Strategy for Knowledge Mobilisation

Author: John Brassey, Lead for Knowledge Mobilisation
Dr Teri Knight, Consultant in Public Health

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Sponsoring Executive Director: Dr Judith Greenacre

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The Board / Committee are asked to: (please select one only)

Approve the recommendation(s) proposed in the paper
Discuss and scrutinise the paper and provide feedback and comments
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Link to Public Health Wales commitment and priorities for action:
(please tick which commitment(s) is/are relevant)

Priorities for action include relevant priority for action(s)
1 Introduction

The vision of this Knowledge Mobilisation Strategy is that Public Health Wales becomes a leader in knowledge mobilisation, innovation and evaluation; knowledge will inform every aspect of what we do. To make this a reality, there is much work to do in setting out what we want to achieve and then how we can make the changes needed. This strategy document sets out what we want to achieve and the general direction of travel for this essential area of work for Public Health Wales. In keeping with our 2015/16 Operational Plan, a more detailed implementation plan will be drawn up once the strategy is approved and in the light of any comments received. The implementation plan will be published before the end of this financial year.

2 Background

In 2014 the Director of Public Health Development and the Director of Health Intelligence identified the need to ensure that Public Health Wales became a more fully, and transparently, knowledge-informed organisation. To that end they created the role of Lead for Knowledge Mobilisation to lead the development of a strategy for knowledge mobilisation. Given that effectively using knowledge is a core public health principle it was felt that the current lack of transparency about how and when we use knowledge in decision-making was a risk to organisational credibility. It was envisaged that this strategy would greatly enhance the reputation of Public Health Wales and our ability to deliver the organisational strategic priorities and Integrated Medium Term Plan.

This Strategy has been developed from a literature review, seeking external expert opinion and case studies from across the organisation, then discussion with staff.

Key Points

- Using knowledge to inspire and inform our actions is essential for Prudent Public Health practice.

- This Strategy sets out how Public Health Wales can mobilise its use of knowledge more effectively.

- To make more effective use of knowledge we need to change cultures; develop our workforce; change practices and strengthen organisational relationships.
3 Description

Link to Standards for Health Services:

Governance and Accountability Framework

Organisations and services operate within a clear and robust framework for decision making and accountability designed to achieve successful delivery of their purpose, aims, and objectives. This Knowledge Mobilisation Strategy will ensure greater transparency for use of knowledge in decision-making.

Health Promotion, Protection and Improvement

Organisations and services work in partnership with others to protect and improve the health and wellbeing of citizens and reduce health inequities. Knowledge Mobilisation Strategy will therefore improve the use of knowledge in planning of public health services and programmes.

Citizen and Service User Engagement and Feedback

The Knowledge Mobilisation Strategy is not public facing. However, one of the four strategic themes is partnership working. We will aim to more effectively share knowledge with, and use knowledge from, our partners who do engage directly with service users. Knowledge includes that of patients and citizens who engage with our services and programmes.

Participating in Quality Improvement Activities

The knowledge mobilisation cycle requires the application of knowledge, evaluation of activity and sharing learning. It is therefore anticipated that the Knowledge Management Strategy will form an essential element of quality improvement. The Knowledge Mobilisation Strategy will also ensure that knowledge is more effectively used to review, assess and improve services.

Safe and Clinically Effective Care

Organisations and services are required to ensure that patients and service users are provided with safe, effective treatment and care. The Knowledge Mobilisation Strategy will ensure that guidelines, for example from the National Institute for Health and Care Excellence, are effectively communicated and appropriately applied.

Research, Development and Innovation

The Knowledge Mobilisation Strategy interfaces closely with the Public Health Wales Research and Development Strategy and promotes the
development of an innovation framework where existing knowledge is lacking.

**Equality Impact Assessment**

At this stage, the Equality Impact Assessment Screening Tool has not been applied as the Strategy is very high level. However, the Equality Impact Assessment protocol will be applied to the implementation of the Strategy.

**4 Financial Implications**

The Knowledge Mobilisation Strategy is intended to be implemented within existing resource, as far as is possible. However, development of the detailed implementation plan may identify where additional resource is required, for example, workforce development.

**5 Recommendation**

The Knowledge Mobilisation Strategy will enable Public Health Wales to become a leader in knowledge mobilisation, innovation and evaluation. The Board is asked to support this approach and reserve to the Executive to assess the financial and resource implications of its delivery.
Strategy for Knowledge Mobilisation

Author: Jon Brassey, Lead for Knowledge Mobilisation and Dr Teri Knight, Consultant in Public Health

Date: 4 November 2015  Version: 1

Purpose of document:
The purpose of this strategy is to transform Public Health Wales into an organisation that has evidence, innovation and evaluation at the heart of its work.
Vision

The vision of this Knowledge Mobilisation Strategy is that Public Health Wales becomes a leader in knowledge mobilisation, innovation and evaluation and that knowledge informs every aspect of what we do. To achieve this vision, knowledge mobilisation will become embedded within organisational culture whereby there is cross-organisational understanding of the need for decisions to be informed by reliable and appropriate knowledge. A skilled and capable workforce will know how to access and use different forms of knowledge, how best to exploit innovation and how to demonstrate efficient and effective implementation by robust evaluation of projects/programmes. The knowledge mobilisation strategy will support and link with other strategies to ensure their outputs are mobilised to increase the impact of Public Health Wales activity.
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1. Executive Summary

Background

In 2014 the Director of Public Health Development and the Director of Health Intelligence identified the need to ensure that Public Health Wales became a more fully, and transparently, knowledge-informed organisation. To that end they created the role of Lead for Knowledge Mobilisation to lead the development of a strategy for knowledge mobilisation. Given that effectively using knowledge is a core public health principle it was felt that the current lack of transparency about how and when we use knowledge in decision-making was a risk to organisational credibility. It was envisaged that this strategy would greatly enhance the reputation of Public Health Wales and our ability to deliver the organisational strategic priorities and Integrated Medium Term Plan.

Knowledge Mobilisation

Knowledge can be generated from different sources including original research, synthesis of evidence arising from research, evaluation of activity and from experience. Knowledge mobilisation is concerned with ensuring that knowledge generated from these different sources is used in decision-making, policy and practice to maximise the potential of the public health system to contribute to achievement of desired health outcomes. It recognises that knowledge creation, flow and implementation are enmeshed in complex institutional and organisational arrangements and thus a high level strategic approach is required. While the term knowledge mobilisation covers many inter-related areas, we identify three main foci: research evidence, innovation and evaluation.

In short, in relation to how this applies to Public Health Wales, a knowledge mobilisation strategy would seek to ensure that our decisions are informed by the best available, most appropriate knowledge and that our activities, both innovative and established are evaluated and learning from this evaluation is efficiently shared within the organisation.

Strategy Development

The development of the draft Knowledge Mobilisation Strategy was informed by:

- A literature review was undertaken by the Observatory Evidence Service to highlight key concepts and themes within the knowledge mobilisation literature.

- External expertise was sought from organisations and individuals who have practical experience of developing knowledge mobilisation solutions for their own organisations.
• Case studies of a number of existing Public Health Wales programmes to better understand current approaches to the use of research evidence, innovation and evaluation.

**Strategic Themes**

There are four main themes within the strategy.

**Culture.** The Strategic Plan highlights the importance of culture. As an organisation we need to embed knowledge mobilisation within our organisational culture so that it becomes ‘the way we do things’; routine practice and expected, so:

• Appropriate and reliable sources of knowledge are routinely considered when planning projects or programmes.

• In the absence of such knowledge, but where there is a need to act, an innovative approach is adopted but within an agreed, supportive, innovation framework.

• Evaluation of projects/programmes, appropriate to scale, is always undertaken and learning from this shared systematically.

This requires explicit support from the highest echelons of the organisation with a clear message that knowledge mobilisation is not optional and is a core way of working.

**Workforce Development.** Having a confident and skilled workforce that understands the rationale and importance of using knowledge and learning from evaluations, is of huge importance. The case studies undertaken to inform strategy development demonstrated that there are a large number of enthusiastic individuals in Public Health Wales who enjoy using knowledge, particularly research evidence, but feel that a lack of confidence and skills had held them back in being able to use it effectively. A key element of the strategy will be to develop confidence and skills, appropriate to role, starting from where staff currently are.

**Organisational Processes.** Public Health Wales already has a number of processes and tools in place which would support knowledge mobilisation. For example, the communications function; research governance systems; templates for project-related documentation such as PIDs; knowledge management systems. So that they more effectively support knowledge mobilisation, awareness of some of these may need to be raised and some may need to be adapted *i.e.* to ensure that use of research evidence informs project/programme development, that any innovation occurs within an agreed and supportive framework and that evaluation is planned from the beginning of any programme of work. We may also need to develop new processes *i.e.* to ensure that knowledge gained in the development of
a project/programme and learning arising from evaluation are effectively managed and pro-
actively shared across the organisation.

**Partnerships.** Successful implementation of the knowledge mobilisation strategy will require
engagement across all Public Health Wales divisions and the Local Public Health Teams; we
need to work in partnership with each other. Further, many public health projects/
programmes are delivered through or with external partners; the sharing and appropriate
use of different sources and forms of knowledge is essential for the development and
delivery of effective collaborative work. We will also engage with others with interests in
knowledge mobilisation such as the Public Health Network, academic partners, NISCHR,
Welsh Government, research funding agencies.

**Strategy Implementation**

A detailed Implementation Plan will be developed, describing what actions needs to be
taken, by whom, when and using which resources, for each of four work-streams; one for
each strategic theme. The Implementation Plan will describe how knowledge mobilisation
can be enacted within our everyday work. It is envisaged that, whilst there will be a lead
role to oversee and coordinate strategy implementation and to monitor and evaluate its
impact, others will facilitate and champion knowledge mobilisation within their directorates
or teams, supported by the knowledge mobilisation lead. This approach mirrors that
adopted for research governance.

Implementation of the knowledge mobilisation strategy will not be about us working
radically differently but will require an acceptance that we need to be more systematic,
consistent and transparent about how we use knowledge across the organisation. It will be
more about joining up organisational processes than it will be about creating new ones. It
will build on and enhance existing public health skills and experience and will require clarity
about how knowledge mobilisation fits into different work and roles.

2. **Background**

“One of the most consistent findings from clinical and health services research is the failure
to translate research into practice and policy. As a result of these evidence-practice and
policy gaps, patients fail to benefit optimally from advances in healthcare and are exposed
to unnecessary risks of iatrogenic harms, and healthcare systems are exposed to
unnecessary expenditure resulting in significant opportunity costs. Over the last decade,
there has been increasing international policy and research attention on how to reduce the
evidence-practice and policy gap.” [1]
While this quote is focussed on health service research and clinical medicine, the comments equally apply to public health. Widespread acknowledgement of the failure to ‘bridge the gap’ between knowledge creation and implementation led to the incorporation of knowledge mobilisation as an essential part of the Public Health Wales Strategic Plan.

The Strategic Plan recognises that “Knowledge mobilisation is key to the delivery of our strategy”. The importance of knowledge mobilisation is reflected in all of our priorities and their underpinning strategic objectives. In many ways the knowledge mobilisation strategy will be the glue that binds different organisational processes together, ensuring knowledge outputs (such as from research, innovation and evaluation) are ‘moved on’ around the organisation and properly used.” The Strategic Plan requires the development of a strategy and implementation plan for knowledge mobilisation.

Knowledge is a complex term to define but in this context is considered to cover knowledge generated through research (research evidence), data analysis and ‘tacit’ or ‘experiential’ knowledge. In order to ensure that knowledge generated within Public Health Wales and externally fully informs decision-making, we need to embed a culture of, and processes for, knowledge mobilisation across the organisation and within work with our public health partners. Knowledge mobilisation is concerned with ensuring that knowledge is used in policy and practice to maximise the potential of public health systems to contribute to achievement of desired health outcomes [2]. It recognises that knowledge creation, flow and implementation need to be enmeshed within organisational arrangements and thus that a high level strategic approach is required.

While the term knowledge mobilisation covers many inter-related areas, we identify three main foci: research evidence, innovation and evaluation. Figure 1 below shows a representation of the knowledge mobilisation cycle, highlighting the various stages of the process and the inter-relations between research evidence, innovation and evaluation. In brief, a public health problem that needs to be addressed is identified. Knowledge about how this problem might be addressed can be generated through primary research or secondary research (evidence review). Innovation is needed where knowledge about how to address a public health problem is lacking. Evaluation, be it of innovative approaches or of local implementation of evidence-based interventions, is essential to ensure fidelity of implementation and for continual improvement of practice.
Steps in the knowledge mobilisation cycle are described below.

| Define problem | At the beginning of a project/programme the reasons for starting it are explicitly articulated. This may result from identification of a population health need through data analysis. The problem or need to be addressed is scoped to define the nature of the knowledge requirements and the cycle begins. |
| Locate evidence | Searching for suitable evidence to inform the project/programme. |
| New knowledge or policy | This step acknowledges that not all knowledge cycles begin with a defined problem. Sometimes a new document (e.g. internal policy, NICE guideline, new research evidence) requires the organisation to consider the implications of the new knowledge and possible changes to ways of working. |
| Appraise | Once relevant evidence has been located the reliability of the evidence is examined, for example, assessment of risk of bias in research evidence. |
| Synthesise | If multiple sources of evidence have been found there is a requirement to synthesise the information to provide a summary of the overall picture, for example, what the research evidence in totality says - this might include calculation of a summary effect size. It is also important to enable users to understand the breadth and limitations of any evidence found. |
As stated in the Strategic Plan:

“The Knowledge Mobilisation Strategy will ensure that knowledge is utilised across Public Health Wales to best effect. In order to achieve this it needs to be at the heart of Public Health Wales’ thinking and act as a central system, interacting with other strategies and systems across the organisation at multiple points. In many ways it will be the glue that binds different systems together, ensuring knowledge outputs (such as from research, innovation and evaluation) are ‘moved on’ around the organisation and properly used.”

**Figure 2: Representation of how the knowledge mobilisation strategy may interface with other organisational processes and strategies.**
An example would be where a public health problem is defined (e.g. low uptake of immunisation or screening in some populations) through data analytical work (interface with health intelligence systems). Existing research is then consulted; search, appraise, synthesise (interface with evidence review processes supported by the Observatory Evidence Service (OES)), to explore what is currently known about factors which may influence uptake. New primary research may then be needed to explore potential local factors (interface with Research Strategy). Findings from this research generate new knowledge and understanding about why the variation arises in Wales. External/existing research is again consulted (evidence review: search, appraise, synthesise) to identify possible solutions to the problem. Potentially effective interventions identified through this evidence review then need to be adapted for the local context (using experiential, local knowledge) and implemented (interface with project management systems). If evidence is lacking however, innovative approaches may be need to be developed as research projects (interface with Research Strategy). Either way, implementation of interventions needs to be evaluated (interface with Research Strategy) in order to assess whether intended impact/outcomes are realised. Learning from this evaluation can then inform continued implementation and will allow assessment of whether the problem has been addressed. The knowledge mobilisation strategy will therefore put in place the processes and mechanisms that enable this cyclical generation and use of knowledge to take place.

3. Where do we want to get to? Strategic aims

The principle aim will be to embed knowledge mobilisation within the organisation’s culture and to support the workforce so that the triad of research evidence, innovation and evaluation are well understood and seen as essential in everyday practice. To achieve this the organisation will need to develop a consistent narrative as to the inter-relationship between these concepts and how they should be used. Further, staff will need to be enabled to feel comfortable that they have the skills and organisational support to use research evidence, to innovate and to underpin their work with rigorous evaluation. This will be especially important when working with partners where staff may need to support and facilitate knowledge mobilisation across collaborative programmes. More specific aims are below. These aims are for the whole organisation and will have coherence across other strategies, for example, with the Research Strategy.

Knowledge

• Workforce development will ensure all staff understand the need for using knowledge in formulating policy and practice.

• We will ensure that knowledge is systematically considered in our work.
• All forms of knowledge will be used appropriately and in ways which are ‘fit-for-purpose’.

Research Evidence

• Research evidence will be obtained, appraised and synthesised in a manner likely to minimise bias and there will be transparency as to how the evidence is considered and used.

• Training, where required (e.g. critical appraisal), will ensure there is a critical mass of skilled staff able to undertake evidence synthesis.

• The review and application of research evidence will be supported by the Observatory Evidence Service who will develop clear and robust evidence review methodologies and services/products for use across the organisation, thus facilitating a more corporate, fit-for-purpose approach to review of research evidence.

• Local knowledge and experience will inform the application of research evidence to local contexts.

• Workforce development will ensure staff understand the implications for practice of uncertainty; situations arising when there is no strong research evidence for a given situation.

• Uncertainty will inform future research and innovation.

Innovation

• We will create a culture where innovation is valued, encouraged and supported.

• Uncertainties, situations arising when there is no strong research evidence for a given situation, will be clearly and systematically highlighted and brought to the attention of our own research team and our research partners and research funders.

• Innovation will be supported by a framework that will maximise the benefits and minimise the risks associated with innovative practice.

Evaluation

• We will create a culture where evaluation is seen as essential and embedded in all project/programme/service plans.
• Training, where required, will ensure that staff can competently design and implement appropriate approaches to evaluation and have the right support to do this.

• There will be oversight and coordination of evaluation activity in order to support staff, and for quality assurance purposes, but also to identify opportunities for adding value to data collected, through supplemental analysis for evaluation purposes.

• Learning gained from evaluations will be systematically shared across the organisation.

4. Where are we now?

In order to understand the current position, we have examined organisational strategy, current practice and processes which might support knowledge mobilisation and have drawn these findings together into an assessment of the current position in relation to desired outcomes.

4.1 Organisational Strategic Context

Public Health Wales does not currently have an agreed approach to research evidence, innovation and evaluation and these elements are not part of a coherent systems approach. With the current funding situation the need to deliver optimal value for money is paramount and an organisation that fully utilises research evidence, embraces innovation and keenly evaluates its interventions in a coordinated, systematic way, will be better placed to deliver an excellent service. The organisation’s Strategic Plan has seven strategic priorities:

1. Adopting and implementing a multi agency systems approach to achieving significant improvements in our public’s health
2. Working across sectors to improve the health of our children in their early years
3. Developing and supporting primary care services to improve the public’s health
4. Supporting the NHS to improve healthcare outcomes for patients
5. Influencing policy to protect and improve health and reduce inequalities
6. Protecting the public and continuously improving the quality, safety and effectiveness of the services we deliver
7. Developing the organisation
The Strategic Plan recognises the need for a shift in our approach to one where knowledge mobilisation is at the heart of what we do. As part of a move towards systems working this shift is further recognised, including the need to systematically use a mosaic of knowledge and increase our risk appetite for innovation, as well as establishing better methods for monitoring and evaluation so that public health policy and innovation can be assessed in a timely way.

Whilst the Health Intelligence Division holds responsibility for leading the development and implementation of a strategy for knowledge mobilisation, it is obvious that the efficient and effective mobilisation and use of knowledge will be essential for achievement of all strategic priorities.

The three foci of knowledge mobilisation; research evidence, innovation, evaluation are threaded through all sections of the Strategic Plan. The Policy, Research and International Development Division’s, (PRIDD) Research Strategy is currently being finalised and interfaces neatly with this Knowledge Mobilisation Strategy, aiming to generate new knowledge from research, test innovative approaches and enable robust evaluation of our programmes and services. The knowledge mobilisation strategy will ensure that research, along with other sources of knowledge, impacts on policy and practice across our public health community. We will continue to work closely with PRIDD, OES and other teams to ensure synergy with different organisational strategies and processes.

4.2 Case Studies

To inform strategy development it was important to understand how knowledge is currently mobilised and used in practice. A number of current programmes were therefore identified for case-study (Transforming Health Improvement in Wales, Child Death Review Programme and Healthy Schools Scheme). All these programmes are complex public health initiatives, are multi-agency and involve external stakeholders and therefore reflect our strategic priorities. They are all about prevention of harm or improvement of health and therefore should be explicitly informed by different forms of knowledge, especially research evidence. For each case-study, key documents were examined and semi-structured interviews were undertaken with relevant staff members (Appendix One provides a more detailed account of the methodology employed). While still ongoing, initial findings from the case-studies have not only enabled an understanding of current practice but have helped identify barriers and enablers to knowledge mobilisation. Key points which have emerged from the analysis to date include:

- Inconsistencies in how knowledge is utilised across projects/programmes. Different projects/programmes place different emphasis on use of knowledge; for some, being ‘evidence based’ is central while in others it appears to be a peripheral consideration.
An exemplar approach is the Child Death Review Programme. The research evidence review component of the programme is well resourced, the end ‘evidence product’ is judged by stakeholders to be robust and fit for purpose and the use of the research evidence can be clearly tracked through to recommendations.

- Those projects/programmes, where being ‘evidence based’ is central, often highlight how using robust evidence can ameliorate any strong opinions individuals may have. Evidence, at the centre of a project/programme, is seen to significantly improve the outputs.

- However, there were concerns raised that project managers, or others with perceived authority, could still introduce bias in use of evidence in projects/programmes due to firmly held sets of ‘beliefs’ thus there was a need for independent scrutiny of use of evidence and for the input of subject experts to be carefully managed.

- There is significant staff support for using research evidence in practice. However, there are concerns about skills and resource to fully utilise evidence routinely. For example, The Transforming Health Improvement project used a large number of staff to undertake the evidence reviews. Once the staff were confident in the methods, such as critical appraisal of research, there was almost universal support/enthusiasm and a desire to continue to use these skills.

- There is appreciation of the support of the Observatory Evidence Service both in their production of high quality products and in their provision of support for staff undertaking evidence reviews.

- The role of evaluation is often not explicit in project/programme documentation or plans or apparent to many involved in the projects/programmes.

4.3 Assessment of current position in relation to desired strategic aims

Appendix two outlines a detailed assessment of our current position relative to the strategic aims. Many of the aims (e.g. culture change, development of a skilled workforce, robust evaluation, translating findings from research into policy and practice) are shared with the Research Strategy. There is therefore coherence across the strategies, which is highly beneficial, as maximum benefit will be seen from the synergistic nature of the two strategies.
5. How do we get there? The Strategy

In order to understand how we can achieve our aims and move from our current position towards our outcomes and vision, we have drawn from the internal case studies (above), knowledge mobilisation literature and an external case-study of Peel Public Health Region in Canada, to identify barriers and enablers to the changes we require.

5.1 Case-study of Peel Public Health Region

Peel Public Health (PPH), one of Canada’s largest public health departments, is a world leader in ensuring evidence is utilised in practice. Information for this case study was obtained through personal communication with the project lead and relevant documents. They are mid-way through a ten year Knowledge Mobilisation Strategy [3-5]. For the first five years they have focussed on embedding research evidence into routine practice and recently have started to formally consider wider types of knowledge [6].

PPH routinely evaluate their progress and in their most recent published study [3] they highlighted a number of critical factors required to ensure evidence is used in practice:

- Clear vision and strong leadership
- Workforce and skills development
- Ability to access research (library services)
- Fiscal investments
- Acquisition and development of technological resources
- Effective knowledge management
- Effective communication
- A receptive organizational culture
- A focus on change management

5.2 Literature review

A review of the literature was undertaken to explore current thinking relating to knowledge mobilisation and specifically the use of research evidence in public health and the wider health system. The review highlighted that incorporating explicit evidence, derived from research, into public health decision-making and practice is a challenge reported internationally. Unfortunately, there are few data quantifying either the extent of, or the mechanisms by which, evidence is integrated into public health decision-making. However, a number of systematic reviews have highlighted facilitators and barriers to knowledge utilisation, for instance:
Barriers

- Production of evidence that is not fit for purpose, which can lead to negative perceptions of evidence
- A lack of focus on social determinants of health
- A lack of recognition of the complexity of multi-component public health systems
- Skills shortages
- Difficulty accessing appropriate evidence
- Lack of contact and mutual understanding between researchers and decision-makers

Enablers

- Easy access to high-quality evidence that is fit for purpose
- Interaction between researchers and decision-makers; brainstorming implementation strategies
- Organisational culture supportive of evidence use; provides support and demonstrates that evidence use is valued (training and rewards for evidence use)
- Making research one of the main pillars of the organisational culture
- Ensuring visibility of research utilisation
- Clear definition of evidence

The full literature review report can be read in Appendix Three

5.3 Strategic Themes

The knowledge gained from the above analyses suggests there should be four main themes within the strategy. Each of these will be developed into a work-stream within a strategy implementation plan:

- Culture
- Workforce development
- Organisational processes
- Partnerships

The work carried out by the various teams, divisions and directorates within Public Health Wales should not happen in isolation. It is all too easy for a project/programme to report and for the findings/conclusions to only act in a small ‘space’; the space being the project team and perhaps those involved at a slight distance. It is imperative that we better use and share knowledge across the organisation. Knowledge mobilisation will ensure that the outputs of our work are shared more widely and organisational learning is optimised. All four work-streams, outlined below, are vital for knowledge mobilisation to be realised.
**Culture**

The culture of an organisation is a reflection of the values, norms, systems and beliefs. In the context of a Knowledge Mobilisation Strategy a suitable culture would be one where staff feel confident in their understanding of the rationale behind the strategy and their role in implementing individual components. There would be a clear expectation that knowledge should be routinely used and in the absence of knowledge, an explicit support of innovation. When undertaking work the requirement for appropriate evaluation of the projects/programmes would be clear and understood and support for this would be available. The importance of culture is highlighted in the Strategic Plan and also the Research Strategy. The latter states:

“A culture needs to be embedded which; (i) develops and supports research capacity, (ii) facilitates the generation of new knowledge, (iii) develops and strengthens collaborative relationships and (iv) effectively communicates the findings from research.”

The above is complementary to the cultural changes needed for knowledge mobilisation and reinforces the role of knowledge mobilisation as a central enabler “interacting with other strategies and systems across the organisation at multiple points” (The Strategic Plan 19.1, page 183).

**Workforce Development**

To underpin a change in culture the organisation requires staff who are suitably trained and educated to appreciate the importance of research evidence, innovation and evaluation. Certain staff will require additional skills in various aspects of knowledge mobilisation e.g. critical appraisal, evaluation. Workforce development is a recurring theme of the Strategic Plan and strategies such as the Research Strategy.

**Organisational Processes**

Public Health Wales has a number of processes in place to drive and support our work e.g. research governance processes, project/programme approval and management processes. We will need to ensure that these interface with the knowledge mobilisation cycle (as described in section 1). For example, we need to ensure that prior to approval, projects/programme proposals clearly demonstrate use of knowledge to define the need for, and evidence-base for, what is proposed. Project management processes then need to ensure that the use of knowledge is tracked through to the project conclusion. We also need processes to ensure that knowledge gained in the development of a project/programme and learning arising from evaluation of it are effectively captured, managed and pro-actively shared across the organisation.
**Partnerships**

Successful implementation of the knowledge mobilisation strategy will require engagement across all Public Health Wales divisions and the Local Public Health Teams; we need to work in partnership with each other. Further, many public health projects/programmes are delivered through or with external partners (local authorities, police, and third sector for example); it will also therefore be important to ensure their understanding and support of our efforts to effectively mobilise knowledge to inform the development and delivery of collaborative work. The ability of Public Health Wales to influence external organisations, in relation to knowledge mobilisation, will ensure the benefits of knowledge mobilisation will extend across NHS Wales and beyond.

There are also others with a shared agenda relating to knowledge mobilisation such as the Public Health Network, academic partners, NISCHR, Welsh Government, research funding agencies. Our engagement with these partners will aim to:

- Ensure a broad understanding of the importance of the various components of knowledge mobilisation
- Through knowledge mobilisation events and training, enable cross-pollination of ideas
- Share learning from evaluations- success and failures, to enhance the spread of organisational learning
- Specifically in relation to academic and research funding agencies, enable an appreciation of public health research evidence needs so as to better focus research procurement on evidence gaps

**5.4 Timescale**

This strategy covers a five year time period, with a phased introduction of key elements of the strategy. This is in recognition that culture change and workforce development will not happen rapidly and will require sustained organisational support. This timescale has, in part, been influenced by the experience of Peel Public Health, a Canadian Public Health Organisation who have been at the forefront of evidence-informed decision making [1-3]. In five years or sooner, if the need is identified, this strategy will be considered for a refresh.
5.5 Implementation Plan

Consultation on the draft strategy with key groups and all staff will further refine it and enable its relevance across the organisation. A detailed Implementation Plan covering three years will be developed. This will build on the table in Appendix Two and will describe what actions need to be taken, by whom, when and using which resources, in order for us to achieve desired outcomes within each of four work-streams; one for each strategic theme. The Implementation Plan will describe how knowledge mobilisation can be enacted within our everyday work. It is envisaged that, whilst there will be a lead role to oversee and coordinate strategy implementation and to monitor and evaluate its impact, others will facilitate and champion knowledge mobilisation within their directorates or teams, supported by the knowledge mobilisation lead. This approach mirrors that adopted for research governance.

Implementation of the knowledge mobilisation strategy will not be about us working radically differently but will require an acceptance that we need to be more systematic, consistent and transparent about how we use knowledge across the organisation. It will be more about joining up organisational processes than it will be about creating new ones. It will build on and enhance existing public health skills and experience and will require clarity about how knowledge mobilisation fits into different work and roles.

6. How will we know when we are there?

Evaluation and monitoring of the impact of the strategy is essential. The strategy consultation process will inform the development of a detailed implementation and evaluation plan, to ensure a broad perspective is taken on what success might look like. This will be developed in concert with the Research Strategy.
7. References


6. Ward M – personal communication. Dr. Megan Ward is an associate medical officer of health for Peel Region leading the evidence-informed decision-making strategy.
Appendix One – Case Studies

Case studies to inform the Knowledge Mobilisation Strategy

Background

The establishment of a knowledge mobilisation strategy was seen as an important development in improving the function and outputs of Public Health Wales (PHW). Knowledge mobilisation ensures that knowledge, arising from research evidence, data analytics and tacit knowledge, is used appropriately within an organisation and that lessons learned from innovation and evaluation of projects/programmes are shared.

To inform strategy development it was important to understand how knowledge is currently mobilised and used in practice; identifying barriers and enablers. We chose to do this through the use of case-studies. Three programmes were selected:

- Transforming Health Improvement in Wales (THIW)
- Child Death Review Programme (CDR)
- Healthy Schools Scheme (HSS)

The above were pragmatically selected to reflect different types of PHW work. They are all complex and involve numerous stakeholders. They are at different stages of development, some being well established (HSS) while the THIW is relatively new. It was also felt that all could benefit from using the best available evidence to inform recommendations or decisions.

Typically, the main focus, in relation to knowledge mobilisation, relates to research evidence and thus this was the focus for the case-studies, although generation/use of other forms of knowledge was noted where it occurred.

Methods

Two main approaches were used in the case-studies to better understand the flow of knowledge arising from research evidence within PHW. The first was to interview staff involved in the three programmes while the second involved an analysis of documents associated with the programmes.

Interviews

Semi-structured interviews were conducted with participants of the three programmes. Participants were selected following discussions with the programme leads. Additional participants were identified using the ‘snowballing’ technique (snowballing uses existing study subjects to recommend future subjects from among their acquaintances). The aim of the interviews was to interview people performing a range of roles within each programme. Potential participants were contacted via email, given an outline of the knowledge mobilisation strategy, the reason for the contact, an explanation of why we felt it was important to understand their perspective on the work they had been involved in and asking for their agreement to be interviewed.

The semi-structured questionnaire was designed to elicit their perspectives on various aspects of knowledge mobilisation such as the meaning of ‘evidence’, their role in using knowledge and how
knowledge was used within the programme (see Table 1 below). The interview questions were, in part, the result of a literature search on knowledge mobilisation1 which helped to highlight key themes from the published literature.

The interviews typically lasted between 30-45 minutes and 85% were carried out face-to-face; when it was not possible to arrange a mutually convenient time and place to meet, interviews were conducted via the telephone. The interviews were conducted with an understanding that they would remain confidential, responses would be anonymised and the responses from all participants would be aggregated into broad themes to prevent any individuals being identified from their responses. This was important as it was felt that a safe environment needed to be created to optimise honest responses. Notes were taken of each interview on paper and were stored securely. Interviewee names were not recorded on these notes.

**Documentary analysis**

Documents relevant to the three programmes were located and analysed in order to understand the way the programme intended to, and did, use knowledge, innovate and evaluate. The documents were identified by asking staff involved in the programme and also searching the PHW website. Once located the documents were read, relevant passages extracted and analysed to reveal themes relating to the use of knowledge.

**Results**

**Interviews**

In total 23 people were contacted across the three programmes and all but two people took part. The reason for the two absences was that one had left Public Health Wales and the other had moved to another area of the organisation and felt it was inappropriate to participate given the need to be seen to be giving their all for their new role! Of the three cases studies, 14 people were interviewed for THIW, 5 for the CDR and 2 for the HSS. While the numbers were low for HSS it was felt, given the nature of responses already received, that additional interviews would not yield a different result. In short, as use of research evidence was not an explicit requirement, asking additional people would only reinforce this finding.

The table below summarises the responses (although full responses have been retained)

**Table 1: Summary of responses from semi-structured interviews**

<table>
<thead>
<tr>
<th>Question</th>
<th>THIW</th>
<th>CDR</th>
<th>HSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning of evidence. What does evidence mean to the respondents?</td>
<td>Most users focussed on research evidence with a small number highlighting other forms of knowledge such as that gained from experience.</td>
<td>All focussed on research evidence.</td>
<td>Tended to be a broader perspective. Research evidence was mentioned as was ‘best practice’, which was typically based on non-research methods e.g. experience.</td>
</tr>
<tr>
<td>Was use of research evidence an explicit</td>
<td>Use of research evidence was explicit and the focus</td>
<td>Use of research evidence was explicit</td>
<td>Not explicit. Knowledge, often in</td>
</tr>
<tr>
<td>Part of the programme? If so, what source? Type of research evidence was to be used?</td>
<td>Was firmly on secondary evidence, namely systematic reviews. and the focus was firmly on secondary evidence, namely systematic reviews.</td>
<td>The form of personal experience, is utilised.</td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td></td>
</tr>
<tr>
<td>Does/did the use of research evidence match expectations?</td>
<td>Many respondents enjoyed using the research evidence, once they felt confident in the evidence review techniques. There was broad disquiet about the focus on secondary evidence that was often out of date. Approximately half of the respondents highlighted problems of reporting secondary evidence summaries to experts who were aware of newer, more pertinent research.</td>
<td>Responders were all positive about their experience with using the research evidence. However it was noted that the CDR is an evolving methodology and that research evidence has taken an increasingly explicit role. Two responders said that using the research evidence was a good counter-balance to the occasional strong personalities who had a strong-held belief on a particular matter. The way the research evidence was graded was particularly praised.</td>
<td></td>
</tr>
<tr>
<td>What would have helped the use of research evidence?</td>
<td>There was no consensus as to what would have helped. However, a number of points were raised: - Inconsistency of evidence grading between NICE and PHW. - Consistency of process, particularly RE-AIM(^2), which went through numerous definitional changes over time, necessitating previous RE-AIMs to be re-examined. - Workforce development - not all staff had the requisite skills and needed significant support. - Being able to use more</td>
<td>The only comment related to the nature of evidence and how, in the absence of research evidence, clearly-marked expert opinion/consensus could have been used.</td>
<td></td>
</tr>
</tbody>
</table>

**Date:** 11 November 2015  |  **Version:** 1  |  **Page:** 23 of 35
recent research evidence would have helped. The reliance on secondary evidence gave a distorted and outdated view of the evidence-base (e.g., ignored recent RCTs)
- Consistent project management; there were two different project leads (for the evidence review element of the programme) which resulted in two different approaches.
- There was a frustration that the research evidence reviews were produced with no reference to other PHW projects and therefore a danger of a mixed message with regard to the evidence PHW is using to support its work.

Other comments

| Broadly, the lack of time was seen as being problematic and exacerbated any underlying project management issues. The major frustration was with the need to re-do the RE-AIM work as the process changed frequently. With more time better piloting could have solved many of the subsequent issues. The other issue highlighted (a significant minority) was a belief that there was some manipulation of the process by senior members of the programme. The view being this led to the way the research evidence was interpreted being |
| There was a comment that some participants on the CDR Thematic review panel, were ‘not up to speed’ in relation to the position and use of research evidence. However, with the good use of the research evidence grading scheme this did not appear to be particularly troublesome as the participants were soon comfortable with the principles. A small number of participants highlighted that production of the research evidence summaries was sometimes made more complicated than it |
skewed to ensure an answer more in line with the senior member’s perspective. needed to be. This was felt to be a relatively easy issue to fix by ensuring more engagement in the evidence production process.

Documentary analysis

THIW – *Phase 1 Implementation Programme Report, Expert Advisory groups* was used as the basis for the analysis. Evidence is a core component of the project; in the summary it states “The groups have made recommendations about the current best available evidence of what works in five priority areas. These recommendations will inform the next phase of the Implementation Programme.” In the table of contents (ToC) it has a section ‘Evidence review’ and throughout the ToC evidence is mentioned. The report also highlights the interplay between the evidence component and the Export Advisory Groups (EAGs). Near the start of the process the EAGs were asked to identify desirable health improvement outcomes and these were used to instigate the production of evidence reviews ie what is the evidence for interventions to support improvements in the outcomes. The EAGs role was to consider the evidence reviews produced and to make recommendations based on the evidence presented to them. The evidence review informed consideration of whether the interventions were suitable for implementation in Wales, using the RE-AIM framework. The EAG could request additional evidence reviews if, for instance, the evidence presented was deemed out of date. Note: this could occur as the evidence reviews used systematic reviews as the source of evidence. These become out of date at different rates so the EAGs were well placed to advise if the evidence was dated and request additional reviews based on primary research evidence.

The document also contains a number of appendices including the methodology and output of the reviews in the form of ‘intervention summaries’. These provided a narrative summary of the evidence of effectiveness for that intervention, the outcome identified by the EAGs that it related to, an evidence grading, issues relating to implementation, as well as the EAG recommendation.

CDR – The CDR is an evolving process and the methodology for evidence review is strengthened following a reflection process at the end of each thematic review. In this analysis documentation from two thematic reviews were examined: Drowning and Sudden Unexpected Death in Infancy (SUDI).

For the ‘drowning’ analysis two documents were used: *Thematic review of deaths from Accidental Drowning (version 0B, 23rd January 2015)* and *Protocol for Child Death Review Programme Research Evidence Review – Drowning in Children and Young People (Version 0a, 19 March 2015)*.

Within the first document it highlights, as a key objective, to ‘Consider evidence from international literature and other reviews on risk factors and on effective interventions applicable to Wales’. The authors also highlight the need for the use of the ‘evidence service’ to support the reviews. Section
6.4 also states that a scoping meeting will draft an evidence review protocol. The evidence review would then be prepared and considered in a second meeting.

The final section of the document (8. Quality) highlights the issue of uncertainty and also that the evidence review will develop its own quality assurance processes.

The second drowning document clearly sets out the background, objectives and review questions to be answered. It also highlights the key staff involved as well as the methods involved. The methods included a search strategy, inclusion/exclusion criteria, critical appraisal, data extraction and method of synthesis.

In the case of the SUDI analysis the January 2015 publication 'Sudden Unexpected Death in Infancy - A Collaborative Thematic Review 2010-2012' was used. This too highlighted the need to find and make use of high quality research evidence to inform recommendations.

HSS – The HSS takes a high level strategic approach; it is not prescriptive (allowing each school to interpret the guidance) but builds on the WNHSS Guidance for working with schools at each phase of the programme and several underlying principles are taken into account:

- the importance of pupil participation in core areas of school life which directly affect the health and well-being of children and young people e.g. teaching and learning; environment, staff selection, pastoral care;
- the importance of the understanding and commitment to action of the whole school community;
- the existence of a positive approach to health;
- equity; and
- links to other relevant national and local programmes and policies.

There are documents (eg Welsh Network of Healthy School Schemes Evidence re the Benefits of the Healthy School Scheme) that explore the evidence for the having healthy school schemes however, these are not focussed on using evidence to inform the design of individual interventions rather they use evidence to show the impact of the schemes per se.

Conclusions

The main conclusion to be drawn from the case studies is that PHW does not have a consistent approach to the use of knowledge in general and research evidence specifically. Programmes such as CDR and THIW place use of research evidence and expert knowledge and experience as a central feature of the work while HSS makes no reference to use of research evidence and appears to rely on tacit and experiential knowledge of practitioners. This latter difference is a reflection of the different position and circumstances of the programme. While CDR and THIW are run centrally within PHW, the HSS programme works in a more devolved way and has less central control of the various actors involved.

This main conclusion reinforces the need for PHW to adequately understand and express the intention to be knowledge informed and for programmes to be explicitly evidence-based. The core principles of knowledge informed policy and evidence-based practice should drive all PHW work.
However, the HSS highlights the challenges to be faced when dealing with organisations that operate with different values and development needs.

In projects, where being ‘evidence based’ is central, the value of the research evidence is recognised and there was enthusiasm for its use. This is an encouraging finding and should give PHW confidence in moving forward. However, there were still concerns raised that project managers, or others with perceived authority, could still introduce bias in use of evidence in projects due to firmly held sets of ‘beliefs’ thus there was a need for independent scrutiny of use of evidence and for the input of ‘subject experts’ to be carefully managed.

Whilst there is considerable staff support for using research evidence in practice, there are concerns about skills and resource to fully utilise evidence routinely. For example, THIW used a large number of staff to undertake the evidence reviews. Once the staff were confident in the methods, such as critical appraisal of research, there was almost universal support/enthusiasm and a desire to continue to use these skills.

There is appreciation of the support of the Observatory Evidence Service (OES) both in their delivery of high quality products and in their provision of support for staff under-taking evidence reviews. As the OES develops and matures they will be a key component of delivering and/or supporting evidence production within PHW. Their ongoing work on devising standards for evidence production are likely to further support the use of evidence within PHW.

One notable area that could be strengthened, and the OES and wider knowledge mobilisation system is ideally placed to remedy this, is the communication of uncertainty related to the use of evidence. While an evidence review might summarise the ‘best available evidence’ there are still methodological short-comings of the available research evidence that could be better communicated to the consumer of the evidence to ensure that an appropriate evidence-based decision is taken.

The role of evaluation is often not explicit or apparent to many involved in the projects. This needs to be remedied as a matter of urgency. At the time of writing, the Policy, Research and International Development Division are finalising a R&D strategy for PHW. A core part of this strategy is to increase the amount of research and evaluation undertaken by PHW.
Appendix Two – Strategic aims and current position

### Strategic aims - Knowledge:

- The organisation will enable all staff understand the need for using knowledge in formulating policy and practice.
- Knowledge will be systematically considered in our work.
- All forms of knowledge will be used appropriately and in ways which are ‘fit-for-purpose’.

<table>
<thead>
<tr>
<th>Outcome</th>
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<tbody>
<tr>
<td>Current position</td>
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<tr>
<td>1</td>
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<td>2</td>
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<td>3</td>
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<tr>
<td>4</td>
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<tr>
<td>5</td>
</tr>
<tr>
<td>- Project Proposal (proposal document to cover for example, reason for project/, evidence of need (definition of the...</td>
</tr>
<tr>
<td>- Project Proposal</td>
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<tr>
<td>- PID</td>
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<tr>
<td>- Evaluation report</td>
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<tr>
<td>Problem, outcomes required, evidence supporting proposed approach, resources required) which is presented for approval by the appropriate body</td>
</tr>
<tr>
<td>Project Initiation (Document (PID) developed once approval for project given and which describes how the project will be implemented, managed and evaluated)</td>
</tr>
<tr>
<td>Evaluation and reporting</td>
</tr>
</tbody>
</table>

Project proposals and PIDs would be subject to peer-review/scrutiny

| Generally the project planning process starts with the production of a PID and not all have explicit, ‘up-front’ evaluation plans. |

| The organisation has a standardised approach to knowledge-informed decision-making, which includes: |
| A statement of need (eg analysis of data demonstrating a population health need) |
| Statement of outcomes of interest |
| Summary of potential options for responding to need, expressed as a Theory of Change or similar logic model which makes assumptions clear |
| Summary of evidence of effectiveness of different options/approaches/Interventions |
| Statement on the proposed option/approach/intervention to be taken |
| Summary of evidence contextualisation using RE-AIM or similar tool which demonstrates how the evidence is relevant to the local context and also that it is implementable |
| Resource implications |
| Outline plan for monitoring and evaluation of the intervention |

| There is no standardised approach to knowledge-informed decision-making across the organisation. |

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**Strategic aims – Research Evidence:**

- Research evidence will be identified, appraised and synthesised in a manner appropriate to purpose, which is likely to minimise bias and there will be transparency as to how the evidence is considered and used.
- Training, where required (e.g. critical appraisal), will ensure there is a critical mass of skilled staff.
- The review and application of research evidence will be supported by the Observatory Evidence Service who will develop clear and robust evidence review methodologies and services/products for use across the organisation, thus facilitating a more corporate, fit-for-purpose approach to review of research evidence.
- Local knowledge and experience will inform the application of research evidence to local contexts.
- Workforce development will ensure staff understand the implications for practice of uncertainty;
situations arising when there is no strong research evidence for a given situation.

- Uncertainty, as a result of a lack of appropriate evidence, will inform future research and innovation.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Current position</th>
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<tbody>
<tr>
<td>7</td>
<td>The workforce has the requisite skills to feel comfortable using research evidence as appropriate to their role.</td>
</tr>
<tr>
<td></td>
<td>We do not know whether the workforce has the requisite skills to feel comfortable using research evidence as appropriate to their role.</td>
</tr>
<tr>
<td></td>
<td>Information from the case studies indicates that the use of research evidence is hampered by the lack of skills and/or the infrequency of using the skills, leading to a loss of confidence.</td>
</tr>
<tr>
<td>8</td>
<td>The Observatory Evidence Service (OES) facilitates and supports the use of evidence through co-production of evidence reviews and other products.</td>
</tr>
<tr>
<td></td>
<td>The OES has begun to facilitate and support the use of evidence through co-production of evidence reviews and other products.</td>
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<tr>
<td></td>
<td>At the last staff conference (November 2014) the OES engaged with staff to explore co-production.</td>
</tr>
<tr>
<td>9</td>
<td>Evidence products/reviews/summaries produced by PHW are fit-for-purpose, user-friendly and easily accessible.</td>
</tr>
<tr>
<td></td>
<td>The Knowledge and Evidence Group is developing methodologies and templates for evidence products/reviews/summaries which aim to be fit-for-purpose, user-friendly and easily accessible.</td>
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<tr>
<td>10</td>
<td>There is clarity within the organisation about uncertainties (eg lack of or weak evidence) within data analysis and research evidence and understanding about the limitations to use of data/evidence – for example, through use of standardised evidence grading/evidence ‘health warnings’.</td>
</tr>
<tr>
<td></td>
<td>The Knowledge and Evidence Group is developing ways to communicate uncertainties.</td>
</tr>
<tr>
<td>11</td>
<td>The organisation engages pro-actively with the research community and funders to highlight uncertainties found during projects and evidence reviews.</td>
</tr>
<tr>
<td></td>
<td>The organisation engages actively with the research community but it is unclear to what extent this relates to highlighting uncertainties.</td>
</tr>
<tr>
<td></td>
<td>The OES have been invited by NIHR to produce ‘evidence gap’ reports arising from their CDR work. These would be used to inform research funding decisions.</td>
</tr>
<tr>
<td>12</td>
<td>An organisationally agreed framework is used to assess the transferability of research evidence to local contexts, utilising local knowledge and expertise.</td>
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<tr>
<td></td>
<td>The Reach Effectiveness Adoption Implementation Maintenance (RE-AIM) framework was trialled in the THIW programme and considered useful.</td>
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**Strategic aims – innovation:**

- We will create a culture where innovation is valued, encouraged and supported.
- Uncertainties, situations arising when there is no strong research evidence for a given situation, will be clearly and systematically highlighted and brought to the attention of our own research team and our research partners and research funders.
- Innovation will be supported by a framework that will maximise the benefits and minimise the risks associated with innovative practice.

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<tbody>
<tr>
<td>13</td>
<td>A workforce that understands the value of innovation.</td>
<td>We do not know the extent to which the PHW workforce understands the value of innovation although stakeholder engagement about the Research Strategy might illuminate this.</td>
</tr>
<tr>
<td>14</td>
<td>In the absence of robust evidence the need for innovation/innovative practice is made explicit and clearly marked.</td>
<td>The Knowledge and Evidence Group is developing systems to communicate uncertainties.</td>
</tr>
<tr>
<td>15</td>
<td>Innovation is given greater prominence and the organisation’s staff are encouraged to innovate, within an innovation framework, and to disseminate this work.</td>
<td>While innovation is frequently discussed there is no unified organisational approach to innovation.</td>
</tr>
<tr>
<td>16</td>
<td>The organisation facilitates the change management process required for implementation of new approaches/interventions.</td>
<td>The Programme Management Unit has some ability to support change management but it does not appear to be used routinely.</td>
</tr>
</tbody>
</table>

**Strategic aims – Evaluation:**

- We will create a culture where evaluation is seen as essential and embedded in all project/programme/service plans.
- Training, where required, will ensure that staff can competently design and implement appropriate approaches to evaluation.
- There will be oversight and coordination of evaluation activity in order to support staff, and for quality assurance purposes, but also to identify opportunities for adding value to data collected, through supplemental analysis for evaluation purposes.
- Learning gained from evaluations will be systematically shared across the organisation.

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<tbody>
<tr>
<td>17</td>
<td>All projects/programmes of certain scale (pre-agreement on this) are subject to appropriate and timely monitoring and evaluation which initiates at the start of the project and concludes within a pre-agreed timescale.</td>
<td>Not all projects/programmes of certain scale are subject to appropriate and timely monitoring and evaluation.</td>
</tr>
<tr>
<td>18</td>
<td>The Policy, Research and International Development Directorate, working with academic partners where appropriate, support and facilitate appropriate evaluation of projects/programmes</td>
<td>The Policy, Research and International Development Directorate are currently developing a strategy for research which will support and facilitate appropriate evaluation of projects/programmes.</td>
</tr>
<tr>
<td>19</td>
<td>There is a system for dissemination of learning from evaluation and the workforce know how to access the collated findings of evaluations.</td>
<td>There is no formal system for dissemination of learning from evaluation and the workforce does not know how to access the findings of evaluations/there is no systematic collation of the findings from evaluations.</td>
</tr>
</tbody>
</table>
Appendix Three – Literature Overview

A review was undertaken in mid-2014 (By Dr Eleri Tyler) to explore the literature on the utilisation of evidence in public health decision making. Below is an edited summary of the larger report (available on request).

It is clear from the search results returned and review of abstracts that incorporating explicit evidence, derived from research, into public health decision-making and practice is a challenge reported internationally. Search results yielded papers from Canada, the US, the UK, Norway, Denmark, Holland and Australia. Public Health Wales do not appear to be an outlier in this regard.

According to a recent systematic review there is little data quantifying the extent of nor the mechanisms by which evidence is integrated into public health decision-making.

The systematic reviews and other qualitative studies identified have captured perspectives on evidence. The term evidence means different things to different public health workers who derive from diverse backgrounds, many of whom have limited training in epidemiology.

A 2011 systematic review [1] sought to determine:

- The extent to which research evidence is used
- What types of research evidence are used
- The process of using research evidence
- Factors, other than research evidence, influencing the decision making process
- Barriers and facilitators on the use of research evidence

in public health decision making processes in countries with universal healthcare coverage.

The authors found little reliable evidence quantifying the extent to which research evidence is used in public health decision making processes. Few studies described the process through which research evidence was used in decision making.

The factors highlighted as influencing decision makers in the UK were financial sustainability, local competition, strategic fit, pressure from stakeholders and public opinion. There was a recurring theme that key personnel influence decisions by making judgements based on “common sense” and “expert opinion” or by acting as a filter through which evidence is transferred. Research evidence was only seen to affect policy with the support and commitment of those who had influence for change. Exchanging tacit knowledge and seeking information from colleagues or experts whom were “trusted” was also reported.

In terms of factors limiting the use of research evidence the systematic review reported that public health decision makers perceived a lack of research evidence and negative perceptions of the usefulness of research that was available. Specific concerns raised included an undue focus on randomised controlled trials, too much uncertainty, poor local applicability, a lack of focus on social determinants of health and a lack of complexity to address multi-component health systems. Also reported was that the collection and appraisal of research was seen as “non-work” amongst those who needed to appear to be taking action. Policy makers were not supported (through training, the structure of documents used to inform decisions, and the expectations of senior managers) to acquire the required skills or to use research evidence. Practical constraints reported were incompatible timeframes, problems in disseminating, accessing and interpreting research evidence.
which was seen to be aimed at an academic audience. The authors include suggestions from the qualitative studies of ways to overcome these barriers such as conducting

- research targeted at the needs of decision makers
- research that clearly highlight key messages
- capacity building in terms of skills

They note however that these suggestions are generally untested.

“The variety of ways in which the concept of evidence is negotiated and socially constructed by and between individuals” was also highlighted as an issue.

Another systematic review examined barriers and facilitators to evidence-use in programme management more generally in healthcare organizations [2] as opposed to limiting the literature search to public health alone.

Barriers highlighted are listed below:

- Negative perceptions of research including lack of relevant research, particularly research that could be used at a local level
- Problems linked to the complex nature of organizational decision-making and the challenges of integrating evidence therein; paucity of processes to incorporate evidence
- Confusion regarding what constitutes evidence
- Too much information
- Difficulty accessing information
- Time-frame for research to generate results
- Lack of time and resources....workload pressures that were described as actively working against the thoughtful reflection essential for evidence- informed decision-making (EIDM)
- Lack of senior management support for EIDM
- Highly politicized environment
- Resistance to change
- Deficit in skills and experience of decision-makers in research literacy and research utilization “capacity was lowest for the domains related to acquiring research, assessing the reliability, quality, relevance, and applicability of research evidence and summarizing the results in a user-friendly way”
- Lack of contact and mutual understanding between researchers and decision-makers

Facilitators highlighted are listed below

- Systematic reviews
- Access to information; targeted dissemination of research findings
- Research-producing organizations knowing...what kind of answers are optimal for different types of decisions
- Advancement of research methods to meet the needs for evaluating complex interventions
- Interaction between researchers and decision-makers; brainstorming implementation strategies
- Individual skill-building in research literacy, utilization and application
- Intra-organizational linkages that promote knowledge-sharing across the organization
- Developing internal expertise on research utilization
- Formalizing the integration of evidence into decision-making processes
- Organizational culture supportive of evidence use, provides supports and demonstrates that evidence use is valued (training and rewards for evidence use)
• Making research one of the main pillars of the organizational culture
• Ensuring visibility of research utilization
• Clear definition of evidence
• Inter-organizational collaborations, sharing expertise

This systematic review notes that research to determine effective strategies to address organizational barriers to evidence-informed decision making has yet to be undertaken.

Another paper describes disconnections between policy, practice and research in public health [3]. The paper describes public health practitioners as wanting to solve problems immediately and having a sense of urgency. They experience time constraints and do not have time for exhaustive analyses or for acquiring profound theoretical insights for the selection of practical strategies. The authors of this review surmise that as practitioners assign high intellectual status to scientific research they do not easily contact researchers for support; brainstorming about causes and solutions and adopting ready-to-use practical strategies from colleagues’ previous experiences are fairly quick and easily accessible. Issues in implementation of ideas are addressed by trial and error and evaluation usually consists of practitioners judgements of program delivery and assessment of client satisfaction. This paper also alludes to the fact that evidence means different things to different people. It also notes that although research findings are often regarded as tentative by scientists, practitioners expect to receive clear guidance on how to act “a cautious scientific attitude may thus clash with a firm attitude towards action. Practitioners may feel inhibited while researchers must fight for the time-consuming accuracy they strive for.” Also mentioned is that many researchers consider practice-based evidence irrelevant.

A Cochrane update paper discusses strengthening evaluation to capture the breadth of public health practice [4]. This paper cites that local evaluations often focus of meeting accountability requirements and may not be designed or resourced to demonstrate overall impact particularly over the longer term. They often also do not describe the intervention in enough detail so that it can be synthesized and be useful to decision makers outside of the local context. They make the following suggestions to strengthen practice-based evidence.

• Adequate resourcing, at least 15% for rigorous analysis of process, impacts and/or outcomes
• Clear evaluation questions with a clear population, intervention, comparison and outcomes at the outset.
• Logic models may identify anticipated links between strategies and outcomes, considering the time lag between implementation and measureable effects can help frame realistic evaluation questions
• Experimental comparison groups are good for impact; matched quasi experimental designs with selected matched comparison groups may be sufficient
• Collecting information on implementation processes, as well as impact and outcomes is optimal.
• Process data collection should capture ‘how tos’ and such information is likely to be captured qualitatively, interviews, reflective diaries, images but could also be quantitative (e.g. counts of stakeholder interactions). It would also include outputs such as how the interventions was delivered, who received the intervention, funding/resources allocated, organizational and political context, the theoretical basis for the intervention and the extent to which the intervention was delivered as planned and also what facilitators were encountered during delivery.
• Impact evaluation will aim to find differences in the target group, environment or population before and after the intervention, and compare this with a group that did not receive the intervention where possible. Quantitative measures are appropriate to identify changes in the conditions that support health (e.g. environments, policies, skills, behaviours). Authors
note a need to go beyond a scientific ‘efficacy’ paradigm (whereby an effect is produced by, and attributable to, the intervention). Objective measurement of health outcomes may not always be feasible or appropriate therefore impact can be measured by subjective methods such as self-report (validated, reliable collection instruments).

- Dissemination via submission to a professional or academic journal, posting online or evidence repository or presented at conferences. It is important to document not only what work but what does not work.
- Building capacity through workforce development and research-practice partnerships

References