

Research. Evidence. Action.

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Outcomes and impact in 2021



2,397

patients participating in 195 clinical trials at the 3 Health Research Board (HRB) Clinical Research Facilities

€5.7m



invested in six European joint programmes (including €4.4 million in co-funding from European funding agency partners)

1,446

cancer patients participating in 182 active clinical trials at cancer centres across Ireland



258,333

live records on LINK

2,186

active users on LINK online data system



10,603

participants enrolled in studies being run by 24 active Definitive Interventions and Feasibility Awards (DIFA), Ireland's only source of public funding for investigator-led clinical trials



€131.8m

awarded (including €58.2 million in co-funding/ co-investment)

evidence products produced for the Department of Health





€28.2m

leveraged by Irish health researchers from the first round of Horizon Europe calls for 23 health-related projects, with 4 projects being led by Irish researchers



clinical trials underway at the 3 HRB Clinical Research Facilities. 244 of these clinical trials are active trials



awards across 12 host institutions and research-performing organisations

- patents
- spinout and
- licence agreement for HRB-supported innovations



€98.5m

invested in Clinical Research Facilities/ Centres, networks, and infrastructure awards (including €47.1 million in co-investment from Hospital Groups and university partners)



138

research jobs supported through HRB-funded awards

Chair and Chief Executive's Report

€39.1m

to support 125 awards across 17 host institutions and research-performing organisations

2021 was an extraordinary, and extraordinarily productive, year for health and social care research. As Ireland's leading public agency supporting innovative health and social care research, the Health Research Board (HRB) sustained its strong contribution to research that enables policy and practice to improve outcomes for people's health.

Through best use of its resources and experience, it enabled Ireland's research community to drive many aspects of the global fight against COVID-19. Now, public awareness of the importance of research, data, and evidence to inform decisionmaking is greater than ever.

In 2021, we launched the HRB strategy 2021–2025, *Health research – making an impact*. This will advance health and social care research that places people at the heart of everything we do, involving them in all aspects of the research process and ensuring that they benefit from research findings to experience better health and care.

Published online in February 2021, *Health* research – making an impact outlines how, between now and the end of 2025, our pursuit of six clearly defined strategic objectives will shape a future where the HRB's work will deliver measurable societal

value, support economic development in a post-COVID-19 pandemic environment and help to make Ireland's health and social care system the best it can be.

We have made great progress towards achieving these objectives, as evidenced by the many inspirational examples detailed in this report. The following is a brief snapshot:

Health research delivery and impact

We responded to the evolving COVID-19 pandemic by:

- Maintaining support for international trials to evaluate new and better treatments for COVID-19, such as the WHO Solidarity PLUS trial, EU-SolidAct, and REMAP-CAP
- Playing a key role in the establishment of the National Irish COVID-19 Biobank (NICB) to advance high-impact research into COVID-19 and inform future biobanking initiatives in other important health areas
- Providing research and evidence supports for the Rapid Testing Expert Advisory Group (RTEAG), and
- Supporting Ireland's involvement in the European Clinical Research Infrastructure Network (ECRIN) and its COVID-19 Taskforce and ensuring Ireland's participation in an EU COVID-19 vaccines network



Dr Mairéad O'DriscollChief Executive



Prof. Bernadette Hannigan Chairperson

We delivered on key work programmes by:

- Continuing to develop a world-class clinical trials ecosystem for Ireland by awarding €55 million to five Clinical Research Facilities/Centres (CRF/Cs), six cancer clinical trial groups, the National Cancer Clinical Trials Network, six clinical trial networks, the National Clinical Trials Office (NCTO), and the HRB Trials Methodology Research Network (HRB-TMRN)
- Advancing public, patient and carer involvement (PPI) in research through the HRB's €5 million co-funding with the Irish Research Council (IRC) of the national PPI Ignite Network, as well as training public reviewers and involving them in the assessment of HRB funding schemes
- Investing €73.6 million in supporting 114 research awards across 12 host institutions and research-performing organisations
- Publishing for the first time monthly National Psychiatric Inpatient Reporting System (NPIRS) data on the HRB website, thus making it more readily available to service providers, so that they can better plan and deliver care
- Informing policy through evidence in important areas of health and social care. For example, the HRB's overview of alcohol consumption and harm in Ireland, Alcohol consumption, alcoholrelated harm and alcohol policy in

- Ireland, highlighted trends in alcohol consumption that reinforce the importance of the introduction of all aspects of the Public Health (Alcohol) Act 2018. This includes the introduction of minimum unit pricing (MUP) as an important way of reducing problem alcohol consumption and alcohol-related harm.
- Enabling the safe sharing, linkage, and use of data for health research purposes.
 For example, the HRB supported the EU joint action Towards the European Health Data Space (TEHDAS), which aims to facilitate the access to, and secondary use of, data across Europe that is required for digital transformation in health and care.
- Advancing open research and fair data principles through the HRB Open Research publishing platform and the HRB's involvement in the National Open Research Forum (NORF).

Enhancing national, European and international collaborations

 Together with Northern Ireland's Health and Social Care (HSC) R&D Division, we supported funding for Evidence Synthesis Ireland (ESI) to address evidence synthesis capacity building on the island of Ireland, and we contributed to policy and practice development. We also managed 11 Cross-border Healthcare Intervention Trials in Ireland Network (CHITIN) studies and co-chaired the CHITIN Advisory Board.

- In collaboration with the Health Service Executive (HSE), we supported a targeted programme to evaluate the lessons learned on approaches to infodemic management from the iHealthFacts intervention, a website where the public can easily check the reliability of a health claim circulated by social media.
- We supported two co-funded projects in collaboration with the HSE National Quality and Patient Safety Directorate and the Royal College of Physicians of Ireland (RCPI): the first project was on quality improvement in acute hospital settings, and the second was on assessment and management of patients with respiratory diseases.
- We participated in the Population Health Information Research Infrastructure (PHIRI) European Union (EU) initiative to assist capacity building for EU member states, and we also produced content for the European Health Information Portal, capturing country-level information on health information infrastructures.
- Working with the Irish research community, we helped Irish researchers to leverage €28.2 million from the Horizon Europe programme, the EU's research and innovation programme, for

- 23 projects, 4 of which are being led by Irish researchers.
- In partnership with the Irish Research Council (IRC) and the Environmental Protection Agency (EPA), we secured a Marie Skłodowska-Curie COFUND programme grant, called DOROTHY, to advance cross-sectoral and interdisciplinary approaches to research on public health crises.
- In support of the Government of Ireland and Science Foundation Ireland's Creating Our Future initiative, we hosted a virtual event in November 2021 to inspire people across Ireland to think about health and social care opportunities and challenges that research could help with.
- On behalf of the Road Safety Authority (RSA), the National Directorate for Fire and Emergency Management, and the National Office for Suicide Prevention, we collected data to inform policy and practice in these important areas.

Supporting ethical and regulatory standards

We worked with the Department of Health to build the core team necessary for the National Office for Research Ethics Committees to operationally support the newly launched National Research Ethics Committees (NRECs). These NRECS, comprising 54 members, appointed by Minister for Health Stephen Donnelly, considered and reached decisions on clinical trials of medicinal products and clinical investigations of medical devices.

We also continued to support the Secretariat operations underpinning the work of the Health Research Consent Declaration Committee (HRCDC). HRCDC activities during 2021 included:

- Twenty-six consent declarations were made for new and previously submitted applications.
- Eight amendment requests were approved.
- Forty-eight annual reviews were submitted to the HRCDC, highlighting how consent declarations and conditions attached are being implemented.
- Four new members were appointed to the HRCDC, thereby increasing its membership from 14 to 17.

Organisational excellence

Obviously, none of the HRB's impact would be possible without its people, all of whom worked very effectively throughout 2021 despite the continued disruption caused by the COVID-19 pandemic. We are extremely grateful to all our staff for their tireless efforts and ongoing commitment. Special mention must go to our Information and Communications Technology (ICT) and Facilities teams who did trojan work on the complex task of preparing our organisation for blended working. Sincere thanks also to our Board for their invaluable governance and expertise.

Future direction

Beyond 2021, we look forward to new achievements as we continue to implement the HRB's strategy, further advance Ireland's health research capability, and deliver on the HRB's mission of supporting research that improves people's health, promotes evidence-informed care and creates solutions to societal challenges.

Hansel J Drawll

Dr Mairéad O'Driscoll

Chief Executive

BmH-p-

Professor Bernadette Hannigan

Chairperson

Snapshot of HRB activities 2021

Awarding research with impact



Informing housing policy for older people

Housing with support for older people: An evidence review explores the perspectives of older people from around the world on housing support and its impact on their well-being. It supports the development of a policy framework for housing for older people in Ireland. Please see the case study on page 22 for more details.

Providing researchers access to COVID-19 data

In order to inform evidence-based decisionmaking during the COVID-19 pandemic, we established a robust process to make COVID-19 data available for research in partnership with the Department of Health and the Central Statistics Office (CSO). Please see the case study on page 18 for more details.



Exploring drug use among people who are experiencing homelessness

Our evidence review exploring international responses to substance use among people who are experiencing homelessness provides expert guidance to service providers on how best to care for this vulnerable cohort.

Putting people first



2021 saw the launch of our new strategy. Health research making an impact, which places people at the heart of everything we do. It also maps a clear direction for our work over the next five years in accordance with six strategic objectives.

Revealing alcohol consumption in Ireland

Key findings from our 2021 alcohol report. Alcohol consumption, alcohol-related harm and alcohol policy in *Ireland*, include initial insights into drinking patterns during the COVID-19 pandemic and the importance of minimum unit pricing in order to reduce harmful alcohol consumption.



⊦R^B

Reporting on the rise in cocaine and crack cocaine treatment entrants

The 2014 - 2020 Drug Treatment Data report showed an increase in the number of people seeking treatment for problem cocaine use, including crack cocaine use, despite a decrease in the overall number of people entering drug treatment.

Providing expert guidance on EU funding

In 2021, the HRB acted as the National Contact Point for Ireland's research community for information and guidance on the wealth of opportunities available from EU4Health and Horizon Europe, two of the EU's most ambitious funding programmes for research and innovation. Please see the case study on page 44 for more details.

Investing €55 million for world-class clinical trials

This significant HRB funding continues our strategic investment in a national clinical trial ecosystem. The funding supports further development of Clinical Trial Networks, Clinical Research Facilities/Centres (CRF/Cs). and cancer trials, along with the National Clinical Trials Office (NCTO) and the HRB Trials Methodology Research Network (HRB-TMRN). Please see the case study on page 40 for more details.

Creating a national biobank for COVID-19 research

Our €2 million investment in the National Irish COVID-19 Biobank (NICB) will advance high-impact research into COVID-19 and inform future biobanking initiatives in other important health areas.



Profiling one to watch

We awarded Jennifer Pallin, PhD scholar and researcher in the School of Public Health at University College Cork (UCC), the 2021 HRB Ones2Watch trophy for her effective communication about her work in diabetic foot screening.

Supporting public, patient, and carer involvement in research

In collaboration with the Irish Research Council, we invested €5 million in the PPI Ignite Network, a new allisland network of public, patient, and carer involvement (PPI) in research centres across Ireland. This funding continues our leadership in the area of PPI. Please see the case study on page 16 for more details.

Produced Vaccine Questions, a podcast about COVID-19 vaccines, with the **Royal Irish Academy**

Welcomed amendments to the Health Research Regulations

Recorded our best cybersecurity scores during penetration tests that simulated a cyberattack

Reported 2020 trends in psychiatric inpatient treatment

Published a new report on the outputs, outcomes, and emerging impacts of HRBfunded awards

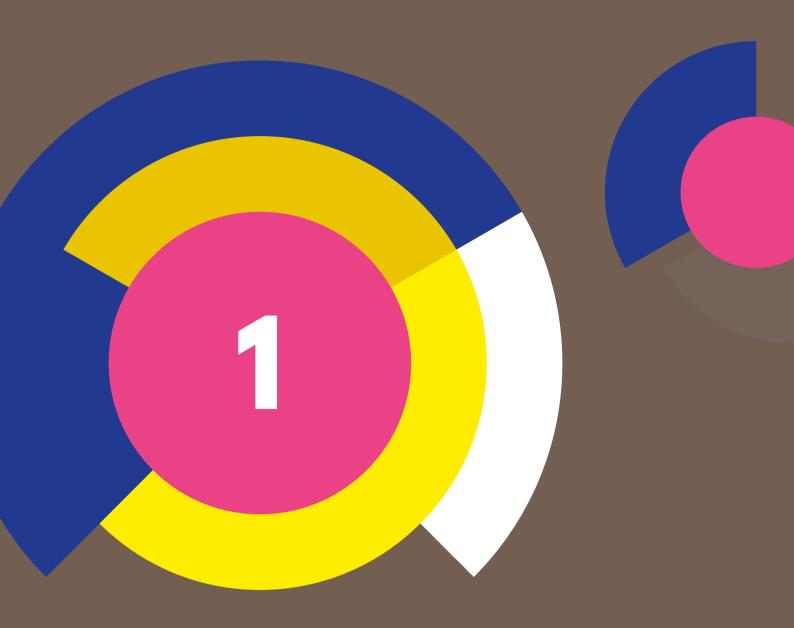
Announced appointment of Ireland's first National **Research Ethics Committees**

Supported a new European Union initiative on research exploring solutions to public health crises

Published a paper examining e-cigarettes as a smoking cessation intervention

Invested €4.5 million in training in order to ensure that research findings translate into better health outcomes

Published the latest edition of our annual Health Research in Action report.



Key deliverables in line with HRB strategy 2021-2025

The Health Research Board (HRB) is Ireland's lead public funding agency supporting innovative health and social care research. As outlined in our new strategy for 2021-2025. Health research - making an impact, our vision is for better health through excellent research, data, and evidence, and our mission is to support research that improves people's health, promotes evidenceinformed care, and creates solutions to societal challenges.

Health research - making an impact also details our commitment to placing people at the heart of everything we do, as led by our values as an organisation: leadership, independence, accountability, quality, responsiveness, collaboration, and inclusiveness.

In order to achieve this over the next five years, our new strategy describes six strategic objectives that will guide our activities. This annual report highlights key achievements during 2021 in line with these objectives, and showcases examples of significant outcomes and successes.



Strategic objective 1

Research that makes a difference

Research enables advances in health and social care that make a real difference to people's lives. The HRB is committed to investing in research that delivers value for health, the health system, society, and the economy.

We do this through a strategic, well-balanced funding portfolio that responds to realworld needs; by collaborating with partners to address challenges and drive innovation in our health system; and by supporting meaningful involvement of patients, carers, and the public in research. This ensures that HRB-funded research is applied in practice and contributes to better health outcomes for Ireland and its people.

Key items delivered in 2021

- We made six awards under strategic objective 1. Of these, three were cofunded with other Irish and international agencies, leveraging €1.2 million of the total €3.7 million awarded in this area. Details of the six awards are as follows:
 - Provided funding of €250,000 to Dementia Research Network Ireland to support its independent multidisciplinary network of dementia-related researchers. practitioners, patients and families, policy-makers, and other stakeholders
 - Awarded €1.6 million in funding to support a further wave of data collection over two years by the Intellectual Disability Supplement to the Irish Longitudinal Study on Ageing (IDS-TILDA) and provided supplemental funding to conduct a follow-on survey of the impact of COVID-19 on people with intellectual disabilities
 - Funded a genomics award worth €1.2 million (the HRB contributed €300,000 under the Science Foundation Ireland (SFI)-HRB-Wellcome Research Partnership)

€3.7 million

awarded in this area to 6 awardees, 3 of these were co-funded with other Irish and international agencies, leveraging €1.2 million

- Invested in two awards worth more than €500,000, funded jointly with the Health Service Executive (HSE) and the Royal College of Surgeons in Ireland (RCSI) through the Research Collaborative in Quality and Patient Safety (RCQPS) scheme
- We launched calls for a new round of Investigator Led Projects (ILP 2022), the flagship scheme for supporting investigator-led ideas for research projects in population health, patientfocused research, and health services research.
- We launched a new round of the Health Research Charities Ireland (HRCI)-HRB Joint Funding Scheme, which supports high-quality research projects aligned with the priority evidence needs of research charities in Ireland.
- We assessed the progress of 24 active investigator-led Definitive Interventions and Feasibility Awards (DIFA) trials and feasibility studies in terms of COVID-19 implications and delays.
- We published a report on the outputs, outcomes, and impacts of HRB-funded awards that finished in 2018 and 2019.
- We advanced public, patient, and carer involvement (PPI) in research by co-

- funding the PPI Ignite Network with the Irish Research Council (IRC); training 147 public reviewers; and engaging 168 public reviewers in the assessment of schemes across our Research Strategy and Funding (RSF) Directorate.
- We published a paper in HRB Open Research of a self-assessment of the HRB against recommendations to reduce research waste, and developed a self-audit tool aimed at funders in collaboration with other members of the Ensuring Value in Research Funders' Forum.
- We participated in the interdepartmental group coordinated by the Department of Further and Higher Education, Research, Innovation and Science to develop, implement, and monitor the next national strategy for science, technology, and innovation.
- We engaged intensively with all HRB grant holders and host institutions in order to provide flexibility and support for nocost extensions and budget reallocations where projects were impacted by COVID-19 restrictions.

Case Study 1

HRB champions public, patient, and carer involvement (PPI) in research

Thanks to HRB support, the new national PPI Ignite Network is driving a transformation of research culture to involve PPI in all stages of health and social care research.

PPI means that the public, patients, and carers are involved in planning and doing research from start to finish, as well as in communicating research results. PPI improves research quality and ensures that it is relevant, useable, and in the best interests of patients and the general population.

The national PPI Ignite Network builds on the previous PPI Ignite Awards to 5 universities, and includes 7 higher education institutions, 10 national partners, and more than 50 local partner organisations. The goal of this funding is to change Irish research culture by supporting researchers to involve people in every stage of their research, from conceptualisation through to the dissemination of the findings.

The new PPI Ignite Network will:

- Develop and deliver PPI education and training to undergraduate and postgraduate students, researchers, the public, patients, community organisations, policy-makers, and research funders
- Explore ways of making it easier to involve patients, the public, and carers in research; how to identify what is good PPI; and how to measure the impact of PPI
- Ensure that the voices of marginalised and disadvantaged groups are heard, and
- Build a shared voice for PPI in research in Ireland.

The National University of Ireland (NUI), Galway is hosting the PPI Ignite Network Programme Office, with other lead sites including the University of Limerick, Trinity College Dublin, University College Dublin, Dublin City University, University College Cork, and the RCSI.

This second phase of funding for PPI will also be led by the HRB and delivered in collaboration with the IRC and the PPI Ignite Network's lead sites. The HRB provides €2.3 million in funding, while an



additional €1.0 million and €1.7 million comes from the IRC and lead sites. respectively, leading to a total budget of €5.0 million over five years.

Commenting on the PPI Ignite Network, HRB Chief Executive Dr Mairéad O'Driscoll said, "People's insights and life experience can inform research in ways researchers operating in isolation can't. The PPI Ignite Network is the next step in the HRB's national leadership of involving people in research. We need PPI at every stage of Irish health and social care research, right from the start, before pen is put to paper for a research proposal."

Wendy Costello is a patient advocate and PPI contributor who works with research groups in NUI Galway, University College Dublin, and the National Children's Research Centre. She says, "As a patient advocate, I'm so excited to see the development of the PPI Ignite Network. This joined-up thinking will see a collaboration of the best minds in Ireland coming together to change the landscape of PPI here and make it the envy of Europe. I can't contain my excitement and want to roll my sleeves up and get stuck in!"

People's insights and life experience can inform research in ways researchers operating in isolation can't. The PPI Ignite Network is the next step in the HRB's national leadership of involving people in research.

This investment complements the explicit funding for PPI activities across all HRB funding schemes and the integration of public reviews into HRB selection processes.

Case Study 2 -

HRB enables new COVID-19 research through secure access to health data

This data-driven research remains crucial during the COVID-19 pandemic because it identifies areas for targeted intervention and informs and shapes public health and policy responses.

In order to support research for evidence-based decision-making during this national emergency, the HRB, in partnership with the Department of Health (DOH) and the Central Statistics Office (CSO), established the COVID-19 Data Research Hub by written permission of Minister for Health, Stephen Donnelly.

The COVID-19 Data Research Hub's key objective is to make certain COVID-19 datasets available to eligible researchers through appropriate safeguards via the CSO. These datasets have been collected by the HSE since April 2020, and include individual-level data on people diagnosed with COVID-19, those referred for testing, those treated in hospital, and those identified as a close contact of a confirmed case.

Central to this process and its safeguards is the Research Data Governance Board (RDGB), an independent body that acts as a central point for the receipt. screening, review, and prioritisation of data request applications prior to accessing the CSO service, which then facilitates secure access to the data if all criteria are met.

The RDGB Secretariat is provided by the HRB and supports the RDGB in all aspects of its work. Since this mechanism launched in March 2021, it has approved seven applications from researchers for access to data for COVID-19-specific research projects, including:

- An examination of the relationship between the COVID-19 pandemic, unemployment, and social disadvantage in Ireland
- General practices' contribution to COVID-19 testing and vaccination in Ireland
- An analysis of COVID-19 clusters and superspreading events in workplaces in Ireland, and
- A comparative study of COVID-19 in North Dublin.

According to RDGB Chair, Professor Patricia Kearney:

The COVID-19 Data Research Hub is an exciting development with far-reaching implications for how we use health and social care data in Ireland, Currently, the [information technology (IT)] infrastructure for this is fragmented. While data is available from a wide variety of sources, there is limited ability to link it. The experience and learnings from the Hub are contributing to ideas on how we can overcome this problem.

The first researcher to access the COVID-19 Data Research Hub was Dr. Anne Devlin of the Economic and Social Research Institute (ESRI), who said:

The valuable research we are performing on the disproportionate impact of COVID-19 in disadvantaged areas across Ireland from health and economic perspectives is only possible due to the data available from the COVID-19 Data Research

Hub. Given the nature of the data. access involves several steps, but this reflects the due care being taken to ensure the process is secure and transparent and supports research in the public interest.

The RDGB continues to review applications for access to the COVID-19 Data Research Hub. More information. including establishment, governance, and Board members, is available on the RDGB section of the HRB website.

The COVID-19 Data Research Hub is an exciting development with farreaching implications for how we use health and social care data in Ireland.

Strategic objective 2 An independent voice

We aim to be an independent, credible voice for research and evidence, and a trusted thought leader. The HRB Evidence Centre continues to support the generation of independent, credible evidence to inform the decisions of policy-makers, practitioners, and the public.

We also seek to enhance coordination between those involved in evidence synthesis nationally and internationally, and strive to earn and maintain people's trust in the evidence produced, while facilitating dialogue on emerging health research topics.

Key items delivered in 2021

- Under strategic objective 2, we made three awards, two of which were cofunded with other Irish and international partners, leveraging almost €1.0 million of the total €3.6 million awarded in this area. The details of these awards are as follows:
 - We made an award worth €3.3 million. co-funded with the Northern Ireland Health and Social Care (HSC) Public Health Agency, Research and Development (R&D) Division to support a further four years of activity by Evidence Synthesis Ireland (ESI) in capacity building and evidence review on the island of Ireland, and with particular reference to lessons learned about the national and global evidence ecosystems during the COVID-19 pandemic.
 - In response to the COVID-19 pandemic, and in collaboration with the HSE, we made a targeted award for a research project to evaluate the lessons learned on approaches to infodemic management from the iHealthFacts intervention, a website on which members of the public can seek credible information on all aspects of COVID-19.

€3.6 million

awarded in this area to 3 awardees, 2 of these were co-funded with other Irish and international partners, leveraging almost €1.0 million

- We made an award of €276,000 to deliver a bundle of research and evidence supports to inform the work of the Expert Advisory Group on Rapid Testing.
- We launched a new round of the Conference and Event Sponsorship Scheme in order to enable knowledge sharing and networking among HRBsupported researchers.
- In collaboration with the Northern Ireland HSC Public Health Agency, R&D Division, we supported free access to the Cochrane Library for all citizens on the island of Ireland.
- The HRB Evidence Centre produced 11 evidence products: 5 evidence reviews and 6 evidence briefs.
- We published the report Housing with support for older people: An evidence review.
- We completed a presentation on the process of identifying and collating research gaps during analysis and discussion of a nearly completed research project. This entailed a preliminary scoping review to ascertain methods of identifying and presenting research gaps that are reported in the discussion section of primary studies and systematic reviews. The purpose of

- this is to use a systematic process for identifying new areas of research for HRB research funding.
- We hosted the 2021 International Realist Conference, titled Fostering Innovation in Practice, on 16–18 February. The conference was attended by 240 registered delegates from around the world.
- We published three peer-reviewed journal articles based on HRB Evidence Centre work in 2021.



HRB evidence review informs housing policy for older people

Housing with support for older people: An evidence review explores the perspectives of older people from around the world on the provision of housing with support and examines its impact on their well-being.

The review supports the development of a policy framework for housing for older people in Ireland, which is being jointly produced by the DOH and the Department of Housing, Local Government and Heritage.

Housing with support refers to noninstitutional accommodation where older people have their own front door and access to support or care services, with the aim of providing independent, accessible housing that can improve quality of life. Its implementation has been rapidly expanding in recent years, and this trend is likely to intensify in the context of COVID-19, which made clear the risks of relying primarily on nursing homes to provide care and support to older people.

Key findings from the international evidence review include the following:

- Individual choice and autonomy are important for successfully transitioning to housing with support.
- The change is easier when the housing location allows older people to maintain existing social networks.
- Although personal care and support services are a key aspect of housing with support, opportunities to socialise are also essential for wellbeing.
- Housing with support has strong potential to maintain quality of life for older people.

The report findings are brought together in an aspirational model of housing with support that will inform future policy, with the aim of improving quality of life for older people. The model categorises the components of housing with support that are identified in the qualitative

The report findings are brought together in an aspirational model of housing with support that will inform future policy, with the aim of improving quality of life for older people.

and quantitative literature under five overarching inputs:

- 1. Building accessible homes and communities
- 2. Integrating health and social care services
- 3. Enabling staff to provide well-being and care
- 4. Increasing awareness of housing with support, and
- 5. Learning from experience.

Describing the model and how it can be used, a co-author of the review and Head of Unit at the HRB Evidence Centre, Dr Jean Long, said:

Our understanding of the literature led us to identify these five inputs as integral to the process of implementing housing with support. Within them, we present potential pathways to physical well-being for older people, pathways to mental health and social well-being for older people, and strategies for monitoring and evaluation of housing with support.

These potential pathways and strategies are grounded in our findings regarding older people's preferences for housing with support from the qualitative review and those regarding the impact of housing with support from the quantitative review. We translated these into actionable activities or inputs for policymakers to improve the quality of life of older people living in housing with support.

The model of housing with support is contained within the full evidence review, which is available for download on the HRB website.

Case Study 4

Providing trusted evidence to counter vaccine misinformation

Produced in association with the Royal Irish Academy (RIA), our Vaccine Questions podcast series provided credible information on all aspects of COVID-19 vaccines and Ireland's vaccination programme.

The roll-out of the COVID-19 vaccines in early 2021 was a triumph of science and research. Yet, even before the first jab was administered, misinformation and disinformation around the vaccines began spreading like wildfire online, threatening to undermine public trust at a time when it was crucial in order to protect public health.

Committed to being an independent, credible voice for research and evidence, the HRB decided to proactively combat this misinformation by collaborating with the Royal Irish Academy's (RIA's) Life and Medical Sciences Committee to produce Vaccine Questions, an eight-part podcast series addressing all aspects of the COVID-19 vaccines and vaccination programme.

Hosted by science journalist Dick Ahlstrom, the series put the public's most pressing questions on vaccines to some of Ireland's leading specialists in health research and beyond. "This was a really exciting project to work on as each episode responded in real time to people's questions as new information and announcements came out," comments Ahlstrom. "The guests were all leaders in their field who could give the most up-to-the-minute information about progress on vaccinations and a well-rounded analysis of the issues."

Professor Luke O'Neill from the School of Biochemistry and Immunology at Trinity College Dublin was first in the hot seat, discussing the vaccine's effectiveness - "absolutely gobsmacking" - and the stringent scientific and regulatory processes involved in vaccine approval. Listeners learned about the number crunching behind the National Public Health Emergency Team for COVID-19's (NPHET's) recommendations with Professor Philip Nolan; got answers to their practical questions on the when,

where, and how of getting the jab with Dr Lucy Jessop, Director of Public Health at the National Immunisation Office: and found out how human behaviour influenced our response to the pandemic and vaccination with Professor Pete Lunn, Head of the ESRI's Behavioural Research Unit.

Other guests included Head of the European Medicines Agency (EMA) Emer Cooke, who explained the vaccine authorisation process in the EU; Professor Jane Suiter, Director of the Institute for Future Media, Democracy and Society at Dublin City University (DCU), who discussed the spread of disinformation and how to combat it: Dr Siobhán O'Sullivan, Chief Bioethics Officer at the DOH, who highlighted the role of bioethics in guiding vaccine policy; and Christine Loscher, Professor of Immunology at DCU, who shared her views on the value and urgency of science demonstrated by the pandemic.

Members of the public were invited to send in their most burning questions ahead of each episode, enabling a dialogue between listeners and each week's guest. The aim was to create a space where people could raise legitimate concerns without judgement, while always foregrounding the importance of facts, evidence, and the outputs of scientific research.

"The HRB firmly believes that individuals need evidence they can trust so they can manage their health in an informed, autonomous way," comments HRB Chief Executive Dr Mairéad O'Driscoll. "By providing people with reliable information when they need it most, resources like the Vaccine Questions podcast can help them navigate complex issues and make the best decisions for their well-being."

Strategic objective 3 Trusted data

Access to health and social care data. especially when linked with research and statistical data, has the potential to transform healthcare delivery and how we manage our own health. The HRB is already playing a leading role in enabling this.

We are committed to promoting and enabling the use of data to shape health policy, enhance healthcare delivery, and drive broader research and innovation initiatives. Moreover, we will work to increase public understanding of the importance of facilitating secure access to health and social care data for research, policy, and planning. We will also support the adoption of best practice in data management, governance, and reuse by data producers and researchers.

Key items delivered in 2021

- Under strategic objective 3, we made 10 awards worth €2.5 million for Secondary Data Analysis Projects to bring together researchers, knowledge users, and data controllers in order to answer policyand/or practice-related questions through the use of secondary data.
- Nationally and at a European level, we collated learnings on the challenges and opportunities for data sharing and linkage. We also shared insights with key stakeholders to inform future legislative and other actions in order to support the optimal use of health data for research and innovation. Activities included:
 - Progressing work to advance a series of case studies as part of the DASSL (Data Access, Storage, Sharing and Linkage) proof-of-concept award with the Irish Centre for High-End Computing
 - Launching a new, secure process for researchers to access COVID-19 datasets in the CSO COVID-19 Data Research Hub, which included the establishment of the RDGB to review applications with the CSO

10 awards worth

€2.5 million

for Secondary Data Analysis Projects to bring together researchers, knowledge users, and data controllers

- Participating alongside the DOH in the Joint Action Towards the European Health Data Space (TEHDAS), which focused on developing data governance and quality frameworks aligned with the General Data Protection Regulation (GDPR), in order to enable access to and secondary use of data across Europe required for digital transformation in health and care and related research and innovation
- Participating along with the DOH and the HSE (Public Health) in the Population Health Information Research Infrastructure (PHIRI) EU initiative to develop a sustainable infrastructure in order to share information across borders, identify gaps, and support rapid policy development, and
- Continuing to lead and enable open science in Ireland through the HRB Open Research publishing platform, co-chairing the National Open Research Forum, and collaborating to implement FAIR (Findable, Accessible, Interoperable and Reusable) data sharing practices.



quarterly performance indicator reports

- We hosted and supported the Secretariat to the Health Research **Consent Declaration Committee** (HRCDC). Activities included:
 - Supporting the operations of the HRCDC to achieve its business mandate to deliver consensus-based decisions and to safeguard personal data for health research in the public interest
 - Monitoring the portfolio of consent declarations through the annual review submission process
 - Working with national organisations to contribute the perspectives and learnings of the HRCDC and to help influence and shape important and progressive national research initiatives, and
 - Delivering guidance to the research community on the consent declaration process, including on the amendments made to the Health Research Regulations in collaboration with the DOH and the Data Protection Commission.

- We published four HRB National Health Information Systems (NHIS) national reports and bulletins.
- We generated 4 infographics and produced 45 quarterly performance indicator reports to provide clear and concise information in order to help policy-makers and service planners make informed decisions about service planning in the area of drugs, alcohol, and disability.
- We completed and submitted six peerreviewed journal articles based on NHIS data. Four of these articles were published in 2021.
- We responded to 78 requests for data from our information systems.
- We collected data on behalf of the Road Safety Authority (RSA), the National Directorate for Fire and Emergency Management, and the National Office for Suicide Prevention.
- We convened a cross-organisational working group on health data which met six times in 2021.



Case Study 5

Supporting targeted approaches to drug and alcohol misuse

The 2019-20 National Drug and Alcohol Survey was the fifth such study undertaken in Ireland, and the first to be managed by the HRB.

In June 2021, we presented the findings of the 2019-20 National Drug and Alcohol Survey (NDAS). This was a general population survey, a key tool used by EU member states to develop knowledge around the prevalence and patterns of drug use.

The survey interviewed 5,762 people in Ireland aged 15 years and over in order to examine what drugs they were using and how often; perceptions and attitudes towards drugs; and the impact of drugs on local communities.

Commenting on the report, Dr Deirdre Mongan, Research Officer at the HRB and lead author, said, "By monitoring trends over time, the HRB can provide solid evidence in relation to changing drug and alcohol use patterns. This supports the development of targeted approaches to create awareness about the prevailing challenges of drug and alcohol use, to help reduce harm or to inform policy change in relation to them."

Illegal drug use

Almost one-quarter (23%) of respondents had used an illegal drug at some point in their lifetime, equating to almost 900,000 adults aged 15 years and over in the general population, and 7% reported use of an illegal drug in the last year.

Results also show that illegal drug use in Ireland has plateaued since 2014-15, with a small decrease reported in cannabis use. However, there has been a significant rise in the use of stimulants (e.g. cocaine, ecstasy, amphetamines) and in the use of lysergic acid diethylamide (LSD) and poppers, and in the number of respondents reporting the use of at least three different drugs in the last year.

> By monitoring trends over time, the HRB can provide solid evidence in relation to changing drug and alcohol use patterns.

Drug use impacts disproportionately on more deprived communities

Speaking about the social impact of drug use, Dr Mongan said:

While there are almost equal numbers of people reporting drug use in less deprived areas as there are in deprived communities, the survey data reinforce the well-documented connection between the negative consequences of drug use and social disadvantage. It also quantifies the very real human toll of drug-related intimidation for those living in these [disadvantaged] communities.

Alcohol use in Ireland

Rates of hazardous and harmful drinking remain high. About 40% of drinkers engage in heavy monthly episodic drinking (binge drinking), and one-fifth of drinkers meet the criteria for alcohol use disorder. Hazardous and harmful drinking patterns are most common among 15–24-year-olds, with 56% engaging in monthly binge drinking and 38% meeting the criteria for alcohol use disorder.

Positive trends

There has been an increase in the age of first use of most illegal drugs since 2002–03, with the median age at which people first use cannabis increasing from 18 years in 2002–03 to 19 years in 2019–20, and the median age at which they first use cocaine increasing from 20 years to 21 years over the same period.

Rise in young abstainers

The number of people abstaining from alcohol has risen since 2002–03, with notable increases among 15–24-year-olds (from 18% in 2002–03 to 28% in 2019–20) and 25–34-year-olds (from 9% to 19% over the same period). The age at which young people have their first drink has also risen from 16 years in 2002–03 to 17 years in 2019–20.



Case Study 6-

HRB improves access to psychiatric data for policy and planning

In 2021, the HRB's National Psychiatric Inpatient Reporting System (NPIRS) began publishing data online every month.

The NPIRS is one of the HRB's four National Health Information Systems. It records data on inpatient admissions and discharges from psychiatric hospitals and units throughout Ireland, which have been collected annually since 1965.

NPIRS reports are prepared quarterly for the HSE and the DOH as part of the performance indicator (PI) reports, and annually in the form of the Annual Report on the Activities of Irish Psychiatric Units and Hospitals. To date, only the NPIRS annual reports have been published on our website and in hard copy format.

During the COVID-19 pandemic, the DOH asked the NPIRS team to report more timely data on psychiatric inpatients. This was in order to address the need for data on mental health services and their provision during the pandemic and to examine the possible impact on mental health. In response, the NPIRS team examined the possibility of producing a breakdown of monthly data at the end of each quarter. Following discussions with the HSE and the DOH, it was decided to produce a breakdown of key monthly

data items at the end of each quarter, and in January 2021, the NPIRS team began uploading these monthly data to the HRB website.

Data are included on:

- All admissions and discharges
- Whether admissions are first admissions
- · Admissions of those aged 18 years and under to adult units
- Admissions of those aged 65 years and over, and
- A breakdown of admissions with diagnoses such as alcohol use disorder, schizophrenia, depressive disorders, eating disorders, and dementia.

Currently, the data cover acute psychiatric units only, as these are returned quarterly to the HSE as PI data. Data for some facilities (such as longstay units for older people or private hospitals) are published annually, but it is hoped that in time they will be included in the monthly data provided on the HRB website.

According to Dr Sarah Craig, Head of NHIS at the HRB:

For the first time, the HRB has begun recording and publishing monthly NPIRS data on its website. This is important for timeliness and making the data available to a wider audience. The data include items not normally reported monthly and provide useful information to service providers on inpatient mental health services. For example, they can point to areas of need and thus allow better planning and delivery of care.

During 2021, our monitoring of HRB website analytics showed that significant numbers of website users are accessing the quarterly data. We are encouraged to see that monthly breakdowns are useful and we will continue adding these data as they become available.

For the first time, the HRB has begun recording and publishing monthly NPIRS data on its website. This is important for timeliness and making the data available to a wider audience. The data include items not normally reported monthly and provide useful information to service providers on inpatient mental health services.

Strategic objective 4

Thriving research environment

Health research that delivers value needs an enabling environment to thrive - from skilled researchers and access to infrastructure, to policies that support and enhance good research practice.

The HRB plays a lead role in building a strong, supportive environment for health research in Ireland, fostering connections between the academic and healthcare systems in the process. In partnership with a wide range of stakeholders, we work to ensure that funding for researchers and infrastructure is delivered effectively; that the highest standards of governance, quality, and ethics are met; and that innovative practices are developed and adopted in Ireland.

Key items delivered in 2021

- We made 90 awards worth €119.3 million under strategic objective 4, of which 12 were co-funded with other Irish and international partners, leveraging €51.7 million of the total funding in this area. The details of these awards are as follows:
 - Awarded 56 Summer Student **Scholarships**
 - Made three Collaborative Doctoral Awards in Patient-focused Research. valued at €4.7 million
 - In collaboration with the IRC and the EPA, secured a Marie Skłodowska-Curie COFUND programme grant, called DOROTHY, to advance cross-sectoral and interdisciplinary approaches to research on public health crises
 - Made nine awards for cancer trials in Ireland (worth a total of €35.7 million, of which €14.2 million was co-invested by Hospital Groups and university partners) in order to support appropriate infrastructure, enabling Irish patients to access a diverse portfolio of high-quality, safe, and compliant cancer clinical trials
 - Made five awards to expand support for Clinical Research Facilities/

Centres (CRF/Cs) on the campuses of Irish hospitals, worth a total of €55.2 million, of which €33.0 million was matched funding from Hospital Groups, academic partners, and the HSE; these facilities provide the infrastructure to conduct high-quality clinical trials of therapies and medical devices across a range of disease areas

- Invested €1.7 million in a National Clinical Trials Office (NCTO) in order to ensure a strategic and harmonised approach to conducting multicentre trials
- Supported the third phase of funding of €3.1 million for the HRB Trials Methodology Research Network (HRB-TMRN)
- Invested €6 million in six Clinical Trial Networks (CTNs) to join healthcare professionals, researchers, patient groups, and others in advancing trials in target areas
- With dedicated support from the DOH in response to the COVID-19 crisis, made the first public investment in biobanking in Ireland via the National Irish COVID-19 Biobank (NICB)
- Through the Fulbright-HRB Health Impact Awards, provided an opportunity for three Irish health researchers to develop collaborations

- with colleagues in the United States of America, and
- Awarded Professor Gerry McElvaney the HRB Impact Award 2021 for his exemplary integration of research findings into policy and practice.
- With the assistance of an independent strategic advisory group, the HRB developed a trial performance metrics framework to support the monitoring and evaluation of our investment in trial infrastructures and networks.





- Through our participation in the International Consortium for Personalised Medicine, the 1+ Million Genomes Initiative (1+MG), and the Beyond 1 Million Genomes (B1MG) project, we convened a meeting of key stakeholders to consider opportunities for Ireland in genomics and personalised medicine research.
- We engaged with government departments in order to provide inputs to, and seek clarifications on, proposed legislation relevant to health research (including the Human Tissue Bill, Assisted Human Reproduction Bill, EU Clinical Trial Regulation, EU Medical Devices Regulation, the National Research Ethics Committee (NREC) Bill, and the Assisted Decision-Making Act (Amendment Bill)).
- We participated in several national and international working groups to guide the development and adoption of next and best practice policy and strategy in Irish and international health research.
- We partnered with the DOH to implement a road map for the transformation of the local system of recognised research ethics committees to a robust NREC system.

- We made a recommendation to the Minister for Health regarding appointments to Ireland's first NRECs for clinical trials of medicinal products and clinical investigations of medical devices, which led to the appointment of 54 members.
- We operationalised the standing subcommittee of the NREC for COVID-19-related health research (NREC COVID-19).
- We progressed work aligned with global and national developments to reform research assessment and culture and to enhance the value of research. This included collaborations with the Ensuring Value in Research Funders' Forum, the Joint Funders Group for the Resume for Researchers (R4R)/narrative-based CV, and the Science Europe working groups on research assessment, research culture, and monitoring cross-border collaboration.

Case Study 7 —

HRB invests €4.5 million in training in order to ensure that research findings translate into better health outcomes

Three new HRB Collaborative Doctoral Awards in Patient-focused Research will directly benefit people living with motor neurone disease (MND) and psychotic disorders, and those at risk of suicide and self-harm.

Under the 2021 Collaborative Doctoral Awards in Patientfocused Research scheme, 3 expert teams each received €1.5 million to provide structured training for 18 PhD candidates. The funding will also support each team to advance research in their area and translate the findings into practice.

This funding will equip a new generation of health and social care researchers to ensure that research done in academic and clinical settings is translated into better care for individuals. This will improve the lives of people affected by these difficult diagnoses, and the lives of their loved ones.

The three Collaborative Doctoral Awards in Patient-focused Research went to:

- MIRANDA: Multidisciplinary 1. Innovation and Research Advancing Neurological care in a Digital Age, hosted at Trinity College Dublin (TCD)
- 2. PSI-STAR: PSychosis Ireland Structured Training and Research programme, hosted at the RCSI
- 3. MHAINTAIN: Early Identification of Suicide and Self-Harm Risk and Comorbid Mental and Physical Disorders: An INterdisciplinary TrAining, Research and InterventioN Programme, hosted at University College Cork (UCC)

Case Study 7 (continued) -

The following is some additional information about each of these awards:

MIRANDA

Amyotrophic lateral sclerosis (ALS) or MND is a degenerative disease of the nervous system which affects 1 in 300 people in Ireland. Those affected lose their ability to use their arms, legs, and voice, and eventually their ability to breathe.

According to Lead Applicant Dr Miriam Galvin:

MIRANDA links clinical research and practice through novel and emerging telehealth solutions in patient-focused research, provided by TCD, and in collaboration with the HSE.

PhD researchers will develop smart technologies to enhance knowledge, minimise burden for healthcare professionals, patients and families, and expand the benefits of cutting-edge multidisciplinary care.

PSI-STAR

Psychotic disorders such as schizophrenia and bipolar disorder affect about 3 in 100 people. They usually start in adolescence or young adulthood and can have a devastating impact on a young person's education, family, social relationships, and career.

According to Lead Applicant Professor David Cotter:

PSI-STAR will develop an all-Ireland integrated network of clinicians and researchers from the disciplines of psychiatry, nursing, social work, sociology and psychology, as well as policymakers, who will foster and implement research findings into psychosis care in Ireland.

Importantly, PSI-STAR has very extensive public, patient and carer involvement (PPI), including an academic with lived experience of psychosis.

MHAINTAIN

This will address the need for doctoral training in order to improve early identification of, and intervention in, suicide and self-harm risk. It involves an interdisciplinary team of researchers, health professionals, and people with lived experience of illness in this area.

According to Lead Applicant Professor Ella Arensman:

By integrating expertise from all relevant disciplines and involving a wide range of stakeholders, including representatives from patient advocacy, this innovative training programme will improve knowledge and expertise.

In addition, the highly experienced partners will bring added value to the training and research programme by facilitating interdisciplinary research and training placements for the PhD scholars.

This funding will equip a new generation of health and social care researchers to ensure that research done in academic and clinical settings is translated into better care for individuals. This will improve the lives of people affected by these difficult diagnoses, and the lives of their loved ones.

HRB invests €55 million for a worldclass national clinical trials ecosystem

The investment continues the HRB's lead in developing patient-focused clinical trials infrastructure in Ireland.

2021 was a significant year for HRB funding in this important area, with our €55 million investment further enhancing Ireland's position as an attractive location for high-quality clinical trials.

We have been strategically investing in this since 2010 (with more than €100 million in total invested since then). The benefit of this was evident in Ireland's response to COVID-19, because it enabled us to react quickly and robustly to the crisis and participate in major international clinical trials to find effective treatments for COVID-19. The investment made in 2021 will build on this.

According to Oonagh Ward, Head of Research and Innovation Infrastructures at the HRB, "This major investment by the HRB in 2021 will enhance patientfocused clinical trials infrastructure in Ireland, keeping us at the forefront of clinical research and trials. This will create greater opportunities for people in Ireland to participate in the latest research to test new treatments and interventions that enhance the care and outcomes of many illnesses."

The 2021 investment went to five key areas that work together to support

a more coordinated and integrated national clinical trials ecosystem. The funding and infrastructures are as follows:

€22 million for CRF/Cs

HRB-funded CRF/Cs (all of which are officially known as HRB centres supporting clinical trials to improve health and care) provide dedicated space, facilities, governance, services, and supports, including the skills and expertise necessary to enable highquality, safe, and compliant clinical trials. This 2021 investment extended HRB funding to two additional CRF/Cs, so we now support five in total. These are:

- 1. UCD Clinical Research Centre
- 2. HRB Clinical Research Facility Cork
- 3. Wellcome-HRB Clinical Research Facility at St James's Hospital
- 4. Children's Health Ireland Clinical Research Centre
- 5. HRB Clinical Research Facility Galway.

€22 million for cancer clinical trials

This investment supports six cancer Clinical Trials Groups (all of which are officially named as HRB partnerships supporting cancer clinical trials to improve health and care - see number 1 for reference) to deliver high-quality cancer trials. This is complemented by an overarching National Cancer Clinical Trials Network, which provides strategic and coordinated support to the groups. The six groups are:

- 1. Children's Health Ireland Cancer Trials Group
- 2. Beaumont Hospital Royal College of Surgeons in Ireland University of Medicine and Health Sciences Cancer **Trials Group**
- 3. Irish Research Radiation Oncology **Trials Group**
- 4. UCC Cancer Trials Cluster
- 5. Ireland East Hospital Group Cancer Trials Group
- 6. Trinity Academic Cancer Trials Group.

€6 million for CTNs

CTNs support a strategic approach to developing trials in specific disease areas, and provide the critical mass needed to conduct multicentre trials. Six CTNs (all of which are officially named HRB research networks to enhance care and outcomes in their respective areas) were funded in 2021:

- Primary Care Clinical Trials Network Ireland
- 2. Dementia Trials Ireland

- 3. Diabetes Collaborative Clinical Trial-Network-Ireland
- 4. HRB Irish Network for Children's Clinical Trials (In4kids)
- 5. Irish Critical Care Clinical Trials Network - Improving Outcomes After Critical Illness, and
- 6. Infectious Diseases Clinical Trials Network Ireland.

€3 million for the Health Research **Board-Trials Methodology Network** (HRB-TMRN)

This funding reinforces the HRB-TMRN's important role in strengthening the quality, methodology, and reporting of clinical trials in health and social care in Ireland, ensuring that trials and their outcomes are relevant, accessible, and influential.

€2 million for the National Clinical **Trials Office (NCTO)**

The NCTO seeks to consolidate and grow the reach, activities, and impact of all of these investments made by the HRB and others in clinical trials across Ireland. It acts as a central contact point for, as well as providing support services to, multicentre clinical trials. It also provides links and access to the European Clinical Research Infrastructures Network (ECRIN).

Strategic objective 5

Productive international partnerships

From pandemics to climate change, many of the greatest health challenges we face are global and can only be addressed through international partnership.

In order to meet these challenges, we are committed to fostering and enhancing European and international coordination, collaboration, and engagement in health research. We support Ireland's research community to compete for EU and international funding, and we work with policy-makers and other stakeholders to identify opportunities to engage in initiatives that can advance health and broader government objectives.

Key items delivered in 2021

- The HRB made four awards worth €5.7 million under strategic objective 5, all of which were co-funded with international joint programming initiative partners, leveraging €4.4 million of the total funding in this area. Details of these awards are as follows:
 - The HRB supported three awards (with a total value of €1.7 million) under the Joint Programming Initiative Healthy Diet for a Healthy Life scheme, which focused on the assessment of diet and physical activity using biomarkers and wearable sensors.
 - We supported one award with a total value of €1.3 million under the ERA-NET NEURON transnational call, in the area of neurodegenerative disease in children and adolescents.
 - We engaged with ECRIN and others in order to ensure Ireland's participation in an EU COVID-19 Vaccine Network, and continued to support the World Health Organization's (WHO's) Solidarity Trial Vaccines, the EU SolidaAct, and the REMAP-CAP clinical trials.

€28.2 million

in funding leveraged from the first round of Horizon Europe calls in 2021 for 23 successful projects, with 4 projects being led by Irish researchers

- We supported the DOH during preparations for the new European Health Emergency Preparedness and Response Authority (HERA).
- We enabled Irish health researchers' participation in the new EU framework programme (Horizon Europe) through the following national delegate activities:
 - Contributed to EU discussions on the preparation and delivery of Horizon Europe and the new European Mission on Cancer, including participation in the Horizon Europe Health Programme Committee, in order to influence funding programmes to ensure the best alignment with Ireland's research strengths, and
 - Worked with the Department of Further and Higher Education, Research, Innovation and Science, the Irish Horizon Europe National Support Network, permanent representatives in Brussels, and national delegates from EU member states to develop and monitor health within the wider Horizon Europe research agenda.

- We provided advice and technical assistance to Irish health researchers on Horizon Europe funding programmes through National Contact Point (NCP) activities.
- We supported Irish researchers to leverage €28.2 million in funding from the first round of Horizon Europe calls in 2021 for 23 successful projects, with 4 projects being led by Irish researchers.
- We ensured that policy-makers, healthcare providers, and researchers were aware of the opportunities presented by the newly expanded EU4Health programme.
- We acted as the EU4Health NCP for Ireland in support of the DOH.

Case Study 9-

Helping Ireland's research community secure EU funding

Thanks to HRB expertise and guidance, 2021 is on track to be the best year yet for Irish researchers securing funding from Horizon Europe and EU4Health.

Many of the health challenges we face are international, making collaboration across borders a must for health research. The HRB is committed to supporting Ireland's research community in accessing international partnerships, including by helping them compete for EU funding opportunities.

2021 was a landmark year in this regard, as it marked the start of a new cycle for two major EU programmes: Horizon Europe and EU4Health.

Horizon Europe is the largest EU research programme to date, with a budget of €95.5 billion over seven years. As the host organisation for Ireland's National Contact Point (NCP) for Horizon Europe, the HRB played a central role in the programme's Irish launch. A HRB kick-off webinar in April 2021 attracted almost 500 participants, and was complemented by a series of webinars for individual universities.

With the first calls opening in June 2021, NCP Kay Duggan-Walls was on hand to provide end-to-end support to the health research community as it navigated the ins and outs of the new programme. Activities included regular online updates and one-on-one consultations, a programme of more than 20 events, and a series of blog posts with top tips on proposal writing and consortium building.

This work is already bearing fruit: 2021 is on track to be the best year yet for Irish



researchers securing EU funding - €28.2 million has been allocated to 23 projects with 34 Irish partners, with 4 of these consortia led by Irish researchers. "This is a phenomenal success for the Irish health research community," remarks Duggan-Walls. "The HRB is delighted to play our part in helping these first-class research teams access the immense benefits of international collaboration through Horizon Europe."

The second pillar of the HRB's EU funding work in 2021 was EU4Health. Although the HRB has held the role of NCP for EU4Health since 2008, the launch of the new programme in 2021 marked the start of a new era of EU funding in health, with an unprecedented €5.3 billion available over seven years.

In order to ensure that Ireland's research and healthcare community can tap into these opportunities, the HRB has a Programme Manager with a special focus on EU4Health (Amanda Daly). Following the launch of the first work programme in June 2021, the HRB sprang into action getting the word out to potential applicants, directly engaging with stakeholders around the country, and

hosting a series of comprehensive online information sessions, one of which featured contributors from the European Commission and the European Health and Digital Executive Agency (HaDEA).

All signs point to a successful first year: the number of applications has increased over the previous period, while the volume of queries attests to high levels of interest not only from academic institutions, but across the health system and from government and state agencies. By supporting participation in EU4Health, the HRB is helping to transform research into action on the ground throughout Ireland's health and care system. "While Horizon Europe focuses on research, EU4Health is all about policy implementation and putting research findings into practice," concludes Amanda Daly. "This is absolutely essential to support an effective healthcare system."

Case Study 10

A unique insight into Europe's research and innovation agenda

During 2021, our involvement on the Horizon Europe Health Programme Committee gave us a unique insight into how Europe's research and innovation (R&I) agenda responded to the COVID-19 pandemic, and how it will prepare for future emergencies.

Pre-COVID-19 – indeed, since 2007 – the Horizon Europe Health Programme Committee (EU Health PC) had already invested €4.1 billion to support and coordinate research to tackle infectious diseases. New research actions specific to COVID-19 were initiated to address epidemiology; preparedness for and responses to outbreaks; the development of diagnostics, treatments, and vaccines; and the infrastructures and resources that enable this research.

According to Patricia Clarke, Irish National Delegate for Horizon Europe with the HRB:

The EU Health PC used mechanisms for emergency funding to support research calls, learning from experience in responding to the Ebola epidemic. Urgent calls were issued for COVID-19 research outside the normal health work programmes, with the Irish research community contributing significantly.

Ireland secured €7.73 million from emergency calls to support our involvement in 12 EU projects to combat COVID-19. These included efforts to develop medical technologies and digital tools, improve understanding of behavioural and socioeconomic impacts of the pandemic, and learn from patient cohorts across Europe.

The EU Health PC also invested in a new clinical trials vaccine platform and the reinforcement of European infrastructures and networks to accelerate vaccine trials for COVID-19 variants. For example, VACCELERATE (European Corona Vaccine Trial Accelerator Platform) was established as part of a larger European biodefence preparedness plan against COVID-19 variants, called the HERA Incubator, a forerunner to the establishment of HERA

Ireland, led by University College Dublin in partnership with NUI Galway, plays a crucial role in this new EU-wide vaccine trial network. In 2021, further emergency funding was allocated to VACCELERATE to run clinical trials exploring strategies for vaccination against COVID-19.

itself.

Established in late 2021, HERA will strengthen Europe's ability to prevent, detect, and rapidly respond to cross-border health emergencies by ensuring coordinated development, manufacturing, procurement, and

In HERA, R&I is positioned as a key pillar to deal earlier and better with future health threats. The HRB is a member of the HERA Advisory Forum, which will play a crucial role in ensuring more cooperation between HERA and the competent authorities.

equitable distribution of key medical countermeasures. The EU Health PC is now preparing for the future, defining research priorities for the 2023-24 work programmes, and contributing to HERA where R&I is positioned as a key pillar to deal earlier and better with future health threats.

The HRB is a member of the HERA Advisory Forum, which will play a crucial role in ensuring more cooperation between HERA and the competent authorities.

Strategic objective 6

Organisational excellence

As a leading agency for health and social care research, evidence, and data, the HRB's goal as an organisation is to be the best in every way.

We will further develop the HRB as a progressive place to work, where our people are supported to be innovative and responsive. We will maintain our culture of organisational excellence, based on shared values, which attracts the best talent, embraces change, and delivers solutions. Our governance structures will support informed and accountable decision-making, and we will communicate with impact in order to strengthen our reputation with our stakeholders.

Key items delivered in 2021

- We commenced an organisation-wide data retention/deletion project - an ambitious project which will deliver a streamlined, compliant approach to managing data across the HRB.
- We introduced OfficePass, a new blended working application to manage staff attendance.
- We upgraded our presentation and hybrid meeting facilities to support an enhanced virtual meeting experience.
- We migrated our Intranet, email archive, and finance server to a cloud-based alternative in line with the information and communications technology (ICT) component of our strategy 2021-2025.
- We conducted penetration tests designed to simulate a cyberattack on two key cloud-based HRB systems, and recorded our best ever scores in terms of security.
- We developed and delivered an overarching health and well-being framework.
- We implemented a workforce planning framework to better align resourcing skills and needs with the HRB's ongoing requirements.

employment of persons with disabilities in the HRB achieved and maintained through delivery of a Disability Action Plan

- We delivered high-volume recruitment, selection, and onboarding solutions.
- We delivered a Disability Action Plan for achieving and maintaining 3% employment of persons with disabilities in the HRB, in line with Part 5 reporting and the Disability Act 2005.
- We provided mental health and wellbeing training for all staff.
- We provided training in managing teams remotely and essential skills for blended working for management and staff.
- We delivered data migration of Single Scheme pension records to the Department of Public Expenditure and Reform Single Public Service Pension Scheme (DPER SPSPS) Databank in line with departmental deadlines for all years from 2013 to 2020.
- We transformed the finance function in order to achieve a 'paperless office'.
- We reduced the turnaround time on the number of days it takes to pay suppliers by 18%.
- We participated in green procurement training in order to help achieve climate goals and national targets.
- We created a working group with other research funders to explore opportunities to further improve financial processes and award management.

- We increased engagement with host institutions to better understand and address each other's financial and business requirements.
- We launched the HRB strategy 2021-2025 at an online event, supported by a web portal and social media campaign.
- We hosted two stakeholder conferences designed to spotlight the impact of our funded researchers' work and create opportunities for learning and networking.
- We developed a new online platform to showcase Health Research in Action, our report to highlight the outcomes and impact of our work and funding.
- We increased broadcast and press coverage from 478 pieces in 2020 to 622 in 2021, increasing the equivalent advertising value by almost €400,000.
- We grew the HRB social media following by more than 2,000 users across Twitter, LinkedIn, and YouTube.

Case Study 11

Ensuring a successful return to the office

2021 saw the Corporate Operations team preparing our organisation for the transition from fully remote working to hybrid working.

In order for the HRB to deliver its services across health research. evidence, and information, our people must be able to work efficiently. The Corporate Operations team ensures that HRB staff have access to the skills, processes, and capabilities they require in order to achieve their objectives and adapt to changing needs – and rarely have needs changed so quickly in such a short time as they have over the past two years.

When COVID-19 forced a pivot to remote work in March 2020, the Corporate Operations team found itself in uncharted territory. Yet, within days, it had equipped staff with everything they needed in order to carry out their tasks from home.

As we entered the second year of the pandemic, however, the team was faced with a new challenge: with the vaccine roll-out underway beginning in early 2021, a return to the office was now on the cards. Corporate Operations began laying the groundwork for a phased return to in-person working from September 2021, in line with updated government guidance. "We had to strike a balance between the imperative to protect staff's health and well-being with the desire many colleagues had to come back to the office after so long working remotely," explains Liam Sinnott, Head of IT and Facilities.



A cross-functional team was put in place to manage the transition, guided at all times by public health restrictions and the Work Safely Protocol for public bodies. Appointed as COVID-19 representative, Facilities Co-ordinator Laura Lysaght was the main point of contact for all related issues.

The top priority was to make the office environment as safe as possible. "New information on virus transmission meant ventilation was a major focus before staff returned," explains Lysaght. "We conducted rigorous audits on our ventilation units to ensure they were up to the task." Measures were put in place to facilitate social distancing: a temporary rule of one staff member per office was implemented, restrictions were placed on canteen usage and inperson meetings, and every office was stocked with sanitation supplies.

Innovative digital solutions supported the transition. Attendance at the office was managed with the new OfficePass system, which was available at staff's fingertips through a mobile app. Additional controls were introduced via email so that management could easily monitor which team members were in the building. Personal responsibility was also crucial, with staff required to undergo COVID-19-specific training and to declare their COVID-19 health status in an online questionnaire before attending in person.

Frequent meetings across Corporate Operations allowed for discussions not only on plans for returning to the office, but also on how to manage challenges arising from remote working. Looking ahead, the experience of combining remote with in-person working will feed into future approaches to blended working at the HRB. As Sinnott concludes, "The insights gained over the past two years will support us in our objective of developing flexible and innovative ways of working in the years ahead."

Case Study 12

Growing the HRB's social media presence

In 2021, a new social media strategy grew our following by more than 2,000 users across Twitter, LinkedIn, and YouTube.

Social media is key to HRB communications, and in 2021 we adopted a new strategy in order to ensure that our posts reached and resonated with as many members of our target audiences as possible. Central to this was data analytics, and we implemented a new reporting regime using Google Data Studio in 2021. This unites all our social media data in one place and displays them in easily understandable, customisable reports and dashboards. This allows us to explore the data and better understand key metrics, such as:

- What social content is most engaged
- What social media content drives the most traffic to our website, and
- Follower growth.

The Communications team now examines social media performance on Google Data Studio at monthly editorial meetings, where we discuss what is (and is not) working, and how we can use this information to optimise our future social media activity. Key insights this uncovered during 2021 include the following:

 Posts on recruitment, funding announcements, and published research articles drive the highest engagement (i.e. interactions with social media content such as likes, comments, and shares).

It's highly rewarding to see that the time and energy invested in a solid social media strategy really pays off. It's also really empowering to have the data to back it up.

- Nearly 10,000 views of video content on our YouTube channel show that it is worthwhile to produce rich content.
- Social media is a useful tool for driving traffic to the HRB website.
- Social media successfully amplifies HRB communications and announcements.

Careful planning and scheduling were also key to our 2021 social media strategy. This saw us pre-populate our social media calendar as much as possible, and as far in advance as possible, with posts for the entire year according to key dates for HRB activity, content such as blogs, and relevant health events. For Twitter, we also scheduled posts on the platform itself. This level of planning and scheduling avoids over-reliance on ad hoc posting, generates greater control over social media content, allows for more strategic and cohesive campaigns, and ensures that our accounts are always kept active with fresh content.

Finally, in 2021, we employed social media best practices which increase engagement as much as possible with all our social posts. These practices include tagging relevant accounts in posts, and adding media such as imagery to posts. And the results were clear, with engagement increasing markedly across all three channels.

Commenting on the success of our new social media strategy, HRB Communications Manager Gillian Markey said:

It's highly rewarding to see that the time and energy invested in a solid social media strategy really pays off. It's also really empowering to have the data to back it up. Particularly when it comes to content optimisation. 2021 laid a strong foundation for our future activity on social. Going forward, I'm particularly excited to create more video content. Now we know our followers enjoy it, we can confidently deliver them more of it.



Appendices



Appendix A

List of HRB publications in 2021

HRB REPORTS

Casey C, O'Sullivan M, Flanagan N, Fanagan S. Annual Report of the National Ability Supports System (NASS) 2020. Dublin: Health Research Board; 2021. HRB StatLink Series No. 1.

Casey C, O'Sullivan M, Fanagan S, Flanagan N. NASS Intellectual Disability Supplementary Report 2020. Dublin: Health Research Board; 2021. HRB StatLink Series No. 2.

Flanagan N, O'Sullivan M, Fanagan S, Casey C. NASS Physical and Sensory Disability Supplementary Report 2020. Dublin: Health Research Board; 2021. HRB StatLink Series No. 3.

O'Sullivan M, Casey C, Flanagan N, Fanagan S. NASS Autism Supplementary Report 2020. Dublin: Health Research Board: 2021. HRB StatLink Series No. 4.

Daly A, Craig S. Annual Report on the Activities of Irish Psychiatric Units and Hospitals 2020. Dublin: Health Research Board: 2021, HRB StatLink Series No. 5.

O'Neill D, Carew AM, Lyons S. 2014 - 2020 Alcohol Treatment Data. Dublin: Health Research Board; 2021.

Kelleher C, Carew AM, Lyons S. 2014 - 2020 Drug Treatment Data. Dublin: Health Research Board; 2021.

Irish Focal Point to the EMCDDA. Drugnet Ireland. Issue 76. Dublin: Health Research Board; 2021.

Irish Focal Point to the EMCDDA. Drugnet Ireland. Issue 77. Dublin: Health Research Board; 2021.

Irish Focal Point to the EMCDDA. Drugnet Ireland. Issue 78. Dublin: Health Research Board; 2021.

Irish Focal Point to the EMCDDA. Drugnet Ireland. Issue 79. Dublin: Health Research Board; 2021.

EVIDENCE REVIEWS

Miler J, Carver H, Masterton W, Parkes T, Jones L, Maden M, Sumnall H. Evidence review of drug treatment services for people who are homeless and use drugs. Dublin: Health Research Board; 2021. HRB Drug and Alcohol Evidence Review No. 7.

Quigley J, Moloney T, Lambe K, Lee C. Linking care bands to resource allocation for home support and long-term residential care: an evidence review. Dublin: Health Research Board; 2021.

Keane M, Cagney O, Cochrane A, Lee C, Farragher A, Long J. Reablement in the home for people aged 65 years and over: components, effectiveness, and influencing factors: An evidence review. Dublin: Health Research Board; 2021.

Long J, Lee C, Schwendicke F, Farragher A, Keane M. Management of non-cavitated and cavitated caries in primary, permanent, and mixed dentition: An evidence review. Dublin: Health Research Board; 2022.

Coyle C, Buggy S, Cagney O, Farragher L, Lee C, Patje D, Long J. Housing with support for older people: An evidence review. Dublin: Health Research Board: 2021.

PEER-REVIEWED JOURNAL ARTICLES AUTHORED BY HRB STAFF

Beecher C, Toomey E, Maeso B, Whiting C, Steward DC, Worrall A, Elliott J, Smith M, Tierney T, Blackwood B, Maguire T, Kampman M, Ling B, Gravel C, Gill C, Healy P, Houghton C, Booth A, Carritty C, Thomas J, Tricco AC, Burke NN, Keenan C, Westmore M, Devane D. What are the most important unanswered research questions on rapid review methodology? A James Lind Alliance research methodology Priority Setting Partnership: The Priority III study protocol [version 2; peer review: 2 approved, 2 approved with reservations]. HRB Open Res. 2021;4:80. Available from: <a href="https://htt

Cody A, Hiney M, Clarke P, O'Driscoll M. Funders' responsibility to ensure value in research: a self-audit by the Health Research Board Ireland [version 2; peer review: 2 approved]. HRB Open Res. 2021;4:35. Available from: https://doi.org/10.12688/hrbopenres.13224.2

Carew AM, O'Neill D, Lyons S, Smyth B. Estimating need for alcohol treatment in Ireland using national treatment surveillance data. Ir J Med Sci. 2021. Available from: https://doi.org/10.1007/s11845-021-02788-9

Doyle A, Craig S, McConkey R. Changes over 15 years in lone parenting of Irish persons with intellectual disability. J. Fam. Stud. 2021. Available from: https://doi.org/10.1080/13229400.2021.2001356

Lynn E, Cousins G, Lyons S, Bennett K. Trends in drug poisoning deaths, by sex, in Ireland: a repeated cross-sectional study from 2004 to 2017. BMJ Open. 2021;11(9):e048000. Available from: https://bmjopen.bmj.com/content/11/9/e048000

Quigley JM, Walsh C, Lee C, Long J, Kennelly H, McCarthy A, Kavanagh P. Efficacy and safety of electronic cigarettes as a smoking cessation intervention: A systematic review and network meta-analysis. Tob Prev Cessat. 2021;7:69. Available from: https://doi.org/10.18332/tpc/143077

O'Brien D, Long J, Quigley J, Lee C, McCarthy A, Kavanagh P. Association between electronic cigarette use and tobacco cigarette smoking initiation in adolescents: a systematic review and meta-analysis. BMC Public Health. 2021;21:954. Available from: https://doi.org/10.1186/s12889-021-10935-1

Dunne M, Halton L, Herlihy B, Madden A, O'Sullivan N. Motorways to boreens: the story of the Irish Health Sciences Libraries Group virtual journal club. Journal of Health Information and Libraries Australasia. 2021;2(3). Available from: https://www.johila.org/index.php/Johila/article/view/88

OTHER PUBLICATIONS

HRB authors registered two protocols on PROSPERO:

- 1. Keane M, Lee C, Long J, Cagney O, Farragher A, Schwendicke F. The management of cavitated and non-cavitated caries in primary, permanent and mixed dentition. Protocol for a systematic overview of reviews. PROSPERO. 2021;CRD42021235201. Available from: https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=235201
- 2. Lambe K, Moloney T, Farragher A, Long J. A systematic review of the systemic health impact of water fluoridation on non-oral population health. PROSPERO. 2021;CRD42021269654. Available from: https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=269654

Appendix B

List of HRB awards made in 2021 to Principal Investigators

Title	Host institution	Scheme	Lead	Lead	Lead	Total awarded
			researcher title	researcher forename	researcher surname	
Wave 5 of The Intellectual Disability Supplement to The Irish Longitudinal Study on Ageing (IDS-TILDA)	Trinity College Dublin	Intellectual Disability Supplement to TILDA	Professor	Mary	McCarron	€1,589,981
Supplemental funding to conduct a carry-on survey of the impact of COVID-19 on people with intellectual disabilities	Trinity College Dublin	Intellectual Disability Supplement to TILDA	Professor	Mary	McCarron	€60,273
iHealthFacts.ie: Co- funding to evaluate the lessons learned on approaches to infodemic management from the iHealthFacts intervention	National University of Ireland, Galway	HRB-HSE Infodemic Management Co- fund 2021	Professor	Declan	Devane	€299,993
Co-developing, piloting and evaluating a trauma-informed awareness and training programme (TIP) for the acute hospital setting using quality improvement and translational simulation methods	Trinity College Dublin	Research Collaborative in Quality and Patient Safety	Professor	Frédérique	Vallières	€271,413
COPD-MAX: Community-based optimisation programme for respiratory disease management and assessment	University of Limerick	Research Collaborative in Quality and Patient Safety	Dr	Roisin	Cahalan	€271,877
The DXA (Dual-energy X-ray Absorptiometry) Management Application Project (MAP): A personalised patient-centred tool for osteoporosis screening and fracture prediction	National University of Ireland, Galway	Secondary Data Analysis Projects	Professor	John	Carey	€249,994

PROJECTS AND PROGRA	MMES					
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Physical activity guidelines for anxiety and depression: Optimal physical activity dose and biopsychosocial profiles predictive of benefit among older adults with and without non-communicable disease	University of Limerick	Secondary Data Analysis Projects	Dr	Matthew	Herring	€247,909
Targeted review and amalgamation of unmapped major trauma and ambulance data in Ireland: TRAUMA	Royal College of Surgeons in Ireland	Secondary Data Analysis Projects	Dr	Frank	Doyle	€249,726
Prescription drugs with potential for misuse: A multi-indicator analysis of supply, patterns of use and the associated health burden in Ireland over the past ten years	Royal College of Surgeons in Ireland	Secondary Data Analysis Projects	Dr	Gráinne	Cousins	€249,857
Generating actionable insights from the analysis of free-text comments from the National Care Experience Programme using qualitative and computational text analytics methods	National University of Ireland, Maynooth	Secondary Data Analysis Projects	Dr	Adegboyega	Ojo	€348,103
EQUIP: Examining Quality, Use and Impact of Psychotropic (Use) in older adults with intellectual disabilities	Trinity College Dublin	Secondary Data Analysis Projects	Dr	Maire	O'Dwyer	€250,000
The scope and nature of potential medication-related harm in older populations in Ireland	Royal College of Surgeons in Ireland	Secondary Data Analysis Projects	Dr	Caitriona	Cahir	€247,628
Informing youth suicide prevention and mental health promotion through secondary analysis of the Planet Youth Datasets (Inform – YSP)	National University of Ireland, Galway	Secondary Data Analysis Projects	Dr	Bernadine	Brady	€205,709

PROJECTS AND PROGRA	MMES					
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
INCLUDE: Integrating National Repositories for the Cooperation Linkage and Understanding of a Data Driven approach to the needs of Excluded people	Trinity College Dublin	Secondary Data Analysis Projects	Professor	Cliona	Ni Cheallaigh	€248,981
Growing up in a pandemic: Trajectories of mental health from childhood to early adulthood in the context of COVID-19	University of Limerick	Secondary Data Analysis Projects	Professor	Ross	Macmillan	€249,874
Human acrocentric chromosomes, nucleolar formation and rDNA genomic stability	National University of Ireland, Galway	SFI-HRB- Wellcome Research Partnership	Professor	Brian	McStay	€1,220,008
Neurodevelopmental ciliopathies: a multimodel approach from molecular mechanisms to patients variant interpretation and treatment strategies	University College Dublin	Network of European Funding for Neuroscience Research	Professor	Olivier	Blacque	€1,329,280
Combining biomarker panels and dietary intake data for improved assessment of healthful/unhealthful plant food intake	University College Dublin	Joint Programming Initiative Healthy Diet for a Healthy Life	Professor	Lorraine	Brennan	€1,678,687
Wearable sensors for the assessment of physical and eating behaviours	University of Limerick	Joint Programming Initiative Healthy Diet for a Healthy Life	Professor	Alan	Donnelly	€844,337
Wearable sensors for the assessment of physical and eating behaviours	University College Cork	Joint Programming Initiative Healthy Diet for a Healthy Life	Dr	Janas	Harrington	€844,337
Dietary assessment and further development of biomarkers for all	Munster Technological University	Joint Programming Initiative Healthy Diet for a Healthy Life	Dr	Janette	Walton	€505,400

Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Dietary assessment and further development of biomarkers for all	Institute of Technology Sligo	Joint Programming Initiative Healthy Diet for a Healthy Life	Dr	Amy	Mullee	€505,400

Total:

€11,968,764

CAPACITY BUILDING A	ND LEADERSHI	P ENHANCEMENT				
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
PSychosis Ireland Structured Training and Research programme (PSI-STAR)	Royal College of Surgeons in Ireland	Collaborative Doctoral Awards in Patient- focused Research	Professor	David	Cotter	€1,559,892
MIRANDA: Multidisciplinary Innovation and Research Advancing Neurological care in a Digital Age	Trinity College Dublin	Collaborative Doctoral Awards in Patient- focused Research	Dr	Miriam	Galvin	€1,558,898
Early Identification of Suicide and Self- Harm Risk and Comorbid Mental and Physical Disorders: An Interdisciplinary Training, Research and Intervention Programme (MHAINTAIN)	University College Cork	Collaborative Doctoral Awards in Patient- focused Research	Professor	Ella	Arensman	€1,559,988
Phase 2 Funding for Capacity Building for Evidence Synthesis through Evidence Synthesis Ireland	National University of Ireland, Galway	Evidence Synthesis Ireland	Professor	Declan	Devane	€3,306,528
Exploring the factors and mechanisms involved in the delivery of healthcare and support programmes to people with dementia from diverse cultural and linguistic backgrounds	University College Dublin	Fulbright-HRB Health Impact Awards	Dr	Purity	Mwendwa	€29,957
Using single-cell RNA sequencing to rationally model inflammatory skin	University College Dublin	Fulbright-HRB Health Impact Awards	Dr	Daniel	Johnston	€9,098
Advancing clinical research on ageing in Ireland	Trinity College Dublin	Fulbright-HRB Health Impact Awards	Professor	Annette	Fitzpatrick	€25,000
HRB Impact Award 2021	Royal College of Surgeons in Ireland	HRB Impact Awards	Professor	Noel G	McElvaney	€49,991
DOROTHY (DevelOp InterdisciplinaRy apprOaches to healTH Crisis CollaborativelY) Post-Doctoral Programme	Health Research Board	Maria Skłodowska-Curie Actions COFUND 2020	Health	Research	Board	€5,868,000

CAPACITY BUILDING A	AND LEADERSHI	IP ENHANCEMENT				
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Retrospective review of elderly patients presenting with upper cervical spine injuries	University College Dublin	Summer Student Scholarships	Mr	Emmanuel	Ohaa	€2,400
Skin cancer in an ageing population	University College Dublin	Summer Student Scholarships	Ms	Daniela	Cino	€2,400
BrainCalm: An evaluation of a sensory integration programme on developmental outcomes for young children	Dublin City University	Summer Student Scholarships	Ms	Shona	McGrory	€2,400
Improving informed consent research in the elderly patient undergoing spine surgery	University College Dublin	Summer Student Scholarships	Ms	Fiona	Newsome	€1,200
The development, implementation and evaluation of 'LifeLab', an interactive, educational experience to support improved health literacy in disadvantaged adolescents	Dublin City University	Summer Student Scholarships	Ms	Ming	Chuen Chong	€2,400
Neuropsychiatric outcomes and their correlates in carriers of Neurexin-1 deletions	Trinity College Dublin	Summer Student Scholarships	Ms	Anna	Begley	€2,400
Promoting practice nurse-led health behaviour change to prevent cardiovascular disease among patients attending general practice in disadvantaged communities: A scoping review and qualitative study	University College Dublin	Summer Student Scholarships	Ms	Sarah	Freeley	€2,400
Pubertal timing and allostatic load: Mediation model of changes in health behaviour and life stress	University College Cork	Summer Student Scholarships	Ms	Laura	Kenneally	€2,400

CAPACITY BUILDING A	Host institution	Scheme	Lead	Lead	Lead	Total awarded
	nost institution	Continu	researcher title	researcher forename	researcher surname	iotal awarace
Can a chaotic home environment modulate the way we perceive emotions across the senses? The case of autism spectrum disorder	University College Cork	Summer Student Scholarships	Mr	Shane	Meehan	€2,400
Air Quality 4 Life – Assessing the difference between patients' perception of their level of asthma management and well-being in comparison to their actual level of asthma self-management care plans	University College Cork	Summer Student Scholarships	Ms	Adina Elena	Zagoneanu	€2,400
Synthetic lipoxin mimetics as therapeutics in diabetes-associated atherosclerosis	University College Dublin	Summer Student Scholarships	Mr	Deon	Shaughnessy	€2,400
Examining factors which impact CPD engagement in intellectual disabilities services in the South East Region: a feasibility study	Waterford Institute of Technology	Summer Student Scholarships	Ms	Ashling	McCoy	€2,400
General practitioner perceptions on integrated care: Evaluation of a study instrument to examine the GP/hospital interface: A Delphi Consensus Study	University College Dublin	Summer Student Scholarships	Mr	Eoghan	Carey	€2,400
The effect of accelerometer feedback on motivation to reduce sedentary behaviour in older hospitalised patients: A pilot randomised controlled trial	Waterford Institute of Technology	Summer Student Scholarships	Mr	Sean	Landers	€2,400
Developing epiCaPture: a urine test for early detection of aggressive prostate cancer	University College Dublin	Summer Student Scholarships	Ms	Jana	Joha	€2,400

CAPACITY BUILDING A	ND LEADERSHI	P ENHANCEMENT	Γ			
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Longitudinal study of mood disorder and health-related quality of life in cervical dystonia	University College Dublin	Summer Student Scholarships	Mr	Andrew	Moriarty	€2,400
Prediction of renal functional decline, cardiovascular disease, and mortality in people with diabetes mellitus and chronic kidney disease using a novel plasma proteomic assay (PromarkerD)	University College Dublin	Summer Student Scholarships	Ms	Chloe	Conroy	€2,400
Motivational interviewing in obesity: A systematic review and meta analysis	Institute of Technology Sligo	Summer Student Scholarships	Ms	Aoife	Duffy	€2,400
Young people's compliance with COVID-19 public health measures	University of Limerick	Summer Student Scholarships	Ms	Tara	Breslin	€2,400
A systematic review of the behavioural effects of COVID-19 misinformation	University College Cork	Summer Student Scholarships	Mr	Omar	Aftab	€2,400
Exploring the ability of social prescribing to meet the unmet needs of cancer survivors	Trinity College Dublin	Summer Student Scholarships	Ms	Lauren	Hayes	€2,400
The involvement of the T cell-related cytokines in Parkinson's disease	Trinity College Dublin	Summer Student Scholarships	Ms	Harriet	O'Leary	€2,400
Dissociating the sensory and cognitive impairment in ALS during an oddball task, using batteries of event-related potentials	Trinity College Dublin	Summer Student Scholarships	Ms	Sarah	Domoney	€2,400
Assessing the mechanism of exercise-induced modulation of neuroinflammation	Trinity College Dublin	Summer Student Scholarships	Ms	Caitríona	O'Sullivan	€1,800

CAPACITY BUILDING	AND LEADERSH	IP ENHANCEMENT	Γ			
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Examining the structural connectivity of a key emotional pathway of the limbic circuit, the stria terminalis (ST), in adolescents with psychotic-like experiences using advanced diffusion tractography	Trinity College Dublin	Summer Student Scholarships	Ms	Rosemary	Tyrrell	€2,400
The role of Factor V expression in ovarian cancer – an in vitro and in vivo study	Trinity College Dublin	Summer Student Scholarships	Ms	Anna	Brennan	€2,400
To investigate the differential effect of the PsA and RA joint microenvironment on endothelial cell function and metabolism	Trinity College Dublin	Summer Student Scholarships	Ms	Éilis	Russell	€2,400
Moving a suicide bereavement peer support group online due to COVID-19: the experiences of group facilitators and attendees	University College Cork	Summer Student Scholarships	Mr	Niall	Seymour	€2,400
Do the people leading community exercise classes think it is safe for older adults with persistent pain to participate in these classes?	University of Limerick	Summer Student Scholarships	Ms	Ailbhe	Mulvihill	€2,400
Improving outcomes for couples undergoing fertility treatment through microfluidic- based sperm selection	University of Limerick	Summer Student Scholarships	Ms	Kelsi	Gallati	€2,400
ECT for major depression: a proteomics study	Royal College of Surgeons in Ireland	Summer Student Scholarships	Ms	Chloe	Chan	€2,400
Systemic inflammation and the risk of secondary respiratory infections in chronic traumatic brain injury patients: a systematic review	Trinity College Dublin	Summer Student Scholarships	Mr	Ruaraidhri	Jordan	€2,400

CAPACITY BUILDING A	ND LEADERSHI	P ENHANCEME <mark>N</mark> T				
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Barriers, facilitators and preferences for physical activity in severe Alpha-1 antitrypsin deficiency (AATD): A qualitative study	Royal College of Surgeons in Ireland	Summer Student Scholarships	Mr	Ciaran	Giblin	€2,400
Does daytime variation in cognitive function vary with chronotype? A study in a UK biobank	National University of Ireland, Maynooth	Summer Student Scholarships	Ms	Alexandra	Keogh	€2,400
Changes in prevalence and patterns of antipsychotic prescribing among two nationally representative cohorts of adults with intellectual disabilities aged 40–49 years over a 10-year period	Trinity College Dublin	Summer Student Scholarships	Ms	Xiaohan	Hu	€2,400
Telemedicine as an educational tool for caregivers regarding auto-injectors and anaphylaxis management	University College Cork	Summer Student Scholarships	Ms	Caoimhe	Cronin	€2,400
Stress and the brain in young people: investigating the associations between amygdalar substructure and cortisol levels in adolescents who report psychotic experiences	Royal College of Surgeons in Ireland	Summer Student Scholarships	Mr	Anurag	Nasa	€2,400
Drugs4COVID: Finding the needles in the haystack	Royal College of Surgeons in Ireland	Summer Student Scholarships	Ms	Maryam	Khan	€2,400
Mapping health services for adults with cerebral palsy in Ireland: a pilot study	Royal College of Surgeons in Ireland	Summer Student Scholarships	Ms	Shalini	Jagdeo	€2,400
Investigating a biomarker of lymph node metastasis in breast cancer	National University of Ireland, Galway	Summer Student Scholarships	Ms	Catherine	Kamel	€2,400
The burden of HPV- associated cancer in a regional radiation oncology healthcare setting	National University of Ireland, Galway	Summer Student Scholarships	Mr	Mikey	Walsh	€2,400

CAPACITY BUILDING A	Host institution	Scheme	Lead	Lead	Lead	Total awarded
Title	nost institution	Scheme	researcher title	researcher forename	researcher surname	iotal awardet
Analysis of nuclear morphology in lobular breast carcinoma	National University of Ireland, Galway	Summer Student Scholarships	Ms	Niamh	Roche	€2,400
The predictive power of a plasma senescence marker for future adverse outcomes in diabetic kidney disease	National University of Ireland, Galway	Summer Student Scholarships	Ms	Raghavi	Patil	€1,800
Understanding the determinants of offering brief behaviour interventions for chronic disease prevention and patient perceptions and experiences of these interventions	National University of Ireland, Galway	Summer Student Scholarships	Mr	Evan	O'Flaherty	€2,400
Development of a computational model for evaluation of sensors for remote EVAR surveillance	National University of Ireland, Galway	Summer Student Scholarships	Ms	Tara	O'Connor	€2,400
How hot is too hot? Towards identifying wound bed temperature indicative of wound infection status	National University of Ireland, Galway	Summer Student Scholarships	Ms	Íde	Ní Dheasmhúnaigh	€2,400
Skin cancer risk factors and sun protection practices in renal transplant patients	National University of Ireland, Galway	Summer Student Scholarships	Mr	Marcus	Murphy	€2,400
Optimisation and angiogenic assessment of macromolecular crowding in human umbilical cord mesenchymal stromal cell culture for the development of a wound healing cell therapy product	National University of Ireland, Galway	Summer Student Scholarships	Ms	Sian	McGarel	€2,400
Investigation of electrohysterography features for preterm birth prediction	National University of Ireland, Galway	Summer Student Scholarships	Ms	Maeve	Kingston	€2,400

Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Investigating the functionality of eNOS in endothelial colonyforming cells from peripheral artery disease patients	National University of Ireland, Galway	Summer Student Scholarships	Ms	Karen	Garvey	€2,400
The incidence of histological evidence of microscopic placenta accreta spectrum (PAS) following delivery in the third trimester	National University of Ireland, Galway	Summer Student Scholarships	Mr	Tom	Doyle	€2,400
The effects of human ACE-2 structural variations and mutations on SARS-2-CoV binding among a set population: How DNA changes influence the impact of SARS-2-CoV and COVID-19	National University of Ireland, Galway	Summer Student Scholarships	Ms	Eimear	Carroll	€2,400
Improving patient care through staff care: An evaluation of Schwartz Rounds and Team Time at Galway University Hospital	National University of Ireland, Galway	Summer Student Scholarships	Ms	Victoria	Byrne	€2,400
The role of wildlife in the persistence and transmission of antibiotic resistance	National University of Ireland, Galway	Summer Student Scholarships	Mr	Colin	Bourke	€2,400
Clinical and pathological features of breast cancers diagnosed by breast screening of women in West of Ireland over a 13-year period: Tortoises, hares, or birds?	National University of Ireland, Galway	Summer Student Scholarships	Ms	Shahd	AlRashed	€2,400
Characterisation of a patient-relevant tumour stromal cell signature	National University of Ireland, Galway	Summer Student Scholarships	Ms	Luma	AlDabel	€2,400

Total: €14,099,352

CLINICAL TRIALS AND	INTERVENTION	IS				
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Primary Care Clinical Trials Network Ireland	National University of Ireland, Galway	Clinical Trial Networks	Professor	Andrew	Murphy	€999,980
Dementia Trials Ireland (DTI)	Trinity College Dublin	Clinical Trial Networks	Professor	Iracema	Leroi	€999,617
DCCT-N-I: Diabetes Collaborative Clinical Trial-Network-Ireland	National University of Ireland, Galway	Clinical Trial Networks	Professor	Fidelma	Dunne	€999,466
HRB Irish Network for Children's Clinical Trials (in4kids)	University College Cork	Clinical Trial Networks	Professor	Geraldine	Boylan	€995,536
Rare Disease Clinical Trial Network	University College Dublin	Clinical Trial Networks	Professor	Rachel	Crowley	€999,910
Irish Critical Care Clinical Trials Network	University College Dublin	Clinical Trial Networks	Professor	Alistair	Nichol	€999,945
Infectious Diseases Clinical Trials Network Ireland	University College Dublin	Clinical Trial Networks	Professor	Patrick	Mallon	€913,392

€6,907,845 Total:

Title	Host institution	Scheme	Lead	Lead	Lead	Total awarded
Title	Tiost institution	ocheme	researcher title	researcher forename	researcher surname	iotai awai de
HRB Clinical Research Facility Galway	National University of Ireland, Galway	Clinical Research Facilities/Centres	Professor	Andrew	Smyth	€11,290,30°
UCD Clinical Research Centre	University College Dublin	Clinical Research Facilities/Centres	Professor	Peter	Doran	€15,435,599
Children's Health Ireland	Royal College of Surgeons in Ireland	Clinical Research Facilities/Centres	Professor	Paul	McNally	€6,501,862
HRB Clinical Research Facility Cork	University College Cork	Clinical Research Facilities/Centres	Professor	Joe	Eustace	€11,249,689
Wellcome-HRB Clinical Research Facility at St James's Hospital	Trinity College Dublin	Clinical Research Facilities/Centres	Professor	Martina	Hennessy	€10,748,745
Cancer Trials Enabling Award – SAOLTA University Healthcare Group and NUI Galway	National University of Ireland, Galway	Cancer Trials Enabling Award	Dr	Maccon	Keane	€99,997
Cancer Trials Enabling Award – University of Limerick	University of Limerick	Cancer Trials Enabling Award	Professor	Ruth	Clifford	€97,731
Clinical Trials Feasibility Award – University of Limerick	University of Limerick	Clinical Trials Feasibility Award	Professor	Paul	Burke	€328,456
Clinical Trials Feasibility Award – Royal College of Surgeons in Ireland	Royal College of Surgeons in Ireland	Clinical Trials Feasibility Award	Professor	Gerard	Curley	€381,065
UCC Cancer Trials Cluster	University College Cork	Cancer Clinical Trials in Ireland	Professor	Roisin	Connolly	€3,875,463
Ireland East Hospital Group (IEHG) Cancer Trials Cluster	University College Dublin	Cancer Clinical Trials in Ireland	Professor	Michaela	Higgins	€4,494,174
Trinity Academic Cancer Trials Cluster (TACC)	Trinity College Dublin	Cancer Clinical Trials in Ireland	Professor	Maeve	Lowery	€6,232,554
Children's Health Ireland/CRF UCD Paediatric Cancer Clinical Trials Cluster	University College Dublin	Cancer Clinical Trials in Ireland	Professor	Owen	Smith	€4,633,937
Irish Research Radiation Oncology Group Cancer Trials Cluster	Trinity College Dublin	Cancer Clinical Trials in Ireland	Dr	Sinead	Brennan	€5,843,273

INFRASTRUCTURE AND NETWORK AWARDS						
Title	Host institution	Scheme	Lead researcher title	Lead researcher forename	Lead researcher surname	Total awarded
Beaumont Hospital and RCSI Cancer Trials Cluster	Royal College of Surgeons in Ireland	Cancer Clinical Trials in Ireland	Professor	Patrick	Morris	€3,467,187
Cancer Trials Ireland Network	Royal College of Surgeons in Ireland	Cancer Trials in Ireland Network	Professor	Ray	McDermott	€6,941,042
Dementia Research Network Ireland	Trinity College Dublin	Dementia Research Network Ireland	Professor	Sean	Kennelly	€248,354
HRB National Clinical Trials Office	University College Cork	National Clinical Trials Office	Professor	Joe	Eustace	€1,897,736
National COVID-19 Biobank	University College Dublin	National COVID-19 Biobank	Professor	Patrick	Mallon	€1,996,475
HRB – Trials Methodology Research Network (HRB-TMRN) Phase III Funding	National University of Ireland, Galway	Trials Methodology Research Network	Professor	Declan	Devane	€3,077,544

€98,841, 184 Total:

Appendix C

Scheme	Co-funding partner	Co-funding allocation	Total award	HRB share
Cancer Clinical Trials in Ireland	Cork University Hospital, South/ South-West Hospital Group, and University College Cork	€1,473,438	€3,875,463	€2,375,025
Cancer Clinical Trials in Ireland	St Vincent's University Hospital, Mater Misericordiae University Hospital, and University College Dublin	€2,134,072	€4,494,174	€2,360,102
Cancer Clinical Trials in Ireland	St James's Hospital, Tallaght University Hospital, Midlands Regional Hospital Tullamore, and Trinity College Dublin	€3,889,570	€6,232,554	€2,342,984
Cancer Clinical Trials in Ireland	Children's Health Ireland and University College Dublin	€2,214,352	€4,633,937	€2,419,585
Cancer Clinical Trials in Ireland	St Luke's Institute of Cancer Research, St Luke's Radiation Oncology Network, St James's Hospital, Wellcome-HRB CRF at St James's Hospital, Cork University Hospital, SAOLTA University Health Care Group, and National University of Ireland, Galway	€3,468,597	€5,843,273	€2,374,676
Cancer Clinical Trials in Ireland	Beaumont Hospital and Royal College of Surgeons in Ireland	€971,539	€3,467,187	€2,495,648
Clinical Research Facilities/Centres	SAOLTA University Health Care Group, and National University of Ireland, Galway	€8,290,469	€11,290,301	€2,999,832
Clinical Research Facilities/Centres	Ireland East Hospital Group, St Vincent's University Hospital, Mater Misericordiae University Hospital, and University College Dublin	€10,114,170	€15,435,599	€5,321,429
Clinical Research Facilities/Centres	Children's Health Ireland and Children's Health Foundation	€3,252,775	€6,501,862	€3,249,087

HRB co-funded awards				
Scheme	Co-funding partner	Co-funding allocation	Total award	HRB share
Clinical Research Facilities/Centres	Mercy University Hospital, South/ South-West Hospital Group and University College Cork College of Medicine and Health	€5,917,582	€11,249,689	€5,332,107
Clinical Research Facilities/Centres	Trinity College Dublin, Trinity College Dublin School of Medicine and St James's Hospital	€5,383,919	€10,748,745	€5,364,826
Evidence Synthesis Ireland	Northern Ireland HSC Public Health Agency, R&D Division	€827,000	€3,306,528	€2,480,000
HRB-HSE Infodemic Management Co-fund 2021	HSE Quality Improvement Division	€100,000	€299,993	€199,993
Joint Programming Initiative Healthy Diet for a Healthy Life	JPI Healthy Diet for a Healthy Life European partners	€1,447,570	€1,678,687	€231,117
Joint Programming Initiative Healthy Diet for a Healthy Life	JPI Healthy Diet for a Healthy Life European partners	€533,162	€844,337	€311,175
Joint Programming Initiative Healthy Diet for a Healthy Life	JPI Healthy Diet for a Healthy Life European partners	€786,945	€844,337	€57,392
Joint Programming Initiative Healthy Diet for a Healthy Life	JPI Healthy Diet for a Healthy Life European partners	€245,275	€505,400	€260,125
Joint Programming Initiative Healthy Diet for a Healthy Life	JPI Healthy Diet for a Healthy Life European partners	€412,068	€505,400	€93,332
Marie Skłodowska-Curie Actions COFUND 2020	European Commission, Irish Research Council, and Environmental Protection Agency	€4,624,200	€5,868,000	€1,243,800
Network of European Funding for Neuroscience Research	ERANet Neuron European partners	€959,305	€1,329,280	€369,975

HRB co-funded awards				
Scheme	Co-funding partner	Co-funding allocation	Total award	HRB share
Research Collaborative in Quality and Patient Safety	HSE Quality Improvement Division and Royal College of Physicians in Ireland	€135,706	€271,413	€135,707
Research Collaborative in Quality and Patient Safety	HSE Quality Improvement Division and University Hospital Limerick	€135,938	€271,877	€135,939
SFI-HRB-Wellcome Research Partnership	Wellcome Trust UK and Science Foundation Ireland	€915,006	€1,220,008	€305,002
	Total:	€58,232,658	€100,718,044	€42,458,858

Corporate Governance and Financial Statements

The Corporate Governance and Financial Statements information will be published in a Part 2 to this document upon receipt of the audited financial statements from the Office of the Comptroller and Auditor General.



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