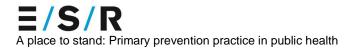
A place to stand: Primary prevention practice in Public Health

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E/S/R A place to stand: Primary prevention practice in public health



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EXECUTIVE SUMMARY

This is the second report of a two-year project on how public health personnel can be effective in influencing decisions, made either by other agencies or individuals, which will reduce or prevent risks to public health. The key objectives of this study are to:

- Find and describe examples of good practice: namely, where public health units (PHUs) have influenced policy or the design of interventions in ways that were likely to prevent or reduce threats to public health
- Identify opportunities for PHUs for effective practice in influencing policy or intervention design
- Produce recommendations, guidelines or advice on how to improve public health outcomes through primary prevention collaborations involving PHUs.

The first report (Nicholas et al 2017) reviewed selected literature and presented findings from the first case study. That case concerned submissions made in response to an application for resource consent under the Resource Management Act (RMA). This report adds insights from two further case studies, influencing policy on on-site waste-water management in the Auckland region, and establishing a forum on healthy houses in the Bay of Plenty.

The report summarises the findings of each case study, adds some comment about the current political and regulatory context, and discusses how public health actors can influence non-health decision-makers in settings that do not require a health input.

We introduce and apply a recently developed generic model for critical collaboration. The model combines concepts from Cash et al. (2002) and Ulrich (2003). While Cash et al. identify three qualities needed to characterise useable expertise: salience, credibility and legitimacy; Ulrich has developed a schema to make power, marginalisation and inclusion discussible. Ulrich's work is about how to set a 'truth claim' in a context of judgement about what is relevant, values and boundaries.

Having applied the model for critical collaboration, we conclude the report by outlining some guiding principles for public health personnel seeking to influence health outcomes as preventative public health.

1. INTRODUCTION

1.1 PURPOSE AND BACKGROUND

This is the second report of a two-year project on how public health personnel can be effective in influencing decisions, made either by other agencies or individuals, which will reduce or prevent risks to public health. The key objectives of this study are to:

- Find and describe examples of good practice: namely, where public health units (PHUs) have influenced policy or the design of interventions in ways that were likely to prevent or reduce threats to public health
- Identify opportunities for PHUs for effective practice in influencing policy or intervention design
- Produce recommendations, guidelines or advice on how to improve public health outcomes through primary prevention collaborations involving PHUs.

The first report (Nicholas et al 2017) reviewed selected literature and presented findings from the first case study. This report presents a summary of findings of two further case studies and a synthesis of findings from the project.

Specific findings from each of the latter two studies will detailed in a separate report.

2. APPROACH

The aim of the project is to describe examples of good practice and to set such examples in one or more useful theoretical frameworks so that key principles can be generalised as practice guidelines. Good practice, for the sake of this project, means that PHU personnel carried out a fit-for-purpose action to influence 'non-health' actors¹ in ways that are likely to prevent or reduce threats to public health.

We seek to set public health prevention in an 'eco-system' of health-oriented and 'non-health' actors. The focus has been on public health influence on decision-making, rather than on situations in which public health officials have opportunity for direct impact. In other words, we have excluded from our study the delivery of health programmes, responses to the outbreak of disease, and occasions that involve public health personnel intervening directly to promote health. The intention is to consider opportunities for public health personnel to identify and respond to potential threats to public health and to act prospectively in situations that require influence of 'non-health' actors. In this, we are applying the concept of primary prevention² to the work of PHUs.

Our approach is to seek examples of good practice and identify opportunities for good practice through interviewing local authority and regional council officials and PHU personnel, and by researching the impact of public health thinking and submissions on local policy and decision-making.

2.1 USING CASE STUDIES

The project is an exploratory qualitative study using case studies (Eisenhardt and Graebner 2007; Stake 2005). That is, the project examines three case sites in which public health units have sought to improve public health outcomes through influencing 'non-health' decision makers. The case study sites were chosen for their potential to yield useful insights for that task rather than for comparability. As an exploratory study, the project does not involve a strict comparison between cases, although it does enable the authors to generalise implications for practice from the aggregated findings of the three case studies³.

2.2 CASE SELECTION

As part of meeting the criterion above, potential to yield insights, the choice of the case-study sites was based on three criteria:

¹ In this report we use the term 'non-health actors' to mean decision-makers for whom health is not their principle purpose or framework.

² Primary prevention refers to "a program of activities directed at improving general well-being while also involving specific protection for selected diseases". primary prevention. (n.d.) *Mosby's Medical Dictionary, 8th edition.* (2009). Retrieved June 19 2017 from <u>http://medical-</u>dictionary.thefreedictionary.com/primary+prevention.

³ This distinction between exploratory and comparative case studies follows Stake: 1995. *The art of case study research*. Thousand Oaks: Sage; 2005. *The SAGE handbook of qualitative research*. Thousand Oaks: Sage; cited by Durepos and Mills: 2013. Sage Fundamentals of Applied Research. *Case Study Methods in Business Research*. Los Angeles: Sage.

- Preliminary evidence of a proactive public health intervention by PHU personnel that involved engagement with non-health decision-makers.
- A co-operative relationship between ESR researchers and key personnel in the PHU concerned.
- Agreement with the Ministry of Health as to the suitability of the case for the project purpose.

2.3 THE CASES

2.3.1 The Harakeke development (Tasman District)

The first case study (Nicholas et al 2017) concerned submissions made in response to an application for resource consent under the Resource Management Act (RMA) by Harakeke 2015 Ltd. The application was to develop 177 hectares of land, between Ruby Bay and Tasman Village on the coastal highway to Motueka, into a new housing and commercial development.

The Harakeke consent processes was chosen by the researchers as a first case study for its apparent simplicity while representing a discretionary intervention to influence non-health decision making. It was deemed a good example of attempting public health influence at a consenting stage of development, and thus within the 'prevention' scope. In the face of a significant property development with potential health impacts there appeared to be no provision for public health officials to have input as independent public health experts. The unit chose to make its submission within a public process. The concerns of the public health service (PHS) were aspects of environmental health: provision of safe drinking water, issues of wastewater disposal, and contaminated land.

The findings have been detailed in Nicholas et al. (2017), and are summarised for this report Section 3 (below).

2.3.2 On-site waste-water management (Auckland region)

The second case study concerned influences exerted by the Auckland Regional Public Health Service (ARPHS) to promote improved management of on-site wastewater management systems (OSWWM) across the Auckland Council area. The case study focuses on ARPHS participation in the submission and hearing processes for the Provisional Auckland Unitary Plan (PAUP).

In consultation with Ministry officials the Auckland region was chosen. As a city it was distinct from Nelson (the case study one location), most notably in size and population. Additionally, the PHU was larger and such a different profile was seen as an opportunity to explore alternative approaches and means to influence third parties.

The findings are detailed in a separate report (forthcoming) and are summarised in Section 3 (below).

2.3.3 Establishing a forum for healthy housing (Bay of Plenty)

The third case study concerns the early initiatives made in the Bay of Plenty by Toi Te Ora Public Health (TTO) in drawing together the many local parties with health and wellbeing related housing interests. Distinct from Nelson and Auckland (the

other case studies), it was an area understood to be particularly challenged by social inequality, and was distinct in representing a Māori and retirement population larger than the national average (Yong et al 2017). As a PHU, it also provided the opportunity to generate a new working relationship and expand our range of understanding alternative means of influencing third parties nationally.

The findings are detailed in a separate report (forthcoming) and are summarised in Section 3 (below).

2.4 DATA COLLECTION

Data for each of the case studies comprised documentary analysis and key informant interviews. For each of the case studies, we sought data to help explain the context, decisions and process of the respective interventions.

We developed an interview guide to serve as a prompt during interviews (see Appendix A). The guide was adapted slightly to fit each case study. It was not intended that all questions in the guide be posed, but that they enable exploration of the case from various angles. Interviewees were encouraged to talk around the issues covered in the interview guide, following an 'in-depth interview' approach (Johnson 2002). Interview durations ranged from 50-100 minutes. Interviewees gave informed consent (Appendix C) for participation in the project as described in the Information Sheet (Appendix B). All interviews were recorded and transcribed for later analysis. Interviews were analysed for themes to understand enablers and indicators of good primary prevention practice for public health officials.

3. SUMMARY OF FINDINGS

3.1 HARAKEKE DEVELOPMENT

The preparation and making of a submission for a property development resource consent highlighted several themes relating to public health units undertaking their preventative role. In particular, the importance of:

- assessing the relative future risks to public health,
- corralling appropriate expertise (both public health and policy),
- knowing and owning the public health role,
- maintaining credible professional relationships between key personnel in public health and those in the district council
- taking the time to participate in a public process.

As we stated in our earlier report on the case (Nicholas et al 2017):

"having strong relationships with people across an array of specialist areas and different agencies was seen as a key element to developing sound submissions on public health issues" (p.13).

The quality of the submission from the perspective of the 'non-health' agent (the council planner) was deemed "excellent". This demonstrated the outcome of collaboration between public health personnel and a policy advisor in the DHB. It also reflected the depth of experience in the public heath team. However, the case also demonstrated that there was no role as of right for public health in the submission process, which made it all the more important that public health personnel had credible relationships with the council, identified potential risk, developed a quality submission and participated in the public process.

The case study prompted our provisional model to support public health preventive initiatives. The model uses three poles identified by Cash et al. (2002): **salience**, **credibility** and **legitimacy**⁴. A development of the model in the light of the subsequent studies, and incorporating insights from Ulrich (1994) is presented in Section 4.

3.2 ON-SITE WASTE-WATER MANAGEMENT

The issue of poor water quality associated with on-site waste-water management (OSWWM) had been the subject of longstanding liaison between ARPHS and various Auckland councils before the councils were amalgamated into Auckland City.

⁴ **Salience** refers to how relevant information is to decision-making bodies or other audiences (Cash et al 2002); in other words, what makes a particular claim or viewpoint compelling for consideration by an actor .**Credibility** refers to the quality of information: "how to create authoritative, believable, and trusted information" (Cash et al 2002). **Legitimacy** refers to "whether an actor perceives the process in a system as unbiased and meeting standards of political and procedural fairness" (Cash et al 2002). A statutory role can contribute to perceived legitimacy.

The case study focuses on ARPHS participation in the submission and hearing processes for the PAUP.

The case study highlights some insights that supplement those from the first case study. We have structured our findings using the categories of Cash et al. (2002) from our preliminary model. To summarise key findings:

- The concerns of ARPHS in relation to OSWWM extended beyond the initial terms of the PAUP. The submission process was seen as an opportunity to address chronic sewage problems by seeking additional inclusions concerning 'cumulative effects' and 'monitoring and certification'. In other words, OSWWM had long been recognised within ARPHS as a salient topic for their attention; but that salience could not be fully contained within the specific scope of the PAUP.
- The context of local body amalgamation disrupted useful working relationships and institutional knowledge, and that highlighted the way these things are important for perceived **credibility**.
- Making submissions to and participating in such a large-scale public consultation process is very demanding in time and expertise, requiring resources and collaboration beyond what is usual. It appears that this proved more demanding because the public health agenda had to be negotiated in relation to the PAUP process rather than being able to take its legitimate place for granted.
- Public health concerns are not considered in isolation from other public, political and social forces. Issues such as cost, equity and landowner autonomy interact with public health advice and can influence decision-makers. That is, public health advice does not have a guaranteed **legitimacy** that would eclipse other considerations by the council.
- Time horizons when considering potential threats to public health may be much longer than those influenced by local authority political and planning cycles; which can marginalise public health advice.
- Public health preventative activity can also seem marginal or poorly aligned (lacking full **legitimacy**) to the more dominant therapeutic perspective of the district health board within which public health units are located.
- Institutional divisions of responsibility can obscure ownership and resource allocation for particular imperatives. That can compromise **credibility**.
- Intra- and inter-agency working groups can promote mutual trust and **credibility** for expert advice
- Continuity of relationships and **credibility** can be adversely affected by lack of staff retention. Succession planning is important
- The approach of ARPHS was seen as that of 'persuasion', and this was seen as both a strength and a weakness. While there is a freedom to be an advocate for public health, there is also a question as to the responsibility of councils to seek public health input. Operating by persuasion requires active attention to establishing and maintaining credibility and legitimacy.
- The perception of public health units by non-health agencies may be rather limited, and skewed toward responding to disease outbreaks, which heightens

the need for the units to establish and maintain **credibility** and **legitimacy** in the role of prevention and long term planning.

 Some important capability in ARPHS was through staff that had previously worked in councils and, therefore, understood that world and retained relationships within it. That capability contributed to credibility in engaging with the council planning process.

3.3 HEALTHY HOUSING FORUM

The case study concerns the early initiatives made in the Bay of Plenty by Toi Te Ora Public Health in drawing together the many local parties with health and wellbeing related housing interests.

The case study illustrates how salience, credibility and legitimacy (Cash et al 2002) are vital factors in public health gaining traction with non-health decision-makers.

The case focuses on interventions by TTO that were already **salient** to a range of central and local agencies, including governmental agencies. Issues of the quality of housing and the impact of housing on disease (particularly rheumatic fever) were readily appreciated by other agencies.

Public health personnel were not seen as standing alone on the importance of health housing. It was possible to communicate the importance of the issue (the salience) to a range of decision-makers, gaining the opportunity to develop and communicate **credible** and **legitimate** responses.

The existence of central government support and mandate added a sense of **legitimacy**. The contribution of TTO research and perspectives were welcomed for their **credibility**, particularly because they added meaning and significance to knowledge or data already held by others. **Credibility** and **legitimacy** were also enhanced by the long-standing commitment reducing to rheumatic fever, and by material commitments of money and time. Public health (TTO) was able to bring specific expertise and methods to a shared agenda alongside other agencies. The involvement of the medical officer of health added **credibility** to the work, as did the perceived independence or neutrality of TTO. The fact that the processes around and prior to the Healthy Housing Forum involved such broad collaboration was a source of **legitimacy**, and the range of expertise engaged added **credibility**.

4. **DISCUSSION**

4.1 PUBLIC HEALTH AT THE ROUND TABLE

The case studies raise important issues of how public health preventative initiatives have influence on decisions and decision-makers in situations that are not obviously about health. There is little question about the relevance and legitimacy of a public health role when there is a disease outbreak. The role is expected and legitimated by legislation and convention. The credibility of health advice on such occasions is rarely questioned. But when it comes to preventative activity, public health is in the role of attempting to influence policies, plans and practices that, typically, are not primarily about health. Resource consents, council long-term plans and ubiquitous social issues such as housing quality are all opportunities for public health input, but they are processes owned by others, health is only one dimension, and often health is quite marginal to the main agenda of decision-makers.

We suggest that the metaphor of a meeting table can represent the challenge for public health input into such non-health settings. While public health would be expected to be at the head of the meeting table when the agenda is response to a disease outbreak, the best that public health can hope for in most preventative work is to have a place at the table as one among others; a place at a table without a head, a round table. Often, however, there will be no guaranteed place at the table at all, and the table may not be round, but be arranged with quite different interests at the head.

Clearly, the skills and attributes necessary for being at the head of the table in an outbreak situation are quite different from those required for contributing credible and persuasive advice in a setting among other interests, with a focus on agenda broader than health. And, the necessary skills and attributes are different again if public health is seen as marginal or lacking legitimacy in relation to the main agenda.

4.2 THE CHALLENGE OF DIVERGENT REFERENCE SYSTEMS

As we noted in our earlier report (Nicholas et al. 2017):

In the absence of a clear public health imperative and scope to act, public health actors need to discover and draw on sources of motivation, power, expertise and legitimacy that may not be immediately recognised by those they seek to influence. No 'universal' discourse validating a public health perspective is available. What is indicated is what Ulrich (2005) refers to as a way to "make it clear to ourselves and to everyone else in what way our evaluation [of the situation and what is needed] depends on a specific reference system that others need not share." For Ulrich, a 'reference system' simply means the thing that is being dealt with. His point is that different participants or affected parties view the system under discussion differently: "in many discussions we fail to achieve mutual understanding, since due to divergent reference systems, we actually speak about different subjects" (Ulrich 2005).

One way, then, of thinking about the challenge faced by public health units when seeking to play their preventative role is the challenge of being clear with themselves

and others that they are working from a specific "reference system that others need not share". Their reference system is preventing or reducing threats to public health, and that comes with a well-developed discourse on the determinants of health, the vectors of disease and risk assessment. The reference systems for others (eg, councils) are quite different. Councils are guided by their legislation and the requirements and constrained processes around consultation and engagement. They are also likely to be more alert to political sensitivities for their council and in relation to their mandate from central government. Such sensitivities will relate to their stewardship of both financial budgets and due process.

The challenge of divergent reference systems is that public health initiatives are attempting to achieve public health outcomes that, at best, are emergent from diverse decisions by diverse decision-makers with multiple (non-health) accountabilities. As Ulrich puts it, the parties are "actually speak[ing] about different subjects".

4.3 THE POLITICAL AND REGULATORY CONTEXT

4.3.1 The Resource Management Act (RMA) and National Policy Statements

Changes to the RMA came into effect in 2017. While this report will not review all the implications for public health of the RMA, some changes to the Act provide an important context to issues discussed here⁵. For example, plans and policy statements under the RMA must only address matters relevant to the RMA. This means attempts by PHUs to add public health issues as part of consultation on plans and policy statements are likely to be seen as illegitimate or naïve, and will lack influence. A further change to the Act means that subdivision of land is permitted unless restricted by a district plan rule or a national environmental standard. An implication of that change is that PHUs may not even become aware of potential threats to public health in a property development, and would have little opportunity to intervene.

While the social, economic, and cultural well-being of people and communities, and their health and safety are a focus of the amended RMA, there is no specific mandate to have regard to risks to public health.

Another example of a challenge for public health preventative work is the national policy statement on urban development capacity (NPS-UDC). While local authorities must provide for the social, economic, cultural and environmental wellbeing of people and communities and future generations, there is no specific mention of public health or safety. Councils are currently preparing their strategies in response to the NPS-UDC. As part of the process councils are to engage with stakeholders and draw on a range of information sources. PHUs are not included in the listed stakeholders or suggested information sources. While there are opportunities for PHUs to have input into council strategies and plans, this is simply an opportunity open to the public; there is no requirement for councils to consult or seek input from PHUs.

⁵ For this section the authors acknowledge their debt to presentations by Vern Goodwin and Christine Foster to a professional development course for public health officials (Wellington, 7 June, 2018).

4.4 A PLACE TO STAND

Our earlier report ventured that:

Public health actors, then, need to establish for themselves and others the basis of their input to 'non-health' decision-making, as this cannot be taken for granted, and may not be seen as relevant or cogent alongside other claims. In situations that provide no or little protected or agreed place to stand, public health needs to establish a defensible position from which to make its contribution (Nicholas et al. 2017).

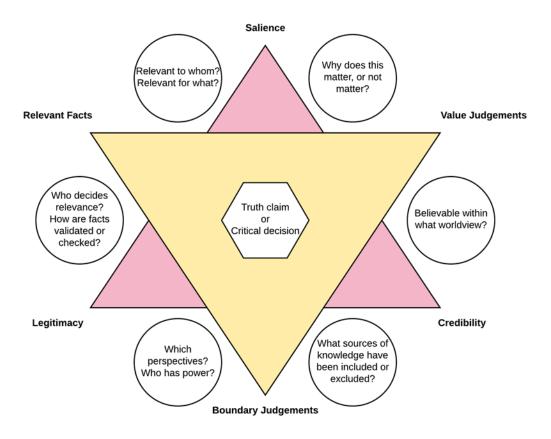
The subsequent two case studies have reinforced this view. Our earlier report offers a provisional model to propose a systemic basis for describing and developing such a 'place to stand'. The model drew on (Cash et al. 2002) in suggesting that fit-for-purpose public health input into non-health decision-making needed to establish with relevant audiences its salience, credibility and legitimacy.

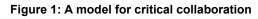
We now propose a more sophisticated model that incorporates insights from Ulrich (1994, 2003). The figure below has been developed by one of the authors (Nicholas) as a generic tool to aid collaboration. We believe it provides a useful basis to discuss and guide public health preventative practice.

4.5 ENHANCED MODEL FOR INFLUENCING POLICY AND PRACTICE

While Cash et al. (2002) identify three qualities needed to characterise useable expertise: salience, credibility and legitimacy; Ulrich (1994, 2003) has developed a schema to make power, marginalisation and inclusion discussible. Ulrich's work is about how to set a 'truth claim' in a context of judgement about what is relevant, values and boundaries.

The two triangles (Figure 1) represent two complementary frameworks: the yellow is from Ulrich (1994; 2003) and the pink is from Cash et al. (2002). The enhanced model poses six questions. Each question is a dialogue between the two adjacent triangle points. The questions are offered as a way to make explicit the assumptions embedded in a critical decision or truth claim. Applications can include self-critical review of options in designing an intervention, and as a tool used with collaborators to surface and discuss divergent positions within a project team. In this case we apply the model to guide PHU personnel in their preventative practice, engaging with non-health decision-makers. The model is presented in Figure 1 in its generic form. We will then move around the core questions of the model to discuss implications for PHUs.





[Combining concepts from Cash et al. (2002) and Ulrich (2003)]

4.6 A CRITICAL APPROACH TO PUBLIC HEALTH COLLABORATION

A 'critical approach', in this context, refers to an approach that is reflexive, critiquing its own stance and mindful of differences of power, worldview and agenda. The model in Figure 1 offers a systematic and systemic way to adopt a critical approach.

4.6.1 Salience

The model asks of anyone making a claim to relevance: relevant to whom, and relevant to what? PHU personnel need to consider this, precisely because their training and professional identity may make the relevance of their view seem obvious and beyond question. The model also asks: why does this matter or not matter? The questions prompt PHU personnel to articulate salience in terms that enter or take account of the world of those they seek to influence.

We now elaborate on this part of the model.

Why does this matter, to us?

This is the primary question for public health initiatives. It is about establishing the motivation to be involved in a matter that is not explicitly required of public health personnel. This is likely to require checking alignment between an assessment of the risk to public health, an understanding of the role of public health actors, and the opportunity to make a difference.

Who else might this matter to, and how?

When the key decision-makers are neither health orientated nor obliged to consider public health input, the question becomes, how might the health implications of a decision matter to the other parties?

How to communicate risks and roles?

In the scenario, public health personnel cannot assume that their assessment of risk and of their role is shared or recognised by others involved in the situation. Nor can they assume that they adequately appreciate the risks and roles identified by other players. The challenge, then, is to establish relationships and opportunities capable of mutual communication of what matters, to whom, and by what assessment of risk and role.

4.6.2 Credibility

The model asks of anyone making a claim to credibility: your claim is believable within what worldview? And, what sources of knowledge have been included or excluded? Public health personnel may be secure in their own expertise, but the basis of that expertise and how it fits with other forms of knowledge may not be obvious to those they seek to influence.

We now elaborate on this part of the model.

In what world would this advice make sense?

Questions around credibility focus on why those with responsibility for decisions should respect the viewpoint and expertise of others (in this case, public health personnel). Public health personnel need to consider how the world looks from the perspective of the decision-makers. For example, where in that world is there a pressing question that would lead them to consider public health expertise to help answer? What assumptions would public health personnel need to make about the world of the decision-maker in order for public health expertise to be considered sensible?

Knowing our place

Expertise is not universally credible, it makes sense within certain communities and within certain ways of seeing the world. In other words, expertise can be seen as the ability to answer or respond to particular questions, and if a question falls outside the set of relevant questions, that expertise is not seen as a credible response. This is sometimes the case with public health expertise.

The challenge is to not just communicate or offer the expertise, but explicitly link expertise to the relevant set of questions. How can public health experts become fluent in making explicit the boundaries around their expertise? This may seem like a strategy for losing influence; however, we suggest that it will assist non-health decision-makers to appreciate and make use of the bounded expertise that public health personnel bring to a situation.

4.6.3 Legitimacy

The model asks of anyone claiming the right to be heard: which perspectives they are representing, and who has power? In a context of contested or multiple accountabilities, claims need to be grounded as coming from some recognisable and

accepted platform. Who do you represent? This is highlighted by a second question related to legitimacy raised by the model that asks: who decides relevance? And, how are facts validated or checked? This is truly public health at the round table. There is no presumption of legitimacy in terms of whose interests are being served, whose interests are being marginalised, which facts are deemed relevant, or how those facts are to be verified.

We now elaborate on this part of the model.

Being a guest

Legitimacy is the right to be 'at the table'. In situations in which legislation or regulation does not provide that right, public health personnel need to come to the table on some other basis. The metaphor of the table suggests other ways of being present. Public health could be legitimately at the table as an invited guest rather than as the host or authority figure. The image, again, is that of a round table, or at least one that does not have public health at the head. If the role is that of an invited guest, the task for public health becomes how to be invited, and how to maintain legitimacy in the role of guest.

There is more than one currency being used

When it comes to deciding who and what has relevance or value, actors from different worlds can appear to be playing with different 'currencies'. In other words, a particular actor can assume or act as though their line of reasoning has more power or influence than that put forward by others. However, the worth of that reasoning (currency) may not be obvious to participants who come from different 'worlds'. Public health personnel have their own set of compelling arguments, but cannot assume that a representative of a district council, for example, will give these arguments the same weight. Likewise, public health personnel may 'devalue' arguments that are seen as high value to a person from the council (such as financial accountability, or political concerns of councillors).

The challenge is to be offering or selling public health expertise in a world of multiple currencies that value things differently.

5. GUIDING PRINCIPLES

In this section we will distil the insights gained from the case studies and the application of the model for critical collaboration, and offer some general principles to guide preventative practice by PHUs.

We offer four principles. Some of this is a repetition of points made above, but collated here for ease of reference.

5.1 MOTIVATION

5.1.1 What is our motivation for being involved?

A PHU will need to target its resources to greatest effect. Fundamental to any attempt to influence non-health decisions as part of preventative public health is clarity about whether the risk assessment, public health role and opportunity to make a difference constitute a compelling case for committing resources.

5.1.2 What is the main motivation driving the decision-makers and other key actors?

Other actors will have their own agenda and motivations. If a PHU wants to have influence it will need some understanding of what matters to those in positions of power.

5.2 POWER

5.2.1 Who calls the shots?

Each situation will have its own hierarchy of power and authority. It is useful to discover who gets to determine what the main questions to be dealt with are, and how they chose to frame the questions. Who determines what is in and what is out of consideration? What 'currency' is used to assert power?

5.3 EXPERTISE

5.3.1 Connect public health expertise to a recognised problem

The key here is to bring PHU expertise and resources to the shared table. That is, collaboration and influence will be enhanced by public health expertise being a resource contributing to reaching goals that make sense to others.

It will be useful to distinguish PHU motivation (the reason to be involved) from collaboration (the way of being involved). Influencing non-health decisions toward achieving improved health outcomes is likely to involve contributing expertise to work on problems other than the core public health agenda.

5.4 LEGITIMACY

5.4.1 Whose interests are we serving?

PHUs may need to help those in other agencies see that the PHU is not serving its own ends, but serving the interests of others. Legislation and habit may caste a PHU as if they are a stakeholder or an affected party, as opposed to a source of expert

independent advice. If a PHU is not very clear about whose interests it is serving in each situation, it may be thought to be serving its own interests (and indeed may be).

5.4.2 Get invited – be a guest

In situations where the public health is not at the head of the table, it is important to get explicitly invited to the table – as a guest. Such an invitation serves to provide legitimacy based on having a recognisable sponsor for PHU involvement.

This implies two subsidiary points: it is important to cultivate relationships and build trust between agencies and individuals. These will make an invitation more likely. And, being a guest is a distinctive way of being present. Sustaining a reputation as a valued guest is likely to enhance influence.

6. CONCLUSION

This report brings together insights from three case studies and certain systems concepts. It has considered some of the challenges and opportunities for public health personnel to engage with other agencies and non-health decision-makers as part of preventative public health practice.

The main challenge we have identified is that many settings in which public health input would be desirable offer little or no formal structure to elicit and consider public health expertise. That leaves PHUs with the preliminary task of establishing their own stance, legitimacy and voice.

We have portrayed this dilemma as one of finding a place to stand, and have applied a generic systems model, the generic model for critical collaboration, to propose guidance to PHUs for when they seek to influence non-health decision processes.

In summary, we argue that public health actors need to attend to how their expertise can be represented as salient, credible and legitimate in situations where those qualities are not able to be taken for granted.

GLOSSARY

ARPHS	Auckland Regional Public Health
	Service (the public health unit for the
	Auckland region
DHB	District Health Board
NPS-UDC	National Policy Statement on Urban
	Development Capacity 2016. A policy
	statement by the New Zealand
	Government setting out the objectives
	and policies for providing development
	capacity under the Resource
	Management Act 1991.
OSWWM	On-site waste-water management.
	Systems of managing sewage and other
	waste-water that are situated on-site
	rather than reticulated to public disposal
	systems.
PAUP	Proposed Auckland Unitary Plan. This
	was a consultation document used in
	preparing for the Auckland Unitary Plan.
	The Plan has become "operative in
	parts" progressively since late 2016.
	The Unitary Plan is a principal statutory
	planning document for Auckland.
PHU	Public Health Unit. This is the generic
	term to refer to regional public health
	services. Public health units focus on
	environmental health, communicable
	disease control, tobacco control and
	health promotion programmes. There
	are 12 PHUs in New Zealand. Many of
	these services include a regulatory
	component performed by statutory
	officers appointed under various
	statutes, though principally under the
	Health Act 1956.
RMA	Resource Management Act. 1991
ТТО	The Bay of Plenty public health unit: Toi
	Te Ora Public Health.

APPENDIX A: INTERVIEW GUIDE

Case study – On-site Wastewater -Auckland (*NB: italic = comments just for us*)

We would like to start with a few general questions to introduce the PHU and your work, and then will then explore the casework you undertook. This will be followed by a few further general questions

<u>General 1.</u> <u>Can you provide some background</u> <u>information about the PHU</u>

- a. Could you provide a little information about this catchment area such as identifying features or any peculiarities (eg population numbers socio-economic factors of those catered for geography & travel demands on you ease of recruitment to PHU and associate roles more??)
- b. What are your goals and priorities here in this PHU?

<u>General 2.</u> <u>Can you provide some background</u> <u>information about your role here</u>

- a. What is your job title, professional education and on the job experience (years)?
- b. Do you have any specific areas of expertise / interests?
- c. Have you undertaken any additional education (special interest / general)?
- d. What responsibilities are uniquely yours and which do you share with others (eg PHO/ EHO?)
- e. What is a typical day ... how do you spend your time?

Case study: Describe the On-site waste water project

Can you tell the story of how the PHS involvement with on-site waste water programme came about? – What made it important enough to work on? *We explore through discussion to answer the following*:

- a. How did you become aware of the issue
- b. Was this situation unusual or have there been other similar examples?
- c. How did you identify and understand the risks? (such as existing knowledge, previous similar experience, PHU priority area, investigation / measurement data, 3rd party alert, etc.)

- d. Which other parties did you collaborate with ... who, how and usefulness?
- e. How did you decide what to do (applied existing knowledge, following procedure, guidance from Manager, collaborative decision (*with who?*), literature search, consulted knowledge broker) & did any priorities drive your behaviour?
- f. Did you need external input such as data from other agencies (eg Landcare, DHB, other council), or specialist knowledge (eg legal, planner, hygienist) etc..?
- g. Did you experience any barriers in the process, such as: (describe)
 - i. Lack of access to information / people
 - ii. Difficulties in decision-making
 - iii. Difficulties emanating from the organisation (PHU/ DHB etc.)
 - iv. Problems direct from the general public (eg social issues)
- h. What stage is it at now (what happened)?
- i. Did you get any feedback was your intervention supported by the PHU / your employer / the community?
- j. Was there an evaluation or review of PHU practice / protocol as a result of your experiences?
- k. What were the successes / failures of this case ... with the gift of hindsight could anything have been done in a better way?

How did this case fit in terms of meaning and significance with the rest of your work programme?

Building on this we are also interested in gaining a little more information on the nature of 'prevention' in your work and how you operate.

General 3. How do you see your role in "prevention"?

- a. What are your key areas of work? (plus those you're less frequently involved in)
- b. What type of things are straightforward and go well and what are more of a challenge?
- c. What influences the varied successes and failures?
- d. How do these aspects fulfil your accountabilities to both the DHB & PHU – are their needs compatible to your way of working and what you are trying to do?

e. Could anything be done better / improved?

<u>General 4.</u> For your 'prevention' work how do you become alert to potential health hazards or risks where you need to act? (and rough proportion of each?)

- a. Who would consult you directly for advice or to raise concerns (eg EHO, general public, knowledge broker, collaborating agencies)
- b. What monitoring do you undertake and how?
 - i. following a set down schedule of assessments and analysis (*how was/ is the set- down schedule / programme determined?*)
 - ii. responding to data alerting you to problems ... perhaps your own or those compiled by o/s agencies (*examples* ??)
- c. Any other means?
- d. Do you have any thoughts on how the 'alert' process could be improved

General 5. Which collaborations are most useful and why?

- a. Who is your team in-house and third-party (such as outside agency)?
- b. Who is easiest to deal with and why? (eg personality, communication means, common purpose, supportive policy etc...)
- c. Does means of communication have any impact on success (eg F2F, phone, email, skype, shared message board / platform (*cloud*), others???
- d. Do you have any thoughts on how 'collaborations' could be improved?

<u>General 6.</u> In deciding what to do which methods (below) do you use and in what order (and rough proportion *of each?*)

- a. Follow procedures, legislation, Standards
- b. d/w colleagues in house
- c. d/w community members
- d. access and assimilate research evidence
- e. Use decision support tools
- f. d/w a researcher / knowledge broker / trusted expert
- g. d/w a 'network' or peer support groups

- h. any other means (outside procedures, beyond rules, areas of discretion)
- Use of specialist advice ESR, DW co-ordination service database, EMIS (Emergency Mgmt, Information Service), MoH - monthly circulars, FAQ's, manuals, guidelines

<u>General 7.</u> <u>Regarding these methods – are there any reasons why</u> <u>some are any better / worse for you?</u> *Example reasons*

- a. Accessibility
- b. Trust
- c. Easier of understanding
- d. Speed of gaining results
- e. Traceability of outcome to support action
- f. Suitability for the type of enquiry
- g. Most up to date
- h. any more reasons?
- i. Do you have any thoughts on how decision-making resources could be improved?

<u>General 8.</u> What sort of range of intervention do you feel is within the remit of your role?

- a. Respond to findings* (*generated in F) by giving advice / making plans etc. independently
- b. Respond to findings* by working collaboratively with colleagues / o/s agencies to agree an action plan
- c. Respond to findings* by reporting problems to your manager [for their decision]
- d. [more]
- e. Do you have any thoughts on how 'intervention' practice could be improved?

<u>General 9.</u> <u>In deciding what to do are there any boundaries or</u> <u>restrictions that 'influence' your actions</u> (such as)

- a. Political influences
- b. Community needs
- c. Financial pressures

- d. Policy initiatives e.g. National Policy Statement on Urban Development Capacity 2016
- e. Concerning your organisation /workload / workspace / time/ capability / work culture etc.
- f. Do you have any thoughts on how the impact of these 'influences' could be improved?

<u>General 10.</u> When you have made decisions or plans do you know whether or not they have been successful? Such as through:

- a. Feedback on performance (in-house, external agencies, clients)
- b. Data gathered through active monitoring
- c. Evaluation
- d. Other?
- e. Does this match your own perception of 'success'?
- f. Do you have any thoughts on how your 'feedback' role could be improved?

<u>General 11.</u> <u>Are you ever involved in developing the strategies</u> [protocols / guidance / procedures] that guide your work? (through inhouse consultation, mock-up exercises etc.)

<u>General 12.</u> <u>Are there any elements of decision-making and planning</u> <u>that you would welcome more input on?</u> Such as:

- a. Own education and understanding research
- b. How to apply findings in practical terms
- c. How to manage conflicting actions (perhaps when there are crosspurposes with other initiatives in terms of manpower, time, finances etc.)
- d. How to deal with ambiguity / uncertainty:- when data is incomplete &/OR when there are no definitive actions
- e. How to manage work conditions and pressures upon your job (eg targets and workload)
- f. How to manage differing expectations upon you from different sources (eg Manager, PHU. MoH, outside agencies, general public ...)
- g. How to enhance public / client interactions
- h. How to gain additional professional support
- i. Other

APPENDIX B: PARTICIPANT INFORMATION SHEET



INFORMATION SHEET FOR INTERVIEWEES

Primary Prevention Practices in Public Health Units

April 2017

You are invited to take part in a study for the Ministry of Health (MoH). We are exploring primary prevention practices within Public Health Units (PHUs). The work aims to produce recommendations that will help PHUs to improve public health outcomes in their areas. We are in the early stages of a two-year study which includes three case studies of work undertaken by different PHUs. This entails exploring the details of a particular project you have undertaken; using it as a focus to identify the different practices, processes and conditions that influenced outcomes (successes ...or not!).

MoH has contracted a Crown Research Institute, the Institute of Environmental Science and Research (ESR) to undertake this study.

ESR will interview key informants such as yourself, by phone or in person, at a time and place that is convenient to both parties. An interview will take 45 - 60 minutes. To supplement interview notes, the interview will be audio recorded (with your consent) and transcribed by a professional transcribing service for later analysis. The interview notes and transcripts will remain confidential to ESR and comments will not be attributed to identifiable individuals without their expressed permission. You are, of course, free to decline to be interviewed or to withdraw from the interview at any time.

Contact

Graeme Nicholas ESR DDI: 03 351 0134 Email: graeme.nicholas@esr.cri.nz Sophie Hide ESR DDI: 03 351 0129 Email: <u>sophie.hide@esr.cri.nz</u>

APPENDIX C: PARTICIPANT CONSENT FORM



Primary Prevention Practices in Public Health Units

Consent form April 2017

I have read and understood the information sheet dated ______ for taking part in the study of primary prevention practice in Public Health Units.

I am satisfied with the answers I have been given. I understand that taking part in this study is voluntary and that I may withdraw from the study at any time.

I understand that in written reports, comments will not be attributed to identifiable individuals/organisations unless permission is given.

I have had time to consider whether to take part in the study, and I know who to contact if I have any questions.

I consent to my interview being audio-recorded:

YES / NO

I ______ (full name) consent to take part in this study.

Date: _____

Signature:		
0		

REFERENCES

Cash DW, Clark W, Alcock F, et al. 2002. *Salience, Credibility, Legitimacy and Boundaries: Linking Research, Assessment and Decision Making*.Research Working Paper 02-046. Harvard University, John F. Kennedy School of Government.

Durepos G, Mills AJ. 2013. Introduction: Positivist Case Study Research in Business. *Case Study Methods in Business Research*. Los Angeles: Sage

Eisenhardt KM, Graebner ME. 2007. Theory building from cases: opportunities and challenges. *Academy of Management Journal* 50 (1): 25-32

Johnson JM. 2002. In-depth Interviewing. *Handbook of Interview Research: Context & Method*. Thousand Oaks: Sage Publications

Nicholas G, Hide S, Hepi M. 2017. *Primary Prevention Practice in Environmental Health: Report 1*.Client Report for Ministry of Health FW17037. Christchurch: Institute of Environmental Science and Research Ltd.

Stake RE. 1995. The art of case study research. Thousand Oaks: Sage

Stake RE. 2005. Qualitative case studies. *The SAGE handbook of qualitative research*. Thousand Oaks: Sage

Ulrich W. 1994. *Critical Heuristics of Social Planning: A New Approach to Practical Philosophy*. Chichester: John Wiley & Sons

Ulrich W. 2003. Beyond methodology choice: critical systems thinking as critically systemic discourse. *Journal of the Operational Research Society* 54 325–42

Ulrich W. 2005. A brief introuduction to critical systems heuristics (CSH). Accessed 22 May 2013. http://projects.kmi.open.ac.uk/ecosensus/about/csh.html

Yong R, Browne M, Zhao J, et al. 2017. *A deprivation and demographic profile of the Bay of Plenty DHB*. University of Auckland Medical and Health Sciences; Health Research Council of New Zealand. Accessed: 15 May 2018. https://www.fmhs.auckland.ac.nz/assets/fmhs/soph/epi/hgd/docs/dhbprofiles/BayOfP lenty.pdf



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