Research Strategic Plan
2016–2019

June 2016
We are committed to equality and diversity. We have assessed these standards for likely impact on the nine equality protected characteristics as stated in the Equality Act 2010 and defined by age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation. A copy of the impact assessment is available upon request from the Healthcare Improvement Scotland Equality and Diversity Advisor.

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www.healthcareimprovementscotland.org
1. Background

Much of the work Healthcare Improvement Scotland undertakes in fulfilling its role to drive improvement in the quality of health and social care could be described as developmental or innovative and as such requires the use of research findings and the application of research methods. Often our work is similar to that undertaken by academic departments in universities and other organisations whose role is to advance applied or ‘translational’ research. Many of our staff, particularly within the Evidence Directorate, have formal training and qualifications in research methods and provide support for some of this research-related activity.

We have well-established relationships with universities and academics, both locally and internationally, for aspects of our work such as guideline development and health technology assessment and the Scottish Health Council hosts a Participation Research Network. However, other functions in the organisation have fewer research-trained staff and ad hoc or less well-developed relationships with academia.

In recognition of the fundamental requirement for high quality research as a component for the delivery of many of our projects and programmes, we published a research strategy in 2012 as a vehicle to systematically develop this support across all our functions.

Healthcare Improvement Scotland’s Research Strategy 2012–2015 was developed to support the establishment of sustainable (that is not person dependent) research collaborations with academic and research units to advance methodological approaches across our functions, and, to attract research and clinical staff to work with our organisation. The strategy included a mission statement and four high level aims and was implemented by developing and delivering annual action plans. The appendix provides an overview of the aims of the strategy and what was subsequently delivered.

The strategic plan presented here is designed to build on the successes of the 2012–2015 strategy and, in particular, to support the extension of what has worked well for some parts of the organisation to other functions which could benefit from greater access to research and the research community.

The process for developing this strategic plan was as follows:

- internal group involved with the delivery of the 2012–2015 strategy reviewed the progress and successes and identified areas for focus for the new strategic plan
- Research Management Group input to draft strategic plan
- Quality Committee review of draft strategic plan in November 2015
- targeted external review of the draft strategic plan, and
- finalised strategic plan presented to the Board in February 2016.

2. Principles

Discussion amongst the internal cross-organisational group of staff who contributed to the plan’s initial development identified a number of principles that need to be considered in the course of this process.

- There is capability amongst the staff in Healthcare Improvement Scotland to identify the need for, and undertake, more primary research, but there is insufficient capacity to do this and deliver our work programme. What capacity there is should therefore be focused on building relationships with external bodies whose primary function is research.
• We ensure that all research activity, conducted internally or commissioned from others, fully involves patients, carers, service users and/or the public in its design and delivery.

• Our research is conducted in partnership with professionals across health and social care to ensure its relevance to those providing services, and, where appropriate, with input from academics with specialist expertise to maximise the use of our resources.

• Any research that we are involved with, through commissioning or collaboration, should have direct and practical application to support improvement of the quality of health and social care.

• The boundaries between research, evaluation and improvement are not clear cut and we must ensure that there is not duplication of effort, including reporting, between projects considered as research activity and other work captured within the local delivery plan.

• We should build on the successes of the Research Strategy 2012–2015 and, in particular, we should consider extending the model of strategic alliances with research organisations and continue to develop methods to evaluate our projects and programmes of work.

3. Our plan

3.1 Strategic alliances

To date, academic input to our work has taken a number of forms including jointly working on projects, providing staff training, and supporting events such as the annual Healthcare Improvement Scotland research symposium. While recognising the importance of inter-personal relationships between Healthcare Improvement Scotland staff and researchers, we should not rely on this as the sole mechanism of engaging with academia. Strategic alliances have been identified as an effective and efficient way of getting input from academic organisations into our work.

These established strategic alliances have involved formalising links between staff from the Evidence Directorate and research units. Less formal links between the improvement activities within the Improvement Hub (formerly the Safety and Improvement Directorate) and the Clinical Directorate and bodies such as the Health Foundation exist, but there is no formalised relationship and this could be explored. Relationships with other organisations with research remits related to our work, for example the Scottish School of Primary Care, could also be developed. There are no formal relationships between the Quality Assurance Directorate and external academic units at present, but there are research teams who could be approached.

We have a number of established links with international organisations, including Guideline International Network (G-I-N) and a European network for HTA (EUnetHTA) which have resulted in Healthcare Improvement Scotland receiving funding to participate in collaborative research projects. We will pursue future opportunities for collaborative research where this would support our corporate strategic aims.
We have secured funding from the Health Foundation to test and support development of quality improvement methodology. Such funded projects have also supported the development of links with other quality improvement organisations across the UK and our relationships with NHS boards as we work together to develop new ways of improving quality of care. Again, other opportunities to secure such funding will be sought where these fit with our organisational aims.

As our work extends into supporting quality improvement in social care through the Improvement Hub, we will need to explore current interaction and connections with researchers in the area of social care and identify and develop sustainable relationships. The purpose of developing such relationships would include both identifying research support for our work and also influencing future research in areas that are relevant to quality improvement. Key research organisations will include the Institute for Research and Innovation in Social Services, Scottish Social Services Council and the Social Services Research Group. We will also explore relationship building with other organisations across the UK with complementary remits to that of Healthcare Improvement Scotland, for example, the Collaborations for Leadership in Applied Health Research and Care (CLAHRCs).

3.2 Translational research

Much of the research activity undertaken in Healthcare Improvement Scotland to date has addressed what was described by Sir David Cooksey as the second translational gap, that is the translation of ideas from primary research into practice\(^3\). This includes the secondary research we conduct to develop SIGN guidelines and Scottish Health Technologies Group (SHTG) outputs. Methodological research to support this work includes projects we have contributed to through G-I-N and EUnetHTA. A recent output from our involvement with EUnetHTA has been the reuse and revision of a rapid review of a health technology, the MitraClip\(^{\text{\textregistered}}\) transcatheter mitral valve repair system, led by an organisation in Italy. The clinical effectiveness and safety sections of the original review were supplemented with local Scottish health systems and economic data to develop our Evidence Note\(^4\). Adaptation of existing reviews has the potential to be a time and resource saving approach to developing advice on technologies for NHSScotland.

Our knowledge into action activities have supported this translation of evidence into practice through a range of evidence-based methods, including:

- developing literature summaries and syntheses
- producing actionable knowledge tools such as mobile applications, and
- providing support for person to person sharing of knowledge of experience and context.

We will continue to develop and build on relationships with academic-led initiatives such as What Works Scotland (http://whatworksscotland.ac.uk/) designed to improve the way local areas in Scotland use evidence to make decisions about public service development and reform.

We will continue to prioritise and develop projects to support translational research, including those contributing to national eHealth programmes and the development of new models of service provision.
3.3 Evaluation

The importance of evaluation of improvement programmes is increasingly being recognised as it supports learning during the course of programmes and can inform decision-making on spread and future investment of resource. External evaluation of programmes will provide an objective review of a programme and this approach is widely used but can be costly for large programme evaluations. Self-evaluation can support learning and be cost effective, although it is important to define objectives and robust indicators of desired outcomes in advance of programme implementation.

Healthcare Improvement Scotland’s Executive Team has demonstrated commitment to further developing and extending our improvement activity by establishing an Evidence and Evaluation Improvement Support Team (EEViT), including the appointment of a researcher with responsibility for evaluation across the organisation.

We will build on progress during the last 18 months to develop our approach to theory-based programme evaluation by further building internal staff capacity in these methods, supporting teams with data collection and collation, and developing tools to aid external evaluation specification.

We will develop an approach to assess our impact as an organisation through the use of theory-based evaluation methods. Assessing organisational impact is challenging due to the many factors that influence the effectiveness of our work including, for example, local and national policy, social, political and economic factors, and readiness of the context. Defining the impact of organisations that operate as intermediaries for improvement is a development area for evaluation. We will work with partners such as the Institute for Research in the Social Sciences (IRISS), NHS Health Scotland and the Centre for Excellence for Looked After Children in Scotland (CELCIS) to define methods that are practical and support our planning and corporate decision-making processes.

A large part of the modest funding (c£15K) assigned to support the implementation of the research strategy will be used to support these activities through contracting with external researchers or hiring of interns or fixed-term researchers.

3.4 Infrastructure

Our Board and staff have noted that publication of our work in peer-reviewed journals facilitates international recognition of our role in driving improvement in health and social care which might otherwise be limited to Scotland. Activity to support this international recognition as part of the research strategy has included convening writing for publication workshops, providing peer review for conference abstract production and investing in BMJ Quality licences to support writing up of improvement projects. However, journal papers remain primarily related to the work of staff of the Evidence Directorate and a few other individuals across the organisation.

EEViT will identify ways of encouraging and supporting writing up of journal articles with Improvement Hub staff, through early identification of articles that might be developed, practical support with writing, and coaching of staff throughout the course of the project rather than at the end. Other efforts to encourage writing will include further capability building and exploring how to involve clinical advisors and other external staff. The effectiveness of the BMJ Quality licences in supporting journal publications will be evaluated and future investment in this resource subsequently reviewed.

Much of our work has the potential to encourage innovation in health and social care service delivery. Therefore, we need to ensure that we can capitalise on our intellectual property to maintain our reputation as an improvement organisation and to support implementation of innovation in Scottish health and social care services. We will do this through our policies and by
engaging with the range of organisations dedicated to supporting innovation, for example the Digital Health and Care Institute.

We will explore other approaches to creating an infrastructure to support and develop our research work through activities such as systematic consideration of collaborative research opportunities in areas of relevance to our organisation, exploration of joint or honorary research appointments for members of staff, and establishing a research skills database.

4. Implementation and reporting

This strategic plan will be implemented through the development of specific operation plans for each of the above areas of activity. The operation plans will be developed in conjunction with the relevant teams across the organisation and oversight of progress against these plans will be provided by the Research Management Group.

A report of progress against this strategic plan will be presented annually to the Quality Committee.

5. Contact details

For more information about this strategic plan or the research work of the organisation, contact:

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6. References


Appendix: Mission, Activities and Achievements of 2012–2015 Research Strategy

Mission statement

We will promote the development, dissemination and use of research to support improvement in the delivery of safe, effective and person-centred care.

Our aims

- **Aim 1: Identify the gaps.** To identify gaps in knowledge and understanding of approaches to improving healthcare that could be addressed through research, and to find mechanisms for these gaps to be addressed.

- **Aim 2: Develop relationships.** To build and sustain relationships with Scottish primary research organisations to increase mutual understanding of the research needs for developing innovation in healthcare improvement work.

- **Aim 3: Establishing translational research collaborations.** To establish collaborative research activity, working with primary research organisations, and involving Healthcare Improvement Scotland staff to address identified research priorities of the organisation.

- **Aim 4: Infrastructure.** Create a sustainable infrastructure to support ongoing research development, dissemination and use.

Activities and achievements

**Aim 1: Identify the gaps**

Staff across the organisation were surveyed as to knowledge gaps that could, potentially, be filled through undertaking or commissioning research activity and these were collated in a research gaps database. Following discussion at the Research Management Group, four topics were identified as priorities:

- i. assessing the impact of evidence reviews
- ii. methodologies for scrutiny and assurance
- iii. clinical engagement in quality improvement and scrutiny, and
- iv. the relationship between quality improvement and scrutiny.

Through this process, it was agreed by the Executive Team that our internal resource should be dedicated to developing our approach to evaluating the impact of our work. This was achieved by commissioning a review of evaluation approaches for quality improvement programmes and bespoke training for the health services research team and other staff in the use of contribution analysis. Development and implementation of evaluation frameworks for three safety and improvement projects were undertaken as tests of the approach.

**Aim 2: Develop relationships**

Formal relationships have been established with the Health Services Research Unit (HSRU), and the Health Economics Research Units (HERU) at the University of Aberdeen through the development of strategic alliances with these units. This resulted in the annual Healthcare Improvement Scotland Research Symposium being jointly sponsored by these units in 2015.

As part of our Strategic Delivery Plan for Medicines, we have been strengthening our relationships and opportunities for collaboration with both Scottish Schools of Pharmacy at University of Strathclyde and Robert Gordon University.
The Scottish Health Council has developed a Participation Research Network whose activities include an annual Knowledge Exchange event to bring together academic researchers with the Participation Network.

Staff within the Evidence Directorate have also developed and strengthened links with researchers through the Health Economics Research Network for Scotland (HENS), the Scottish Health Economics Group and the Glasgow University Health Economics and Health Technology Assessment Team.

Interaction with these organisations has involved methodological advice and input to projects and processes, Healthcare Improvement Scotland representation on the HERU policy advisory group, and hosting of the HENS post in Healthcare Improvement Scotland.

**Aim 3: Establishing translational research collaborations**

Activity undertaken under this aim includes Healthcare Improvement Scotland partnership status in the Scottish Improvement Science Collaborating Centre (SISCC) initiative led by the University of Dundee and NHS Tayside. Richard Norris is on the SISCC Board and there are Healthcare Improvement Scotland staff representatives on most of the associated advisory groups.

Healthcare Improvement Scotland is also a national partner in What Works Scotland, a research consortium led by the University of Glasgow and the University of Edinburgh to develop and improve the use of evidence in the design and delivery of public services in Scotland.

Other current collaborative research projects in which Healthcare Improvement Scotland is a partner or collaborator:

- evaluating the regulatory impact of medical revalidation commissioned by the General Medical Council and led by University of Plymouth
- developing an Evaluating Communication Strategies to Support Informed Decisions and Practice Based on Evidence (DECIDE) Funded by the European Union and with University of Dundee as co-ordinating partner
- RARE-Bestpractices, funded by the European Union with Istituto Superiore di Sanità, Rome, Italy as co-ordinating partners, and
- European network for Health Technology Assessment (EUNetHTA) Joint Action funded by the European Union.

We also have a number of externally-funded improvement projects with support from the Health Foundation.

**Aim 4: Infrastructure**

Our Research Management Group oversees the delivery of the research strategy and supports compliance with our research governance arrangements. We have developed a research database to register and track work across Healthcare Improvement Scotland under the definitions of research, evaluation, audit and major consultations. A short-life research skills working group has developed and delivered training for staff on producing abstracts and posters for conferences and writing up work for publication. WebEx training has been delivered for Scottish Health Council staff on research and survey methods. A number of journal clubs have been established by teams to support awareness of new research relevant to Healthcare Improvement Scotland. Funding in the region of £15K per annum has been used for the following purposes:

- hosting an annual research symposium which has seen a year on year increase in participants
- purchasing licences for BMJ Quality Reports to support writing up and publishing of quality improvement projects
- commissioning of evaluation review, training, and researcher support to collect and collate data for pilot evaluations, and
- staff attendance at research conferences not funded through project budgets.