Healthcare Infection Society

Research, Innovation and Guidelines Strategy 2025-2030.

1 Summary

1.1 Introduction

Healthcare Infection Society (HIS) has made considerable progress in reducing the planned deficit budget it has been operating within over the last few years. A huge contributing factor to this has been the reduction of the funds awarded for grants and research.

For its next five-year strategy period, HIS research, innovation and guidelines strategy will adopt a focused, strategic, and collaborative approach to ensure maximum impact with reduced resources. The overarching aim of both the research and guideline committees will remain the support, development and education of HIS members to the wider benefit of all healthcare professionals.

This paper proposes a new framework based on principles of prioritisation, innovation, collaboration, and financial sustainability. It proposes to integrate research strategy with guidelines strategy, and it focuses on evidence generation, rapid translation of knowledge, and implementation to improve infection prevention and control outcomes and patient safety.

Commitment to Equity, Diversity, and Inclusion (EDI)

Embedding EDI into all aspects of HIS's research, innovation, and guideline development is essential to delivering equitable healthcare outcomes.

Going forward, EDI will be a key consideration in all HIS-funded research, helping to ensure that our outputs are representative, inclusive, and accessible to the communities we serve. This approach reinforces HIS's commitment to inclusive excellence and aligns with our broader organisational values.

- HIS is committed to ensuring that the research we support is relevant to the UK and international population.
- Given the diverse demographics in the UK and globally, we encourage researchers to consider how their work can best reflect and serve this diversity. This may involve incorporating diverse representation in research design, study populations, and ensuring that findings are accessible to all.
- Diversity should be addressed where appropriate, using a proportionate and thoughtful approach. This might include involving individuals who are typically

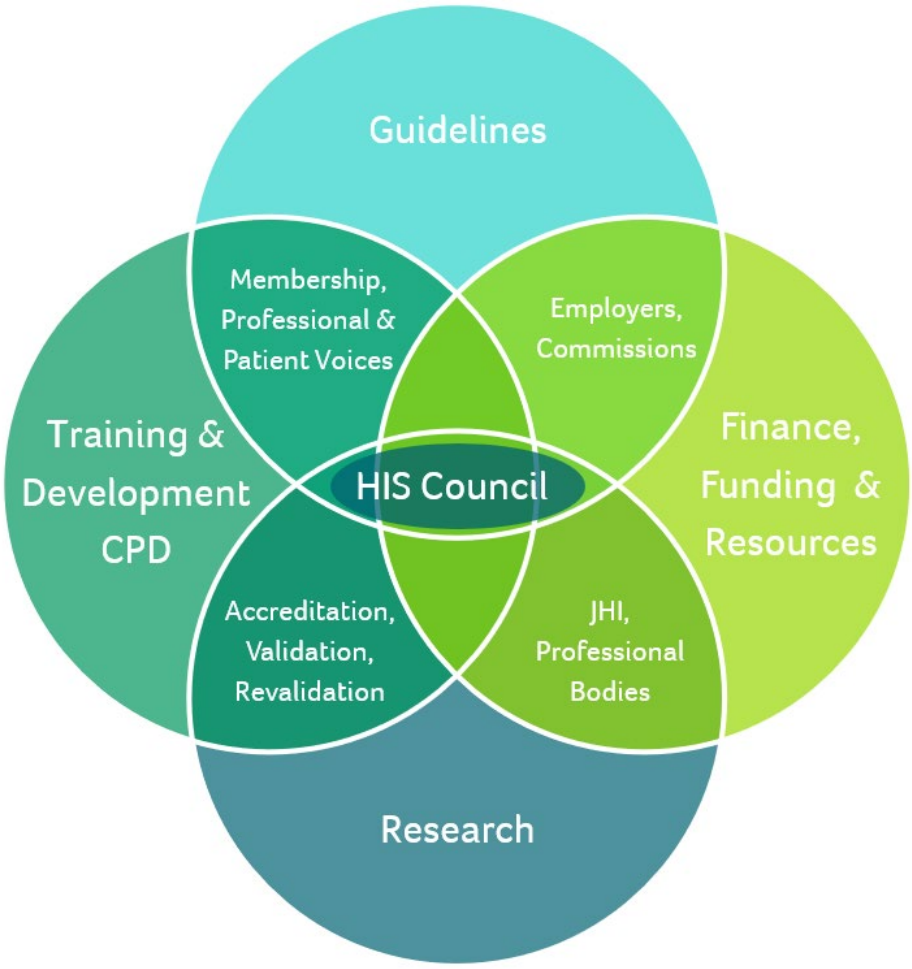
underrepresented in research, such as patients from vulnerable groups or those with specific characteristics (e.g. gender, socioeconomic status, ethnic minorities).

- Researchers should also consider, where relevant, differences in treatment outcomes across various UK populations and internationally, with a focus on equity.
- HIS supports the inclusion of activities that promote equity, diversity, and inclusion (EDI) in research applications. We are committed to funding these activities appropriately, provided they are proportionately costed.

To find out more about our EDI principles and actions, please visit: www.his.org.uk/about/equity-diversity-and-inclusion

1.2 Strategic vision

To create a synergistic model where research, guidelines, training and education are priority driven and aligned, ensuring efficient, relevant and impactful outcomes for healthcare professionals in infection prevention and control.



Improved integration between HIS's key committees will allow for more responsive support of members, increasing visibility of HIS's work, and improved engagement with potential funders and stakeholders.

The aim is sympathetic to the current limitations in resources within HIS and has the additional advantage of making the organisation more present and relevant to its current members. It is hoped that this new model of working will improve the professional footprint of HIS, generating additional membership and attracting appropriate levels of external interest and investment.

1.3 Key Features:

- Research strategy
- Guidelines strategy
- Integration plan for research, innovation and guidelines strategy

2 Research strategy

2.1 Strategic prioritisation of research areas

a. **Focus on High-Burden, High-Impact Areas:**
Prioritise research on IPC with the greatest burden on healthcare systems (see proposed research themes)

b. **Address Critical Knowledge Gaps:**
Within identified priorities determine important evidence gaps that are within the remit of IPC practitioners. These may have been identified via HIS Guidelines Committee/working parties/membership surveys/Special Interest Groups (SIG) and/or Special Interest Collaborative (SPARC.

c. **Align with Global and National Priorities:**
Ensure HIS funded research aligns with the strategic priorities of national and international health bodies to maximise policy impact, support implementation and attract cofounding. This includes emphasis on critical areas such as antimicrobial resistance (AMR) in healthcare settings and infection prevention and control (IPC).

2.2 Leverage collaborative research models

a. **Build Strategic Partnerships:**
Collaborate with academic institutions, healthcare providers, public health bodies, sister organisations, industry, and international organisations to co-fund and co-design research. Ensure clear communication so responsibilities are appropriately allocated.

b. **Foster Multidisciplinary or Multiprofessional Teams:**
Promote cross-disciplinary research (e.g., epidemiology, microbiology, behavioural science, data analytics) to develop holistic infection prevention strategies.

c. **Foster Data Sharing and Collaborative Networks:**
Encourage the formation of/collaboration with (existing) **research networks** and consortia to facilitate data sharing, minimise duplication, and amplify the impact of limited resources. By fostering a collaborative ecosystem, HIS can ensure that researchers, clinicians, and policymakers have access to high-quality, real-time data to drive evidence-based decisions.

One key example is the HIS **AMR and Wastewater SIG/SPARC initiative**, which is establishing a **global research network** to promote collaboration, raise awareness of emerging challenges, and support the exchange of data and research findings. This model can be expanded to other high-priority areas, ensuring that research efforts are better coordinated, more visible, and directly aligned with policy and practice needs.

2.3 Optimise resource allocation by targeted funding for priority research areas

Given the reduced funding available for grants (approved in February 2024 by Council), HIS will strategically allocate resources by prioritising research projects that address key gaps identified by guideline working parties/guideline committee and/or SIGs/SPARCs. This ensures that limited funding is directed towards high-impact, high-priority areas where evidence is most needed to inform policy, guidelines and clinical practice (hence the greatest return/value for HIS membership and mission).

Key Actions:

- **Structured Priority Setting:** Internal working groups and SIGs will conduct regular reviews to identify critical research gaps in infection prevention, antimicrobial resistance (AMR), and emerging threats. We will explore the feasibility of undertaking a James Lind Alliance priority setting process.
- **Thematic Funding Calls:** Research grant funding will be aligned with these priority areas, ensuring a more focused and impactful research portfolio.
- **Collaborative & Co-Funded Opportunities:** HIS will seek external partnerships and co-funding to supplement resources, increasing the reach of research efforts.
- **Emphasis on Implementation Science:** Preference will be given to practical, applied research that improves infection control practices and enhances patient safety.
- **Collate and disseminate evidence:** All hierarchies of evidence, from expert opinion to systematic reviews, to support timely support for IPC practitioners.

By embedding funding decisions within HIS's expert networks (research/guidelines committee and related working parties/SIGs/SPARCs) and priority-setting mechanisms, this approach ensures that research is both strategic and actionable, maximising impact despite financial constraints.

2.4 Foster capacity building and knowledge translation

a. Maximise volunteer and members contribution:
Accelerate the outputs via increased effectiveness of working with our volunteers and members

b. Focus on speed (without compromising quality):
Rapid evidence synthesis: Establish rapid review units to synthesise and disseminate evidence quickly, especially during outbreaks or public health emergencies.

Expert-led resources: Establish strategic plans to produce expert-led resources in under researched areas. Note with a disclaimer and with view to supersede with evidence-based resources (when available).

c. Strengthen Knowledge Translation:
Ensure research findings are effectively communicated to policymakers, clinicians, and the public to influence practice and policy.

Explore extending scope of publication (in journals or website) to disseminate research findings and expert-led resources, increasing traffic to the HIS website and journals.

2.5 Diversify funding streams

a. Seek Alternative Funding Sources:
Pursue partnerships with philanthropic organisations, international agencies, and private sector stakeholders interested in global health and AMR.

b. Encourage Co-Funding and In-Kind Support:
Leverage in-kind contributions (e.g., data access, laboratory resources) from partners to supplement financial grants.

c. Demonstrate Return on Investment:
Develop metrics to showcase the cost-effectiveness and impact of HIS-funded research to attract future investments.

2.6 Patient and Public Involvement and Engagement (PPIE)

- Embed (where possible) PPIE across all stages of the research process, from design to dissemination.
- Establish advisory panels with diverse patient representatives and community members to provide lived experience perspectives.
- Ensure PPIE representatives are adequately supported, including through training and reimbursement for their time.
- Incorporate PPIE insights into research priorities, study design, data interpretation, and knowledge translation to ensure research is relevant, accessible, and impactful.
- Promote transparency by documenting and reporting on PPIE contributions within HIS-funded research projects.

Proposed Research Themes for 2025–2030

1. Antimicrobial Resistance (MDROs, stewardship and behavioural change) *
2. Built Environment including Water Safety

3. Infection Prevention in Healthcare Settings:
    a) isolation facilities (Limited availability, unclear prioritisation, and delays in emergency departments) *
    b) ward closures, patient flow and overcrowding (Includes general safety, colonization of drains with MDROs, risk recognition, and drinking water safety) *
    c) environment and cleanliness (Impacted by low staffing levels, inability to deep clean, and inadequate national cleaning standards) *
4. Digital Health and Infection Surveillance
5. Emerging Infectious Diseases and Pandemic Preparedness
6. Emerging topics:
    a) Environmental sustainability in IPC*
    b) Fungal infections*
    c) IPC beyond acute care*

*Identified as key challenges in 2023 survey.

3 Guidelines Committee-Strategy and new ways of working

Over the years guidelines committee has served HIS members by producing evidence-based guidelines. These guidelines have all been published in the JHI (a peer reviewed journal) and have conformed to NICE guideline methodology and accreditation. This is a rigorous and respected methodology which has produced excellent guidelines. The downside of this has been the tremendous workload imposed on HIS scientific staff and the lengthy gestation time for the publication of guidelines. The current average time for a guideline to be produced is 36 months with some guidelines extending into a decade in production. In 2024 NICE announced that it would no longer be supporting its guideline accreditation scheme. The guidelines committee agreed to continue to use NICE methodology for guidelines in advanced stages of production (at or post evidence synthesis stage) and revert to GRADE methodology for new guidelines. A review of current guideline strategy was presented to HIS council in December 2024.

3.1 Redefining Guideline Priorities

There is currently no rigorous process for approving choice of guideline subject matter. Expressions of interest are received by the committee and discussed at committee meetings with informal reference to other priorities within HIS and the profession. In the past this has led to the production of guidelines for special interest groups or for niche subjects. In the future consideration will be given to the following:

1. Priorities from HIS Council- has the society identified a current or emergent need to a new guideline?
2. Consider priorities from external bodies e.g. UKSHA, WHO etc- does current guidance need updating or review, is the profession in line with other international guidance, are there current

or emergent priorities for guidance which have been identified at a national or international forum?

3. Regular surveys of HIS members to identify emergent priorities- need for guidelines identified by the healthcare workers across the spectrum of primary, secondary and tertiary healthcare
4. Suggestions from trainees and the professional development programmes/committees- attention and priority will be given to the need for guidelines identified from medical, nursing and scientific trainees.
5. Suggestions from the Research, Training and QI committees- priorities identified by the other committees in HIS

3.2 Improving guidelines through greater collaboration

Whilst the Guidelines Committee oversees the commissioning, development and publication of guidelines, the majority of this burden falls to the specific working parties or groups which report back to the Guideline Committee. The membership and working of these groups has been largely left to the chair of the specific working party, who frequently has been the person who initially suggested the guideline topic. Whilst historically this informal process has worked well, it now seems an opportune moment to ensure greater diversity and collaboration from all interested member groups and stakeholders. For this reason, the following is proposed.

In the future Guideline working groups, under the guidance and direction of the HIS Guidelines Committee will:

- Reach out to current and future members e.g. via Webinars to ensure greater awareness and participation across the HIS membership.
- Ensure the involvement of representative nurses, scientists and medical trainees across the membership. Endorsement of this through professional colleges and bodies should allow the award of CPD points for participation in a guideline working group.
- Court endorsement from professional bodies, deaneries and industry to enhance awareness of guideline in development, greater dissemination post publication and judicious endorsement or investment.
- Involve experts, where appropriate, from non-medical disciplines such as hospital engineers, operational managers, medico legal, communications, finance, environmental sustainability.
- Ensure communication and participation among stakeholders including those non-acute settings, industry, private healthcare sector.
- Ensure engagement, participation and feedback from independent patient representatives to enable the production of practical, patient friendly clear, concise and digestible guidelines (visual abstracts/infographics).
- Facilitate the engagement for overseas members in working groups to ensure that the guidelines produced have relevance and gravitas outside the United Kingdom.

3.3 Revising the way of working for HIS Guideline Committee and subcommittee guideline working groups

The operational working and governance of both the HIS Guidelines Committee and the subcommittee working groups will need to be revised to ensure that:

a) Guidelines are commissioned in an appropriate manner, paying attention to the priorities identified in section 3.1 and compliant with evidence-based GRADE methodology.

b) Working groups work cohesively and efficiently to produce evidence-based guidelines in a timely fashion. The use of ADOLOPMENT methodology as opposed to current evidence synthesis methodology may serve to expedite the production of evidence.

c) Implementation of new evidence is piloted or tested in the field in the peri publication period and results of such studies used to update and refine guideline recommendations.

d) Output of the working groups is communicated effectively in a timely manner to allow consensus statements are disseminated as interim guidance till the production of final guideline. This can be done using internet-based platforms including social media networks as well as more traditional forms of communication.

e) Existing guidelines are kept up to date by working parties who will continue to meet periodically (e.g. annually or 6 monthly to ensure that guideline remains up to date, relevant, add addendums to guidelines or guidance and/ or recommend that the HIS Guidelines Committee retire guidelines if and when appropriate).

3.4 What the future looks like

This revised strategy aims to achieve the following:

1. An improvement in the operational working and governance of the HIS guidelines, resulting in defined pathways for the selection of guideline topics for development and the selection of working party members to produce accessible, relevant and timely guidelines to support the profession and improve patient safety.

2. Preservation of the excellent quality and scientific rigour of HIS guidelines. Introduce implementation studies and post publication updates

3. Production of interim guidance resulting from consensus opinions of working parties or from evidence synthesis during the production of a guideline to ensure timely periodic updates during the pre- publication period of guidelines. Internet based platforms or social media will be employed to achieve this.

4. Embed EDI in the guideline development process, both in the interpretation of research evidence to guide practice and by extending the diversity of working parties to include participation of multi-professionals and trainees, patients and relevant stakeholders to ensure that guidelines are accessible and relevant to all.

5. Improve the accessibility to include a search function and 'Infectionpedia' platform to allow users to quickly access information, keep up to date with the outputs of the working parties.

4 Integrate research, innovation and guideline development strategy

Integrating research strategy and guideline development strategies will ensure that research is practical, relevant, and rapidly translated into clinical practice, enhancing both evidence-based policy development and real-world healthcare outcomes. Below outlines how this can be achieved:

4.1 Create a feedback loop

a. Research Informs Guidelines:

- Prioritise research projects that address key **evidence gaps identified in existing guidelines**.

b. Guidelines Identify Research Needs:

- Every HIS guideline update should include a section on **"Research Priorities"** to guide future funding decisions.
- Use guideline development meetings as opportunities to identify emerging research needs from frontline clinicians and policymakers.

4.2 Embed implementation science into both strategies

a. Research on Guideline Implementation:

- Fund implementation studies of guideline recommendations, identifying barriers, facilitators, and strategies for improvement.

b. Quality Improvement (QI):

- Link research projects with QI initiatives to test, refine, and adapt guidelines in real-world settings, creating a **cycle of evidence generation and improvement**.

4.3 Prioritise rapid evidence generation and updates

a. Agile Research-to-Guidelines Pipeline:

- Develop mechanisms for **rapid reviews** and **living reviews** to quickly update guidelines in response to new evidence (especially for emerging threats like AMR or pandemics).
- Establish **"fast-track" research funding calls** for urgent topics related to guideline revisions.

b. Horizon Scanning:

- Integrate horizon scanning for emerging infectious diseases and technologies into both research, innovation and guideline strategies to stay ahead of future challenges.

4.4 Strengthen collaborative structures

a. Joint Committees or Working Groups:

- Create **joint research-guidelines advisory groups** to ensure alignment of priorities, funding decisions, and knowledge translation efforts.

b. International Collaboration:

- Align HIS research, innovation and guidelines with global efforts (e.g., WHO, ECDC) to leverage external data, reduce duplication, and increase the global impact of HIS outputs.

4.5 Optimise resource allocation for maximum impact

a. Dual-Purpose Funding Calls:

- Ensure HIS and their members get maximum value from research and innovation funding by encouraging applicants to demonstrate impact on education (e.g. conference sessions), journal clubs, guideline development and implementation and HIS involvement e.g. expert for HIS on specific area in the future.

b. Metrics and Impact Assessment:

- Measure the success of HIS research not just by publications but by **how many guidelines it informs**, **policy changes it drives**, and **clinical outcomes it improves**. Growth in membership including associates is also a measure of success/people engagement

Conclusion

By embedding research within the guideline development and implementation process, HIS can create a **dynamic, responsive system** where evidence generation and clinical practice continually inform and improve each other. This strategy ensures that **every research pound spent has a clear pathway to real-world impact**.

By embedding EDI and PPIE into its research, innovation, and guidelines strategy, HIS can ensure equitable, inclusive, and impactful healthcare outcomes. This integrated approach will enhance the society's ability to serve diverse healthcare professionals and communities, fostering a fairer and more inclusive healthcare environment for all.

Next steps – to produce and bring to Council:

- Integrated Research, Innovation and Guidelines Strategy: Action Plan
- Strategic plan for expert-led resources