The Academy of Medical Sciences

Embedding evidence in public health

Challenges and opportunities in the context of England's new public health structures

Summary of a workshop held on 12 October 2022

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Opinions expressed in this report do not necessarily represent the views of all participants at the event, the Academy of Medical Sciences or its Fellows.

All web references were accessed in December 2022.

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Executive summary

In October 2021, the functions of Public Health England were transferred to two new entities, the Office for Health Improvement and Disparities (OHID) and the UK Health Security Agency (UKHSA).

A year on, the Academy of Medical Sciences convened experts in public health policy, research and practice, from across the UK, to:

- Reflect on the research remits of OHID, UKHSA, NHS England (NHSE) and Integrated Care Systems (ICSs).
- Consider the challenges of translating research and evidence into public health policy.
- Identify opportunities for England's new public health structures, researchers, policymakers and funders to ensure that evidence is utilised effectively to improve public health and respond to health threats.

This in-person meeting also provided an opportunity for relationship building, debate and the sharing of lessons learned from public health systems around the UK.

Throughout the course of the workshop, participants identified a series of challenges, opportunities and potential next steps, which fell under the following eight key themes:

1. **Relationships and communication:** The recent restructures have put additional pressure on the already fragile links that exist between different parts of the system (e.g. UKHSA, OHID, NHS, regional and local public health structures, academic research, third sector organisations and research funders and regulators). Current connections rely on individual relationships, rather than being embedded in organisation working. Sustained and mutually beneficial relationships must be built between a) researchers and policymakers; b) different public health organisations; c) national, regional and local public health structures; and d) third sector organisations and public health structures. In addition to the translation of research into policy, communication from policy back to research is also important. This 'reverse translation' approach helps ensure that policy relevant research questions are being asked and enables researchers to understand how their evidence is used and how it should be presented.
2. **Skills and workforce:** One mechanism for improving relationships and coordination between organisations includes increasing the mobility of the workforce between parts of the system through secondments and joint appointments. Such opportunities should be available to people of all career stages, in all disciplines and sectors. As well as strengthening connections between organisations, secondments and joint appointments could help to develop knowledge brokerage skills, improving understanding of policymaking and evidence communication amongst researchers, and the generation of evidence amongst policymakers.
3. **Data:** Issues raised included data sharing, access to data and published research, data gaps in health promotion research, and the linkage of data from different systems (e.g. health, education, work, justice) to enable research into the social determinants of health.

Participants highlighted priorities for further action including enabling data linkage through improving governance processes, legislation or establishing a dedicated health determinants data body; reviewing the health determinants data landscape; strengthening data science and management skills; and working with the public to improve trust and understand how to incentivise them to share their data.

4. **Transdisciplinary working:** Current and future public health issues will require a transdisciplinary approach to research, research translation, and policymaking, for example working across public health, economics, social and behavioural science, data science and other disciplines, and using different and multiple methods.
5. **Academic research culture:** Research practice and culture is often not conducive to bridging the gap that exists between research and policy. The way research quality is assessed does not incentivise transdisciplinary working and 'team science' approaches, and may favour research that answers questions about 'what' the problem is instead of 'how' public health issues should be tackled. Researchers, higher education institutions, funders and journals all have a role to play in ensuring research culture supports the translation of evidence into policy. A number of participants stressed the importance of reforming the Research Excellence Framework (REF) to ensure that it incentivises team science.
6. **Time and capacity:** Across public health research, policy and practice, lack of time and capacity were cited as major barriers to the translation of evidence into policy. This suggests a need for targeted investment in the workforce and dedicated time and training for evidence translation.
7. **Evidence-based policy in Government:** Political and ministerial priorities can have a big impact on public health policy. Discussions centred around how to influence political priorities, how to communicate evidence to policymakers, and the need to improve the practice of evidence-based policymaking.
8. **Public involvement:** To better understand the problems that need to be addressed and to ensure the development of effective public health interventions, the public must be involved in all stages of the research-to-policy process, including priority setting, research design, policy design, implementation, and evaluation. Participants recognised a need to improve the culture of patient and public involvement in public health policy and identified a role for research in understanding how to perform effective public involvement.

A summary of the potential actions suggested at the workshop for each stakeholder can be found in the final section, 'Potential next steps'.

Introduction

In 2016, the Academy of Medical Sciences convened a working group to explore how to optimise the UK's public health research environment to improve the health of the public. The resulting report, *Improving the health of the public by 2040*, formulated recommendations relating to research evidence, capacity, workforce and infrastructure, and the mechanisms for translating research into practice.[1]

Fast forward to 2022, and the context within which evidence informs public health policy in the UK has been transformed. The COVID-19 pandemic has impacted public health and transformed how we respond to infectious disease threats. Public health systems in England and Scotland have undergone restructures, and new Integrated Care Systems have been established in England (under the Health and Care Act of 2022) and Northern Ireland. These changes pose a need to reconsider how public health research can be best utilised to inform public health policy in the UK.

This workshop focussed primarily on the use of evidence by national and regional public health structures in England, but aspired to simultaneously enable the sharing of lessons learned between all four UK nations. It is linked to and will inform a broader programme of work to review the recommendations from the Academy's *Improving the health of the public by 2040* report, which will seek to draw on the unique and shared challenges faced by all four nations.

The meeting was chaired by **Professor Catherine Law CBE FMedSci**, Professor of Public Health and Epidemiology at University College London, and brought together experts across public health practice, policy and research, as well as research funders and regulators, to:

- Reflect on the research remits of OHID, UKHSA, NHSE and ICSs.
- Consider the challenges of translating research and evidence into public health policy.
- Identify opportunities for England's new public health structures, researchers, policymakers and funders to ensure that evidence is utilised effectively to improve public health and respond to health threats.

While local authorities and community organisations also face challenges in the translation of evidence into policy and practice, it was acknowledged the majority of these challenges are different to those experienced at the regional and national level and would require a separate and dedicated analysis. Therefore, the use of evidence by local public health structures was considered out of scope for this meeting.

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The context: Public health in England

The COVID-19 pandemic has highlighted the importance of public health structures in safeguarding the health of the population, and brought into sharp relief some of the fragilities within the system. Public health as a specialty has three domains - health protection, health promotion and healthcare public health (Box 1) - which need to support one another to achieve maximum population benefit.

In England, these functions were formerly combined under Public Health England (PHE), an executive agency of the Department of Health and Social Care (DHSC), with some specialised health promotion and healthcare public health functions lying with NHS England (e.g. vaccination and screening). In August 2020, the UK Government announced that the health protection and promotion functions of PHE were to be separated. Health protection was to be delivered by a new executive agency, the UK Health Security Agency (UKHSA), and health promotion brought closer to the Government under a new Office within the DHSC, now called the Office for Health Improvement and Disparities (OHID). NHS England was also granted further health promotion and healthcare public health functions previously covered by PHE. UKHSA and OHID were formally established in October 2021. The current remit of these structures is detailed in **Annex 3**.

Alongside these reforms, the Health and Care Act 2022 brought about the formalisation of Integrated Care Systems (ICSs). Each of the 42 ICSs in England have two parts: an Integrated Care Board (ICB) and an Integrated Care Partnership (ICP). ICBs are statutory organisations that replace Clinical Commissioning Groups. They are responsible for allocating the NHS budget and commissioning services, and, amongst other statutory duties, must work to reduce health inequalities and promote innovation and research. ICPs are committees that bring together representatives from local authorities, the ICB, Healthwatch[i] and other third sector and community partners to develop an 'integrated care strategy' – a plan to deliver integrated healthcare, social care and public health services across the locality to improve the health of the population within the ICS area.

[i] Healthwatch is an independent organisation that was established under the Health and Social Care Act 2012 to understand the needs, experiences and concerns of people who use health and social care services and to speak out on their behalf. They exist at a national and local level – Local Healthwatch are funded by and accountable to local authorities and Healthwatch England is a statutory committee of the Care Quality Commission.

Box 1 – Definitions

Public health: The science and art of promoting health, preventing disease, and prolonging life through the organised efforts of society.[2]

Health protection: The protection of individuals, groups and populations through the effective collaboration of experts in identifying, preventing and mitigating the impacts of infectious diseases and of environmental, chemical and radiological threats.[3]

Health promotion: The process of enabling people to increase control over, and to improve, their health. It represents a comprehensive social and political process; it not only embraces actions directed at strengthening the skills and capabilities of individuals, but also actions directed towards changing social, environmental and economic conditions so as to alleviate their impact on public and individual health.[4]

Healthcare public health: The practice of improving health at a population level, by preventing diseases or improving health-related outcomes through access and utilisation of effective healthcare interventions or treatments.[5]

Executive agency: An organisation that allows the delivery of executive functions of government to be carried out separately from – but within a policy and resources framework set by – a primarily policy-focused department.[6]

Multidisciplinary: People from different disciplines working together, each drawing on their disciplinary knowledge ('additive').[7,8]

Interdisciplinary: Integrating knowledge and methods from different disciplines, using a real synthesis of approaches ('interactive').[7,8]

Transdisciplinary: Creating a unity of intellectual frameworks beyond the disciplinary perspectives ('holistic').[7,8]

Team science: Research involving two or more research groups that aims to produce an academic publication or other research output. Team science may occur within a single discipline or across disciplinary boundaries and can involve collaborations either within one institution or among multiple organisations.[9]

Progress in embedding evidence in public health

Setting the scene for the meeting, **Professor Dame Anne Johnson DBE PMedSci**, President of the Academy and Chair of the 2016 working group report, *Improving the health of the public by 2040*, set out the progress that has been made in developing research and embedding evidence in public health policy and practice since the working group report was published.[10]

The first recommendation of the report was the establishment of the UK Committee for Strategic Coordination of Health of the Public Research (SCHOPR). SCHOPR was established as a sub-committee of the Office for Strategic Coordination of Health Research (OSCHR) in 2017 and brings together funders across all four nations to 'provide strategic direction, enhance coordination and identify priorities for improving the health of the public research'. Since its establishment, SCHOPR has produced a set of public health research principles and goals and initiated activities with local authorities, public health practitioners and funders to promote research and evidence-based policy in public health.[11]

Dame Anne highlighted the increased investment that public health research has received over the last 6 years. For example, the UK Prevention Research Partnership, led by the Medical Research Council, is investing £50 million to support system-level and transdisciplinary research into prevention of non-communicable diseases. The National Institute for Health and Care Research (NIHR) has also made major contributions, including a recently announced £50 million investment in a series of local government partnerships, known as Health Determinants Research Collaborations (HDRCs), to conduct research into health inequalities and embed a culture of evidence-based decision making in local government.

Investment must be matched with efforts to build a sustainable and transdisciplinary workforce. Examples of progress in this area, mentioned by Dame Anne, included the NIHR Public Health Incubator[12] and NIHR Population Health Career Scientist Award.[13]

Public health research remits of UKHSA, OHID and NHSE

The workshop provided a platform for senior leaders from UKHSA, OHID and NHSE to set out how each of their organisations were using research and evidence at the time of the workshop.

UKHSA

Richard Gleave, Director of Science Strategy and Development at UKHSA, described UKHSA as the nation's health security agency which is bringing together the established function of health protection with the concept of health security. This includes contributing to the current refresh of the cross-Government Biological Security Strategy of 2018.[14] The UKHSA has five key parts to its remit:[15]

- **Prevent:** anticipate threats to health and help build the nation's readiness, defences and health security.
- **Detect:** use cutting-edge environmental and biological surveillance to proactively detect and monitor infectious diseases and threats to health.
- **Analyse:** use world-class science and data analytics to assess and continually monitor threats to health, identifying how best to control and mitigate the risks.
- **Respond**: take rapid, collaborative and effective actions nationally and locally to mitigate threats to health when they materialise.

- **Lead:** lead strong and sustainable global, national, regional and local partnerships designed to save lives, protect the nation from public health threats, and reduce inequalities.

As emphasised by Mr Gleave, research and evidence are central to all five of these areas. The UKHSA is developing science and data strategies which will underpin practice within the organisation, partnership and system-level practice, and the advice that is given to the Government.

Mr Gleave introduced Caplan's 'Two Communities' theory (1979), which describes how the perceived gap between the research and policy/practitioner communities was a barrier to implementing research and evidence.[16] UKHSA staff are often both researchers and policymakers or practitioners, and the organisation is exploring new ways of combining 'doing' research with 'applying' research, including through **appointing academics and enabling secondments between academia and UKHSA**. Mr Gleave noted that this need for people who can move between research and policy poses a challenge for funders, and there must be **consideration of how to fund these roles within national structures (including the NHS), universities and local authorities**.

Mr Gleave concluded by highlighting four areas that UKHSA has identified for further focus:

1. The interface and **relationships** between UKHSA and local and regional structures.
2. The integration of health equity research, knowledge and evidence within the work of UKHSA.
3. Public and patient involvement and engagement (PPI/E).
4. Know-'how' vs know-'what': **generating and using evidence that informs *how* to best respond** to health security threats as well as understand *what* these threats are.

OHID

Dr Jeanelle de Gruchy, Deputy Chief Medical Officer and co-lead of OHID, described how OHID brings together the former health improvement teams of PHE with policy teams from DHSC. As well as working within DHSC, one of the primary goals of OHID is to drive the prevention agenda across Government to reduce health disparities.

Dr de Gruchy acknowledged that OHID is in a transition period, and work is ongoing to understand how the office can make best use of its data, intelligence and analytical assets and bring in evidence from a range of disciplines. These assets include the Regional Directors of Public Health, who are jointly appointed by OHID and NHSE, fostering interactions between the two organisations and with regional and public health teams.

The underpinning rationale for bringing health promotion closer to the Government through OHID was that it would help embed a culture of evidence-based policymaking in decisions affecting health and health inequalities.[17] Dr de Gruchy recognised this as an opportunity and noted the importance of ensuring that evidence is readily available to policymakers. Echoing comments made by Mr Gleave, Dr de Gruchy emphasised that this evidence must crucially **focus on 'how' public health interventions and solutions are delivered**, not only on defining 'what' the problems are. The system must be able to provide evidence on the wide-ranging impacts of public health interventions, alongside analyses of the **strength of the evidence and level of uncertainty**.

NHSE

Professor Yvonne Doyle CB FMedSci, Medical Director for Public Health at NHS England, began by highlighting previous Academy work with relevance to public health research and

evidence, and drew together the cross-cutting priorities from those reports that are pertinent to the role of the NHS (**Figure 1**).

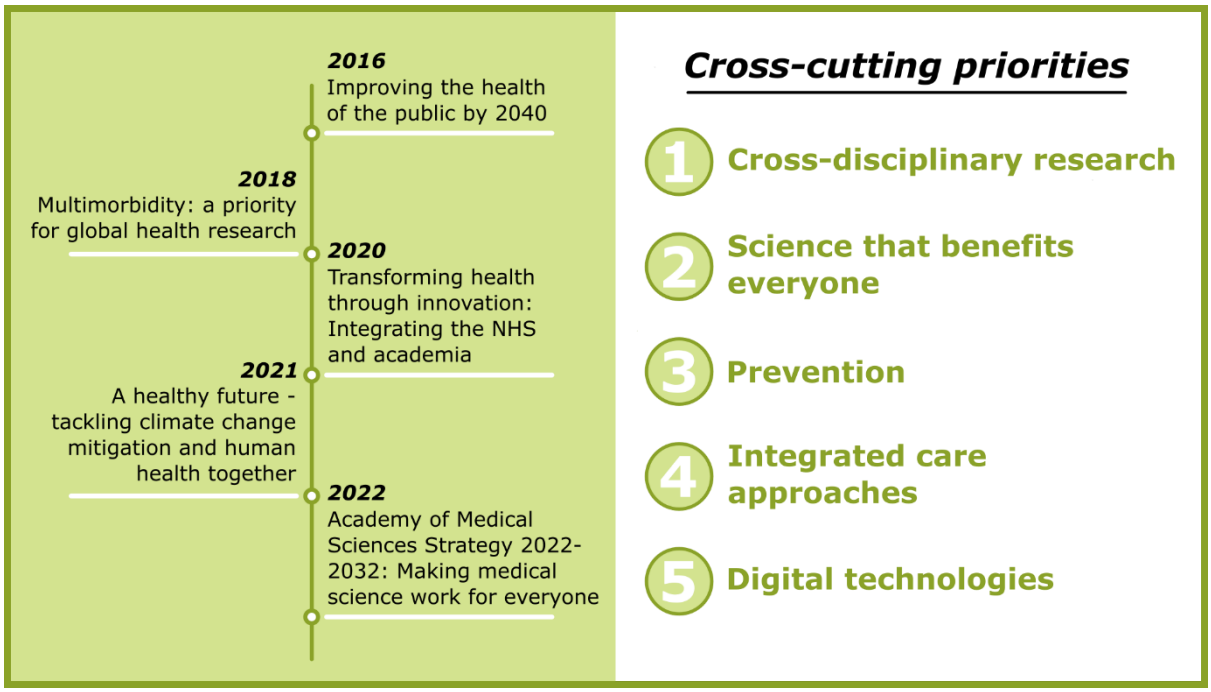

Figure 1: Timeline of Academy of Medical Sciences reports with relevance to public health research and evidence, alongside the cross-cutting priorities brought out in those reports that are relevant to the role of the NHS, highlighted by Professor Doyle.

Explaining the role of NHSE in health improvement, Professor Doyle emphasised that NHSE is serious about prevention, and is pushing to establish more preventative programmes and increase clinicians' understanding of their role in prevention. The prevention directorate is also undertaking evidence-based evaluations of ongoing NHS prevention programmes, such as those related to diabetes, obesity and tobacco use. Professor Doyle highlighted that work needs to be done to **build relationships between research collaborations and NHSE**, as a means to **identify research and evidence gaps**. She also emphasised that the NHS must **make it easy** for healthcare workers to use good evidence and suggested that a **prevention collaboration within NHSE** should be established to synthesise the best and latest evidence around prevention that clinicians can access with speed and ease.

With regards to Integrated Care Boards, Professor Doyle mentioned that the NHS National Public Health team has developed a series of 10 top tips for ICBs to provide a quality public health function across their ICSs,[18] based on the World Health Organisation Essential Public Health Functions.[19] Of relevance to the workshop, tip number five is to 'advance public health research'. During further discussion, Professor Doyle stressed that while ICBs seem to be putting greater focus on addressing population health needs, **conflicting priorities and the current pressures** on the NHS pose a challenge to embedding a culture of using evidence for improving population health.

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Challenges and opportunities

As England's new public health structures are established, there is a window of opportunity to bolster the processes that enable evidence to be embedded in public health decision-making. Through group discussions and plenary sessions, participants identified barriers to the translation of research into public health policy, and opportunities for England's new public health structures, researchers, policymakers and funders to address these challenges.

The identified challenges and opportunities fell under the following eight themes:

1. Relationships and communication
2. Skills and workforce
3. Data
4. Transdisciplinary working
5. Academic research culture
6. Time and capacity
7. Evidence-based policy in Government
8. Public involvement

Potential next steps for a variety of stakeholders are noted throughout the following sections. These suggestions were not formally agreed on by all participants, nor do they represent an official position of the Academy of Medical Sciences or its Fellows.

Relationships and communication

Difficulties navigating the system and 'knowing who to go to' was one of the most frequently mentioned challenges facing the translation of research into policy. This problem has been exacerbated by, but existed prior to, the recent restructures. Due to competing priorities and time pressures across all systems, building and maintaining relationships is currently viewed as a 'nice to have', rather than being an essential function of an effective public health system. Participants emphasised that this can only be addressed through a **cultural change in how relationships are built, valued and maintained**.

It was noted that relationships currently rely on strong, yet often short-term, personal connections. In relation to the researcher-policymaker axis, there is a risk that this could lead to the development of policy built on a limited view of the evidence. Action is therefore needed to embed **sustainable, inclusive and diverse relationships at the organisational level** to ensure they are retained in institutional memory and transcend workforce changes and restructures.

It was suggested that, out of the four UK nations, this problem is reasonably specific to England, given its size and complexity of the public health ecosystem. In Wales, for example, relationships between public health researchers, practitioners and policymakers, as well as research funders, were described as being closer and easier to facilitate. The Wales COVID-19 Evidence Centre was cited as an example of best practice.[20]

Conversations focussed on relationships between four groups of actors:

1. Researchers and policymakers

As echoed by Mr Gleave in his summary of the 'Two Communities' theory, participants repeatedly referred to a large and widening gap between researchers and policymakers. Although lessons have been learned from the COVID-19 pandemic in relation to the translation of research into policy, there was debate about whether the pandemic has exacerbated this gap, whether it has changed over time, and the role and nature of scientific independence. One participant suggested that there is a need for **better models of deliberative decision-making** that involve, instead of being informed by, researchers from varied disciplines.

In line with the translational framework for public health proposed by Ogilvie *et al.*,[21] participants noted that the relationship between research and policy is bidirectional, iterative, and closely intertwined with public behaviour and resulting health outcomes. To ensure that research is implementable and likely to benefit public health, **feedback loops from policymakers back into research** are essential.

As emphasised by both Mr Gleave and Dr de Gruchy during the panel discussion, academic research has a stronger focus on characterising public health issues rather than on examining how they can be addressed. Mr Gleave argued that this is partly because information about the evidence required to inform decisions about interventions is not clearly set out by policymakers for academics to investigate. This was echoed by participants throughout the meeting, who suggested that researchers and ICBs have little insight into what evidence is required by OHID and UKHSA. Researchers also require information about **how the evidence might be used, and how it should be presented**, to enable effective translation. To facilitate this 'reverse translation' from policy to research, it was suggested that:

- Policymakers should review and **standardise the processes they use to feedback to researchers** about how their evidence was used and how useful it was to ensure this becomes standard practice, enabling researchers to adapt their ways of communicating evidence to policymakers.
- Policymakers should communicate **areas of research interest** to researchers.
- Research funders should **fund more reverse translation activities** (including secondments – page 16).
- Former civil servants and policymakers should be encouraged to engage with academic settings.

The need for communication of research priorities from national bodies to researchers was generally accepted, but it was argued that the process of identifying research gaps and priority setting should involve all stakeholders, including researchers, funders and the public. Research should not only aim to address the current questions being asked by OHID, UKHSA and NHSE (which will be influenced by Government policy and priorities at the time) but should also help deliver innovative solutions to problems of the future, which can only happen through blue skies research.

The NIHR Health Protection Research Units (HPRUs), which partner with UKHSA, and the NIHR Public Health Policy Research Unit (PH-PRU), which partners with DHSC, are exemplars of how

to build two-way connections between multidisciplinary research and policy. As the Academy suggested in its response to the DHSC 'Transforming public health' consultation,[22] participants called for the HPRU programme to be expanded. In particular, it was noted that feedback loops from policy into research appear to be more effective in areas of health protection than in health promotion. For example, a comparison was drawn between the COVID-19 and cost of living crises, where the latter is unlikely to receive an amount of research funding or interest that is proportional to its impact on public health. It was therefore suggested that **the HPRU programme should be broadened out** with units covering health improvement and health inequalities research, implementation science and PPI/E methods research. Although the NIHR PH-PRU has a focus on understanding social determinants of health, it was suggested that HPRUs and the PH-PRU should **involve a range of Government departments**, beyond DHSC and UKHSA.

2. National public health structures in England

Health improvement and health protection are closely intertwined both operationally (e.g., within local authorities) and biologically (e.g., multimorbidity increasing risk of death from COVID-19). It is therefore imperative that the prevention and health improvement agendas of OHID and the health protection activities of UKHSA remain aligned.[23] In line with previous calls from the Academy for UKHSA and OHID to develop joint initiatives and research agendas,[24] participants highlighted that **joint programmes of work** will not only help deliver an integrated approach to linked health protection and health promotion issues, but will also help foster sustainable relationships between the two organisations.

Better collaboration and alignment between these structures will likely improve their relationships with other stakeholders, especially if they are able to **develop a coordinated and streamlined approach** for engaging with researchers, funders and third sector organisations.

3. National, regional and local public health structures

Building relationships between national, regional and local public health actors (for example, between UKHSA and local authorities) was seen as crucial, particularly to enable a better flow of intelligence between the levels, and to facilitate the integration of research into local decision-making. NHSE has a role to coordinate research activities across ICSs, but it was suggested that this function is not yet working optimally, leading to duplication of research efforts and missed opportunities for collaboration.

4. Third sector organisations and national and regional public health structures

As described in further detail below, third sector organisations are uniquely placed to provide independent advice to Government, influence policy and press for action in areas both within and outside of Government priorities. Participants from third sector organisations called for **transparency to allow better navigation** of the system, noting that ICSs and ICBs seem particularly difficult to engage.

Beyond the four types of relationships listed above, suggestions of how to improve across the entire system included:

- Building **quantifiable measures** of the strength of external relationships into organisational reporting.
- Holding **multistakeholder cross-sector events** for furthering common objectives and developing joint initiatives.
- Developing **case studies** of where investment in relationship building has had a quantifiable positive impact.

- Increasing **investment in the infrastructure**, particularly the **workforce**, needed for relationship building. This point is covered in more detail in the following section.

It was suggested that OHID and/or SCHOPR could take forward these suggestions and help foster these relationships by **playing a convening role**.

Skills and workforce

Comments about skills and the workforce could be grouped into two broad priorities: **enabling knowledge exchange** and **tackling skills gaps**. It was noted that these priorities need to be addressed alongside tackling the wider workforce crisis in public health practice and interacting settings, particularly in health and social care.

Knowledge exchange

Secondments, exchanges, internships and joint appointments were frequently mentioned at the workshop as a means to enable workforce mobility between research and public health policy (in Government, UKHSA or the NHS). Such initiatives not only improve interorganisational relationships and allow 'cross-pollination of ideas' between different parts of the system, but also build a much-needed skills base in knowledge brokerage. Participants noted a need to **improve knowledge of the policymaking process and skills in political influencing within the research workforce**, and secondments and joint appointments were recognised as a way to achieve this.

Improving the health of the public by 2040 recommended the establishment of 'Health of the Public Policy Fellowships' to 'build reciprocal relationships, mutual understanding and long-term networks between researchers and policymakers'.[25] In line with this recommendation, in 2021, the Economic and Social Research Council (ESRC) and Arts and Humanities Research Council (AHRC) funded a number of Policy Fellowships for researchers to spend 18 months with a UK or devolved government department.[26] Funding for a further 22 fellowships was announced in July 2022.[27]

Other examples of initiatives that facilitate knowledge exchange, that were cited during the workshop, include the Centre for Science and Policy (CSaP) Policy Fellowships, which enable policy professionals from Government, industry and third sector organisations to connect with researchers,[28] and the UKRI Policy Internships scheme, which provides opportunities for UKRI-funded doctoral students to undertake a three-month placement at one of a selection of policy organisations.[29]

Beyond these recognised funded opportunities, it was acknowledged that it can be difficult for public health structures, particularly ICSs and local authorities, to host researchers due to the monetary costs, time and resources involved.

Suggestions of next steps related to knowledge exchange put forward by participants at the meeting include:

- Facilitating the **sharing of best practice and guidance** around joint appointments and secondments.
- Establishing a **pilot of programmes or joint appointments** that allow people to rotate between public health structures, including between national and local levels.
- Developing a **strategic approach for enabling workforce mobility**, embedding such initiatives in normal ways of working rather than one-off opportunities.

- Ensuring policy fellowships and internships are available to **senior researchers** as well as early-mid career researchers.
- **Expanding initiatives similar to CSaP** that connect policymakers with researchers, and rolling them out across the UK.
- **Expanding existing student internship schemes**, such as the UKRI policy internships, to **medical students** as well as research students.
- Funding joint appointments or secondments for researchers within **ICSs or local authorities.**

It was also proposed that the Academy could enable opportunities for researchers from multidisciplinary backgrounds to work in public health policy through its grant schemes, such as its Springboard scheme.[30]

Skills gaps

As described above, a need to **increase understanding of policymaking and how to communicate evidence to policymakers** amongst researchers and practitioners was identified. It was suggested that research funders and Health Education England have a role to play in building this skills base.

Some participants indicated that public health structures at all levels – national, regional and local – lack the capacity to gather and filter the vast amount of evidence that exists. Participants proposed that there is a need for a **professional discipline in knowledge brokerage**, working within public health structures and Government to help synthesise, analyse and communicate evidence to decision-makers.

Data

Data sharing and access

The immediacy of the threat posed by COVID-19 led to concerted efforts from policymakers and researchers to enable the sharing of data, such as via the Control of Patient Information (COPI) regulations,[ii] increased use of Open Science approaches and publication of research prior to peer review through preprint servers. However, attendees felt that the progress made during COVID-19 is not being sustained.

Specific examples where barriers to data sharing are hindering the conduct and translation of research, mentioned during the meeting, include:

- HPRUs finding it difficult to access surveillance data from UKHSA.
- Researchers unable to access data within GP records.
- Researchers unable to access data within ONS/Government trusted environments during the pandemic.
- Researchers unable to access NHS and local authority data, due to a culture of risk aversion in these organisations who view the risks posed by data governance penalties as outweighing the potential benefits.

Participants agreed that the public has a key role to play in enabling access to their health data. This action could be supported through simplifying data sharing agreements and research into how to communicate the purposes of, and build trust in, data sharing with the public.

[ii] COPI was an emergency measure that allowed greater sharing of healthcare data to manage and mitigate the spread of COVID-19. It enabled initiatives such as NHS Test and Trace and the COVID-19 RECOVERY trial. The notice was extended three times during the course of the pandemic, but expired on 30 June 2022.

In addition to issues around data sharing, participants also raised problems around access to published research, especially for people in public health policy and practice without links to academic institutions. One participant suggested that researchers and journals should consider how to **translate research papers into an accessible and usable format** for policymakers. It was noted that successful implementation of the recommendations from the 2022 Goldacre Review[31] would go a long way in addressing the challenges identified at the workshop, while OpenSAFELY was cited as an example of best practice for enabling access to GP records and linking across health data sources.[32]

Data gaps

Discussions also highlighted several gaps in the knowledge base due to missing or incomplete data, largely in the health improvement field. These included:

- Data stratified by ethnicity.
- Social care data (it was hoped that investment in social care digitisation, set out in the Government's health data strategy,[33] will help fill this gap).
- Data on social and commercial determinants of health.
- Surveillance data for non-communicable diseases, which was described as not being as comprehensive as that for communicable diseases.
- Qualitative data (as a means to gain narrative accounts of public health issues and/or public opinion).

A need for a more comprehensive and holistic approach to identifying data gaps was identified, which could be fulfilled by a **data landscape review** led by UKRI or Government and involving cross-sector partners. The review should consider what data exist, who can access which data and what data are missing, and should focus particularly on health determinants data.

In addition to gaps in data on social and commercial determinants of health, it is well recognised that there are problems linking data between systems to enable analyses of the impacts of these determinants on health outcomes. Discussions mirrored those at a recent British Academy and Academy of Medical Sciences workshop on the historic and geographic patterns of health inequalities[34] – in both workshops, the need to be able to **link data controlled by different areas of Government**, such as employment, income and social security data from the Department of Work and Pensions and HM Revenue & Customs to health data, was identified as a priority.

There are a number of examples of data linkage initiatives trying to address this problem. Public Health Scotland holds multiple datasets relating to health and its wider determinants, and is able to link and share data across public services. Work is ongoing to link national level data to local datasets, to enable more granular analyses.[35] Other examples included the work of Health Data Research UK and Administrative Data Research UK. It was proposed that there needs to be a specific focus on health determinants data linkage, which could be fulfilled by a separate but related entity, for example, '**Health Determinants Data Research UK'**. One participant noted that the Digital Economy Act 2017 enabled the linking and sharing of de-identified data by public authorities, including tax and justice data, and asked whether a similar process could be achieved for health data.

Data skills

In addition to the skills gaps identified in the previous section, data science was another area where participants identified a need for further training opportunities. This shortfall was also recognised in *Improving the health of the public by 2040*, which called for 'higher education institutions and research funders to **further enhance training pathways in informatics for health**'.[36]

Transdisciplinary working

Being able to draw associations across different determinants of health and analyse the impacts of government policies on health requires an interdisciplinary and transdisciplinary approach to research, research translation and policymaking. This was a key theme of the *Improving the health of the public by 2040* report, which identified a need to develop the UK's transdisciplinary public health research capacity.[37] Participants spoke of the need for researchers and policymakers to **work across disciplines** such as anthropology, psychiatry, psychology, commercial research and behavioural, systems and social sciences, and **different methodologies**, including qualitative and ethnographic research. However, it was acknowledged that for policymakers this could mean having to evaluate and integrate a vast amount of evidence, which may have conflicting conclusions. During COVID-19, epidemiologists, behavioural scientists and economists tended to work separately, each feeding in their own evidence to policymakers. It was suggested that a transdisciplinary approach at the research stage would have helped to provide a joined-up overview of the potential scenarios and their varied outcomes on different health and economic measures, and the certainty of those outcomes, to facilitate informed decision-making by policymakers. Participants indicated that researchers, funders, journals and higher education institutions all have a role to play in promoting transdisciplinary public health research.

In the panel discussion, Mr Gleave noted the importance of multidisciplinary, interdisciplinary and transdisciplinary working (**Box 1**) and the need to break down barriers to those interactions. He highlighted that UKHSA is building expertise in a wide range of disciplines including data science, economics and social science, but acknowledged that pulling those areas together within the organisation and the wider system is a challenge that has started to be addressed.

Dr de Gruchy gave obesity as an example, for which there is a need to consolidate evidence on the commercial and economic determinants and impacts, for example understanding the downstream consequences of obesity on productivity and economic growth. She also emphasised the need to design innovative solutions to public health challenges, and that this relied upon being able to draw from other areas outside of public health.

Although there are some good examples of multidisciplinary working in NHSE, Professor Doyle indicated that it was an ongoing challenge for the organisation. In particular, she raised concerns over the risk of losing the knowledge that was gained during the pandemic around how people live their lives, how this affects health, and how infection interacts with multimorbidity. Professor Doyle also highlighted the need for an **integrated approach to different disease areas**, particularly when considering mental and physical health and tackling health inequalities.

Academic research culture

Team science

In academic settings, the way in which research quality is assessed during peer review, publishing, national exercises like the Research Excellence Framework (REF), and funding and employment decisions, is widely thought to drive a competitive research culture that rewards a single discipline mentality.[38] This view was shared by participants at the workshop. In particular, there was a strong sense that the **REF processes, whilst improving, should be further revised to ensure that it incentivises 'team science'** (**Box 1**). It was suggested that **the Academy should continue to work to implement the recommendations set out in its '*Improving recognition of team science contributions in biomedical research***

***careers'* report and strive to influence changes to future iterations of the REF**.[39] In 2022, the Academy responded to a consultation on the Future Research Assessment Programme (FRAP), outlining the need for any future assessment exercise to value work done by higher education institutions to support team science careers.[40]

Research design

Participants also noted that the way in which research quality is measured appears to favour and promote research that is designed to describe the aetiology of public health issues, rather than research that has outcomes that can be implemented for public health benefit.

Some participants raised the need for a greater variety of research methodologies to answer public health questions, particularly highlighting the value of pragmatic and community-based trials and qualitative research. The involvement of all stakeholders, including policymakers and the public, early in priority setting and research design is important (page 14). A couple of participants mentioned a drive to change this culture in Wales, so that the audience and users of evidence are involved in research planning from the onset. For example, NHS Wales have been using target audience personas (profiles of people who represent the target audience groups) to train staff how to adapt their communication style to different audiences.

Participants highlighted the tension between rigour and timeliness, and noted that while a good research culture favours rigour, in policy timeliness can be just as important, especially in times of crisis. Furthermore, the competitiveness of academia can drive researchers to overstate the certainty of their conclusions, which is counterproductive in settings where policymakers need to make decisions on the basis of the certainty of different sources of evidence.

Funding

Participants raised concerns that current funding strategies are not always designed to support implementable public health research. Many grants are not long enough to allow for the longitudinal studies that are required to study trends in health over time and for relationships to be built between research and policy. Small pots of funding allocated competitively also disincentivise collaborative and transdisciplinary working.

The Biotechnology and Biological Sciences Research Council (BBSRC) and NIHR were praised for their funding programmes that allow researchers to gain extra funding to support the translation of fundamental research into practical application or policy.[41,42] It was suggested that **other funders could establish similar schemes**.

As highlighted elsewhere in this report (page 16), funders were also called upon to expand the **funding of programmes to enable knowledge exchange between research and policy**, especially within ICSs and local authorities.

Value of policy work

Researchers also engaged in policy activities reported an insufficient allocation of time and funding to conduct that work. Concerns were raised over the lack of support given to scientists who pivoted to work on COVID-19 during the pandemic, and were unable to balance their academic, teaching and policy commitments in a sustainable manner. A need to **increase workforce capacity in higher education** was stressed, along with a suggestion to explore innovative workforce models. This could include establishing a **pool of people that can back-fill particular roles** (e.g. teaching roles) when required.

Time and capacity

Related to the previous section, another challenge identified, that exists across all parts of the public health system, is the lack of time and capacity required to focus on the translation of research to policy. In both clinical and public health settings, participants referred to a system that remains in 'firefighting mode', with a focus on reactive provision of services instead of prevention.

Participants cited competing priorities in the light of the restructures, where OHID, UKHSA, NHSE, ICSs and local authorities have all been given new responsibilities at the same time as having to manage workforce restructures and develop strategic plans. For all of these organisations, the time required to synthesise and evaluate evidence was seen as a large barrier. This is particularly pertinent in times of crisis – during the COVID-19 pandemic, participants recalled times where evidence was being gathered through word-of-mouth, as there was simply not enough time to do thorough evidence reviews. **Building workforce capacity in knowledge brokerage (page 17) and rapid evidence synthesis** for times of crisis were described as potential solutions.

Evidence-based policy in Government

Political priorities and policies are always changing and this is a major challenge facing the development of evidence-based policy in public health. Dr de Gruchy and others spoke of the need for a **forward-thinking approach** so that the **evidence is 'ready to go'** when political priorities allow for progress to be made on a particular issue. Some were optimistic about the impact that those working in public health could have on political priorities but indicated a need for more **targeted engagement with political parties and ministers**, in addition to civil servants. Another suggestion is to **improve understanding of political influencing and how to present evidence to policymakers amongst researchers**.

On the topic of presenting evidence, participants highlighted a number of ways in which researchers could improve their methods of communication with policymakers:

- Present evidence on how proposed interventions or policies align with or support policy priorities (such as economic growth).
- Present evidence in different ways, for example, combining quantitative data with narrative accounts of public opinion or experiences.
- Integrate evidence from multiple sources to indicate potential outcomes of interventions or policies on multiple sectors (e.g. health and the economy) (page 19).
- Provide clear information about the strength and certainty of the evidence (page 10).

Participants identified a key role for third sector organisations in advocating for evidence-based policy, bringing the public voice into the discourse, and presenting evidence to policymakers. This reinforces the need for **stronger links between different third sector organisations, and between the third sector and UKHSA, OHID, NHSE, ICSs and local authorities** (page 15). The Office for National Statistics (ONS) was another organisation with a potential role to play in providing evidence relating to policy areas that do not have a strong evidence base.

An important question raised at the meeting was how to strengthen the culture of evidence-based policymaking in government. It was proposed that the Academy could work with the Chief Scientific Advisors in Government departments to **consider how to better support the**

embedding of evidence and research outcomes in decision-making. Participants were aware of existing training for policymakers within Government on the use of evidence, but it was agreed **that this training should be more widespread and should include guidance on how to provide useful feedback to researchers** to ensure that researchers can adapt their ways of communicating evidence to be easily understood and implementable (page 14).

Crucially, participants spoke of a need to ensure that the **impact of policies on population health are considered across all Government departments**, with a couple of participants citing propositions to use health indices and health impact assessments in policy design and evaluation.

Public involvement

Public opinion and behaviour can often determine the success of evidence-based policies and interventions. **Involving members of the public from all communities and demographic groups at all stages of the process**, including priority setting, research design, policy design, implementation and evaluation, is therefore crucial for ensuring that public health interventions are successful and benefit all in society.

In the panel discussion, speakers were asked about what their organisations are doing, and the challenges they are facing, in the area of public involvement. Mr Gleave spoke about The People's Panel, an initiative started by the Health Protection Agency (the precursor to PHE), which brought together over 1,300 lay members to regularly participate in engagement exercises. UKHSA are now developing a People's Pulse panel and have gathered around 150,000 people from a variety of backgrounds and experiences, representing all ages and genders, who have agreed to take part in research so they can be engaged in ongoing conversations about health threats and risks. UKHSA is now reflecting on the academic research that has improved understanding of how to conduct effective patient, public and community involvement, engagement and participation and is considering how to translate that understanding into effective public involvement and engagement design in health protection research. Mr Gleave noted particular challenges in engaging the general public, who may not directly be affected by an issue, in conversations about health threats and risk.

Dr de Gruchy referred to the discussion about multidisciplinary working, noting the importance of behavioural science for understanding population and individual's behaviour, particularly in response to risk. Professor Doyle noted that although the public and patient voice is apparent in individual prevention programmes, there is an opportunity to **improve the influence of patients and public at the organisational level of NHSE**.

Conversations during the group discussions highlighted a need for more research to understand:

- Which research methods are most effective for gathering evidence on public opinion and needs.
- Which methods of public and patient involvement in research and policy are most effective in delivering public health benefit.
- The most effective ways to communicate about public health research, policy, evidence and risk to the public, and the role of social media in supporting or hindering this communication. The Health Foundation recently published the results from a programme of work exploring the most effective ways to talk about the wider determinants of health,[43] including a communications toolkit for people working in public health.[44]
- How to communicate with the public about data sharing and build trust.

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Potential next steps

The overarching message from the workshop was that there is a need to strengthen relationships and transdisciplinary work across the public health system in England, and invest in the time, skills, and data needed to bridge the gap between research and policy.

There was also a strong sense of the need to balance learning from the **past**, identifying research and data gaps to address the most pressing issues of the **present**, and enabling innovation to tackle the challenges of the **future**. Participants raised the need to learn from past successes and failings in embedding evidence into policy, quoting examples related to smoking, the soft drinks industry levy, and COVID-19. Improving the bidirectional relationship between research and policy will help to ensure that current policy making is evidence-based, while creating space for researchers to conduct 'blue skies' research will ensure that evidence is ready when the political context allows for policy change on a particular issue.

Across the eight themes that were covered at the workshop, participants identified potential opportunities and next steps for a variety of stakeholders. **These suggestions were not formally agreed on by all participants, nor do they represent an official position of the Academy of Medical Sciences or its Fellows.**

Relationships and communication		**Academic research culture**	
Skills and workforce		**Time and capacity**	
Data		**Evidence-based policy in Government**	
Transdisciplinary working		**Public involvement**	

At the meeting, participants suggested that **policymakers** in UKHSA, NHSE, OHID and other Government departments could:	
Place greater value on, and invest in, building sustainable relationships with each other and other parts of the system, including researchers, the public, and third sector organisations.	
Develop a coordinated approach to building relationships and stakeholder engagement across UKHSA, NHSE and OHID, to enable better navigation of the system.	
Improve relationships with regional and local public health structures, including ICBs and local authorities.	
Hold multistakeholder cross-sector events for furthering common objectives and developing joint initiatives.	
Develop aligned research strategies and joint programmes of work that intersect health promotion and health protection.	
Work with researchers, research funders and the public to define priority research questions and promote transdisciplinary and multi-method approaches.	

Help researchers to understand what research is needed, and how to present evidence in the most usable format. Standardising the processes they use to provide feedback to researchers could facilitate this.	
Provide training for all staff on use of evidence, including how to provide feedback to researchers.	
Create more opportunities for secondments and joint appointments, including ones that allow rotation between public health structures.	
Facilitate the sharing of best practice and guidance around joint appointments and secondments.	
Consider how to build workforce capacity in knowledge brokerage and evidence synthesis.	
Work with research funders to conduct a health determinants data landscape review.	
Consider mechanisms to enable better data linkage between different systems.	
Work with Research England to ensure next iterations of the REF recognise team science and transdisciplinary research as measure of research quality.	

Participants also highlighted that research **funders** could:	
Consider establishing more funding programmes for studies that focus on how to implement public health policies and interventions.	
Consider funding activities that enable the reverse translation of policy into research, including, but not limited to, secondments for policymakers.	
Expand the HPRU programme to create units that focus on health improvement and health inequalities research, implementation science and PPI/E methods research, enabling interactions with all Government departments.	
Consider how to build researchers' skills in: • Knowledge brokerage/communication of evidence to policymakers • Influencing • Data science	
Expand opportunities for knowledge exchange and workforce mobility, for people at all career stages, in all disciplines and sectors.	
Work with policymakers to identify opportunities for improving data linkage between sectors.	
Expand opportunities for follow-on funding for implementation of research into policy and practice.	
Work with researchers, policymakers and the public to define priority research questions and promote transdisciplinary and multi-method approaches.	
Work with policymakers to conduct a health determinants data landscape review.	

Participants identified opportunities for **researchers** to:

Work with data holders to simplify data consent forms and support the public to enable data sharing.	
Work with research funders, policymakers and the public to define priority research questions and promote transdisciplinary and multi-method approaches.	
Engage with public health policy and practice, and take opportunities to gain skills in: • Knowledge brokerage and communication of evidence to policymakers • Influencing policy • Data science	

Participants felt that **universities and research institutes** could:	
Improve support for staff engaging with public health policy and practice, especially in times of crisis.	
Consider how to build researchers' skills in: • Knowledge brokerage and communication of evidence to policymakers • Influencing • Data science	

It was suggested that **the Academy** could:	
Work with the Departmental Chief Scientific Advisors to better understand how research and evidence is used in government, how the impact of policies on population health is measured, and how to better support evidence-based policymaking.	
Consider opportunities for enabling Academy grant holders or programme participants to work in public health policy or practice.	
Continue to promote recommendations from the Academy's team science report.	

Participants noted that **third sector organisations** have an important facilitative function and could:	
Build relationships with other third sector organisations to develop coordinated strategies for political influencing, and with public health structures to understand public health needs.	
Enhance engagement with ministers and political parties, in addition to civil servants.	

Participants proposed that **journals** could:	
Consider how to enable people working in public health policy and practice to access research published behind a pay-wall, for example through accessible and usable read-outs of research findings.	

Annex 1: Agenda

9.30-10.00	**Registration and refreshments**
10.00-10.10	**Welcome and introduction** Meeting Chair: Professor Catherine Law
10.10-10.20	**Comment from President of the Academy and Chair of the Health of the Public 2040 working group, Professor Dame Anne Johnson**
10.20-11.05	**Panel discussion – How England's new public health structures use research and evidence** • Richard Gleave, Director of Science Strategy and Development, UK Health Security Agency • Dr Jeanelle de Gruchy, Deputy Chief Medical Officer and co-lead, Office for Health Improvement and Disparities • Professor Yvonne Doyle CB FMedSci, Medical Director for Public Health, NHS England
11.05-11.25	**Break and networking**
11.25-12.05	**Breakout discussion 1: Challenges** What are the current challenges facing the translation of research and evidence into public health policy within the context of England's new public health structures?
12.05-12.35	**Plenary session** to share challenges and discussion
12.35-13.20	**Lunch and networking**
13.20-14.15	**Breakout discussion 2: Solutions, opportunities and next steps** How can policymakers, researchers, public health professionals, funders and other stakeholders help to address the challenges identified?
14.15-14.55	**Plenary session** to feedback and discuss potential solutions and next steps.
14.55-15.00	**Close of meeting**

Annex 2: Attendees

Chair

Professor Catherine Law CBE FMedSci, Professor of Public Health and Epidemiology, University College London

Participants

Professor Ashley Adamson, Professor of Public Health Nutrition, Newcastle University
Dr Rubina Ahmed, Director for Systems Engagement, Stroke Association
Dr Bola Akinwale, Deputy Director, Policy and Sector Insights, National Healthcare Inequalities Improvement Programme, NHSE
Dr Raghib Ali OBE, Chief Medical Officer and Joint Chief Investigator, Our Future Health
Iain Bell, National Director for Public Health Knowledge and Research, Public Health Wales
Michael Bowdery, Joint Head of R&D Division, Welsh Government; Head of Programmes, Health and Care Research Wales
Rachel Conner, Senior Research Programme Manager, Department of Health and Social Care
Dr Jeanelle de Gruchy, Deputy Chief Medical Officer, OHID
Professor Yvonne Doyle CB FMedSci, Medical Director for Public Health, NHSE
Marie Gabriel CBE, Independent Chair Designate, North East London Integrated Care System; Trustee and Chair, NHS Race and Health Observatory
Liz Gaulton, Chief Officer, Public Health and Inequalities, Coventry and Warwickshire Integrated Care System
Richard Gleave, Director of Science Strategy and Development, UKHSA
Dr Sam Ghebrehewet, Interim Regional Deputy Director, UKHSA North West
Dr Felix Greaves, Director of Science, Evidence and Analytics, National Institute for Health and Care Excellence
Professor Dame Anne Johnson DBE PMedSci, President, Academy of Medical Sciences; Professor of Infectious Disease Epidemiology, University College London
Professor Frank Kee, Director, Centre for Public Health, Queens University Belfast
Dr Simon Lande, CEO and Co-Founder, HealthLumen
Dr Layla McCay, Director of Policy, NHS Confederation
Aaron Mills, Head of Public Health System Engagement, NHSE
Dr Catherine Moody, Head of Population Health Sciences, MRC
Professor John Newton, Director of Public Health Analysis, OHID
Gwen Nightingale, Assistant Director, Healthy Lives, The Health Foundation
Professor Steven Riley, Director General for Data, Analytics and Surveillance, UKHSA
William Roberts, Chief Executive Officer, Royal Society of Public Health
Professor Caroline Sabin FMedSci, Professor of Medical Statistics and Epidemiology and Director of NIHR HPRU in Blood-Borne and Sexually Transmitted Infections, University College London
Dr Eileen Scott, Public Health Intelligence Principal, Evidence to Action, Public Health Scotland
Professor Trevor Sheldon FMedSci, Professor of Health Services Research and Interim Director of the Centre for Public Health and Policy, Queen Mary University of London
Julie Stanborough, Deputy Director Health and Life Events, ONS
Dr Diane Stockton, Head of Clinical and Public Health Intelligence and Research, Public Health Scotland
Jeremy Taylor, Director for Public Voice, Centre for Engagement and Dissemination, NIHR

Professor Michael Tildesley, Professor in Infectious Disease Modelling, University of Warwick
Joy Todd, Deputy Director, Research Portfolio, ESRC
Professor Arpana Verma, Head of the Division of Population Health, Health Services Research and Primary Care, University of Manchester
Professor Sarah Walker OBE FMedSci, Professor of Medical Statistics and Epidemiology, University of Oxford
Professor Nicholas Wareham FMedSci, Director, Programme Leader and MRC Investigator, MRC Epidemiology Unit, University of Cambridge
Dr Alasdair Wood, Public Health Specialty Registrar to the Deputy Chief Medical Officer, OHID
Professor John Wright, Director, Bradford Institute for Health Research

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Dr Nicola Boydell, Policy Immersion Candidate, Academy of Medical Sciences; THIS Institute Postdoctoral Research Fellow
Dr Claire Cope, Head of Policy, Academy of Medical Sciences
Dr Alice Fletcher-Etherington, Policy Officer, Academy of Medical Sciences
Holly McIntyre, Careers Policy Officer, Academy of Medical Sciences
Ashna Patel, Policy Intern, Academy of Medical Sciences
Katy Stokes, Policy Intern, Academy of Medical Sciences
Angel Yiangou, Senior Policy Manager, Academy of Medical Sciences

The Academy also wishes to thank **Professor Vittal Katikireddi**, Professor of Public Health and Health Inequalities, University of Glasgow, who could not attend the workshop but advised on the workshop aims, planning and content alongside Professor Catherine Law.

Annex 3: Remit of England's public health structures

Organisation	Status and public health remit	Former functions of PHE now covered by the organisation
UK Health Security Agency (UKHSA)	The UKHSA is an executive agency of the Department of Health and Social Care. The UKHSA combines the former health protection functions of Public Health England with NHS Test and Trace, the Joint Biosecurity Centre, and the Managed Quarantine Service. From September 2022, the UKHSA also took over responsibility for the Vaccine Taskforce (VTF). Although the majority of its public health functions relate solely to England, the UKHSA has taken over from the work PHE carried out on a UK basis, either as reserved functions or under collaborative arrangements with the Scottish, Welsh and Northern Ireland administrations.	• Emergency Preparedness and Response (EPR) • Regional and Local Health Protection • Rare Zoonotic Infections, Gastrointestinal Infections and Associated Areas • Radiation, Chemical and Environmental Hazards • National Specialist Surveillance and Reference Laboratories • Local Microbiology Laboratories and Infection Specialist Services • Infections Research and Development • Healthcare Acquired Infections and Anti-Microbial Resistance • National Immunisation • Vaccines and Countermeasures • National Poisons Information Service • Global Public Health (Health Protection) • Medical and Public Health Professional Leadership and Practice • Health and Justice • Blood safety, Hepatitis, Sexually Transmitted Infections Service (STIS) and HIV • Science Hub Programme • Research, Translation and Innovation (Health Protection)

		• People services • Strategy • Corporate Functions • Internal and external communications • Business development • Financial management and financial strategy and services • Digital and Information Communication Technology (ICT) • Procurement • Estates and Facilities • Data and Analytical Sciences (formerly part of NIS) • COVID-19 response
Office for Health Improvement and Disparities (OHID)	The OHID is a UK Government unit with the Department of Health and Social Care. The aim of OHID is to: • identify and address health disparities, focusing on those groups and areas where health inequalities have greatest effect • take action on the biggest preventable risk factors for ill health and premature death including tobacco, obesity and harmful use of alcohol and drugs • work with the NHS and local government to improve access to the services which detect and act on health risks and conditions, as early as possible • develop strong partnerships across government, communities, industry and employers, to act on the wider factors that contribute to people's health, such as work, housing and education • drive innovation in health improvement, harnessing the best of technology, analytics, and innovations in policy and delivery, to	• Global Public Health (Health Improvement) • Nursing, Midwifery, AHP and Emergency Services Public Health Leadership • Maternity and Early Years • Alcohol, Drugs, Tobacco and Inclusion health • Diet, Obesity and Physical Activity • Health Marketing and Behavioural Change • Regional and Local Health and Wellbeing Advice and Support • Dental public health • Health Improvement Priority Programmes (including public mental health) • Sexual Health and HIV services • UK National Screening Committee • Research, Translation and Innovation (Health Improvement) • Health Intelligence • Public Health Workforce • Health Economics and modelling • Quality, Clinical Governance and Safeguarding • Public Health Grant Assurance (with DHSC)

	help deliver change where it is needed most	In addition, National Screening Programmes are now shared between OHID and NHSE
NHS England	In addition to the public health functions that NHSE has taken over from PHE (on the right), the existing public health functions of NHSE are: • Immunisation programmes • Population screening programmes • Child health information services • Public health services for children and adults in secure and detained settings • Sexual assault services Under the Health and Care Act 2022, Integrated Care Systems will bring together NHS and non-NHS bodies to ensure that health services are designed to meet the needs of the system population. They will build on existing effective partnerships, notably Health and Wellbeing Boards and the expertise of local Directors of Public Health.	• Screening Quality Assurance • Regional and Local Screening and Immunisation Commissioning Support and Expert Advice (embedded in NHSE) • Regional and Sub Regional Health Care Public Health (HCPH) • National Healthcare Public Health NHS Digital are now responsible for National Disease Registration, which previous fell under PHE.

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