



Public Health Reform Programme

Leadership for Public Health Research, Innovation & Applied Evidence

Interim Report – December 2018

1 Background

The Public Health Reform Programme's Leadership for Public Health Research, Innovation & Applied Evidence Commission (LPHRIAE) required that the Scottish Public Health Network (ScotPHN) identify and work with a short-life working group that engaged with as wide a range of stakeholders as it thought necessary to describe the ways in which Public Health Scotland will address the challenges facing, and seize the opportunities available to, the new organisation in order to:

- achieve co-ordination of academic public health in Scotland (and is well connected to, and has an influential voice in, the wider UK public health research and evidence system and able to connect internationally when valuable to do so);
- respond to technological developments;
- put knowledge creation and mobilisation at the heart of what it does, fostering an environment for exchange of information, expertise and (potentially) training and resources between organisations;
- foster an environment for exchange of information, expertise and (potentially) training and resources between organisations; and
- make it a priority to ensure that public health policy and practice is wherever possible underpinned by research and evidence, and that the research and intelligence functions in public health are focussed on being policy and practice-relevant.

This interim report provides an overview of the progress made to date in fulfilling this commission. Progress mapped against the "Target Operating Model"¹ is included as an annex to the report.

¹ The Public Health Reform Programme has adopted the use of a Target Operating Model (TOM) approach to describing the way in which Public Health Scotland's functions and operations will be carried out. A formal TOM template has been created specifically for this purpose and all the programmes commissions are expected to use

2 Commission Deliverables

LPHRIAE has three commission deliverables:

- **Deliverable 1** required that ScotPHN set out the membership of the working group, definitions of what will be considered within ‘research’, ‘innovation’ and ‘applied evidence’, and a timeline for draft and final deliverables. This was delivered on 22nd May 2018 to the Public Health Reform Team (PHRT).
- **Deliverable 2** outlined the approach to wider stakeholder involvement in designing proposals for the new body. This was delivered on 15th June 2018 and has been used as the basis for subsequent stakeholder engagement and participation.

The first stakeholder event in Glasgow (21/08/2018) started the process of engagement by exploring the vision for Public Health Scotland’s approach to research, innovation, and applied evidence using an initial framework set out by three “fixed point” documents².

On the basis of the engagement event in Glasgow, a series of propositions that explored how Public Health Scotland might deliver this vision in what it did, how it would support and collaborate with others, and how it might be a strong influencer in providing leadership for these functions, were explored at the second engagement event in Perth (24/10/2018). The propositions were considered against a strengths, weaknesses, opportunities and threats framework. This event also helped to identify areas for further consideration in developing operational approaches to deliver for the new organisation. In addition, online engagement surveys have been used to widen participation after the Glasgow and Perth events

All the documentation relating to the Glasgow and Perth events and their outputs have been made available online on the [Commission’s webpage](#).

In supporting Deliverable 2, other engagement activity has included the first of a series of engagement meetings with staff from both Public Health and Intelligence (PHI) and Health Scotland (HS) (03/12/2018).

A further major stakeholder event – exploring the implications of the commission’s work for research and applied evidence “end-users” is planned for 30th January

this in describing their options/recommendations. The use of a TOM approach will also allow a greater degree of alignment between commission outputs. (see: <https://publichealthreform.scot/media/1336/paper-15-phr-target-operating-model-pid-v02-25-september-2018.pdf>)

² The three “fixed point” documents are: Academy of Medical Sciences [Improving the health of the public by 2040](#); WHO(E) [WHO European Action Plan for Strengthening Public Health Capacities and Services](#); Scottish Government [Scotland’s Digital Health and Care Strategy](#).

2019. This event will help identify qualities / characteristics for the way in which PHS will successfully deliver these functions.

- **Deliverable 3**, which requires that options/proposal for how the leadership in public health research should be delivered in the new body and any associated timescales, costs and resources required, is the major focus of the SLWG work from now until March 2019 when this deliverable is due. This will allow the findings from the three main design commissions to be reflected in the proposals made under LPHRIAE.

In addition, themes from LPHRIAE which have a bearing on the design commissions have been fed directly to the appropriate leads. Similarly, implications from LPHRIAE for Corporate projects – notably the Corporate IT project and the Data Science and Innovation project – have been shared with project leads.

3 Leadership for Public Health Research, Innovation, and Applied Evidence

In summarising the work to date, it is clear that the wider group of stakeholders who have supported this commission see Public Health Scotland as providing leadership for the public health system in Scotland. It is expected to support research, innovation and applied evidence functions as a service provider, a collaborator, a supporter, a facilitator, and an interpreter across all three domains of public health and the data and intelligence functions which underpin them.

A second key theme, one which also runs through the other commissions, is the need to recognise the need for a wider conception of the determinants of population health and the broad scope of the public health system needed to address these. Stakeholders were clear that the research, innovation and applied evidence leadership envisaged for Public Health Scotland could not be too narrowly focussed on the “health” function(s) and needed to reflect the wide range of social, economic, environmental, cultural, and organisational factors that are in play.

The vision for Public Health Scotland is that it be an organisation that undertakes, facilitates, and enables:

- quality research:
 - as a provider and commissioner of research activities;
 - as a source of high quality data for public Health research;
 - as a subject for research into how its own ways of working translate evidence into action;
 - as a reporter/identifier of pressing Public Health research questions / priorities;
 - as an influencer of research agenda of funders; and
 - as a research facilitator, building relationships that sustain research collaborations; and

- innovation in public health:
 - as a leader and facilitator for innovation in public health practice and the application of emerging technology to population health;
 - as a facilitator in converting evidence into actionable products that are used in practice across the system; and
 - as a developer of skills and capabilities across the public health system for research and knowledge mobilisation;

- evidence creation and use:
 - as champion for, and provider of, practice-based evidence as a source of knowledge in its own right and evidence from the lived experience of people and communities;
 - as a trusted source for evidence for application in policy and practice:
 - as a learning organisation that is continually testing the quality, effectiveness, efficiency and equity of what it and the wider PH system is doing;
 - as an agency that encourages sharing of knowledge, and able to sustain a culture of learning about not just “what works”, but “how to make it work” locally; and
 - as a focus for creating world-leading approaches in knowledge generation and mobilisation, in evaluating policy and practice for public health benefit.

- workforce development:
 - as an enabler for the wider public health workforce to develop and strengthen skills and competencies in undertaking research and evaluation, developing knowledge and applying evidence for policy and practice in public health;
 - as an enabler of its own staff to be active in research, innovation and evidence application activities;
 - as an agency that can provide a base in which funded research and innovation placements (such as PhD studentships) can be undertaken; and
 - as a place in which public health academics and professional can develop their skills and competencies through collaboration.

The initial engagement with PHI and HS staff confirms a real ambition amongst staff for the new organisation to undertake and sustain research and generate evidence, as well as support system-wide knowledge mobilisation. This will require that the organisation has an in-house research and innovation function and a knowledge service.

These functions must be underpinned by effective research, information and knowledge governance approaches which facilitate collaboration. This should be available to provide dynamic leadership and facilitate collaboration across the public health system in Scotland in all its guises. A preliminary list of the functions that need to be considered in developing these services are outlined in the appendix.

4 Further Work to Operationalise the Public Health Scotland Functions

The SLWG is now considering how the identified functions can be operationalised. These considerations will inform the commission's recommendations. Given that the role of LPHRIAE is cross-cutting across all the other commissions, an important next step will be consider the work of the four Public Health Reform Programme's "design" commissions and agree with the Public health Reform Team how we can ensure that the work from LPHRIAE is effectively co-ordinated across commissions. To this end, we will be seeking advice on developing the necessary co-ordination and communication between commissions so that we can ensure LPHRIAE is helping inform all of Public health Scotland's final functions and operating model, rather than simply describing the research and innovation, and applied evidence functions.

At the Glasgow and Perth events, participants were clear that a really central function for PHS was to be a focal point or hub for multiple sectors and organisations to work together, adding value through the brokerage it can bring and resources / processes that it could dedicate towards research, innovation and knowledge mobilisation. Underpinning this, SLWG members captured a number of "operational qualities" that they consider important in moving towards operationalising the functions. These reflect the need for PHS to:

- maintain appropriate impartiality and independence in its activities;
- collaborate with research commissioners and agencies in Scotland, across the UK, and internationally;
- build on existing research activities, whilst encouraging radical system change;
- balance the roles of evidence generator, trusted knowledge broker, and facilitator of knowledge mobilisation;
- evaluate policy and practice and use such knowledge to improve its own work and support others to do so;
- be flexible in creating approaches that meet Scottish needs; and
- engage external stakeholders to ensure research and knowledge translation are co-productive endeavours.

Developing services that meet these operational qualities require a collective leadership style and dedicated resources as well as structural responses. The organisation will need to encourage a culture that values research and innovation, and transformational application of evidence, as part of the organisation's DNA.

It will also require staff with the skills and experience for it to operate efficiently, effectively and authoritatively as a research and innovation based organisation. Developing such a culture and relationships across the system will be facilitated by further work engaging with PHI and HS staff in the coming months.

More broadly the SLWG is seeking to:

- learn from the experiences of Public Health England and Public Health Wales, as well as colleagues in Ireland through the Five Nations forum; and
- document the wider contributions that can be made to population health from a wide range of research disciplines and sectors.

5 Conclusion

The Leadership for Public Health Research, Innovation, and Applied Evidence Commission has reached its mid-point. To date it has completed the first two of its required Deliverable outputs.

Through a wide-ranging and inclusive approach to stakeholder engagement it has established a vision of the organisation and mapped out the main functions that stakeholders expect to see adopted by Public Health Scotland.

Further work is now needed to consider the appropriate structures that will support these functions, as well as create the requisite organisational culture for their delivery.

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On behalf of the LPHRIAE Short Life Working Group.

APPENDIX

Commission Progress against the Target Operating Model

A.1 Customers and Benefits

Identification of the customer requirements for the function(s) of Public Health Scotland in regard of LPHRIAE have been explored following the process set out in Deliverable 2. The event in Glasgow established the “fixed points” – the key policies and approaches that Public Health Scotland needed to inform its function³. These were explored further in a series of propositions⁴ that were considered in Perth as part of a SWOT analysis⁵. These set out suggestions of how Public Health Scotland could provide a service; how it could support or collaborate with others; and how it should influence others in regard to research, innovation and applied evidence.

These propositions were also explored within the PHI/HS staff engagement meeting which started the process of how this could be operationalised, building on existing services and functions⁶.

A.2 Processes

The main outputs from all the wider and staff stakeholder and engagement work have refined the functions for Public Health Scotland. These are summarised in the table below.

A.3 Organisation

A.3.1 Research

At present the research service arrangements between PHI and HS complement each other well and could be brought together within Public Health Scotland. There is general agreement that Public Health Scotland will be an organisation that both leads, and participates in, research. This will require it to have a specific Research Function that:

- supports the main functions for the organisation as a research organisation: commissioning; mobilisation and innovation; governance; and research ethics and review;
- facilitates and supports research as an active collaborator in research; and
- which acts as one of the UK Public Health Research Hubs (cf Health of the Public in 2040⁷).

³ See: https://www.scotphn.net/wp-content/uploads/2018/07/2018_10_12-LPHRIAE-Engagement-Event-Final-1.pdf

⁴ https://www.scotphn.net/wp-content/uploads/2018/07/2018_10_18-LPHRIAE-Combined-Propositions-for-Perth-final.pdf

⁵ https://www.scotphn.net/wp-content/uploads/2018/07/2018_10_29-SWOT-Analyses-of-propositions.docx

⁶ [DN: Insert PHI/HS Staff Engagement meeting note]

⁷ See: <https://acmedsci.ac.uk/policy/policy-projects/health-of-the-public-in-2040>

Table: High Level, Preliminary Summary of Research, Innovation, & Applied Evidence Functions

Public Health Scotland	Research	Innovation	Applied Evidence
Core Function(s)	Research activities	Emerging Technology Applications (inc. Data Science)	Public Health Knowledge Service (all domains)
	Commissioning (procurement & funding)		
	Mobilisation & Impact	Public Health Practice Development (inc. Evaluability assessment, policy models, horizon scanning, etc.)	PH Knowledge base provision
	Institutional QA & Ethical Review		
	External funding / income		
	Research Governance Information Governance Knowledge Governance		

Support/Collaboration Function(s)	Research Data Access (inc. Research Trials Data)	Emerging Technology Applications	PH input to wider knowledge “hubs”
	eData Research & Innovation Service (eDRIS)	Public Health Practice Development	Digital Health & Care Strategy knowledge mobilisation
	Advisory Support		Advisory Support
	Supporting collaboration & facilitating in Scottish research – the “Hub” functions ⁸		
	Building system-wide research & knowledge skills & capabilities		

⁸ Note: There were a large number of very specific functions considered within the propositions presented at Perth. These were very positively received and include actions such as mapping the research landscape; developing tools to identify research questions of relevance to public health; providing training – events, training needs analysis. Further information is contained in the documentation associated with the Perth event.^{4,5}

Influencing Function(s)	Scottish & UK PH Research Organisations: <ul style="list-style-type: none"> • Strategy; • Priorities; and • Funding. 	External Innovation Development	Encourage the development of approaches in transdisciplinary knowledge mobilisation
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A.3.2 Applied Evidence

There is a widespread stakeholder requirement to more actively support knowledge into action structures, especially across the wider public health system. This is presumed to be based on an active knowledge function that provides a specialist public health knowledge service and access to a public health knowledge base. At present the knowledge service arrangements between PHI and HS complement each other well reflecting health improvement, health protection and health and social care services functions. These could be brought together within Public Health Scotland swiftly.

A.3.3 Innovation

Innovation in research and applied evidence to support public health practice has been identified as essential by wider LPHRIAE stakeholders. It can be generally noted that an innovation function for PHS would be needed and that this would work closely with research and knowledge functions. Existing work within the overall corporate development projects has focussed on Data Science, though this work recognises that innovation in technological application is not the only form of innovation which is required. Further co-ordination of between innovation strands within reform commissions will be required.

A.4 Locations

At present LPHRIAE has not considered location issues for its core functions. However, the feedback from the Stakeholder events would emphasise the importance of network / collaborative approaches. There is little appetite for requiring any form of centralisation in creating system-wide working in these areas.

A.5 Information

Work to advise work on both the IT project and the Data Science and Innovation project has been initiated. The main areas already noted cover the inputs around Data Science development with the research function and the development of the knowledge base as part of the corporate IT project digital delivery requirements.

A.6 Suppliers

At present LPHRIAE has not considered supplier issues.

A.7 Leadership and Management

At present LPHRIAE has not considered leadership and management issues. These will be covered in final report. However, public health leadership for all three functions – research, innovation and applied evidence – can be assumed will be required. A skills audit early in the establishment of the organisation to assess readiness, capability and capacity to support the functions outlined in the table above would be recommended.

A.8 Finances

At present LPHRIAE has not considered finance issues, though it can be expected that the existing functions will need to be maintained. Funding from research may also need to be considered.

A.9 Funding/Revenue Streams

At present LPHRIAE has not considered external/additional funding issues. As a research organisation, it may be expected that mechanisms to support research funding coming into Public Health Scotland will be required.