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22 October 2025

Dear Clare,

I am pleased to share with you the second paper in the *Healthcare Science in Scotland* series: 'Redefining Our Workforce', which is being published today – 22 October 2025.

This important document demonstrates work that has been underway to begin to strengthen and elevate the role of healthcare science across the NHS in Scotland. It also moves us closer towards achieving the strategic vision set out in our first *Healthcare Science in Scotland* publication last year.

Healthcare scientists are central to delivering safe and effective care to the population and their expertise contributes to improved patient outcomes every day. However, their work often goes largely unnoticed due to a lack of understanding about the critical work they do. This paper begins to address that. It introduces a unified professional identity, standardises and strengthens professional roles and groupings, and sets a requirement for Board level scientific leadership across NHS Scotland.

This is bold, but necessary. It will enhance visibility of the profession, and better embed scientific expertise into service planning and delivery which will support wider service reform being undertaken through the Service Renewal Framework.

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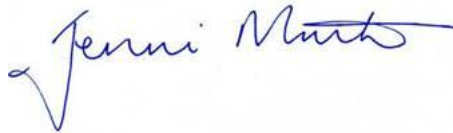
What is significant about this work is that it will, for the first time, provide us with the opportunity to fully understand what the scientific workforce looks like in Scotland. A symptom of poor visibility and understanding is the varied approach to how this part of the NHS workforce are recorded on HR systems meaning that data cannot be used reliably to inform workforce planning, which also has an impact on our ability to ensure the correct educational pathways are in place to ensure a sustainable future workforce.

A period of implementation will now take place, in which Boards will be required to adopt the new nomenclature that has been set out and adjust their HR systems as required. This will feed into national reporting, which already takes place, but will now be more accurate and will give a clearer breakdown of the current scientific workforce which we can subsequently use to undertake more robust workforce planning.

This publication is the result of extensive engagement with the scientific workforce, NHS Boards, professional bodies, and international experts and I would like to record my thanks to all those who have been involved in contributing to this work.

I look forward to sharing more details with you as work to develop healthcare science in Scotland progresses further.

Yours sincerely,



Jenni Minto MSP

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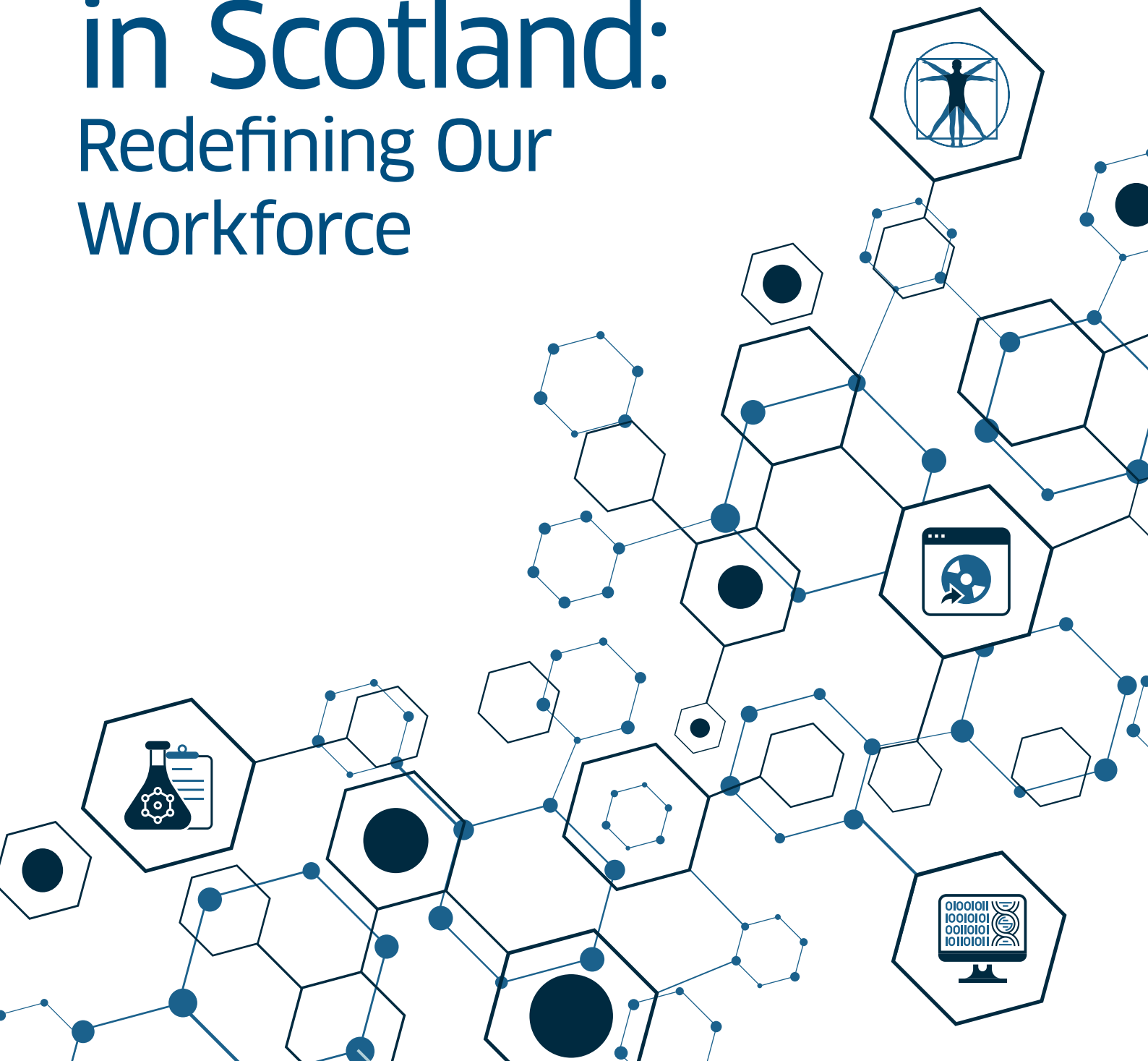


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Healthcare Science in Scotland: Redefining Our Workforce



Ministerial Foreword



The Scottish Government continues to recognise and champion the crucial role of healthcare science in delivering safe, effective, and innovative healthcare across Scotland.

Our scientific workforce is at the heart of excellence in our NHS, and their contributions span diagnostics, treatment, data science, and technological innovation, impacting patient outcomes every day.

This second paper in the 'Healthcare Science in Scotland' series builds on the strategic vision set out in our first publication. It focuses on redefining the scientific workforce

to ensure it is visible, valued, and empowered to meet the evolving needs of our population.

By redefining the profession, and by strengthening leadership, we aim to create a more resilient workforce identity that supports both career development and service transformation.

We know that the challenges facing our health service are complex and multifaceted – but within these challenges lie opportunities to innovate, to collaborate, and to lead. Healthcare scientists are uniquely positioned to drive this change, and this paper sets the foundation for a future where their expertise is fully utilised into service planning and the delivery of healthcare in Scotland.

I am proud to support this work and remain committed to ensuring that healthcare science continues to thrive in Scotland. Together, we can build a system that not only recognises the value of science in healthcare but also ensures that the population of Scotland benefits from its full potential.

Jenni Minto MSP

Minister for Public Health and Women's Health

The Chief Scientific Officer for Scotland



Science is at the heart of our healthcare system, and our scientific workforce is critical to the delivery of safe and effective healthcare in Scotland. As we move forward in our strategic journey, redefining the healthcare science workforce is a vital step in ensuring that this profession is fully recognised, empowered, and equipped to meet the challenges of modern healthcare.

This second paper in the Healthcare Science in Scotland series marks a significant milestone. It reflects the collective insight and expertise of our healthcare science community, and I want to extend my sincere thanks to all those who contributed to shaping this work.

Your voices have helped us build a clearer, more unified identity for the profession - one that strengthens visibility, supports leadership, and enhances the impact of healthcare science across the NHS in Scotland.

By redefining healthcare science, we are laying the foundation for strengthening the identity of our scientific workforce in Scotland. This will provide a basis to grow the understanding of what healthcare science is, and the impact that this part of the workforce has, and can have in the future, on the system and patient outcomes.

As we continue to navigate a complex and evolving healthcare landscape, this work will help us unlock the full potential of healthcare science in Scotland. It is a bold and necessary step toward a future where science and innovation are central to the health and wellbeing of our population.

Professor Catherine Ross
Chief Scientific Officer for Scotland

Executive Summary

This paper, Healthcare Science in Scotland: Redefining Our Workforce, is the second publication in the Healthcare Science in Scotland series. It builds upon the strategic vision set out in the March 2024 publication, [Healthcare Science in Scotland: Defining Our Strategic Approach](#). It aims to redefine the healthcare science (HCS) workforce in Scotland to ensure it is visible, valued, and empowered so that it can better meet the evolving needs of the population and health system now and in the future.

Healthcare scientists play a vital role in delivering safe, effective, and innovative care across NHS Scotland. Their expertise spans diagnostics, treatment, data science, and technological innovation. However, the profession has historically lacked a unified identity, limiting its visibility and integration into strategic planning.

This paper sets out a clear framework to strengthen the professional identity of healthcare scientists, including:

- **A single national definition of a healthcare scientist in Scotland**
- **Redefined professional groupings:** Engineering Sciences, Health Informatics Sciences, Laboratory Sciences, Physical & Imaging Sciences, and Physiological Sciences
- **Refined levels of practice**, to support workforce planning and career development

A key outcome of this work is the instruction from the Chief Scientific Officer and Scottish Ministers that each territorial NHS Board appoint a substantive Scientific Director. This dedicated leadership for healthcare science is essential to ensure that the profession's expertise informs decisions that directly impact the quality and safety of care across the health system in Scotland.

The paper also aligns healthcare science with wider health policy, such as the Scottish Government's Service Renewal Framework, highlighting the role of the profession in advancing prevention, digital transformation, personalised care, and population health planning.

Through national engagement, collaboration, and logic modelling, this publication provides a roadmap for embedding healthcare science at the core of the NHS in Scotland. It provides a framework for systemic change, improved workforce data, and strengthened leadership to unlock the full potential of the scientific workforce in Scotland.

Introduction

Background

In March 2024, the Scottish Government published '[Healthcare Science in Scotland: Defining Our Strategic Approach](#)' which set out the need to fully realise, and utilise, the potential of healthcare science in Scotland, to improve and transform our public services – delivering the best quality care and outcomes for our population.

That paper provided a clear vision (Figure 1) for the profession over the next ten years and described four strategic ambitions (Figure 2) which act as a guide for activity within the system to ultimately support how we will achieve that vision.

To ensure that the contribution of the healthcare science workforce to the health of the population is maximised and that the workforce is fully recognised and valued.

2024–2034 vision for healthcare science in Scotland

Figure 1

People working in and interacting with the health system understand what healthcare science is and how the scientific workforce can improve patient outcomes.

Patient outcomes are improved as the healthcare science workforce is fully considered and utilised in service planning, development and delivery.

Healthcare science contributes to the sustainability of the NHS workforce in the future as it attracts and retins a diverse range of people to careers, at all levels, which are appealing and support delivery of healthcare to meet the needs of the population.

Healthcare scientists are leaders in the NHS, and spearhead innovation into the future whilst championing delivery of safe and quality services in line with scientific best practice.

Figure 2

Whilst these ambitions were not set out sequentially to avoid limiting progress, it was agreed that a clear understanding of the scientific workforce and its impact on patient outcomes is essential as the foundation of any future work. Without this foundation, advancing the other ambitions and achieving the overall vision would not be possible, as fundamentally they remain wholly reliant on visibility and understanding.

As set out in the first of the strategic ambitions (Figure 2), the need for an understanding of healthcare science is multi-faceted and is required from both professionals within the health service and those interacting with it.

There is now a valuable opportunity to raise awareness about the scientific workforce and the vital role they play in improving the health and wellbeing of the population.

As we undertake transformation of the NHS in Scotland, understanding our workforce composition is key. This will help us plan how we deliver services in the future, particularly within an increasingly challenging fiscal envelope.

To fully embed healthcare science into planning and delivery of services across the NHS in Scotland, a better understanding of the profession is required. A clearer narrative must be developed to sit above robust data and evidence about the impact healthcare science has, and can have, on patient outcomes and population health planning.

Understanding The Scientific Workforce in Scotland

Overview

While there is broad consensus that healthcare science is a distinct and vital profession drawing on scientific, engineering, and technological expertise to enhance individual and population health, the definition of a healthcare scientist varies across the globe, and even within the UK. The classification of roles and specialisms also differs between countries, highlighting the potential need for greater international collaboration and shared understanding as healthcare science continues to evolve.

There is growing recognition of the value of healthcare science across the UK and this presents a significant opportunity for healthcare science in Scotland to play a more prominent role in shaping the future of health and care delivery. By fully integrating the scientific workforce into national service planning and strategic decision-making, Scotland can unlock the full potential of healthcare science to improve outcomes and drive innovation.

The structure of the scientific workforce in Scotland has evolved over time, shaped by emerging specialisms and more focussed use of scientific practice in healthcare. In 2007 '[Safe, Accurate, Effective: An Action Plan for Healthcare Science in NHS Scotland](#)' described scientific disciplines within health as being across three primary streams; life sciences, physiological sciences and physical sciences. This grew to four streams within '[Driving Improvement, Delivering Results](#)' which was the Scottish Government's Healthcare Science Delivery Plan final report, published in 2022.

In recent years, the application of science and technology in health has expanded significantly, accompanied by the emergence of new disciplines and professional specialisms, underscoring the imperative to strengthen and expand the scientific workforce. Growth has largely been organic and in response to new technologies, methods of care and population need which is positive but also presents challenges. At this point, greater standardisation across the profession will allow improved workforce planning and better understanding of the complexities of the profession will enable the scientific workforce to be more fully integrated in planning and delivery of high-quality care across all settings.

Effective planning and investment in Scotland's Healthcare Science workforce depends on robust data insights. Accurate information on the number, roles, and locations of healthcare scientists is essential to guide strategic decisions, optimise workforce deployment, and ensure a skilled, adaptable, and future-ready workforce capable of meeting the evolving needs of patients and the health system.

Redefining the Scientific Workforce in Scotland

Logic modelling was undertaken to understand what actions should be taken to support the realisation of the ambitions, and ultimately the vision, set out in [Healthcare Science in Scotland: Defining Our Strategic Approach](#). With regards to the first ambition, which this work relates to, this is summarised at Figure 3.

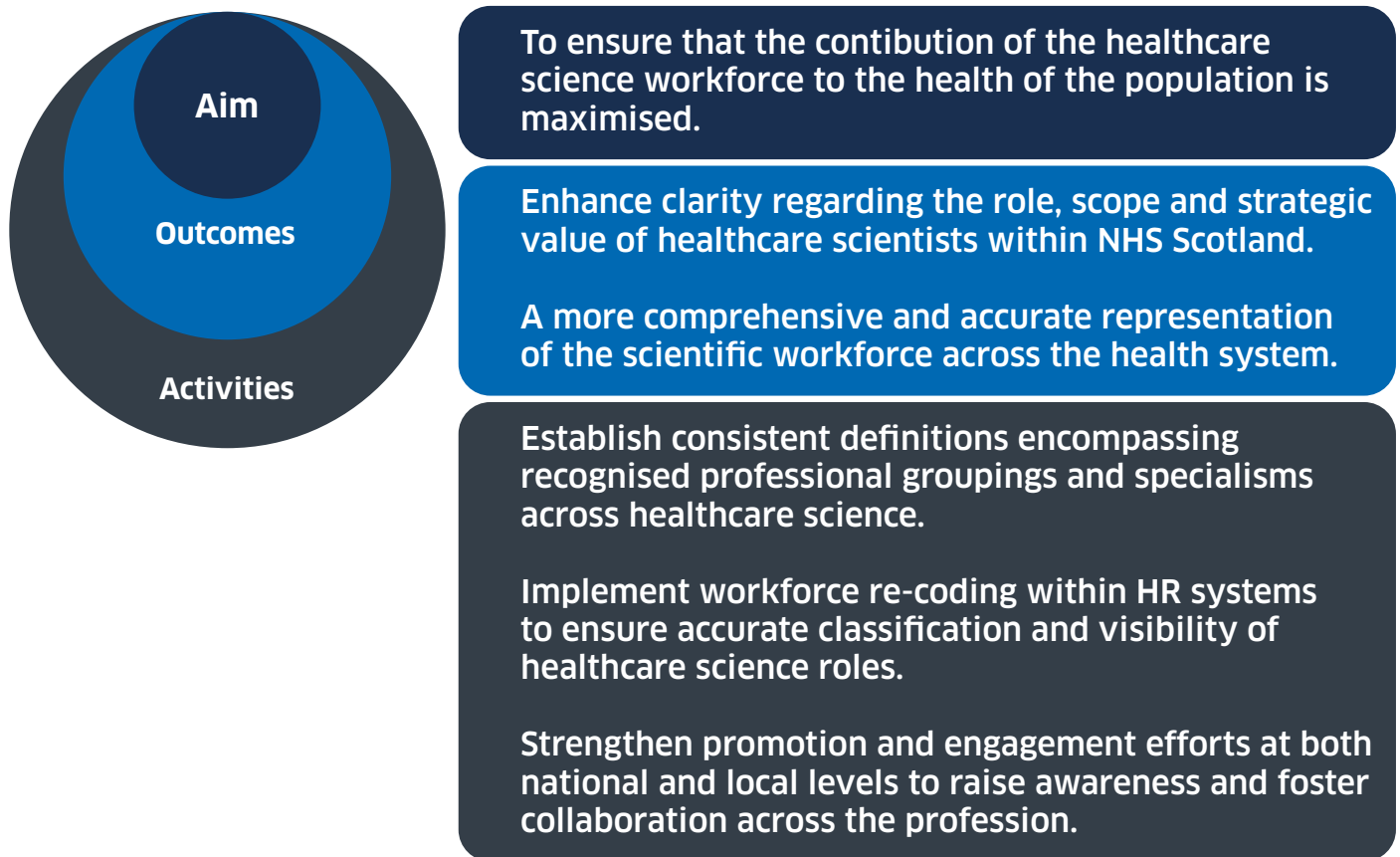


Figure 3

To support progress, a short-life working group was convened comprising of representatives from across NHS Scotland and each of the four recognised professional streams within healthcare science. The group was tasked with progressing a core objective:

We will simplify how we refer to our scientific workforce in Scotland – ensuring that there is a single definition for healthcare science as a whole, and for each stream of the profession, to create a more cohesive identity for the workforce.

To deliver on the objective, the short life working group (SLWG) considered the following in relation to healthcare science:

- Professional Identity
- Professional Groupings
- Definitions
- Specialisms and Roles

To support this initiative, the Scottish Government convened a series of national engagement events, held both in-person and online, with active participation from key stakeholders and leadership from the Chief Scientific Officer for Scotland. These sessions provided a platform for the scientific workforce to contribute insights and perspectives on proposals to streamline and strengthen the profession's identity.

Following initial discussion, members of the SLWG engaged directly with their respective professional communities to ensure comprehensive representation of all current specialisms and roles. The decision was made not to extend into sub-specialisms, in order to avoid unnecessary complexity – a key principle of this work as a whole.

As part of wider engagement around the proposals, engagement was also undertaken by the Scottish Government with key stakeholders including professional bodies, NHS Boards and international experts. The process for this work is outlined at Figure 4.

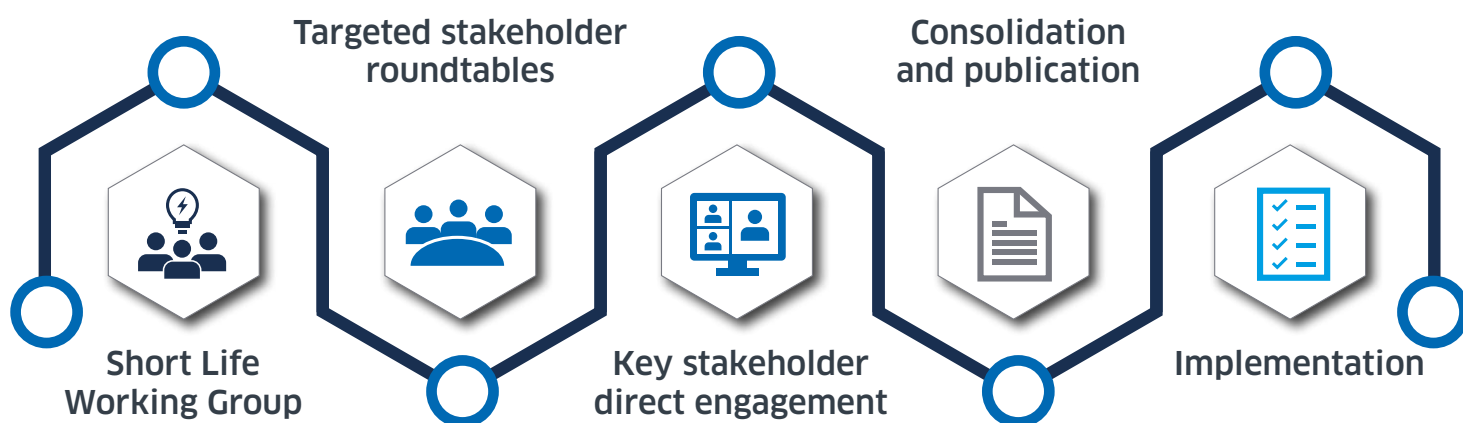


Figure 4

A Stronger Scientific Workforce for Scotland

Redefining the scientific workforce in Scotland marks a pivotal shift toward a more unified, visible, and strategically aligned profession. A strengthened identity is the first step in addressing the challenges outlined earlier in this paper; inconsistency around professional identity, job roles, and visibility.

Importantly, it provides the foundation for more accurate data gathering to support future planning and delivery across NHS Scotland which will better allow the profession to align with the Scottish Government's broader ambitions for service renewal, prevention, and digital transformation, defined within the [Service Renewal Framework](#).

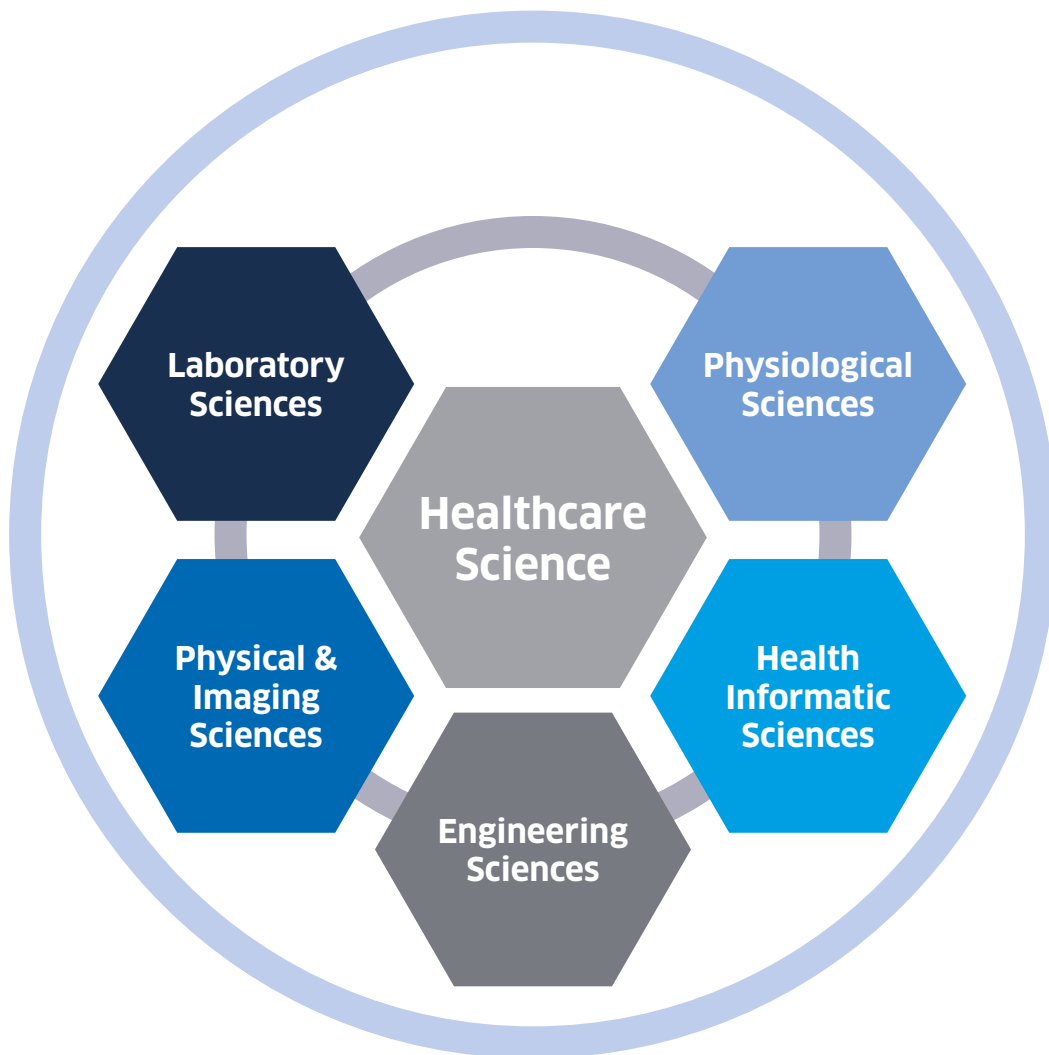


Figure 5

Professional Identity

Professional identity in this context refers to how healthcare scientists perceive and define their role within the NHS in Scotland, and how that is seen by others.

While many professions in health such as medicine and nursing benefit from clearly defined roles and career pathways, this has not been the case across the entire scientific workforce in Scotland. As a result, there has been limited recognition of their impact and insufficient understanding of the nature and opportunities of a career in healthcare science.

Some of the healthcare science specialisms have benefited from long established career frameworks and training pathways: we have an opportunity to develop and strengthen these across all of healthcare science. By strengthening the visibility of healthcare science careers, we can deepen understanding of their impact and inspire more people to see the value and potential of a career in this vital field.

A strong professional identity for the scientific workforce is fundamental to the effective delivery of health services. Clear recognition of their expertise, roles, and contribution not only will support workforce retention and recruitment but also will ensure that their impact is visible and valued within multidisciplinary teams. Establishing a well-defined professional identity enhances collaboration with other health professions, promotes public trust in scientific input to care, and provides a foundation for structured education, training, and career progression. In turn, this strengthens service quality, innovation, and sustainability, ensuring that health systems are equipped to respond to current and future challenges.

A single definition of healthcare science in Scotland has now been established as part of the work described in this paper. This definition will serve as the cornerstone for building a cohesive identity, enhancing visibility, and supporting the strategic integration of healthcare science across NHS Scotland.

A healthcare scientist is a professional working in the NHS who applies scientific, engineering, or technological expertise – underpinned by data and research – to improve the quality of care and health outcomes for the population.

Definition of a Healthcare Scientist in Scotland

This is grounded in feedback from the SLWG and through engagement with the workforce. As such, it reflects the central aspects of the profession in a way which is easy to understand. It creates a clear link to redefined professional groupings which sit alongside this and are outlined in the next section.

Professional Groupings

Clear professional groupings and classifications create a strong, flexible framework that supports workforce planning, strengthens identity, and allows new specialisms to be recognised and integrated, advancing healthcare science across Scotland's health and care system.

Five professional groupings (Figure 6) for the scientific workforce in Scotland, and definitions (Figure 7) for each, have been agreed as a result of this work, through engagement with stakeholders across the NHS in Scotland and more widely.

Professional Grouping
Engineering Sciences
Health Informatics Sciences
Laboratory Sciences
Physical & Imaging Sciences
Physiological Sciences

Figure 6

These groupings better reflect the breadth of the profession in Scotland and create a clearer narrative that will support improved workforce mapping and better understanding and integration across the system.

The use of 'sciences' in each of the professional group titles reinforces the collective identity of the healthcare science workforce. It clearly demonstrates that these roles belong to a defined job family, reducing the risk of misclassification and making it easier for colleagues, managers, and patients to understand the scope and contribution of scientific staff. This clarity is especially important in multidisciplinary environments, where collaboration depends on mutual understanding of roles and responsibilities.

Definitions for each grouping have been carefully developed through engagement with the workforce and stakeholders. Scientific knowledge and research were identified as integral parts of scientific practice and so have been reflected in each of the definitions of the professional groupings and in the overarching definition of healthcare science. Not only do healthcare scientists across all groupings use research, but they also undertake and lead research to improve the health of patients and the population.

The development of five clearly defined professional groupings; Engineering Sciences, Health Informatics Sciences, Laboratory Sciences, Physical & Imaging Sciences, and Physiological Sciences, marks a significant advancement in the organisation and articulation of the healthcare science profession in Scotland.

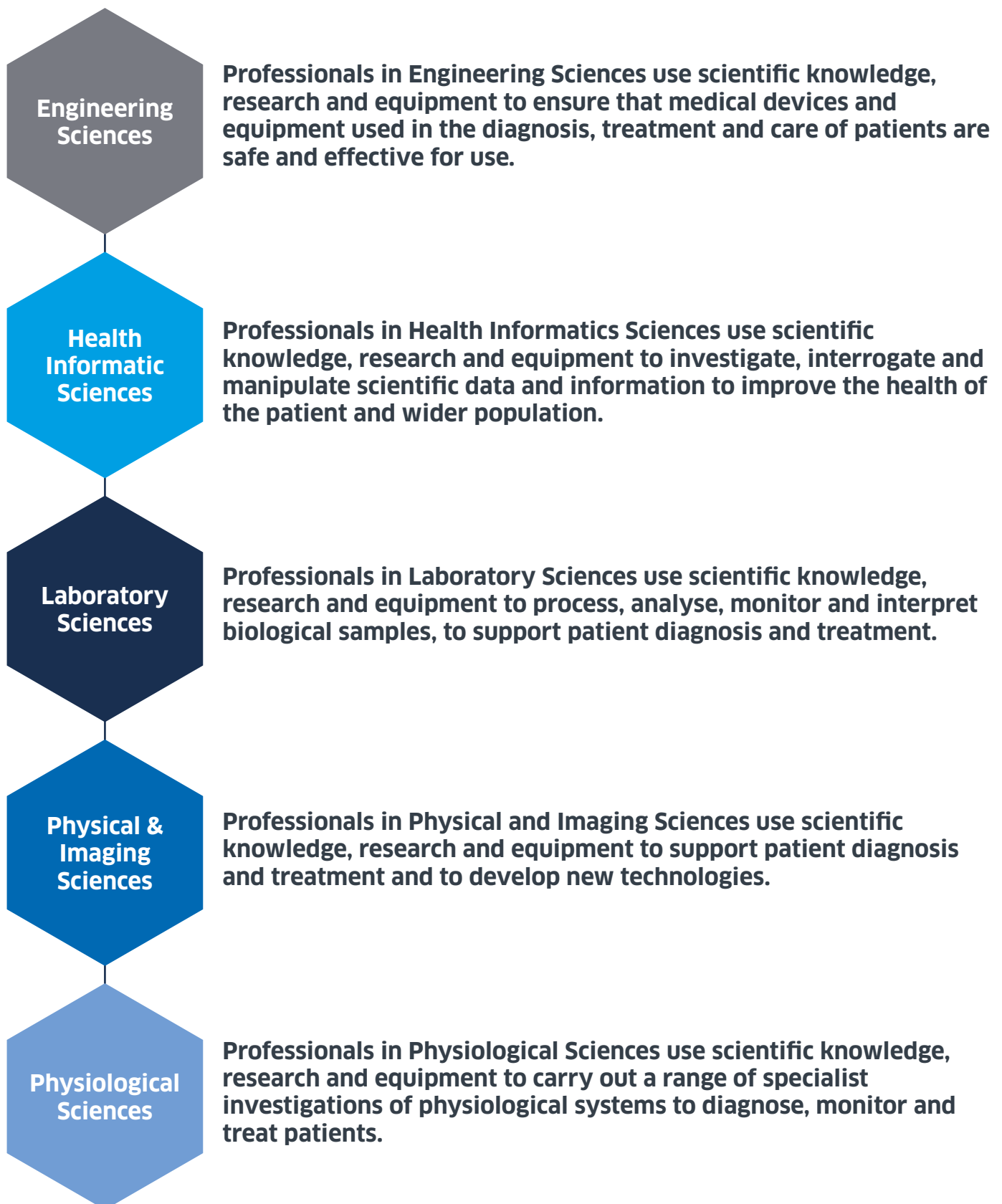


Figure 7

Specialisms

This work has clarified healthcare science specialisms into more clearly defined professional groupings, enabling the profession to move beyond the historic approach of describing significant numbers of specialisms and sub-specialisms. This shift will strengthen professional identity, support improvements to workforce planning, and ensure that healthcare science is better positioned to deliver greater impact within a modern and integrated health system.

Importantly, this approach does not diminish the breadth or complexity of the work carried out by healthcare science professionals. Rather, it provides a simplified and more accessible framework through which the profession's contributions can be more clearly articulated, understood, and valued, supporting its integration into strategic planning and service transformation.

Healthcare science continues to evolve, and it is anticipated that new specialisms will develop over time, reflecting the dynamic nature of scientific practice and the ingenuity of the workforce.

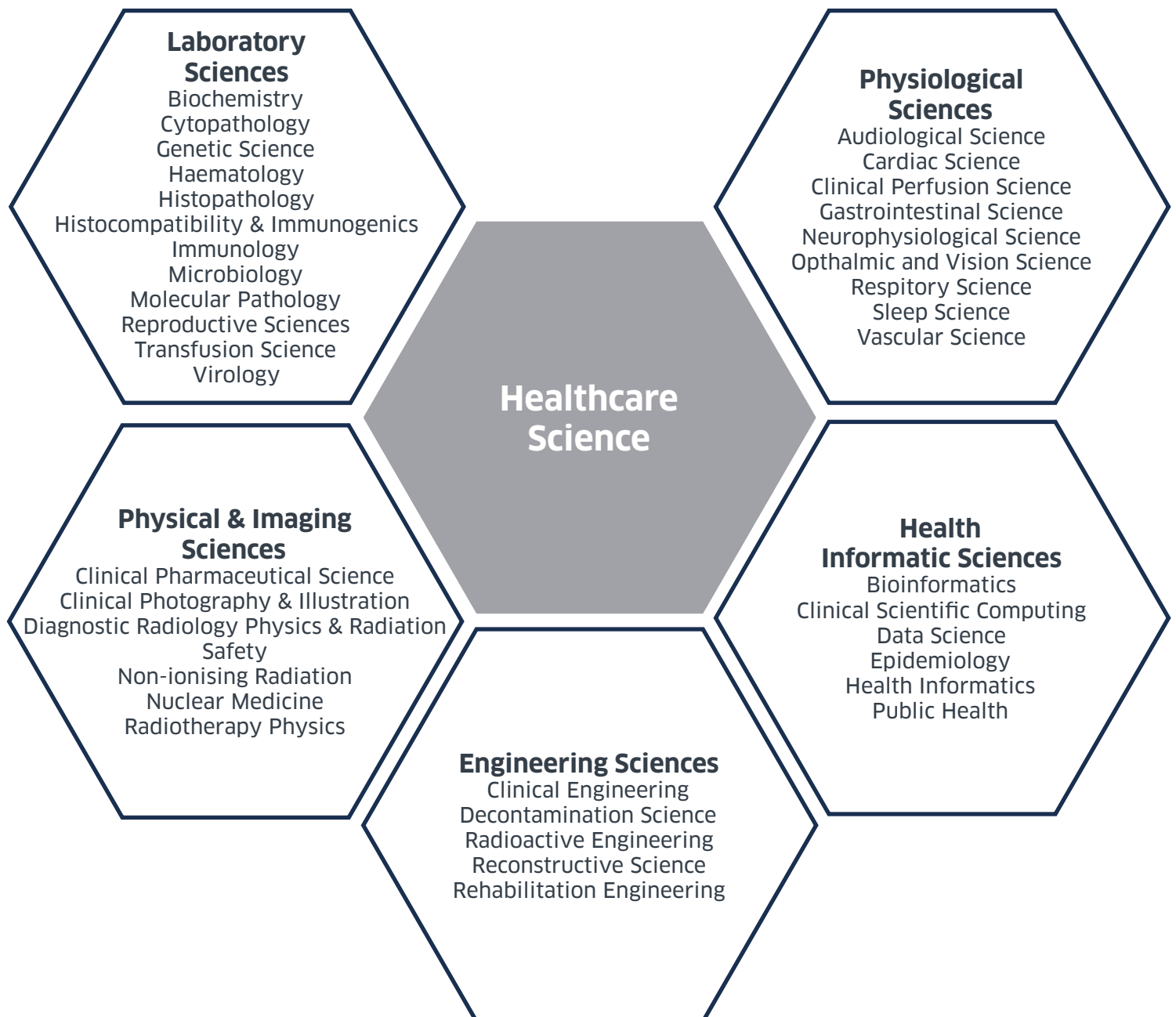


Figure 8

Levels of Practice

Consultant Healthcare Scientist

A Consultant Healthcare Science combines deep scientific expertise with extensive professional and strategic leadership. They are senior leaders who drive service improvement, innovation, and workforce development across health and care systems. Their roles encompass professional leadership and development, clinical and operational management, commissioning, education, and accountability for service delivery.

Consultants play a pivotal role in advancing healthcare science through the integration of evidence-based practice, translational research, data-driven decision-making, and the application of emerging technologies. They lead and support quality improvement initiatives, shape service design, and drive innovation to ensure that healthcare science contributes effectively to patient outcomes, operational efficiency, and system transformation. Consultant Healthcare Scientists may act as Chief or Principal Investigators for research projects, they are key member of the research team, responsible for leadership, design and conduct of all or part of a research study.

By bridging research, practice, and policy, Consultant Healthcare Scientists ensure that scientific expertise is embedded at every level of decision-making. Their influence extends across education, workforce development, and commissioning, enabling NHS Scotland to deliver safe, effective, and future-ready care while continuously advancing the contribution of healthcare science to the wider health system.

Advanced Specialist Healthcare Scientist

An Advanced Specialist Healthcare Scientist is a highly skilled specialist who applies advanced scientific knowledge to deliver high-quality patient care and support clinical decision-making. Working either directly with patients or within laboratory and technical environments, they use their scientific expertise to perform complex diagnostics, interpret clinical data, and implement innovative techniques and technologies.

Their role focuses on scientific excellence and specialist problem-solving, ensuring the accuracy, reliability, and safety of procedures and equipment. They collaborate closely with clinicians and multidisciplinary teams to translate scientific insights into practice, contributing to service improvement and the delivery of safe, effective, and evidence-based care. They are key members of the research team, and may be involved in any or all aspects of the research process.

Through their specialist knowledge, Advanced Specialist Healthcare Scientists drive innovation within their field, develop new methodologies, and support the advancement of healthcare science, ensuring that scientific expertise is applied to meet the evolving needs of patients and the health system.

Specialist Healthcare Scientist

A Specialist Healthcare Scientist applies scientific knowledge and specialist skills to deliver safe, high-quality services. They may carry out complex tests, investigations, and procedures on patients, samples, or equipment, ensuring accuracy, reliability, and compliance with rigorous quality and safety standards.

Their work may include managing medical devices, supporting therapeutic interventions, complex analysis or providing expert advice within their area of specialty. They often contribute to service development, education, and operational improvement within their teams, providing leadership within their specialist practice. They are members of the research team, and may be involved in supporting specific aspects of the research process.

Whether working directly with patients or in laboratory and technical environments, Specialist Healthcare Scientists play a vital role in diagnosing, monitoring, and evaluating health conditions. They apply scientific expertise to support clinical decision-making, drive innovation, and undertake research to interpret complex biological, physiological, or technical data, ensuring the delivery of safe, effective, and evidence-based care.

Healthcare Scientist

Healthcare Scientist applies scientific knowledge and skills to deliver safe, high-quality services. They may carry out tests, investigations, and procedures on patients, samples, or equipment, ensuring accuracy, reliability, and compliance with rigorous quality and safety standards.

They often contribute to service development, education, and operational improvement within their teams. Healthcare Scientists can work directly with patients, in laboratory or in technical environments. They monitor and evaluate health conditions and apply scientific methods to support clinical decision-making, and take part in research to ensure the delivery of safe, effective, evidence-based care.

Healthcare Science Support Workers

Associate Healthcare Science Support Worker

An Associate Healthcare Science Support Worker applies scientific knowledge and skills to support the delivery of safe, high-quality healthcare services. They combine factual and theoretical understanding within their area of practice with an awareness of its limits, enabling them to contribute effectively to patient care and service operations.

They use their expertise to solve problems, make informed judgements through careful analysis and interpretation, and support the evaluation of treatment outcomes. In addition, they contribute to service improvement initiatives, ensuring that processes and practices are efficient, accurate, and aligned with quality and safety standards.

Associate Healthcare Science Support Workers may also support the development of colleagues through supervision, training, and mentoring. By integrating specialist knowledge with practical application, they play a vital role in underpinning safe, effective, and evidence-based healthcare science services.

Assistant Healthcare Science Support Worker

An Assistant Healthcare Science Support Worker provides essential support to multidisciplinary teams, contributing to the delivery of safe, high-quality healthcare science services. They apply practical scientific knowledge to perform routine tests, procedures, and technical tasks in line with established protocols, ensuring accuracy, consistency, and reliability.

Their responsibilities include preparing equipment, maintaining safe and effective working environments, and supporting clinical and laboratory activities. By adhering to quality and safety standards, they underpin the effectiveness of healthcare science services and contribute to positive patient outcomes.

Assistant Healthcare Science Support Workers play a key role in enabling specialist and professional staff to deliver advanced scientific services. Through their practical expertise and attention to detail, they help maintain high standards of service delivery, supporting the overall efficiency, safety, and effectiveness of healthcare science.

Leadership

Strong leadership is essential to delivering safe, effective, and responsive healthcare. Across NHS Scotland, professions such as nursing, medicine, pharmacy, and those in allied health have long benefited from established senior leadership roles that guide clinical practice, inform strategic decisions, and shape service delivery.

These roles ensure that professional expertise is embedded at every level of the system, enhancing patient outcomes and supporting workforce development. Healthcare science in NHS Scotland has not traditionally had this leadership despite being the fourth largest professional group in the NHS. However, there is now an opportunity to address this leadership gap.

The Scottish Government is committed to strengthening the role of healthcare science in shaping service design, strategic planning, and innovation, while placing patient safety at the forefront. As such, the Scottish Government has instructed all NHS Boards to introduce a substantive 'Scientific Director' post.

Dedicated leadership for healthcare science is essential to ensure that the profession's expertise informs decisions that directly impact the quality and safety of care across the health system.

These Directors will hold equivalent seniority and influence to other leadership positions within other professions, ensuring scientific representation is embedded at the heart of decision-making. They will act as the professional lead for the scientific workforce within each Health Board, strengthening visibility, accountability, and the consistent application of scientific expertise across services.

The Scottish Government will work in partnership with Boards and the wider scientific community to fully develop the role description and specification, ensuring that Scientific Directors are empowered to deliver maximum impact. Their appointment will enable Boards to plan services with greater precision, accelerate the adoption of emerging technologies, and optimise patient outcomes.

At a national level, Scientific Directors will provide strategic leadership to enable whole-system collaboration, accelerate progress on prevention and digital transformation, and address health inequalities. Ensuring healthcare science contributes effectively to the delivery of high-quality, sustainable services across Scotland.

By embedding this leadership, NHS Scotland will unlock the full scope of its scientific workforce to drive innovation, improve efficiency, and better deliver safe, effective, and future-ready care.

The Role of Healthcare Scientists in Delivering Sustainable Change

The Role of Healthcare Scientists in Delivering the Operational Improvement Plan

Healthcare scientists are key to Scotland's journey to modernise and future-proof its health service. Their expertise underpins patient pathways, and their ability to harness innovation, precision diagnostics, and advanced therapies will be central to building services that are faster, smarter, and more responsive to the needs of our population. By enabling earlier interventions and reducing delays, healthcare scientists will help shift the system towards proactive and preventative care, ensuring patients receive the right support at the right time.

Looking ahead, healthcare scientists will drive the safe and rapid adoption of next-generation technologies, from genomics and digital pathology to artificial intelligence and robotics. Their leadership will ensure that NHS Scotland is not only keeping pace with scientific advances but is positioned as a leader in harnessing science and technology to transform care. This ambition will accelerate our ability to redesign services, improve resilience, and deliver outcomes for the population of Scotland.

In parallel, healthcare scientists will play a vital role in addressing Scotland's most pressing health challenges, including health inequalities.

Together, these contributions position healthcare scientists not only as essential enablers of the [Operational Improvement Plan](#) but as leaders of the next generation of healthcare in Scotland. By fully mobilising their expertise, NHS Scotland will ensure sustainable and consistent improvement to deliver a truly modern, innovative, and equitable health service.

Healthcare Science and the Service Renewal Framework

The Scottish Government's [Service Renewal Framework](#) (SRF) sets out a bold and long-term vision for health and social care in Scotland, one in which people live longer, healthier, and more fulfilling lives. This vision is grounded in five strategic principles: Prevention, People, Community, Population Planning, and Digital. Together, they provide a blueprint for reshaping services into a proactive, person-centred, and sustainable model of care fit for the future.

Healthcare Science will be a driving force in realising this ambition. As a profession defined by evidence, innovation, and multidisciplinary collaboration, healthcare scientists are uniquely placed to translate the SRF's principles into tangible outcomes:

Prevention: Harnessing advanced diagnostics, genomics, and predictive technologies, healthcare scientists will enable earlier identification of risk, shifting the focus from illness to prevention and from treatment to lifelong health.

People: By generating the data and insights that power personalised medicine, healthcare scientists will help ensure every individual receives care tailored to their specific needs, circumstances, and aspirations.

Community: Through innovations such as remote monitoring, wearable technologies, and point-of-care diagnostics, scientific services will increasingly move beyond hospitals, strengthening care in communities and closer to people's homes.

Population: Healthcare scientists' expertise in analytics, modelling, and service evaluation will support the design of services that respond to the needs of local populations, advancing equity and ensuring resources deliver the greatest impact.

Digital: Positioned at the forefront of digital transformation, the scientific profession will accelerate the safe adoption of AI, automation, and new technologies, modernising services and ensuring Scotland meets the evolving expectations of its citizens.

Looking forward, redefining and strengthening the healthcare science workforce will be critical to ensuring this profession is not only aligned with the SRF but is empowered to lead its delivery. By embedding scientific expertise at every level of service planning and decision making, Scotland can unlock the full potential of healthcare science to transform care.

Implementation

Looking ahead, we must be ambitious in how we develop healthcare science in Scotland, maximising its impact on the NHS and the population.

Healthcare scientists will be recognised as system leaders and their expertise will guide not only clinical decisions but will also drive innovation and shape the future of care.

Implementation will now focus on putting the contents of this paper into tangible action, and is the first step in ensuring the scientific workforce is in a strong position to be fully recognised and utilised in the planning and delivery of services.

The Scottish Government will work with NHS Boards to apply consistent naming conventions across professional groupings, specialisms and levels of practice. This will build a strong identity both locally and nationally for the profession as a whole. For the first time in Scotland, this will also enable the collection of robust and accurate data on the scientific workforce, as staff will be recorded correctly within systems according to the new classifications. This will support future planning and decision making around key areas such as planning for workforce and education.

Locally, work will be overseen by new, dedicated, Scientific Directors across all territorial NHS Boards. This is critical as it provides a solid link between local and national activity and supports the scientific workforce to better deliver for the population, on priority areas. Establishment of a national Scientific Directors group will equally allow sharing of knowledge, good practice, risks and opportunities, enabling a co-ordinated scientific voice to shape responses to challenges and drive innovation across the NHS in Scotland.

The work set out in this paper reflects the collective commitment of the healthcare science community, NHS Boards, professional bodies, and the Scottish Government to build a stronger future for the profession. It has been developed through genuine collaboration, bringing together the expertise, experiences, and ambitions of those who know the system best.

The success of this work depends on maintaining and deepening that collaborative spirit as we move forward. Delivering the transformation outlined in this paper will require sustained partnership between healthcare scientists, clinical colleagues, system leaders, policymakers, and the population. By aligning national leadership with local action and fostering strong networks across disciplines and professions, we will create an environment where healthcare science in Scotland flourishes.



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