children with keratoconus (GUI002-02)
<p>“The evidence supports the routine adoption of corneal cross-linking (CXL) for children and adults with progressive keratoconus. Compared to standard care, CXL slows the disease progression and may improve visual acuity. It may also reduce or delay the need for corneal transplantation.”</p>	
May 2021	Point-of-care ultrasound to diagnose gallstone disease (GUI029)
<p>“The use of portable point-of-care ultrasound to diagnose gallstone disease shows promise, but the current evidence is insufficient to support routine adoption.”</p>	
July 2021	Antimicrobial barrier caps for use with haemodialysis catheter hubs to reduce catheter-related bloodstream infections (GUI030)
<p>“The evidence supports the routine adoption of ClearGuard HD antimicrobial barrier caps for use with haemodialysis catheter hubs. Clinical evidence shows that the use of ClearGuard HD caps reduces the rate of blood stream infections compared to standard caps.”</p>	
September 2021	Freestyle Libre flash glucose monitoring for the management of diabetes (GUI004-02)
<p>“The evidence supports the routine adoption of Freestyle Libre flash glucose monitoring to guide blood glucose regulation in people with diabetes who require treatment with insulin. The use of Freestyle Libre flash glucose monitoring in these people improves the proportion of time that the blood glucose is in target range and reduces time in hypoglycaemia and hyperglycaemia.”</p>	
November 2021	Natriuretic peptides to rule-in and rule-out a diagnosis of acute heart failure (GUI026)
<p>“The evidence supports the routine adoption of N-terminal pro B-type natriuretic peptide (NTproBNP) measurement to rule-in and rule-out acute heart failure in adults presenting to the emergency department in whom there is clinical suspicion of this diagnosis. The addition of NT-proBNP measurement to routine clinical assessment may reduce length of hospital stay and the rate of re-hospitalisations.”</p>	
November 2021	Strategies for Relatives (START) to improve the mental health of carers of people with dementia (GUI031)
<p>“The evidence supports the routine adoption of Strategies for Relatives (START) intervention for carers of people with dementia. The use of START leads to a reduction in symptoms of depression and an improvement in quality of life of the carer as compared to usual care. Benefits are evident in the short term but are also maintained over a longer time period.”</p>	



HTW guidance: FreeStyle Libre flash glucose monitoring

What did we do?

HTW originally issued guidance on FreeStyle Libre Flash Glucose Monitoring (FLFGM) in November 2018. Following a targeted consultation with stakeholders, HTW agreed that it was appropriate to re-appraise this topic and issue updated guidance because there has been a substantial change in the available evidence since the original guidance was published. HTW guidance is periodically updated when necessary.

The work was generated by evaluating the pieces of secondary and primary evidence that were published since November 2018 and were found relevant to establish the clinical and cost-effectiveness of this technology. New analyses for both the clinical and cost-effectiveness were conducted.

Who with?

We engaged with the original group of stakeholders that participated in the development of the first iteration of guidance on this topic. During the consultation period we received feedback and expert input from the national clinical lead for diabetes as well as other consultants and nurses in diabetology.

Following advice from the HTW Patient and Public Involvement (PPI) Standing Group we conducted a patient experience literature review and sought input from Diabetes Cymru for a Patient Submission. We summarised the literature reports of patient experiences, perspectives and opinions to supplement the Patient Submission from Diabetes Cymru for the use of FGM in adults and children with type 1 and 2 diabetes.

The Appraisal Panel considered the published evidence and input from clinical and patient experts in their decision-making processes. It concluded that the evidence supports the routine adoption of FreeStyle Libre flash glucose monitoring to guide blood glucose regulation in people with diabetes of any type that requires treatment with insulin.

What were the reactions?

Encouraged by the clinical expert team that reviewed the Evidence Appraisal Report, the HTW researchers will be preparing a manuscript to be published in a peer-reviewed journal on the clinical and cost-effectiveness associated with the use of this technology. This will catalyse the efficient dissemination of the findings.

What did people learn?

The use of FLFGM in people with diabetes of any type that requires treatment of insulin can improve the proportion of time in blood glucose target range thus reducing episodes of hypo- and hyperglycaemia. The cost-utility analysis indicated that FLFGM is a cost-effective intervention compared to finger-prick self-monitoring of blood glucose for both type 1 and 2 diabetes.



What difference has this made?

“Flash glucose monitoring is an important tool that can help people to improve their quality of life, reduce hospital visits and gives patients more confidence in managing their condition. The outcome of the review is a step forward in helping people across Wales to access the right technology to help them live better, happier lives with all types of diabetes.”

Joshua James, Diabetes UK Cymru Policy and Public Affairs Manager

“We're delighted to see the Health Technology Wales guidance for flash glucose monitoring, meaning many more people with diabetes in Wales will now have access to a technology that can improve the self-management of diabetes and quality of life. We are especially pleased to see the clinical expert opinion which outlines that observational studies are an important part of the appraisal process, as supportive evidence alongside randomised controlled trial data. This is key for data-rich technologies, such as the FreeStyle Libre system, for which there is extensive real-world evidence demonstrating the value in clinical practice rather than just in a clinical trial setting.”

Sam Howard, Market Access Director for Abbott's Diabetes Care



HTW Guidance: Strategies for relatives (START) intervention

What did we do?

HTW received a topic submission from Social Care Wales and Carers Trust Wales for the Strategies for Relatives (START) programme and, based on our topic exploration report, it was prioritised and taken forward. During the development of the topic, we worked with the HTW Assessment Group to ensure the scope of the review was achievable and produced an Evidence Appraisal Report summarising the clinical and cost-effectiveness of the programme. Based on this evidence, the [HTW Appraisal Panel](#) was able to recommend that START should be routinely adopted for carers of people with dementia across Wales.

What were the reactions?

Our guidance on the START programme was well received on publication with stakeholders from local authorities and local health boards welcoming the guidance and highlighting that it aligned with other initiatives to improve services for people with dementia and their carers. Social Care Wales said they were delighted that the guidance could support the delivery of START for carers of people with dementia across Wales.

What did people learn?

Appraising the START programme gave us an opportunity to assess whether our methods and processes are appropriate for topics related to social care and allowed us to consider adaptations. For our methods, we were able to develop a search strategy that included new databases that include evidence in social care. We learned key lessons about ensuring a realistic scope for appraisal, and we were able to consider how to address issues of perspective. We also reflected on the need to ensure that both health and social care are well represented in our advisory groups.

What difference has this made?

Our guidance provides a recommendation for a specific programme that has been shown to be effective and cost-effective that delivers support to carers of people with dementia. Delivering this type of support for carers is a priority for Welsh Government and our recommendation of START highlights a programme which can address this priority. This guidance and the supporting evidence appraisal sets the expectation that local health boards adopt START or justify why this is not appropriate.

Who with?

As part of our broader partnership, we asked Social Care Wales to identify priority topics related to social care. Support for carers was highlighted as an important issue and the START programme was suggested as an intervention that could provide valuable support. Throughout the appraisal, we consulted people with expertise of appraising topics linked to social care to ensure adaptations that we made were appropriate. We also worked with the Alzheimer's Society to facilitate focus groups with people living with dementia and their carers to ensure that their voices were heard during the process.

“As the ICF Dementia Care Programme at Cardiff and Vale University Health Board approaches the end of its 4th year and is on the verge of undergoing some potential re-modelling, the publication of this guidance by Health Technology Wales is very timely. We know that carers play an absolutely vital role in the care of people with dementia. Thank you HTW for appraising this issue of high importance and great topic suggestion.”

It would be great to see the routine adoption of the START intervention to really deliver transformational change for dementia care across the Cardiff and Vale region.”

Meredith Garnier, Chris Ball, Cath Doman, Rachel Jones, Julie Skelton, Cardiff and Vale UHB





ADOPTION

Authoritative guidance to inform care commissioning and promote the efficient use of resources



Piloting the HTW adoption audit

When HTW was established, it was highlighted that guidance should have an 'Adopt or Justify' status and that the adoption of guidance should be audited to ensure that it was having an impact on access to effective and cost-effective technologies. [An Adoption Audit Task and Finish Group](#) reported findings in 2020 and outlined that HTW should be responsible for leading the adoption audit with support from partners across NHS Wales. This work was paused through 2020 and into early 2021 to avoid drawing attention from the ongoing management of the COVID-19 pandemic and vaccination efforts but has progressed significantly through the year.

We worked with the All Wales Medical Directors national peer group to identify nominated leads in each of the local health boards and other health commissioning bodies in Wales and met with each of the contacts to discuss local arrangements for monitoring responses to our guidance. Based on our findings, we have been able to develop a draft process for our annual adoption audit and have developed standard operating procedures and templates to support a pilot of a selection of our previous guidance. The process is built around trying to gain an idea of the response to guidance from the relevant commissioning bodies, assessing whether changes in procurement data demonstrate adoption, and accessing knowledge on changes to services from local topic experts.

After developing these processes, we identified eight pieces of guidance which reflect the varying characteristics of non-medicine technologies. We then developed individualised monitoring plans for each of these guidance and we have disseminated these to our nominated leads, procurement contacts, and topic experts. We have also been able to offer financial support to each local health board to support their interactions with us on adoption audit. This support should help to develop systems for responding to guidance from HTW, NICE and other bodies and will support adoption of innovation in Wales. In early 2022, we will collate findings for the pilot and provide our first adoption audit annual report.

Through the development of our adoption audit process, we have been able to review approaches to monitoring adoption from other bodies in Wales and the wider UK, as well as working with international partners to learn lessons on how work has proceeded elsewhere. The findings of the pilot will help us understand whether our draft processes are appropriate and we will take feedback from the nominated leads on whether these processes could be improved.

After the pilot, the adoption audit will be completed on a yearly basis. It will provide valuable information about the level of adoption of our guidance and will help ensure that our work is having an impact on people accessing care. It will also provide information to Welsh Government and NHS Wales on the challenges associated with adopting our guidance for Wales.

“We have received great support from Health Technology Wales for the adoption audit project, including the offer of financial assistance to enable us to develop systems and processes to undertake the requirements of the audit. Development of new ways of working using this funding will not only provide benefits for this project but will also contribute towards the delivery of wider health board objectives. Colleagues within Health Technology Wales are always helpful and responsive with queries and the Stakeholder Forum that has been established will provide an excellent opportunity to connect with colleagues from across Wales as we progress the annual audit.”

Lisa Davies, Head of Effective Clinical Practice and Quality Improvement, Hywel Dda University Health Board



ENGAGEMENT

Collaborating with stakeholders to increase evidence-informed decision making



Engagement in 2021

Throughout 2021 we have engaged with stakeholders from across the health, social care, industry and research sectors in Wales to raise awareness of the importance of evidence informed decision making on the use of non-medicine health technologies.

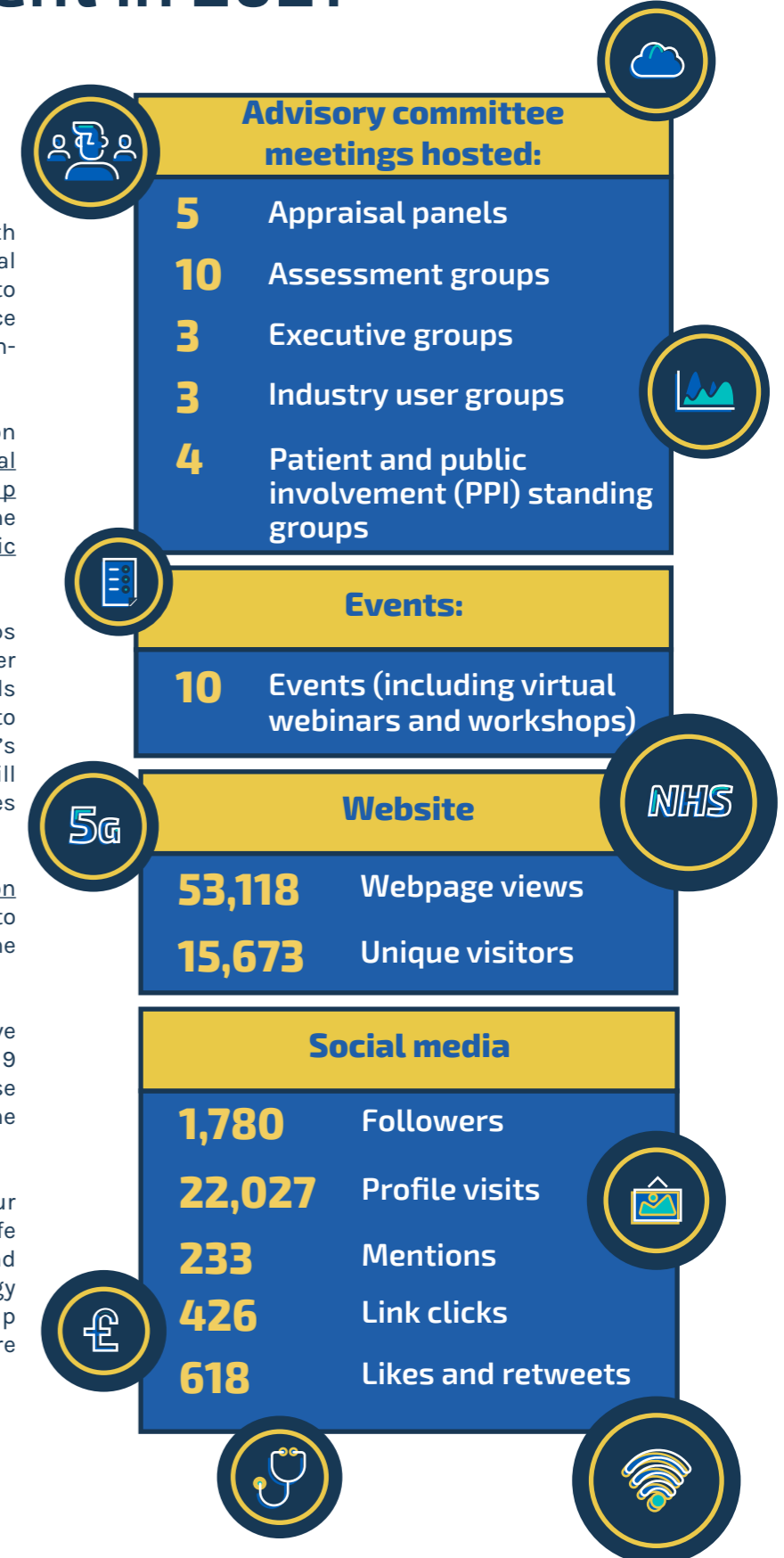
We maintain a two way flow of information through our work with the [HTW Appraisal Panel](#), [Assessment Group](#) and [Executive Group](#) members and by meeting regularly with the [Industry User Group](#) and [Patient and Public Involvement \(PPI\) Standing Group](#).

This year we strengthened our relationships with key partners by setting up a Stakeholder Forum aimed at ensuring that HTW understands the views of stakeholders and enables them to influence its work. As well as supporting HTW's work programme, the Stakeholder Forum will provide guidance on priorities for care services in Wales.

We have also established [a new collaboration with Social Care Wales](#) which will enable us to better understand how our work can support the broader care sector in Wales.

Throughout the COVID-19 pandemic we have worked in collaboration with the Wales COVID-19 Evidence Centre to provide research expertise that supports evidence informed and time critical decision making.

Meanwhile we continue to work closely with our existing partners in the Bevan Commission, Life Sciences Hub Wales, All Wales Therapeutics and Toxicology Centre, All Wales Medicines Strategy Group, Scottish Health Technologies Group and the National Institute for Health and Care Excellence.





International engagement

Collaboration with global HTA agencies on patient involvement position statement

What did we do?

As a member of the [International Network of Agencies for Health Technology Assessment \(INAHTA\)](#), HTW worked alongside other INAHTA members on the production of a position statement on Patient Involvement in health technology assessment (HTA). This statement reflects members' views on the role of patient involvement in HTA and provides guidance on how HTA organisations can undertake the generation of patient evidence for a technology appraisal. HTW contributed our experiences, methods, processes and lessons learned in conducting Patient and Public Involvement (PPI) for our health technology assessments to inform this position statement and provided guidance in conducting PPI to international members as a result.

Who with?

INAHTA is a network of 50 HTA agencies that support health system decision making that affects over one billion people in 31 countries worldwide. INAHTA members connect together to cooperate and share information about producing and disseminating HTA reports for evidence-based decision making. Patient and Public Involvement (PPI) is recognised by INAHTA as an important and valuable part of health technology assessment and sharing methods, process and principles for conducting PPI is essential for the production of international co-operation establishing best practice.

INAHTA position statements are one of the ways in which best practice methods can be shared so that INAHTA members and others can learn from each other. Position statements focus on general issues, methods, definitions or processes relevant to health technology assessment and to HTA agencies and provide agencies with guidance on best international practice.

What did we learn?

[INAHTA's position statement](#) outlines that patients have a right to be involved in the HTA process as the outcome of the assessment could affect them directly. It goes on to say that identifying what matters to patients will ensure that HTA outputs are more responsive to care needs and the wider health goals of society.

Involving patients and the public in HTA can improve the quality of the assessment and supports patient centred decision making.

At HTW, PPI forms an invaluable element in our health technology assessments. We strive to ensure that patient groups and those that could be directly affected by the outcome of an HTA are involved in the appraisal process. Our Patient and Public Involvement Standing Group provides direction and guidance to ensure that HTW maintains effective PPI throughout its work and has worked with our PPI team to create a flexible, dynamic and responsive approach to conducting PPI.

What difference did this make?

The INAHTA position statement highlights the importance of PPI in HTA and supports HTA agencies in their efforts towards engaging effectively with patients to enable them to contribute meaningfully to HTA processes and outputs. This statement describes the different aspects of patient and public involvement in HTA and shares best practice. HTW engagement in this work shares our work internationally and ensures that our PPI work is informed by cutting edge PPI methods as well as allowing other HTA agencies across the globe to make use of our experiences and process as well as our approach to flexible and reactive PPI.

"Your efforts were both vital and much appreciated in the group. We could have not produced such a high-quality document without your contributions."

INAHTA Board Members Dr Sophie Söderholm Werkö and Karen Macpherson



International engagement

HTW wins INAHTA impact award

In September 2021 HTW received the prestigious international David Hailey Award for best impact story at the [International Network for Health Technology Assessment \(INAHTA\) Congress](#). We used our appraisal of autologous haematopoietic stem cell transplantation (AHSCT) for highly active relapsing remitting multiple sclerosis (RRMS) as a case study to demonstrate how we evaluate the impact of our work.

The event's 100 attendees, representing INAHTA's 50 member organisations, voted for HTW to win the prize which is awarded to the HTA agency which presents the best example of the impact an assessment has had and what lessons were learnt from the process.

The commissioning body Welsh Health Specialised Services Committee (WHSSC) submitted the topic to HTW, and the appraisal and guidance were published in July 2020. During the assessment process HTW engaged with an extensive panel of clinical experts including consultant neurologists, consultant haematologists, academics, and other HTA bodies. The organisation also sought direct engagement from two patient organisations, who provided independent patient submissions. Patient organisations later described being included in the appraisal process as invaluable and said that people living with MS were listened to throughout the process.

Professor Peter Groves, HTW Chairman, said: "I am very proud that HTW has been announced as the 2021 winner of the INAHTA David Hailey Award. This reflects the quality of the work done in preparing the guidance on autologous haematopoietic stem cell transplantation (AHSCT) for highly active relapsing remitting multiple sclerosis (RRMS) as well as the collaborative approach that we undertake in our appraisals."

Following publication of HTW's guidance, the WHSSC Prioritisation Panel recommended AHSCT for RRMS as a 'high priority' for funding. The guidance was featured on the MS Trust website and in several news articles and patient groups have since called for clear 'next steps' towards opening specialist treatment centres in Wales.

"HTW competed against impact stories from agencies around the globe and won this award during the INAHTA Congress 2021. Theirs was scored as the best story by fellow members based on criteria of topic importance, contribution to HTA, impact assessment knowledge and clear story telling. Congratulations HTW!!"

Tara Schuller, MSc Executive Manager, INAHTA

HTW supports the HTAi 2021 event

HTW was asked to join the Local Organising Committee of the 2021 annual meeting of Health Technology Assessment international (HTAi) - a global society for organisations that produce health technology assessments (HTA). The organisation's global network of members from over 60 countries met virtually in June for the event, which focussed on the role of HTA in leading health innovation.

During the event, members explored how adaptive approaches to HTA can support innovation in health systems as technology continues to evolve and new challenges emerge. They discussed how traditional approaches to HTA are being challenged as decision makers meet the changing needs of local health systems.

The HTAi 2021 Annual Meeting also provided an opportunity for researchers, policymakers, health care practitioners, technology developers and patients to reflect on their role in driving innovation through HTA.

The HTW team chaired panel discussions and gave both oral and poster presentations on topics ranging from innovation in HTA to putting patients at the heart of the innovation pathway.



What our stakeholders say

“Since it was established in 2017, Health Technology Wales has met a significant need in the system to systematically appraise health technologies on a once for Wales basis.

I've been really impressed with HTW's exploration of additional opportunities to interface with government, the health and care sector, academia and industry partners. This has added significant value to innovation platforms such as the Welsh Health Hack and Bevan Exemplars programme.

It is also exciting to be involved with newer HTW initiatives such as their Scientific Advice Service and working to co-design the UK government's Innovative Devices Access Pathway; programmes of work that again identify and meet tangible health and care system needs.”

Thomas James, Head of Innovation and Technology, Welsh Government

“Lauren Elston provided us with an excellent and rapid review on the risk associated with COVID-19 transmission in semi enclosed environments. This was timely and excellent.

The evidence review established that there is a lack of evidence to enable the formulation of robust guidance on semi-enclosed environments.”

Professor Davey Jones, Bangor University, Advisor to Welsh Government TAG-E

“Evidence documents and final guidance are succinct, clear and well presented.

The committee discussion was well managed and well timed. The evidence review is of very high quality. It is important that Wales has its own HTA organisation as it can help to ensure patients in Wales have access to the most appropriate treatments at a cost that can be sustained by the system.

I think NICE could learn a lot from HTW and hope we have the chance to work collaboratively in future.”

Kimberley Carter, Health Technology Assessment Advisor, NICE



“HTW listens to our considerations and comments when we study an EAR report. The reports are very well presented and are very thorough and concise.”

Sian Jones, volunteer and PPI Standing Group member

“HTW Rapid Evidence Summaries provide evidence to support the IPFR Panel decision making process. We have recently received summaries for Functional Neurology Disorder, High Intensity Focussed Ultrasound and Biological Mesh.

HTW Guidance is also helpful in the IPFR Decision Making Process. The IPFR Panel has recently considered the guidance for Corneal Cross-linking.”

Zoe Rees, Commissioning Officer, Individual Patient Funding Request (IPFR)

“HTW provided clear guidance on the role of natriuretic peptides in heart failure in acute settings.”

Mohamed Anwar, Research fellow and registrar, Edinburgh University



Industry engagement

Industry User Group Collaboration (IUGC)

Throughout 2021 HTW continued to build on its relationships with industry representatives by hosting quarterly meetings of the Industry User Group (IUG).

The IUGC, a collaboration between industry representatives and Health Technology Wales, was set up with the aim of raising awareness of HTW's work and improving access to technology for NHS Wales.

Members of the group include small and medium sized enterprises and multi-national companies, all of which have links to Wales and are involved in the development and manufacture of innovations for the health and social care sector.

At its quarterly meetings the group discusses updates on HTW and NICE processes and members are provided with guidance on market access routes, meeting regulatory requirements and best practice in developing evidence. The IUGC enables HTW to ensure its methods meet the needs of industry members when it comes to the identification, appraisal and adoption of non-medicine health technologies. It also provides an opportunity for HTW to keep up to date with the latest industry trends and spot opportunities for improving healthcare in Wales.

Innovative Devices Access Pathway (IDAP) pilot

HTW is collaborating on a new Great Britain-wide supported research and access route for innovative medical technologies that meet a critical need in the health and care system. The Innovative Devices Access Pathway (IDAP) is a joint project between the National Institute for Health and Care Excellence (NICE), the Medicines and Healthcare products Regulatory Agency (MHRA), HTW and the Scottish Health Technologies Group (SHTG). The aim is to develop a pathway that allows technology developers to provide their innovative products to care professionals and service users at the earliest, yet safe, opportunity. The proposed pathway will be piloted in 2022.



Celebrating scientific achievements

In December 2021 HTW took part in the 14th annual MediWales Awards – an opportunity to celebrate the achievements of the NHS, life sciences and health technology sectors in Wales.

HTW sponsored the Scaling Up Innovation and Transformation Award which was won by the All Wales Medical Genomics Service and the Velindre Cancer Centre in recognition of their work in developing a pharmacogenetics test that can predict adverse reactions to chemotherapy. The team established a new innovative test for patients due to receive the chemotherapy drug fluoropyrimidine, which identifies their risk of suffering severe side effects.

Earlier in the year HTW also took part in the MediWales showcase event at which members of Wales' life sciences community gathered to share information about their latest projects.





Working in partnership with Social Care Wales



Using effective health and social care technologies is an important part of delivering the best care to people who need it. There are well-established processes and methods for assessment of health technologies but these may not be fully suitable for assessing technologies or ways of working in social care. Health Technology Wales has committed to ensuring that our work is accessible and appropriate for social care and has made significant progress on this work in 2021.

At the beginning of the year, [Health Technology Wales and Social Care Wales launched a partnership](#) to share expertise and understand how HTW methods and processes can be adapted to social care and how we engage with the social care sector in Wales. Through this partnership we have run a series of events to improve awareness of our work and discuss key issues. These have included a social care [roundtable](#) for leaders from health and social care, government, academic and policy and a social care [workshop](#) for people accessing social care, their carers, and social care professionals. Both allowed us to increase our visibility in social care and improve our understanding of the challenges and opportunities for HTW to contribute to social care. As part of this partnership, Social Care Wales also identified the [Strategies for Relatives \(START\)](#) programme as a high priority for appraisal and we have now developed an Evidence Appraisal Review and guidance recommending routine adoption in Wales.

HTW planned a Social Care Open Topic Call to launch in early 2022. This should promote our work further and bring us a series of topics from social care which we are able to consider for prioritisation for our work programme. To prepare for this open topic call, we have reviewed our website and key documentation to ensure that the language we use clearly signals that social care is within our remit and is accessible to people who may want to submit a topic. We have also developed our communications strategy to support the roll out of this open topic call.

Our key learnings from our work this year have been that there will be a large number of challenges that we will have to face when working with social care. However, there are significant opportunities for us to contribute and we have begun forging links with existing groups and networks that could support our work. We have had positive feedback on our work from Social Care Wales on our genuine commitment to engaging with and learning from partners in social care and adapting our work to support social care.



Key findings from the HTW social care roundtable and workshops

Our [Social Care Roundtable](#) ran in May. Our main aim was to discuss what adaptations may be needed to make health technology assessment more appropriate for social care and how this could be supported in Wales. The roundtable was attended by senior leaders from health, social care and government and by academic and policy experts and there were a mix of presentations from people with expertise on evidence-based social care and the Welsh context as well as open discussion.

A comprehensive report was published and some of our key findings are highlighted here:

- Participants emphasised that people working within HTA should be aware of the realities of social care that will pose challenges. These may be related to de-centralised and fragmented delivery of care, staffing turnover, and less developed links between social care and research environments.
- A more flexible approach is needed to ensure benefits related to person-centredness, dignity and respect and abilities are captured and that real world evidence from both research and non-research settings support decision-making. Consideration will also need to be given to how economic evaluation can support assessments of value using adapted methods.
- Efforts will be needed to ensure that there is diverse representation of voices from social care, both to support continuing conversations about adaptations that stem from the roundtable and to inform appraisals and guide decision-making in the longer term.
- Participants were clear that HTA must support change within social care to ensure ongoing buy-in from partners. HTA agencies will need to consider how guidance is communicated to ensure awareness and should explore how adoption of guidance can be promoted and measured.

Our [Social Care Workshop](#) ran in June and aimed to better understand how able people felt to interact with HTW and explore how accessible our public facing materials are. The workshop was designed by HTW, Social Care Wales and the Social Care Institute of Excellence and had a mix of presentations, whole group and break out room discussion, and question and answer sessions.

Some key findings are as follows and are available in our workshop report:

- More inclusive language that reflected both health and social care would help remove barriers. Considering a strengths based approach may be beneficial.
- People were keen to explore whether the process could be made to feel less one-way with more of a dialogue between the topic proposer and the HTW team and whether additional support could be made available.
- Participants also raised the issue that evidence will be a challenge in social care and that HTW should be aware that outcomes may be harder to measure and an adapted approach may be needed.



HTW has developed a [Social Care Action Plan](#) to help address the themes which came up across both the roundtable and the workshop and we are committed to continuing this work over the coming years.

“Over the last year we’ve continued to work closely with the team at Health Technology Wales to raise the profile of social care in its work. We’ve focused on making the HTW processes more accessible and easy to navigate for people in social care and future topic calls will benefit from the improvements now in place. It’s been – and continues to be – a true collaboration, and we’re looking forward to our future work to promote and embed the practice of health technology assessment in social care in Wales.”

Lisa Trigg, Social Care Wales



Patient and public involvement

We've had a busy and exciting year continuing our commitment to conducting innovative patient and public involvement (PPI). Highlights for this year include incorporating greater flexibility into our PPI process for a more reactive and dynamic approach to engagement, holding our first patient and carer focus groups, tailoring our processes for social care topics and presenting our PPI work at the international HTAi conference.

We have also welcomed representatives of patient communities to take part in our appraisal panel discussions, where our national guidance on the use of health technologies is formed. The contributions of patients and the organisations that represent them is an essential and valuable part of HTW appraisals, where the evidence they submit is recorded under a specific part of our Evidence Appraisal Reports and is discussed at Appraisal Panels. We continue to improve and develop this process as we learn from patients, carers, the public and best practice.

- 5 Topics with PPI
- 4 Patient submissions received
- 2 Questionnaires/ Surveys circulated
- 2 Specific patient evidence literature reviews

The HTW PPI team at HTAi 2021

We proudly showcased our PPI work at the HTAi 2021 online conference where we presented at three PPI related panels; 'Patient Participation at the Organisational Level', 'Achieving Effective Patient Engagement in Rapid-Cycle Medical Device HTAs' and 'How to Evaluate the Patient and Public Involvement in HTA'. These panels were watched by over 100 conference attendees and generated thoughtful and involved discussions. Our PPI work was applauded and we received positive feedback from attendees.

As part of the project on 'Patient Participation at the Organisational Level', Alice Evans, Alan Meudell and Susan Duncan took part in a wider project reflecting on the engagement of patients and public representatives across committees and boards in HTA organisations. Alan, a member of HTW's PPISG and a Public Partner, also sits on HTW's Audit and Adoption committee and provided reflections on working within various roles in HTA as a public representative.

Despite the challenges posed by the pandemic it has been a positive that the PPI group and HTW have continued to develop the PPI processes and activities within HTW to make them more effective and to ensure that the experiences of the patients and carers are part of the evidence used in the decision-making process and that their voices are heard. The PPI group and HTW have also recognised the importance of engaging with the global HTA community to share the knowledge we have gained and to learn from other countries' HTA processes. In the last year we have participated in HTAi research which looked at 'Participation in HTA at an organisational level' where HTW and the PPI group shared how this happens in Wales.

Alan Meudell, HTW PPI Standing Group member and Public Partner

The HTAi Patient and Citizen Involvement in HTA Interest Group (PCIG) brings together more than 300 members from different disciplines and stakeholder groups in 43 countries to strengthen patient and public involvement in HTA. HTW has quickly gained international attention for its approach to patient and public involvement. We greatly appreciate the opportunity to learn, share and reflect on practice with HTW, and its staff's generous contribution to panels at the HTAi 2021 Annual Meeting and studies on the impact of patient and public involvement and its role at an organisational level outside of individual assessments.

Ann Single, HTAi Patient and Citizen Involvement Interest Group Chair



Collaborative working with patient groups

Our commitment to flexible and reactive PPI engagement has enabled us to undertake several exciting projects working jointly with patient organisations this year. Joint co-production of patient evidence enables more organisations to work with us on contributing to HTAs using novel methods that have ensured patient voices remain at the heart of technology assessment. As a result, HTW have undertaken several 'firsts' in PPI engagement;

- Our first patient and carer focus groups held jointly with the Alzheimer's Society;
- Our first engagement with patients through social media, held jointly with FND (Functional Neurological Disorder) Action UK across their social media platforms;
- Our first accessible methods of individual patient evidence collection, including telephone calls and virtual consultations;
- Our first effort to combine two or more forms of patient evidence for our revised guidance on flash glucose monitoring devices, where we combined a Patient Submission from Diabetes UK Cymru with a patient evidence literature review.

PPI making a difference in HTA

HTW reviewed our guidance on corneal cross linking and flash glucose monitoring this year in line with our policy to ensure that our guidance is relevant and up to date with recent evidence. Since publishing guidance on these topics in 2018 and 2019 respectively, we established our flexible and responsive PPI process, which enabled us to include patient evidence in the revised guidance conducted this year. We worked with the Keratoconus group for our guidance on Corneal Cross Linking and with Diabetes UK Cymru for our guidance on flash glucose monitoring. Being able to include patient evidence made a big difference to the outcome of the revised guidance, in addition to the clinical and cost-effectiveness evidence. Revised guidance supporting the use of both technologies was published as a result.

PPI in social care

HTW undertook an HTA for our first social care topic this year and our PPISG welcomed a new member, Louise Baker, who has been instrumental in adapting our PPI processes for social care topics. Louise took part in our social care task and finish group, helped to organise and run our PPI engagements with Alzheimer's Society for the START topic and has helped PPISG adapt our PPI tools to be more appropriate for use in social care. A new process for undertaking PPI for social care topics will be developed in 2022 as we look forward to taking on more HTA for topics in social care settings.



Online resources and training

We are exploring the ways in which we can help improve the understanding of health technologies, health technology appraisal and gathering and presenting patient evidence in patient and public communities across Wales and in the UK. Our PPISG have produced a video informatic on PPI for our website which provides an oversight on PPI and how individuals and organisations can get in touch to learn more. PPISG also held an introductory webinar on health technologies and health technology assessment in December 2020 which was attended by representatives of patient organisations from across Wales and the UK and is now available to watch on our website. We have also started offering one-to-one training on HTW and HTA to patient organisations who are interested in learning more. So far, we have delivered this tailored, in-depth training to:

- Rare Diseases and Genetic Alliance UK
- Alzheimer's Society
- Crohns and Colitis UK
- Cystic Fibrosis UK
- Velindre Cancer Centre Patient Experiences

Working with HTW on their first exploration of social care topics has been such a rewarding experience. I hope that the work I have been helping to shape will be able to encourage more social care topics in 2022 so that a richer sense of the work social care professionals undertake with technology can benefit wider communities in Wales.

Louise Baker, HTW member and Public Partner



Advanced therapy medicinal products

Over the last few years, cell and gene therapies, also known as advanced therapy medicinal products (ATMPs), have been developed to treat serious conditions. These therapies have the potential to make a big impact on patients and on the health care system.

As part of the Advanced Therapies Treatment Centre Network Programme, we collaborated with the Midlands-Wales Advanced Therapy Treatment Centre (MW-ATTC) and a large network of specialists to deliver on projects to aid the assessment and adoption of ATMPs. The projects aimed to develop tools, frameworks and methodologies to aid the assessment of ATMPs and therefore to facilitate future commissioning decisions.



Economic analysis of cell therapy for people with critical limb ischaemia

We used routinely collected data from the Welsh Secure Anonymised Information Linkage (SAIL) database to provide a more detailed understanding of the natural progression of critical limb ischemia. We have used the estimations of disease progression to inform the development of an economic model comparing a revascularisation technique with standard care in people with critical limb ischemia.

Economic analysis of cell therapy for platinum resistant ovarian cancer

We developed an economic analysis on the use of tumour infiltrating lymphocytes (TILs) for platinum-resistant ovarian cancer. The model assessed whether routinely collecting and storing TILs from tumour samples when patients are undergoing surgery for ovarian cancer is less costly than patients having additional surgery to collect TILs at the point when treatment with TILs is needed.

An ATMPs micro-costing toolkit

We performed a systematic literature review of the resource collection methods employed in previous economic analyses of ATMPs. We then used this evidence and expert input to develop a micro-costing toolkit, which can be used to inform the collection of resource use data across different phases of the delivery of ATMPs. The micro-costing toolkit aims to facilitate the assessment of the full cost of delivering advanced therapies to the NHS. This could inform future assessments of whether different ATMPs deliver sufficient value for money.

Spreading the word about ATMPs

We recorded a webinar which demonstrates how the micro-costing toolkit might be used in practice, which is available [here](#).

The webinar demonstrated how the user is able to switch between different types of advanced therapies. It also shows how the user can select whether a top-down cost is available, or whether more detailed micro-costing is necessary.

Since posting on the MW-ATTC website in September 2021, the webinar has been viewed 36 times. There were also 41 interactions with a Tweet about the webinar and an engagement rate of 5.71% on LinkedIn.



“[The] microanalysis costing toolkit has been well received by third parties and will be incorporated into the pan-ATTC national toolkit as an accessible NHS resource. [The] additional costing review and analysis will be used to inform commercial business models.”

Mark Briggs, Head of Cell and Gene Therapy at the Welsh Blood Service

Patient and public perspectives on cell and gene therapies

We worked with MW-ATTC on a research project to understand patient and public knowledge and perspectives of cell and gene therapies. Using systematic review methodology, we undertook a scoping review to identify and synthesise all available evidence on the topic, which was published in the open access journal Nature Communications.

Our paper, '[Patient and public perspectives on cell and gene therapies: a systematic review](#),' focuses on patient and public knowledge and perspectives of cell and gene therapies, to inform future research, education and awareness raising activities. This review highlights the need for appropriate patient and public education on the various aspects of these therapies, which pose complex logistical, economic, ethical and social challenges for health systems.



Individual patient funding requests

What did we do?

HTW has a strategic goal to identify technologies likely to have a major impact on health and social care services and to benefit people in Wales. Part of delivering this goal involves reviewing Individual Patient Funding Requests (IPFRs) to identify potential topics for appraisal.

Who with?

AWTTC delivers a portfolio of services in therapeutics and toxicology, including the HTA of medicines. They want to create a healthier, better informed Wales and aim to be the authority on therapeutics and toxicology in Wales. AWTTC has representation on our decision-making committees, including Appraisal Panel and Assessment Group.

Since 2015, AWTTC has worked to strengthen and improve the IPFR process in Wales. One gap identified was the comparative lack of support in summarising available evidence to support IPFR applications on non-medicine technologies. For medicines, this work is already done by AWTTC or local medicines information services. Making use of AWTTC's processes and network of contacts, we now provide Evidence Summaries to health boards as part of IPFR applications for non-medicine technologies on request. Our Evidence Summaries provide a high-level overview of the known evidence on a treatment considered for an IPFR. They also summarise any economic considerations.

What were the reactions?

IPFR co-ordinators and panels passed on their gratitude to our team for the extra support they receive through HTW Rapid Evidence Summaries.

A member of the Cwm Taf Morgannwg University Health Board (CTMUHB) was very complimentary of the support provided by the HTW team, registering that communication with HTW was excellent and the Rapid Evidence Summaries were really comprehensive and completed in a timely manner.

Consultant and Clinical Lead at the All-Wales Managed Clinical Network in Paediatric Palliative Medicine, of Cardiff and Vale University Health Board (CAVUHB), Richard Hain said:

“The evidence presented by HTW was extremely valuable in this very complex case.”

Of the same Rapid Evidence Summary, a lay member of the CAVUHB panel noted that it was very useful and improved their understanding of the comparative evidence.



What difference did this make?

HTW's work on IPFRs aims to ensure that best practice is followed for all IPFR applications in Wales, and that decision makers on IPFR panels have access to evidence searching, synthesis and health economic support when considering medical technologies.

The CTMUHB panel member encouraged other members to use the service and was pleased to find that HTW are producing a more detailed appraisal of FND treatments, which will benefit IPFR panels. The member noted that other panels might consider flagging IPFRs for fuller appraisal by HTW.

The CAVUHB IPFR panel lay member reported that HTW's Rapid Evidence Summary had a major positive impact. The CAVUHB Clinical Lead Richard Hain provided feedback on the impact of the Rapid Evidence Summary on the panel's decision-making:

“The evidence concerning the effectiveness was essential in our reaching our decision. It would have been extremely difficult for us to assimilate that evidence without the concise and detailed summary provided by HTW.”



INAHTA Disruptive Technologies Position Statement

Disruptive technologies are innovations that significantly alter the way health systems operate. These innovations are playing an increasingly important role in the way health systems develop, for example, in the face of challenges associated with the COVID-19 pandemic.

The International Network of Agencies for Health Technology Assessment (INAHTA) is an international network that connects health technology assessment agencies worldwide to enable knowledge sharing and the exchange of information. Its position statements are general declarations that mark a particular point of view or standpoint supported or approved by INAHTA members.

Who with?

The Disruptive Technologies Position Statement task group was made up of volunteers from INAHTA's 50 member agencies. These included representatives from HTA agencies in Germany, Taiwan, Italy, Austria, Canada, Argentina, South Africa, Malaysia and the UK. Support was also provided by the INAHTA secretariat.

What did we do?

In 2018 HTW joined a task group to produce a position statement on Disruptive Technologies following the INAHTA Congress 2018 World Café on Disruptive Technologies event. The event was attended by representatives of INAHTA's 50 global member organisations.

Dr Susan Myles, HTW Director and HTW's Information Specialist Jenni Washington, became members of the task group and provided input to the development of the position statement.

Jenni drafted a systematic literature search strategy which was critiqued by the information team at INAHTA's Federal Joint Committee (G-BA) based in Germany. She then ran the search and co-ordinated double screening of the results. The task group undertook screening of both abstracts and full text, as well as data extraction.

Throughout the process Jenni and her German Information Specialist counterpart Lydia Jones were instrumental in driving the project forward and in ensuring that task group members had all the information and tools required to prepare and agree the position statement.

What difference did this make?

Despite delays caused by the COVID-19 pandemic the position statement was finalised through the joint efforts of the task group members.

The resulting position statement was supplemented with preparation of a peer reviewed journal article which will be published in a forthcoming edition of the International Journal of Technology Assessment in Health Care (IJTAHC).



Our future

This year we published our first [Strategic Plan](#), to ensure we continue to support the identification, appraisal and adoption of innovative health and social care technologies that offer most promise to deliver improved health, well-being and value for the people of Wales.

The five-year plan was developed in consultation with our key stakeholders and endorsed by the Welsh Minister for Health and Social Services. It outlines our ambitious goals to drive improvements in population health and social care services, by applying the best available evidence to inform decisions on the appropriate use of health and social care technology innovations in Wales.

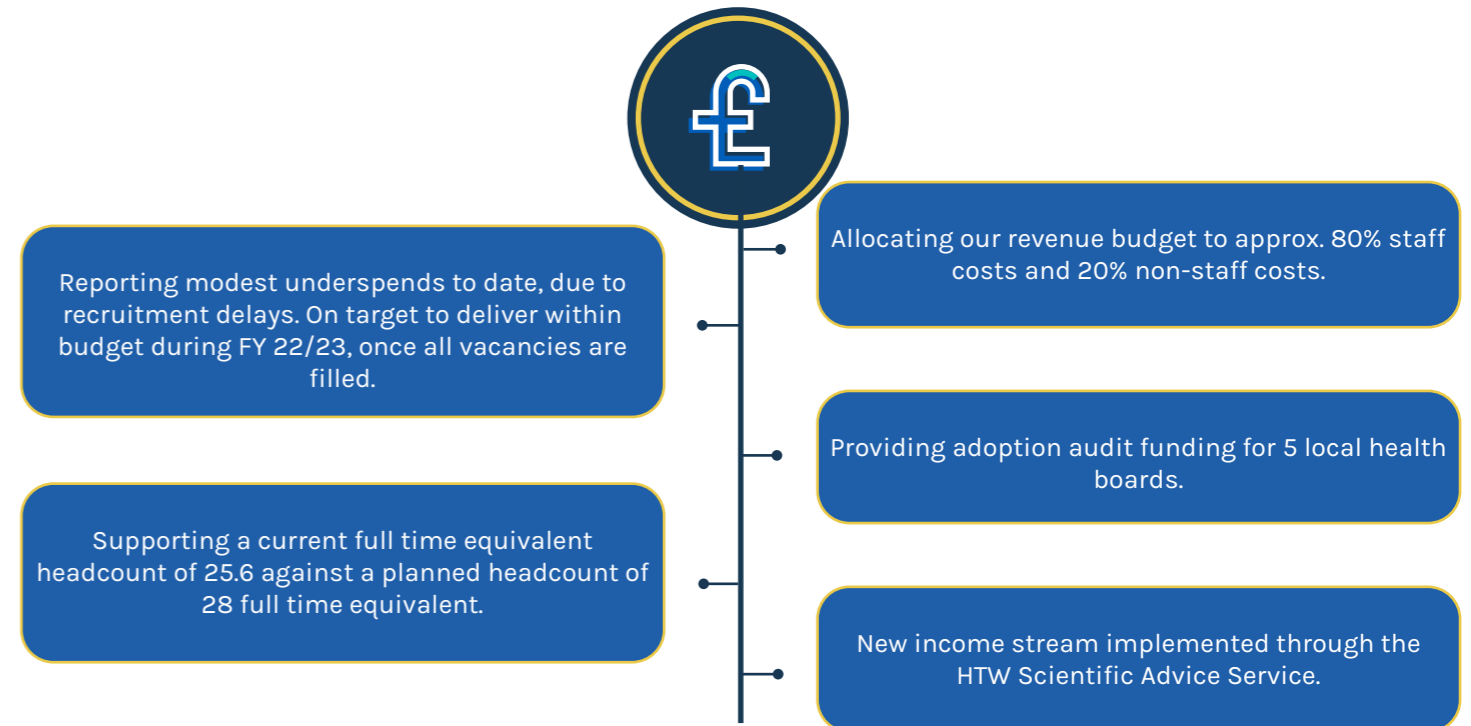
The five priority objectives for 2021 which have guided our work programme, were:

- Expand HTW’s topic identification, prioritisation and selection efforts.
- Significantly increase HTW’s evidence appraisal and guidance output.
- Target social and digital care innovations for appraisal.
- Support time-critical COVID-19 care and policy decision making.
- Pilot and roll-out the HTW technology adoption audit function.

The full plan can be accessed via our [website](#).

Budget delivery

HTW launched its Strategic Plan for 2021 – 2025 which sets out the organisation’s immediate and medium-term strategic goals and objectives. The Welsh Government therefore increased funding from £1 million to £1.5 million for 2021-2022, to fund our core work. HTW received additional income of £145,000 to fund its work as a Collaborating Partner of the Wales COVID-19 Evidence Centre and two years of grant funding to support its work on Advanced Therapy Medicinal Products (ATMPs).



Our team

The work in this Annual Report has been delivered by the Health Technology Wales team. Our team comprises of 25 people including health services researchers, health economists, information specialists, communications specialists, project managers and administrators.

In 2021 the HTW team expanded with the addition of three new Health Services Researchers who joined on a permanent basis and two fixed-term Health Services Researchers appointed to support COVID-19 funded research. An additional Health Economist joined HTW and an Information Specialist was also appointed. Meanwhile five new team members joined the Programme Office department.

This expansion reflects HTW’s ambitious plans to significantly increase its evidence appraisal and guidance output and to increase its engagement activity. In addition, in 2021 there were six internal promotions within the HTW team.

We come from a broad range of backgrounds and skillsets and collectively have extensive experience in both the public and private sectors. The team is supported by the invaluable contributions of our external committee members who continue to ensure our work meets the needs of the health and social care sectors in Wales.

Thank you for reading and learning about our work to support a national approach to the identification, appraisal, and adoption of non-medicine health technologies in Wales.



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Social media
Twitter
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LinkedIn
[‘Health Technology Wales’](https://www.linkedin.com/company/Health%20Technology%20Wales)



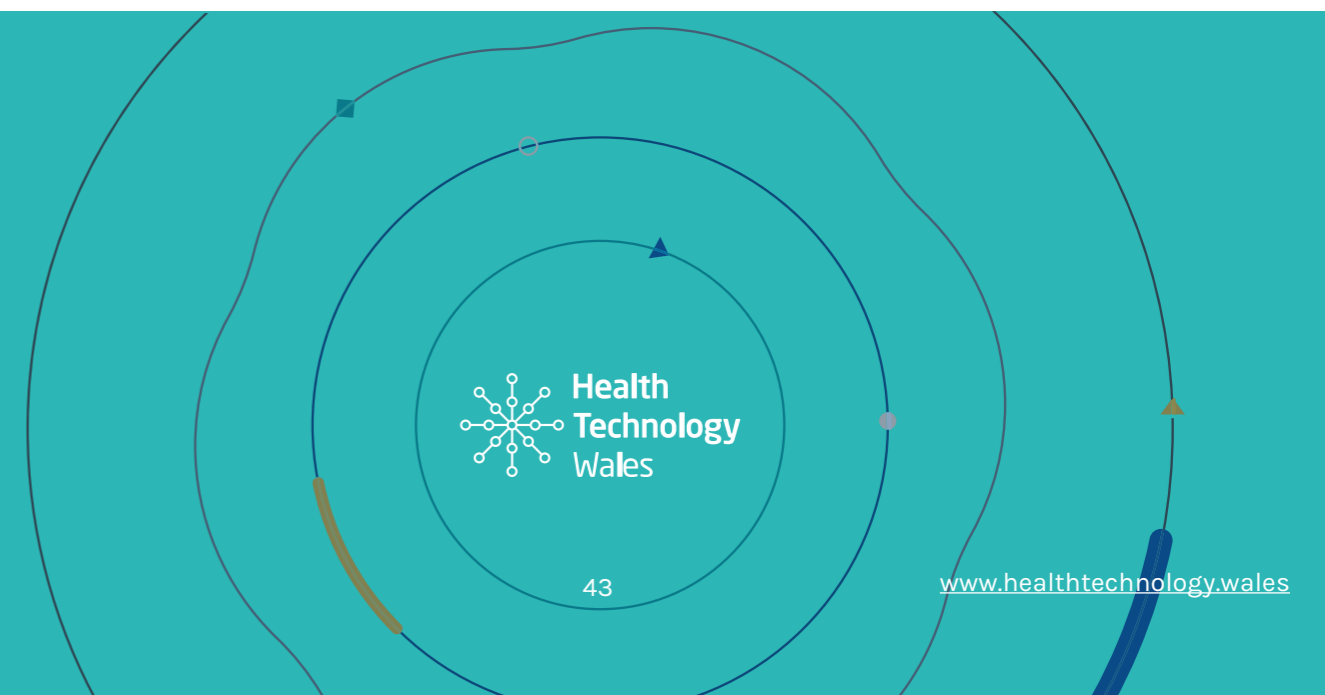
Health technology developers and innovators can optimise their evidence plans and route to market with help from the Health Technology Wales Scientific Advice Service.

Our expert consultancy supports developers and innovators in Wales to generate evidence and demonstrate value that meets the needs of care commissioners, care providers, patients and service users in Wales.

Start your service today:
www.healthtechnology.wales/sas

We want to understand how our work is having an impact on health and social care outcomes that matter to people in Wales, and where we can improve in the future. Anyone is invited to complete this online survey:

www.healthtechnologywales.onlinesurveys.ac.uk/htw-feedback-survey





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