Research & Development
Taighde & Forbairt

HSE Action Plan for Health Research 2019–2029

Dr. Ana M. Terrés, Assistant National Director
Head of Research and Evidence

Seirbhís Sláinte
Níos Fearr
á Forbairt

Building a
Better Health
Service

2019

Contents

Glossary

DoH:	Department of Health
EI:	Enterprise Ireland
EU:	European Union
HIQA:	Health Information and Quality Authority
HPRA:	Health Products Regulatory Authority
HR:	Human Resources
HRA:	Health Research Authority
HRCI:	Health Research Charities Ireland (formerly Medical Research Charities Group / MRCG)
HRB:	Health Research Board
HSE:	Health Service Executive
IP:	Intellectual Property
IPPOSI:	The Irish Platform for Patient Organisations, Science & Industry
IRC:	Irish Research Council
KPI:	Key Performance Indicator
NIHR:	National Institute for Health Research
PPI:	Public and Patient Involvement
R&D:	Research and Development
RDI:	Rare Diseases Ireland
RECs:	Research Ethics Committees
SFI:	Science Foundation Ireland
WHO:	World Health Organisation

Acknowledgements

The ground work that has led to the development of this plan started in 2018. This work was essential not only to understand the context and the historical reasons for the current research status quo in the health service, but also to understand the depth and breadth of existing research activity and the current gaps in supporting infrastructure. Sincere thanks to Mary Clare O'Hara and Pádraic Fleming from the HSE Health Intelligence Unit who did a lot of the ground work that contributed to this understanding.

This led to a consultation document entitled "HSE Research & Development function" which articulated how the newly created HSE R&D could strategically and operationally contribute to support, develop and sustain research in the health service in order to *"make knowledge work for health".* I would like to thank the many parties that contributed with critical feedback during the consultation process, including colleagues from the HSE, the Department of Health, the Health Research Board, Clinical Research Development Ireland, and internally within the HSE national divisions, hospital groups, community healthcare organisations and health and social health professions.

From this process, and from further work carried out by the newly created R&D team, the final draft of the plan emerged and further consultation ensued. I would like to give my sincere thanks to the HSE R&D team, Virginia Minogue (NHS Research Forum, UK) and Teresa Maguire (DoH), for their unique insights; and to, Avril Keenan (HRCI) and Derick Mitchell (IPOSSI) for helping us to understand the patient perspective, all of which contributed to the final version of this plan.

Foreword

The delivery of high quality and safe healthcare to our service users, communities and the wider population is one of my immediate priorities. Health research is a critical but often underestimated enabler of health service delivery. Countries with the most advanced healthcare services around the world have the highest numbers of researchers per capita. We also know that health services where research is embedded as part of day-to-day operations deliver better outcomes for patients and for the population at large.

Research generates critical evidence to inform decision making, and ensures that our practices are evidence based. The benefits of involvement in research are also indirect, including the ability to attract and retain the best staff. I believe that keeping healthcare professionals at the heart of health research activities will ensure that the patients benefit to the fullest. Although the health service has thousands of research active staff, the implementation of this Action Plan for Research 2019-2029 will ensure that we can realise the benefits of this activity in full.

Demographic changes in our population, and the increase in life expectancy resulting from improved healthcare, are contributing to service and demand pressures. It is imperative that we bring innovative solutions to deliver the care and treatment necessary to successfully address these challenges. *Sláintecare* is our roadmap for this change, and change needs to be evidence-based to justify the effort and resources required for successful implementation. This Plan is an important step towards creating a supportive and enabling environment for research, and to ensure that the health service can benefit from the talent of our research active staff.

This plan aims to introduce the conditions for sustainable research growth. We will do this by implementing actions to support capacity building, and by providing more opportunities for meaningful patient participation and involvement. We will develop research leaders, as well as establishing the supports, governance and oversight required to underpin high quality research activity. This will also make Ireland and the HSE a more attractive location for research.

The health service is a critical partner of the overall national health research system. Through this plan we will put the building blocks in place to ensure that the health service is ready to engage in meaningful collaborations with academic institutions and funders, as an equal and valued partner, to increase the potential for research impact into policy and practice.

This plan sets out an ambitious but achievable path forward to drive a culture of research and innovation throughout the organisation, and I look forward to supporting its implementation.

Paul Reid

Paul Reid
Chief Executive Officer
Health Service Executive

HSE Research and Evidence

The imperative of ***Making Knowledge Work for Health***, the first ever strategy for Health Research in Ireland published by the Department of Health in 2001, still remains today; we cannot afford to ignore the power of new knowledge and data in improving the health service and the health of the population.

The Research and Evidence (R&E) function of the HSE aims to be a key driver in exploiting available data, enabling the discovery of new approaches and innovative ways to deliver health and social care services, and broadening access to the latest evidence by integrating the work of its three component multi-disciplinary services: Research and Development, Health Intelligence, and the National Health Library and Knowledge Service. Our vision is that of a health system renowned for its culture of building and using data and knowledge for improved patient care, improved health service delivery and improved population health and wellbeing.

R&E VISION

‘A health and social care system renowned for its culture of building and using knowledge to improve the health and wellbeing of the population’

Evidence-based practice requires that decisions about health care are based on the best available, most current, valid and relevant evidence,[i] and bringing this evidence into practice, strategy and policy is the only way to realise the impact of health research for the benefit of service users, staff, the service delivery system and the population at large. Our aim is to be a key driver for research, evidence-based practice and data-informed decision making within our organisation in order to:

- Achieve optimum care by improving the quality and process of care.
- Attract and retain the best healthcare staff.
- Increase levels of productivity and efficiency.
- Deliver a more effective and comprehensive service.
- Increase patient engagement and satisfaction.
- Inform decision making to optimise healthcare service delivery and improve population health and wellbeing.

The HSE Research and Evidence function is working now to strengthen and embed a culture of knowledge translation, data informed decision making and evidence-based practice into healthcare delivery. The Research and Evidence function will play a leading role, working with its stakeholder groups at service delivery and national level to design new health service structures proposed by Sláintecare, to ensure a stronger research and evidence footprint is designed into new services structures, supported by national frameworks and supports.

Stephanie

Dr. Stephanie O’Keeffe
National Director
Strategic Planning and Transformation
Health Service Executive

---

[i] Dawes, M., Summerskill, W., Glasziou, P. et al. Sicily statement on evidence-based practice. BMC Med Educ 2005, 5(1)

Introduction

The Government's Healthy Ireland Strategy(1) and the *Sláintecare Report*(2) represent the context within which the health service will evolve over the upcoming years to be able to cater for the needs of a growing and ageing population, and to keep people healthier for longer. Research, innovation and evidence will be key enablers underpinning the reform of the Irish healthcare system to ensure that we can generate the information required to address the need for new ways of working.

A growing body of evidence indicates that healthcare organisations with a strong research culture deliver better care. Such a culture is associated with better organisational performance, including lower patient mortality rates, reduced staff turnover, improved patient satisfaction and improved organisational efficiency, and these benefits go beyond those experienced directly by research participants.(3) (4) (5) (6) (7) (8) (9) Furthermore, organisations in which the research function is fully integrated into the organisational structure outperform other organisations that pay less attention to research and its outputs.(3) (4)

A recent assessment of health research activity carried out by the HSE shows that a significant body of research is taking place in the publicly funded health service. This research activity has grown through the interest and passion of staff from all sectors of the organisation who want to improve the provision of care. However, research is not formally embedded as part of health service delivery, and much can be done to capitalise on the willingness of staff by creating a more supportive environment for research and innovation. This plan articulates the steps that are required to create such an environment, and in doing so responds to the objectives articulated in the *Government's Action Plan for Health Research 2009-13*(10) and also the *Making Knowledge Work for Health strategy 2002*, a national plan for Health Research which materialised elsewhere around the country, but not in the health service.

We need to develop robust governance structures for research, to enhance the ethical and scientific quality of our projects, to promote good practice, reduce adverse incidents and to ensure that lessons are learned – and in doing so to safeguard our patients and increase public trust. Equally important are the establishment of adequate support mechanisms for staff, and the introduction of capacity building measures to increase our ability to access external funding, to increase our human capital for research and to strengthen our relationship with our academic partners and other internal and external stakeholders.

Patients must be at the heart of any health system, and we need to facilitate and encourage greater public and patient involvement (PPI) in research. This will enable researchers to co-design processes that are participant friendly to improve understanding and participation, and to better understand patient priorities so that patients become an equal partner in the process of discovery. By putting the patient at the centre of the priority setting we will also be able to achieve greater impact. Ultimately, to achieve such an impact, knowledge needs to translate into meaningful action. As an organisation, we must articulate our research priorities, and implement international models of best practice to ensure the impact of research is realised by enabling the transformation into policy and practice, to avoid research wastage and to ensure the health service receives the maximum benefit from the underpinning research activity that it hosts.

This plan will contribute to the on-going transformation of the health and social care service by enabling it to benefit from the knowledge that it generates and by contributing to a culture of enquiry and best practice. It will be a challenging and exciting journey.

Dr. Ana M. Terrés
Assistant National Director
Head of Research and Evidence
Health Service Executive

1. Executive Summary

A review of research in the health service by HSE Research and Development (R&D) found a significant level of research activity in hospitals, community healthcare organisations and national services, engaging both clinical and non-clinical staff. Research has a positive impact in healthcare organisations but it needs to be properly governed and supported to ensure that the health service derives benefit. A further review of governance and support structures in 2018 identified gaps which may pose a risk to patients and organisations and represent an opportunity cost.

The objective of this plan is to embed a culture of research, evidence based practice and innovation in the health service so that research becomes a critical enabler of health service delivery by attracting and retaining the best healthcare staff, improving the quality and process of care, increasing the levels of productivity and efficiency, and increasing patient engagement and satisfaction. It aims to develop the mechanisms and operational infrastructure required to embed research as part of health service delivery and decision making, positioning research as a key enabler of the transformation required to implement Sláintecare.(2) The plan focuses on six key areas:

- **Adequate research governance to ensure participants are protected:** *Research governance mechanisms are necessary to ensure public confidence, by guaranteeing that research complies with all professional, ethical, legal and scientific standards, hence reducing risk, enhancing ethical and scientific quality and encouraging good practice.*

- **Support for staff engaged in research:** *Research management and support structures are essential to ensure research governance is implemented successfully to develop a research culture and to build capacity.*

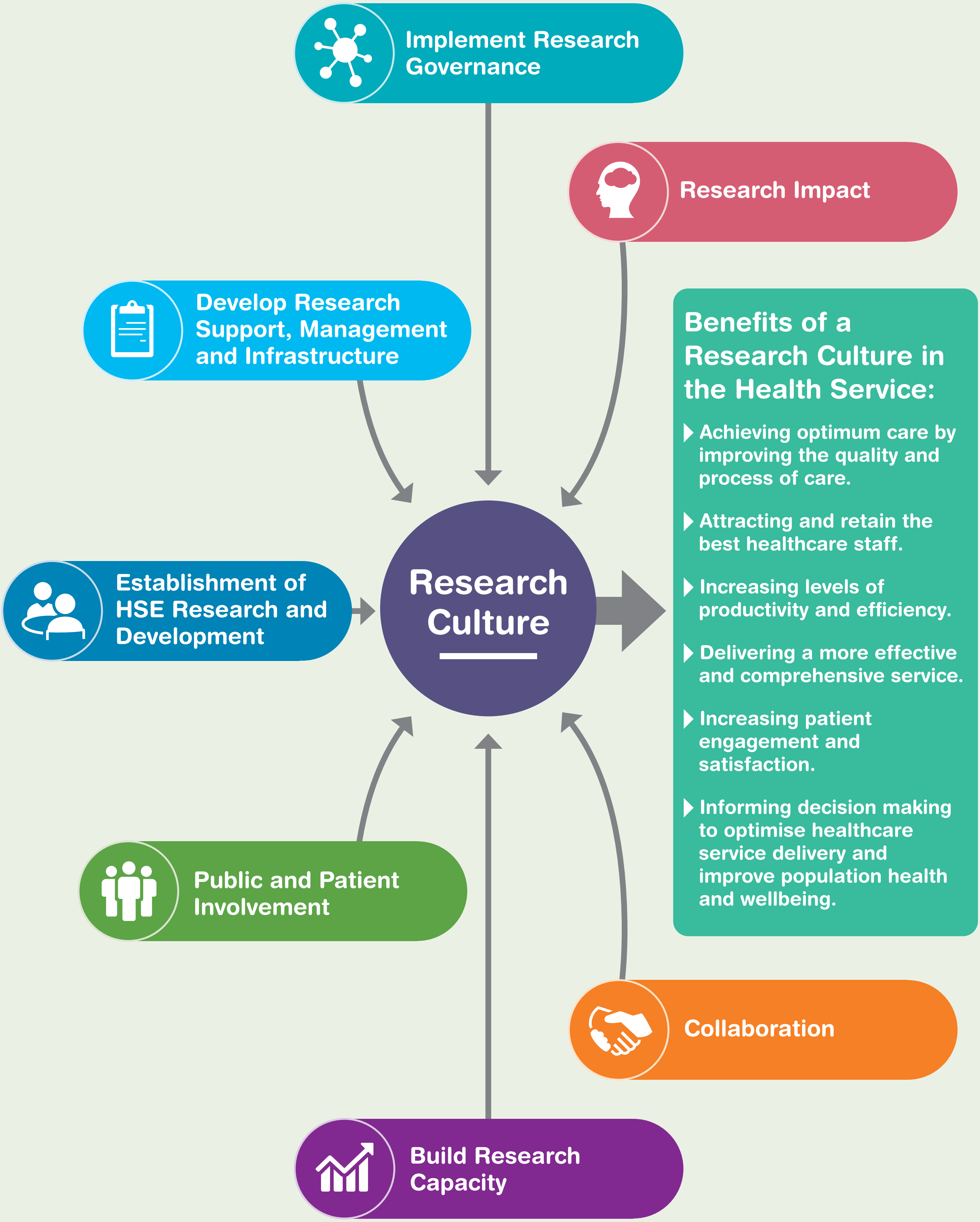
- **Increasing human and financial capacity:** *The health service currently faces severe financial and staffing pressures in the process of delivering care. Hence, the service must be able to leverage external investment and expertise to support and grow research activity, and to ensure internal investment in research represents value for money.*

- **Adding value through research:** *In order for research to have impact, research must be relevant to the needs of the patients, the health service and the policy makers, and the knowledge generated must be translated into policy and practice. Dissemination and implementation are essential to achieving impact, so that the benefits of knowledge generation are passed to other researchers, practitioners and the wider community. Knowledge translation is the application of that knowledge by relevant stakeholders to accelerate the benefits of global and local innovation in strengthening health systems and improving people's health.*(11) (12) *Institutional strategies are needed to promote and facilitate dissemination, and to facilitate knowledge translation.*(13)

- **Involving patients:** *The involvement of patients and the public in research plays an important role in ensuring that patients are informed about research that is relevant to them. This can result in increased patient participation and involvement in research. Enabling patients and their families to inform research focus areas and processes is likely to improve the relevance of research.*(14)

- **Leveraging the power of collaboration:** *The Health Service is a key component of the national health research system. This includes other key actors, such as the third level sector, health funders and charities, patient groups, the Department of Health, industry and other agencies and organisations. The system must work in one direction to achieve maximum impact, and this can only be achieved by establishing strong collaborative links to ensure alignment between health service needs, research and education, policy and innovation. Hence mechanisms to facilitate alignment, engagement, knowledge exchange and collaboration are essential to ensure success.*

In acknowledging that this Action Plan for Research represents a significant program of change, it has been purposely set out within a realistic time frame to achieve our objectives over the next ten years. This timeline is parallel to the *Sláintecare* implementation plan, which is also an opportunity to embed a culture of research within the new structures for integrated care.



Implement Research Governance

Research Impact

Develop Research Support, Management and Infrastructure

Establishment of HSE Research and Development

Research Culture

Public and Patient Involvement

Collaboration

Build Research Capacity

Benefits of a Research Culture in the Health Service:

- Achieving optimum care by improving the quality and process of care.
- Attracting and retain the best healthcare staff.
- Increasing levels of productivity and efficiency.
- Delivering a more effective and comprehensive service.
- Increasing patient engagement and satisfaction.
- Informing decision making to optimise healthcare service delivery and improve population health and wellbeing.

2. Scope

This plan is concerned with research that takes place in the publicly funded health and social care service involving its patients, data, staff or infrastructure. Research is often confused with other activities which require rigorous approaches to methodology in terms of design, procedure, analysis and interpretation of data, such as clinical audit, health service evaluation and other usual practice, such as that carried out by Departments of Public Health. However, they are not the same and for the purpose of this plan, research is defined in accordance with the UK Research Governance Policy Framework(15) as **“the attempt to derive generalizable or transferable new knowledge to answer or refine relevant questions with scientifically sound methods”**,[ii] and it excludes all the above activities (audit, service evaluation and usual practice), but includes health research activities as defined by the Health Research Regulations 2018 (Figure 1).

Figure 1: Definition of health research in the Health Research Regulations 2018.(16)

Population Health

Improving the health of the population through a better understanding of the ways in which social, cultural, environmental, occupational and economic factors determine health status.

Basic and Applied Biomedical

Understanding normal and abnormal functioning at the molecular, cellular, organ system and whole body levels.

Clinical

Improving the diagnosis and treatment of human disease and injury.

New Technologies

Innovative strategies, devices, products, or services for the diagnosis, treatment or prevention of human disease or injury.

Health Service

Improving the efficiency and effectiveness of health professionals and the health care system.

[ii] https://www.hra.nhs.uk/planning-and-improving-research/policies-standards-legislation/uk-policy-framework-health-social-care-research/

3. Research in the Health Service – the context

3.1 Policy context

The drive to embed research as part of health service[iii] delivery dates back to 2001 as published by the Department of Health and Children in their Health Research Strategy "Making Knowledge Work for Health", where a desire to offer all the benefits of new knowledge to patients and to our health services is clearly articulated. This followed a period of significant investment in health research which contributed to strengthening the capacity of the third level sector, but which had limited impact within the health service. A decade later, the Action Plan for Health Research 2009-2013 went a step further to clearly articulate the role of the HSE in leading a national health research system, which unfortunately the economic downturn made impossible to achieve. Today, the Sláintecare Implementation Strategy(2) reinforces again the importance of health research:

"Health research is a key factor in promoting the health of the population, combating disease, reducing disability and improving the quality of care. It brings learning from international best practice and appropriate evaluation techniques and application. This evidence is essential to the creation of a fairer, more efficient health system and for the delivery of better health outcomes. In an environment that is dynamic and changing, health research in Ireland needs to be positioned to make its greatest contribution for patients, the health system and the economy".

3.2 Current landscape

Results from a research activity scoping exercise carried out in 2018 indicate that a significant level of research activity currently exists in the Health Service.(17) Circa 2000 respondents to a survey of research active personnel indicated that many different categories of health professionals are involved in research, including medical, nursing, midwifery, health and social care and other non-clinical staff, across the acute and community setting, as well as within national services and programmes. Staff members, both with and without academic appointments, produce many research outputs, with over 3000 peer reviewed publications and around 1900 approvals by research ethics committees on an annual basis. A lot of this activity is possible thanks to the significant investment in clinical research that has taken place over the last ten years through the academic sector via the Health Research Board (HRB), which is a key player in the sustainability of clinical research infrastructure, including clinical research facilities and clinical trial support networks.

However, despite encouraging signs of activity taking place, and in spite of significant investment in health research via the academic sector, the number of clinical trials in Ireland is much lower than that of other EU countries of similar size. Furthermore, gaps in governance, support and lack of strategic direction also exist. These represent a barrier for the performance of good quality research and research capacity building. Some of the key areas that need to be addressed include:

- Clear articulation of the roles, responsibilities and functions required for the appropriate governance of research in the health service to ensure research quality, good practice, public trust, and to facilitate the engagement with our academic collaborators.
- Development of research management and support capacity to strengthen the environment for research and the establishment of a research culture and evidence based practice, to enable access to data, and to facilitate engagement with the third level sector.

[iii] The term "Health Service" is used throughout the report and refers exclusively to the publicly funded health and social care services (HSE and its funded organisations).

- Definition of priorities which need to be informed by key knowledge gaps and to consider the public and patient perspective.
- Development of capacity and leadership in our workforce to develop research potential and to promote a culture of research and innovation.
- Facilitation of the translation of research into policy and practice.
- Transparency about research and further public and patient input and involvement.

3.3 Adding value

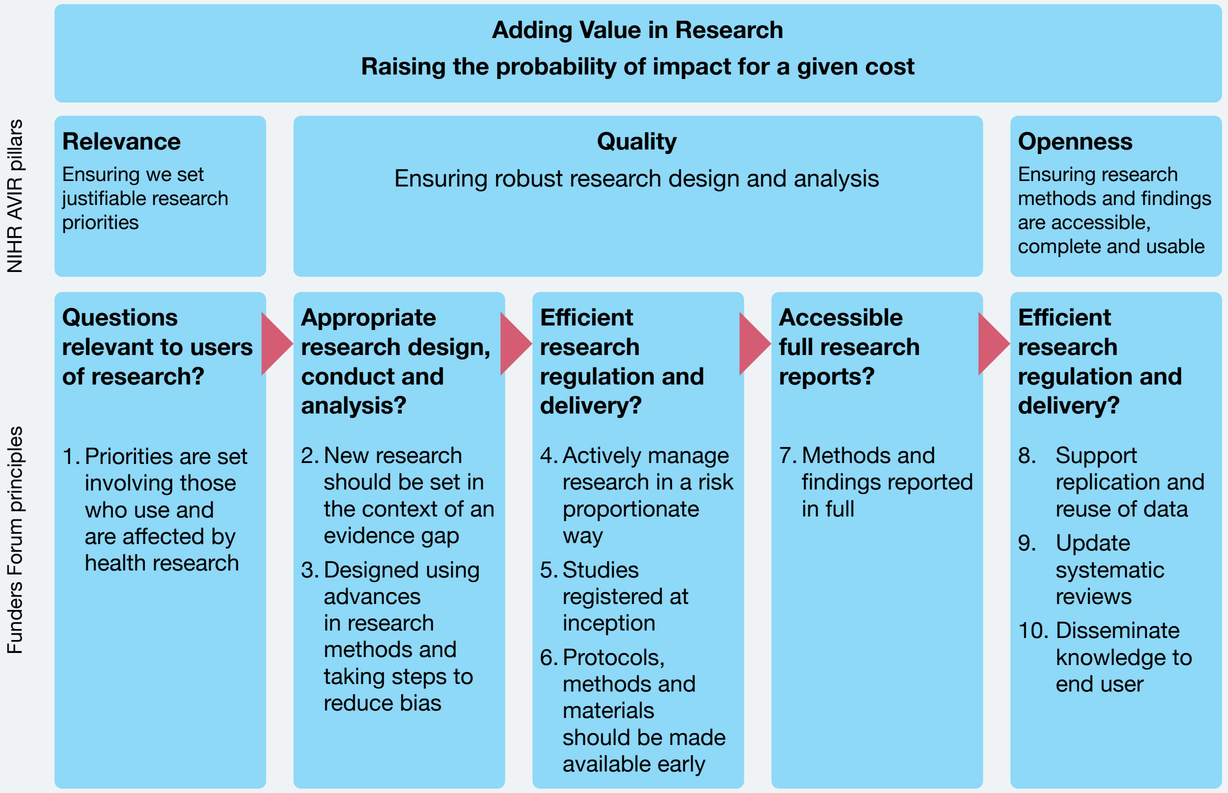
Realising the impact of research has become a key driver in the allocation of research funding at national and EU level. The health service must ensure that research adds value and that the knowledge generated has the maximum impact for the service, the patients and the public (Figure 2). The translation of knowledge into policy and practice is not always guaranteed, activity may not be aligned with the knowledge gaps, research activity may be of low value or poorly designed, implementation of associated change can take several years and may be perceived as high cost for relatively low benefit, and results may not be disseminated or published.(18)

The development of appropriate governance, management and support mechanisms for research can ensure research wastage is minimized by ensuring that:

- Research is relevant.
- Research design is appropriate.
- Research results are delivered appropriately and efficiently.
- Results are accessible and useable.
- Research is valued.
- The workforce is enabled by an appropriate culture and has opportunities for development.(19)

Addressing these issues will enable the health service to capitalise on the research outputs for the benefit of the patient and for health service improvement, and to support on-going evidence based transformation.

Figure 2: NHS Research Forum Framework for Adding Value in Research[20]



	Adding Value in Research **Raising the probability of impact for a given cost**				
NIHR AVIR pillars	**Relevance** Ensuring we set justifiable research priorities	**Quality** Ensuring robust research design and analysis			**Openness** Ensuring research methods and findings are accessible, complete and usable
Funders Forum principles	**Questions relevant to users of research?** 1. Priorities are set involving those who use and are affected by health research	**Appropriate research design, conduct and analysis?** 2. New research should be set in the context of an evidence gap 3. Designed using advances in research methods and taking steps to reduce bias	**Efficient research regulation and delivery?** 4. Actively manage research in a risk proportionate way 5. Studies registered at inception 6. Protocols, methods and materials should be made available early	**Accessible full research reports?** 7. Methods and findings reported in full	**Efficient research regulation and delivery?** 8. Support replication and reuse of data 9. Update systematic reviews 10. Disseminate knowledge to end user

3.4 Risks and opportunity cost

It is difficult to think about the long-term impact of research in the context of the difficulties currently being experienced by the health service in Ireland; and the challenges of both front line staff and those in management are not to be underestimated. However, it is important to acknowledge that maintaining the status quo in relation to our research activity is not in line with international best practice, and it is not an option if we want to transform and modernise the health service into an effective and efficient service that is valued by all.

As described above, significant levels of research take place already within the health service. If we do nothing, existing levels of research may continue but the full potential impact of that research in terms of improvements in health service delivery and patient wellbeing will not be realised:

- We will fail to retain our home-grown, highly skilled healthcare staff, and to attract candidates who are currently working abroad to return to Ireland.
- We may incur financial liabilities as a result of non-compliance with legislation or lose public confidence due to unsuitable research governance structures.
- The Irish health service and patients will not benefit from the new knowledge generated and the potential for innovation.
- The interaction with the third level sector without appropriate operational and governance structures will stand in the way of meaningful collaboration opportunities.
- Transformation cannot happen without innovation and without evidence-based decision making.

There is also an opportunity cost to doing nothing; it is hard to put a monetary value on the cost of new possibilities to create competitive advantage, to implement efficiencies of scale and to increase patient satisfaction, but the value is undoubtedly high.

4. Aims

1. Develop and implement a robust governance framework for research activity in the context of evolving healthcare structures to protect and promote the interests of patients and the public in health and social care research.
2. Create research support and management roles, and develop the infrastructure required to underpin, enable and manage the research activity in the HSE.
3. Build research capacity in terms of human and financial capital to enable the sustainable growth of research activity into the future.
4. Implement institutional measures to facilitate the translation of research and innovation into policy and practice and increase dissemination of knowledge.
5. Support and promote the involvement of patients and the public in all levels of research activity.
6. Establish strong collaborative working relationships with key external stakeholders and contribute to the national health research system in a meaningful way.

Figure 3: Aims and objectives of HSE Action Plan for Health Research

Aim 1

Develop and implement a robust governance framework for research activity in the context of evolving healthcare structures to protect and promote the interests of patients and the public in health and social care research.

Why?

Research governance mechanisms are necessary to safeguard public confidence and encourage public and patient participation in research. By articulating clear lines of organisational, institutional and individual responsibilities and accountability, good governance protects participants and staff, enhances ethical and scientific quality, promotes good practice and ensures lessons are learned from mistakes.

Objectives

i. Design and implement a framework for the governance of research to clarify accountability and responsibilities across the health service to include:

   - Responsibilities for oversight and approval.
   - Compliance with ethical principles and legislative requirements.
   - Assessment of risk and impact on patients, service or staff.
   - Financial governance for research funds.
   - Research integrity.
   - Intellectual Property management.
   - Access, use, management and governance of data for research.

ii. Design and implement an agreed legal framework for research activity involving the third level sector to:

   - Articulate responsibilities, processes, and accountability in respect of patient safety, healthcare and research staff, the management of research funds and intellectual property, etc.
   - Enhance the potential of existing operational and collaborative arrangements.

iii. Develop the necessary policies, guidelines, standard operating procedures and contractual frameworks to facilitate the governance of research in the health service.

iv. Provide support to the Research Ethics Committees (REC) and put in place interim measures to address existing shortfalls.

Aim 2

Create the research support and management foundations as well as the infrastructure required to underpin, enable and oversee the research activity.

Why?

Research management and support structures, including key senior management roles, are essential to ensure research governance is implemented successfully. They are also essential to build research capacity, to facilitate engagement with the academic and private sector and to develop a research culture within the entire health service.

Objectives

i. Establish the national HSE R&D function linked to a network of regional R&D offices capable of delivering their function in the context of evolving healthcare structures. These will be essential to enable research governance and to provide research support services for staff to deliver high quality research, to manage intellectual property and to navigate engagement with the private and academic sectors.

ii. Support the development of key senior research management and leadership roles in both the acute and community sectors.

iii. Encourage the development of research champion roles at different levels throughout the organisation.

iv. Support the development of appropriate research information managements systems at local and national level to enable research governance and to provide key information to support decision making.

v. Engage with national HSE initiatives aimed at consolidating health data to ensure access for research purposes is facilitated in the context of appropriate information governance.

vi. Contribute to the design of the electronic health record for acute and community settings to ensure the research support functionality is considered from the outset.

Aim 3

Build research capacity in terms of **human and financial capital** that will enable the sustainable growth of research activity.

Why?

The health service currently faces severe financial and staffing pressures in the process of delivering care. Hence, the service must be able to leverage external investment and research expertise to support and grow research activity as well as ensuring that internal investment in research represents value for money. Embedding research into healthcare service delivery will also contribute to attracting and retaining high quality healthcare staff.

Objectives

Human resources

i. Develop a research capacity building framework in collaboration with relevant internal and external stakeholders to address operational issues currently hindering research including:
   - Research career structure and salary scales.
   - Training and professional development material for research active staff.
   - Recruitment framework for researchers hired by externally funded research projects.
   - Creating mechanisms for secondments or research time “buy out” for research active healthcare staff.[iv]

ii. Implementation of the EU charter and code of HR practices for researchers within the HSE.

External research funding

i. Fulfil the requirements of national funders in order to be recognised as a research host institution/s for the purpose of administering research awards according to their terms and conditions.

ii. Develop organisational capability for research accounting and financial management of external research funds.

Research support services

i. Develop research support services aimed at helping staff with all aspects of the planning, funding and management of research throughout its lifecycle, including:
   - support with commissioning and procurement of external research and evaluation activities to maximise value for money.
   - the development of further partnerships and capability for collaboration.
   - supporting staff with critical appraisal, planning and undertaking research, writing for publication and dissemination generally.

[iv] https://euraxess.ec.europa.eu/sites/default/files/am509774cee_en_e4.pdf

Aim 4

Implement institutional measures to facilitate the **translation** of research and innovation into policy and practice, and increase dissemination of knowledge.

Why?

In order for research to have impact, the knowledge generated must produce results that can be translated into policy and practice. In order for this to happen, research must be relevant to the needs of patients, the health service and the policy makers. Research that is aligned with the needs of the health service can add value on many fronts, including:

- health service planning and improvement.
- health promotion and disease prevention.
- future population health needs.
- disease diagnosis, treatment and clinical management.
- integrated care of the person.
- implementation of government health policies.

Dissemination is an essential component of the research process and is the first step towards achieving impact, so that the benefits of new knowledge generation can be passed onto other researchers, practitioners and the wider community. Knowledge translation is the application of that knowledge by relevant stakeholders to accelerate the benefits of global and local innovation in strengthening health systems and improving people's health. (11) (12) (13) Without institutional strategies to promote and facilitate dissemination, and to facilitate knowledge translation, new knowledge and innovations may never turn into real benefits for the health service.

Objectives

i. Contribute significantly to the National R&D forum which is to be established as part of the Sláintecare implementation plan.

ii. Support the development of research priority setting at local, regional and national level with the aim of addressing existing knowledge gaps.

iii. Develop a Research Dissemination Policy based on the HRB National Open Research principles.

iv. Implement international best practice strategies at institutional level to facilitate translation.

v. Devise and measure key performance indicators for impact in order to promote the translation of research into practice.

vi. Develop capability for intellectual property management and technology transfer.

vii. Develop an evaluation framework to measure the impact of implementing this action plan.

Aim 5

Support and promote the involvement of **patients and the public** in all levels of research activity.

Why?

Public and Patient Involvement (PPI) in research plays an important role in ensuring that the real life experiences of patients and the public are considered in decision-making processes around research and that research is relevant to their needs.(14) It is distinct from patients participating in research studies or informing patients about research, but involves partnership with the public and patients during the co-design, undertaking and implementation of research, and in the articulation of research priorities. In addition to improving relevance, it can also result in increased participation in research and in the reduction of research waste.

Objectives

i. Develop a Public and Patient Involvement (PPI) in research action plan and work in partnership with patients and patient organisations for its implementation.

ii. Provide support and education to the research community, to patients and the public, to facilitate increased PPI.

iii. Organise regular events to showcase research in the health service to the public and highlight opportunities for involvement.

Aim 6

Establish strong **collaborative working relationships** with key external stakeholders and contribute to the national health research system in a meaningful way.

Why?

The Health Service is a key component of the national health research system, which includes other key actors, such as the third level sector, health research funders, charities, patient groups, the Department of Health and other agencies and organisations. The system must work in partnership to achieve maximum impact, and establishing strong collaborative links and mechanisms for knowledge exchange are essential to ensure success and to leverage opportunities for capacity building.

Objectives

Establish the HSE Research and Development function as a key driver in the development of collaborative links with:

i. External policy makers to ensure the health service contributes to research related strategy and policy developments at national and international level.

ii. Internal stakeholders to foster collaboration, resource and knowledge sharing, and a synchronised approach to the implementation of research related policies.

iii. Third level sector researchers, groups, centres networks and management.

iv. National funders (e.g. HRB, SFI, EI, IRC, charities, etc.) and international funders (e.g. EU).

v. Representative bodies for patients and patient organisations (e.g. IPPOSI, HRCI, RDI, disease-specific organisations).

vi. Other relevant organisations (e.g. Cancer Trials Ireland, Clinical Research Development Ireland, State Claims Agency, HIQA, HPRA, etc.).

5. Timeline and Deliverables

This plan is to be implemented over the next 10 years in line with the Sláintecare timeline and the HSE R&D function will be its key driver. Strengthening collaborative mechanisms with the third level sector and other partners will be key to its success.

5.1 Establishment Phase 2019-2020

- Establish the National R&D function and the relevant advisory and working groups.
- Development of a draft research governance framework for wide consultation.
- Development of a contractual framework for research engagement with the third level sector.
- Work with existing and future RECs to develop support mechanisms, ensuring appropriate REC coverage for research activity at national level.
- Launch of a website as a mechanism to provide guidance to staff engaged in research activity.
- Scope the requirements for research information management systems.
- Initiate the development of required policies and standard operating procedures for research.
- Develop a plan to create appropriate institutional structures for research management.
- Development of an evaluation plan to determine effectiveness of the HSE Action Plan for Health Research.
- Articulation of health service research priorities.
- Contribute to the design of the electronic health record for both acute and community settings to ensure research is factored into the blueprint from the outset.

5.2 Development Phase 2021-2024

- Full implementation of the Research Governance Framework.
- Collaborate with the Integrated Information Service in the development of an appropriate information governance framework to enable access to data for research activity in the health service.
- Develop HR and research finance capacity building implementation plan.
- Policies, guidelines and standard operating procedures for:
    - good research practice and scientific integrity.
    - dealing with allegations of research misconduct.
    - costing of research activity.
    - research data management; access, storage, processing, and disposal.
    - research data governance.

  - HSE research dissemination guidelines.
  - financial governance of research funds.
  - intellectual property.
- Development of a research support function.
- Articulation of knowledge gaps and requirements for the health service.
- Develop PPI strategy and implementation plan and commence implementation.
- Development of research management infrastructure at organisational level.
- Establishment of healthcare organisations as approved hosts for national research funders.

5.3 Embedding Phase 2025-2026

- Implementation of research finance capacity building plan.
- Implementation of research HR capacity building plan.
- Develop a hub in collaboration with relevant stakeholders to facilitate the implementation of innovative evidence-based ideas.

5.4 Consolidation Phase 2027-2029

- Network of research support and governance structures aligned to healthcare delivery structures in place.
- Research management roles and research leadership positions established.
- Framework for ensuring research provides added value is implemented.
- Development of research KPIs for the organisation and evaluation of the impact of this 10-year plan.

6. Conclusion

The HSE Action Plan for Health Research aims to establish the organizational foundations that will enable research in the health service to grow on a sustainable footing, and to integrate into the process of health service delivery for the benefit of patients. Each of the six action pillars are essential to create a whole that is more than the sum of its individual parts, and failing implementation of the actions in any one of the pillars will have a negative impact on all others.

Establishing an appropriate forum to engage with patients and the public, to ensure we listen to their voice, is a central aspect of this plan. Equally, collaboration with the academic institutions is of paramount importance to ensure that clinical practice is academically informed and that the health service becomes a meaningful contributor to academic research excellence. But we need to support the staff members who contribute to the development of new knowledge and innovation with extremely hard work and passion, and without whom this plan would be meaningless. Justifiably, the creation of organizational infrastructure is the foundation to enable the implementation of appropriate research governance, provide research support to staff and help establish collaborative links with external stakeholders.

This plan aims to create a culture where research activity and evidence are valued and utilized to inform service delivery, development and planning and it will be a key contributor to achieve our vision of creating "a health and social care system renowned for its culture of building and using knowledge to improve the health and wellbeing of the population". However, while the HSE R&D function will be a key driver of its implementation, its success lays upon the willingness and commitment of the many arms of the health service to understand the value that research brings to patients, and to invest accordingly.

References

1. Department of Health. Statement of Strategy 2016–2019, 2016. Available via https://health.gov.ie/wp-content/uploads/2016/12/DoH-SoS-2016-2019-Final-En.pdf, accessed Feb 20, 2019
2. Government of Ireland. Sláintecare Implementation Strategy: Sláintecare Implementation Strategy and Next Steps, 2018. Available via https://www.gov.ie/en/publication/0d2d60-slaintecare-publications/#slaintecare-implementation-strategy, accessed Feb 20, 2019
3. Hanney S, Boaz A, Jones T, Soper B. Engagement in research: an innovative three-stage review of the benefits for health-care performance. *Health Serv Deliv Res* 2013, **1**:(8)
4. Boaz A, Hanney S, Jones T, Soper B. Does the engagement of clinicians and organisations in research improve healthcare performance: a three-stage review. *BMJ* Open 2015,**5**:e009415. doi: 10.1136/bmjopen-2015-009415
5. Christmas C, Durso SC, Kravet SJ, Wright SM. Advantages and challenges of working as a clinician in an academic department of medicine: academic clinicians' perspectives. *J Grad Med Educ* 2010, **2**(3):478-84
6. Harding K, Lynch L, Porter J, Taylor NF. Organisational benefits of a strong research culture in a health service: a systematic review. *Australian Health Review* 2016, **41**(1):45-53
7. Krzyzanowska MK, Kaplan R, Sullivan R. How may clinical research improve healthcare outcomes? *Annals of Oncology* 2011, **22**(Suppl 7):vii10–vii15. https://doi.org/10.1093/annonc/mdr420
8. Redmond B, Guerin S, Nolan B Devitt C and Egan A. The Retention of Social Workers in the Health Services: An Evidence-Based Assessment. Project Report 2010, University College Dublin (unpublished). Available via http://trap.ncirl.ie/id/eprint/1695, accessed Feb 20, 2019
9. IJsselmuiden C, Matlin S. Why health research? Research for health: Policy Briefings. Council on Health Research for Development and Global Forum for Health Research, 2006. Available via http://www.cohred.org/downloads/cohred_publications/Why_Health_Research_Research-vol.1_0_0.pdf, accessed Feb 20, 2019
10. Department of Health. Action Plan for Health Research 2009-13, 2009.
11. World Health Organisation. Knowledge translation framework for ageing and health, 2012. Available via https://www.who.int/ageing/publications/knowledge_translation.pdf, accessed Feb 20, 2019
12. World Health Organization. Bridging the "Know-Do" gap in global health. Meeting on Knowledge Translation in Global Health, 2005, Geneva, Switzerland. Available via https://bit.ly/2T8oyKI, accessed Feb 20, 2019
13. Knowledge Translation Australia. Lost in Translation, Research Translation and Translational Research: Demystifying Research Translation. Available via https://www.ktaustralia.com/demystifying-research-translation/, accessed Feb 20, 2019
14. Medical Research Charities Group. Patient and Public Involvement in Health Research in Ireland? Report, 2016. Available via https://www.mrcg.ie/assets/54/5EA4C50F-D400-4DD8-AE435C7BB37A9F9D_document/Final_Conference_27-9-16_Report.pdf, accessed Feb 20, 2019
15. NHS Health Research Authority. UK Policy Framework for Health and Social Care Research, 2017. Available via https://www.hra.nhs.uk/documents/1068/uk-policy-framework-health-social-care-research.pdf, accessed Feb 20, 2019
16. Office of the Attorney General. Irish Statute Book. Data Protection Act 2018. Available via http://www.irishstatutebook.ie/eli/2018/act/7/enacted/en/print.html, accessed Feb 20, 2019
17. Terrés A, O'Hara MC, Fleming P, Cole N, O'Hanlon D and Manning P. Research activity in the HSE and its funded organisations: A report of staff engagement in research, research studies undertaken, publication output and research networks. Health Service Executive, Dublin 2019
18. Chalmers I, Gasziou P. Avoidable waste in the production and reporting of research evidence. The *Lancet* 2009, **374**(9683):86-89. DOI: https://doi.org/10.1016/S0140-6736(09)60329-9
19. NHS Research and Development Forum. Adding value in Research (AVIR) through research management, support and leadership, 2018. Available via http://www.rdforum.nhs.uk/content/wp-content/uploads/2018/07/FINAL-Forum-Adding-value-write-up-V1.0-JULY-2018-1.pdf, accessed Feb 20, 2019
20. National Institute for Health Research. Adding Value in Research (AViR) Framework. Available via https://www.nihr.ac.uk/documents/nihr-adding-value-in-research-framework/20147, accessed on Feb 20, 2019