Essential Public Health Functions; Carpe Diem Time for New Zealand?

Preamble

This paper, prepared for the Ministry of Health by Helen McCracken, is intended to be a think piece, a vehicle for informing and progressing discussion on the value of Essential Public Health Functions (EPHFs) in the New Zealand context. It is not a comprehensive and scholarly presentation of the issues; rather it is intended to stimulate debate. The paper reflects mainly the views of its author enhanced considerably by input from several key stakeholders. The author’s thanks and acknowledgement go to this group.

July 2004
Executive summary

The purpose of this paper is to inform discussion on the relevance and usefulness of essential public health functions (EPHFs) in the New Zealand context. Such a discussion is opportune given New Zealand’s attendance at a Western Pacific Region consultation on EPHFs in Fiji last December and our endorsement of the concept of EPHFs as an excellent tool to strengthen public health in the Western Pacific region.

The paper defines EPHFs as “identified conditions that permit better public health practice and strengthen the institutional capacity needed to deliver on public health goals”. It suggests EPHFs have developed in response to the increasing pressures being placed on public health infrastructures around the world and as a means of defining the “new public health”.

Five EPHF frameworks are reviewed in the paper.

1. The United States Core Public Health Functions: Essential Public Health Services
2. The WHO/Dephi EPHFs
3. The Pan American Health Organisation EPHFs
4. The Australian Core Public Health Functions
5. The WHO/Western Pacific Region EPHFs.

The development of each of these frameworks is summarised and some consideration is given to how the framework has been applied in practice. It is suggested there is considerable congruence among sets of functions and a clear developmental path from the early work through to the most recent.

An analysis of how EPHFs might be used to achieve positive public health outcomes is presented. This draws on the content of three key papers delivered at last year’s WHO/WPR workshop on EPHF development. The first paper delivered by Dr Tony Lower describes how EPHFs could be used to develop guidelines, tools and indicators to evaluate monitor and strengthen public health infrastructures. A second paper presented by Dr David Phillips scopes the potential of EPHFs to provide unity and stimulus to the development of the public health workforce. The third paper presented by Dr Gillian Durham discusses ways in which EPHFs can strengthen and define the central role of the Ministry of Health.

Whether it is Carpe Diem time for EPHFs in this country can, it is suggested, best be answered through informed discussion among public health stakeholders. Our public health sector needs to be more conversant with EPHFs and how they might be used to benefit public health objectives here.

It is recommended this discussion take place and that it begins with a consideration of the WHO/WPR framework. Three questions are suggested to initiate discussion.

1. Are there benefits or opportunities in adopting or developing EPHFs for New Zealand
2. Should we be looking at adopting the WHO/WPR framework or adapting it?
3. How might the work best be progressed?
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1.0 Introduction

1.1 Purpose of this paper

While there is now a considerable body of work on the development of Essential Public Health Functions (EPHFs) in other countries and regions, there has been only limited discussion amongst the public health sector in this country on the relevance and usefulness of EPHFs in the New Zealand context. This paper sets out to inform such a discussion.

Such a discussion is opportune. Last December New Zealand attended a WHO sponsored consultation on developing EPHFs for the Western Pacific Region. This meeting of senior public health representatives endorsed the concept of EPHFs as an excellent tool to strengthen public health in the Western Pacific region acknowledging that there are current limitations in implementation.

The meeting also recommended the continued development and use of EPHFs at a regional, country, provincial and programme level,

New Zealand’s endorsement of the WHO/ WPR EPHFs and the recommendation for their continued development requires a wider understanding by key stakeholders on what EPHFs are and how they might best be used to benefit public health objectives here.

A consideration of EPHFs is also timely in that potentially, it complements and feeds into the Public Health Workforce Action Plan Project (PHWAP) and associated projects (in particular the planned development of public health competencies) currently being undertaken by the Ministry of Health.

1.2 What are Essential Public Health Functions (EPHFs)?

Essential public health functions (EPHFs) are identified conditions that permit better public health practice and strengthen the institutional capacity needed to deliver on public health goals i.e. addressing the determinants of health, protecting a population’s health, and treating disease.

While essential public health function is the terminology chosen by many researchers to describe the “must do” of public health action other studies employ the term core public health function (CPHF). The two terms appear to be largely interchangeable throughout the research literature. So too are they in this paper

EPHF (or CPHF) frameworks cluster the many and diverse elements of public health activity into limited and defined functional groups. On a broad, descriptive level, EPHFs share a common body of content and provide a common language for public health across programmes, disciplines and agencies and across countries and regions.

EPHFs are a flexible and dynamic concept and set out to identify not just what the public health “effort” currently is, but also what it should and could be. EPHF frameworks are in a constant state of review and will continue to evolve and change over time. While the health sector is a key stakeholder in the concept, EPHFs also act as a framework for all areas of government, not just those that lie officially within the jurisdiction of a Ministry/ Department of Health.
EPHFs are not exclusive to the public domain. They represent public goods and in this respect governments need to ensure their provision. Governments do not however necessarily have to directly implement and finance EPHFs. This might occur through a mix of public, private and non-governmental organizations and community groups depending on what is most relevant for an individual country or region.

Some EPHFs are conceptualised as “final” in that they directly assist in meeting the end goals of public health. Examples of final EPHFs are health promotion and the control of risks and threats. Other functions are considered “instrumental” in that they are the means to achieve the end goals of public health. Examples of instrumental EPHFs are monitoring and analysing health status and developing human resources and public information.

While in some frameworks, the distinction between EPHFs and public health services or programmes is somewhat blurred, most notably in the Australian framework, for the most part, the two are seen as distinct from one another. EPHFs can be used to build the capacity to carry out public health programmes. In this way they are more akin to other “core government functions” such as revenue collection and maintenance of law and order. Like these other functions their measurement poses certain challenges.

The relationship between EPHFs and personal health care is still evolving. It is generally accepted that while personal health services are not the focus of an EPHF framework, EPHFs do involve a consideration of equity of access to personal health services, a guarantee of their quality and the incorporation of a public health perspective into individual health services.

1.3 Origins of EPHFs

Recent attempts to define essential public health functions around the world are linked to the parallel process of redefining public health itself. Over the last two decades the “old public health” with its focus on regulatory controls, disease prevention and health sector focused promotion services has evolved into the “new public health” influenced by Ottawa Charter rhetoric and with a focus on addressing the determinants of health, protecting a population’s health and preventing and managing the burden of disease. A major element of EPHF development has been the drive to identify, describe and operationalise this evolutionary process of change.

Globally, the development of EPHFs has also been driven by a number of contextual factors that have put increasing pressure on public health infrastructures. These include major demographic changes such as the ageing of populations and increasing inequalities in health, and the challenges posed by globalisation, the impact of new technologies, diseases such as SARS and emergent environmental hazards, for example global warming.

Many countries around the world have undertaken health reforms to meet these challenges. The focus however has been on structural, financial and organisational change rather than operational reform. Privatisation and decentralisation have been the main drivers of health sector reform. Both processes have contributed to a focus on personal health services. Such a climate has resulted in limited investment in the public health sector and as a consequence, a weakened infrastructure and capacity to deliver effective public health action.
This comparative neglect of public health and health outcomes in health reforms is being addressed internationally. The World Health Organisation has led the process with the release of key documents such as “Health 21: The Health for all policy framework for the WHO European Region” (1999) and The World Health Report 2000. Health systems: improving performance, (2000). However for individual countries to refocus ongoing health sector reform on investment into public health infrastructure and outcomes will involve the public health sector being able to identify what public health action is and being able to measure its effectiveness.

2.0 The EPHF journey; A tale of five frameworks

This section looks at how EPHFs have developed in a number of countries and regions of the world over the last 15 years. It begins in the United States in 1988 and ends in the Western Pacific Region in the here and now. There has been no attempt to achieve comprehensive coverage of all EPHF/ CPHF frameworks. Not only would this be outside the scope of this paper but it would also involve a great deal of repetition as each country or region has borrowed from and built on previous work.

Those frameworks that are covered are;
2.1 United States: Three Core Public Health Functions: Nine Essential Public Health Services
2.2 WHO: Delphi Study - Nine Essential Public Health Functions
2.3 Pan American Health Organisation – Eleven Essential Public Health Functions
2.4 National Public Health Partnership of Australia - Nine Core Public Health Functions
2.5 WHO: Western Pacific Region - Nine Essential Public Health Functions

The development of each of these frameworks is overviewed and some consideration is given to how the framework has been applied in practice.

This section finishes with a summary of EPHF development.

2.1 The US: Core Public Health Functions: Essential Public Health Services

Developing the framework

The United States was the first country to undertake a comprehensive body of work on the core functions of public health and the only country working in this area for much of the 1990s. The work undertaken in the US is of real significance as it has been the baseline from which most other frameworks have been developed. Work in the US has been largely carried out under the auspices of government agencies using working parties of experienced public health stakeholders to achieve consensus decisions.

The first step in the journey was in 1988 when the US Institute of Medicine identified and described three core functions of public health at a broad level; assessment, policy and assurance. Although the core functions were useful in understanding the broad role of public health, the US researchers wanted to use their work more specifically to measure public health performance, and for this, more detail was required. In 1989 the Centres for Disease Control and Prevention identified ten organisational practices associated with CPHFs, which were later reworked by the Core Public Health Functions Committee and renamed Essential Public Health Services.
United States: Core Public Health Functions: Essential Public Health Services (1994)

CPHF #1: Assessment – Includes these essential services
1. Monitor health status to identify community health problems
2. Diagnose and investigate problems and health hazards in the community.

CPHF #2: Policy Development – Includes these essential services
3. Inform, educate and empower people about health issues
4. Mobilise community partnerships to identify and solve health problems
5. Develop policies/plans that support individual and community health efforts

CPHF #3 Assurance – Includes these essential services
6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health care services and assure the provision of health care when otherwise unavailable
8. Assure a competent public health and personal health care workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population based health services

All three core functions include;
10. Research for new insights and innovative solutions to health problems

Applying the framework

This framework has been widely used in the United States for public health capacity building activities such as curriculum development, certifying local health departments using practice guidelines and developing leadership in public health at a national, state and local level.

The framework has informed the Public Health Functions Project, a major body of work undertaken by the US government in the 1990s to address the widening gap between the challenges to improving the health of Americans and the capacity of the public health infrastructure and workforce to meet these challenges. One project output has been a list of organisational competencies for each of the 10 essential public health services. These competencies are clustered under skills headings eg analytic skills, communication skills cultural skills.

The framework has also spawned the National Public Health Performance Standards Programme (NPHPSP) a partnership effort to improve the practice of public health and the infrastructure supporting public health action. The NPHPSP used the EPHS framework as the organising structure to develop performance standards that can measure the most important characteristics of a high performing public health system able to deliver the desired public health outcomes. The programme has developed three assessment instruments to assess performance standards in state and local public health systems. An underpinning belief is that if public health service providers are involved in the assessment process they will help to identify gaps in performance and capacity and be drawn to generating improvement strategies.


Visit http://www.phppo.cdc.gov/nphsp/index.asp for information on the NPHPSP
2.2 WHO: Delphi Essential Public Health Functions Study

Developing the framework

In January 1997, the WHO Executive Board recommended promoting the conceptual development of EPHFs to support renewal of the WHO Policy of Health for All by the Year 2000. Underpinning the recommendation was a concern that all countries, regardless of their level of development, were experiencing rapid changes in their health systems, which could impact very negatively on the health of their populations.

The WHO used the terminology “essential public health functions” in a different way to the US Studies. This study proceeded from concerns that countries at all levels of development were experiencing rapid changes in their health systems which might result in dramatic, negative health impacts. It began therefore with the question of whether a set of functions in public health could be identified which are “essential” because they ensure that the public health system could respond to emerging and priority needs. This concept of essential as a set of generic minimum standards is somewhat different to the US notion of essential as practices which must be undertaken to ensure that the core functions of public health are being performed.

The WHO study also undertook a different methodology to the US in order to define public health functions. Using a Delphi approach to elicit expert opinions by questionnaire they surveyed some 138 public health experts from 67 countries around the world, conducting in all three consecutive consultative rounds. Both a high response rate and a high degree of consensus were achieved in the study. The result was a set of nine EPHFs.

<table>
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<tr>
<th>WHO Delphi Study EPHFs (1998)</th>
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<tr>
<td>1. Monitoring the health situation (morbidity and mortality, determinants of health, effectiveness of public health functions);</td>
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<td>2. Protecting the environment (safe water, food quality and safety, sewerage, drainage and waste disposal, hazardous substance control);</td>
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<td>3. Health promotion (community involvement in health, information and education for health and life skill enhancement);</td>
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<td>4. Prevention, surveillance and control of communicable disease (immunisation, disease outbreak control, disease surveillance);</td>
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<td>5. Legislation and regulations related to public health;</td>
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<td>6. Occupational health;</td>
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<td>7. Public health services (including school health, laboratory services, emergency disaster services);</td>
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<td>8. Public health management (international collaboration, health policy, planning and management, use of scientific evidence, research); and</td>
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Care of vulnerable and high-risk populations (maternal health care, family planning, infant and child care).

Consensus was not reached on whether personal care services should be included in the framework. The conclusion of the second round of the Delphi study was that individual patient care should be considered a public health function only when the care provides benefits to a larger population, though the means of measuring such “spill-over effects” was not specified.

Despite differences in methodology and in notion of “essential” the US and the WHO: Delphi frameworks still share a lot of common ground. Functions in common include monitoring of health, epidemiological surveillance, health promotion, legislation and regulation. The main ways in which the WHO; Delphi study differs from the US framework is it includes two work areas (occupational health and protecting the environment) as functions and has as a major and distinct function, public health management. This latter function focuses on planning research and collaboration at a global level or between countries in contrast to the US human resources function of assuring a competent workforce.

Applying the framework

There was no expectation that the WHO: Delphi EPHF framework would be used in the same way as the US (and later) frameworks to measure performance or build public health capacity. Instead, the perceived usefulness of the study was its potential to support minimum resource requirement in countries experiencing rapid change to respond to emerging and priority public health need.

The researchers urgently recommended that new studies be conducted at the national and international level. The Delphi study certainly contributed to the development of both the methodology (the Australian) and content (PAHO) of subsequent frameworks.

2.3 Pan American Health Organisation (PAHO) Framework

Developing the framework

PAHO has supported an ongoing effort to identify essential functions as a common framework for communication within and across countries. Known as the Public Health in the Americas Initiative, the project has been a collaborative effort in conjunction with the US Centres for Disease Control and Prevention and the Latin American Centre for Health Research. It set out to first define and then measure the performance of EPHFs with an emphasis on the work and responsibility of health authorities at all levels of the State. PAHO describes essential functions as those conditions that permit better public health practices.

The specific scope of the initial project included:

- Promoting a common understanding of public health and the essential functions in the Americas;
- Developing a framework for evaluating the performance of essential public health functions applicable to all the countries in the Hemisphere;
- Evaluating public health practice in every country by measuring the degree to which the essential functions are being carried out;
- Developing a hemispheric plan of action for strengthening the public health infrastructure and improving public health practice.

In developing their own framework, PAHO acknowledged the “great strides” taken in EPHF development by both the NPHPSP project and the WHO Delphi study. They specifically searched for areas where the two approaches coincided with their own thinking. The functions they came up with differ only slightly to the US framework, the main difference being the addition of EPHF eleven. A list of function components were included with each of the 11 EPHFs and these were intended to be the basis for defining and developing standards, indicators, measurements and sub-measurements.

<table>
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<tr>
<th>PAHO Essential Public Health Functions</th>
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<tbody>
<tr>
<td>1. Health situation monitoring and analysis</td>
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<td>2. Public health surveillance, research and control of risks and damages to public health</td>
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<tr>
<td>3. Health promotion</td>
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<td>4. Social participation and empowerment of citizens in health</td>
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<td>5. Development of Policy, planning and managerial capacity to support efforts in public health and the steering role of the National health Authority (NHA)</td>
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<td>6. Public health regulation and enforcement</td>
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<tr>
<td>7. Evaluation and promotion of equitable access to necessary health services</td>
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<tr>
<td>8. Human resources development and training in public health</td>
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<td>9. Ensuring the quality of personal and population-based health services</td>
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<tr>
<td>10. Research, development and implementation of innovative public health solutions</td>
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<td>11. Reducing the impact of emergencies and disasters of health</td>
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</table>
Applying the framework

Initial measurement instruments were developed from the framework and exercises undertaken to validate these instruments in three countries; Bolivia, Columbia and Jamaica. This was done with a group of key informants that included staff from the different level of health authorities, academics and representatives of the public health professional associations. Adjustments were made as a result of the pilot studies and an updated version developed.

In September 2002 the PAHO published “Public Health in the Americas; Conceptual renewal, performance assessment and bases for action”. This book provided national health authorities in the region with a methodology for assessing how well they perform the essential functions of public health function with the longer-term goal of improving the ability of each authority to fulfil their steering role in health.

Based on the results of the assessment of performance undertaken in 41 countries and territories of the region the book’s findings included:

- In most countries there was “low to intermediate performance” overall on EPHFs.
- “Reducing the impact on health of emergencies and disasters” and “public health surveillance” were the EPHFs assessed most positively.
- The lowest performers were “ensuring the quality of personal and population-based health services” and “human resources development and training in public health”.
- A high correlation between performance in “health policies and management” with performance in nearly all other functions suggested that focused efforts to improve performance in this area were likely to yield positive results in others.
- There were shortcoings in the adaptation of surveillance systems to new epidemiological challenges such as mental health risk, risk factors for chronic diseases, occupational health and the environment.
- Common fundamental areas that, if strengthened, would likely boost performance in all functions were; evaluation and monitoring, performance incentives and information management.


2.4 The Australian Experience

Developing the framework

In 1998 the Australian National Public Health Partnership Group (NPHPG) began a major piece of work to define the core public health functions for Australia. In content and approach the study drew on both the US and WHO work. The NPHP study took an approach that:

- was closer to the US framework in terms of its focus on capacity building rather than minimum standards
- was based on expert opinions rather than working parties and so used a similar method to the WHO study
- considered functions to encompass processes, practices, services and programmes

Two rounds of questionnaires were sent out to public health experts drawn primarily from academic institutions and national and state government departments and NGOs. The first questionnaire focused on defining the characteristics of public health functions, creating a list of public health functions and establishing what make a function core. The objective of the second round was to move from a general list of public health functions to a more detailed list and to move from defining public health functions to defining “core” public health functions.

Given the diversity of the public health community in Australia, the study achieved a surprising level of consensus on what public health functions are, and which ones were the most important or core. Based on the findings nine categories of core functions were identified.

Specific practices for each function were also identified and these were classified as either “established” or “evolving”. These terms were not seen as fixed. Emerging functions could in time evolve into “core” functions or alternatively disappear/ be replaced by other concerns. It was envisaged that this would be decided by a repeat of the Delphi process after three to five years time.

Core Public Health Functions, NPHP (2000)

1. Assess, analyse and communicate population health needs and community expectations;

2. Prevent and control communicable and non-communicable diseases and injuries through risk factor reduction, education, screening, immunisation and other interventions;

3. Promote and support healthy lifestyles and behaviours through action with individuals, families, communities and wider society;

4. Promote, develop and support healthy public policy including legislation, regulation and fiscal measures;

5. Plan, fund, manage and evaluate health gain and capacity building programmes designed to achieve measurable improvements in health status, and to strengthen skills, competencies, systems and infrastructure;

6. Strengthen communities and build social capital through consultation, participation and empowerment;
7. Promote, develop, support and initiate actions which ensure safe and healthy environments;

8. Promote, develop and support healthy growth and development throughout all life stages;

9. Promote, develop and support actions to improve the health status of Aboriginal and Torres Strait Islander people and other vulnerable groups.

The set of nine functions that emerged from the Delphi process obviously owed much to both the WHO and US frameworks on which the Australian work was based. CPHFs 1 through 4 and CPHF 6 can be aligned with both frameworks while CPHF 5 owes more to the US model and CPHF 7 to the WHO study. However with CPHFs 8 and 9 the Australian framework differs from its predecessors. The Australian framework also strikes new ground with its concept of established and emerging functions and (like the WHO framework) includes services and programmes in its approach. This latter factor has resulted in some difficulties with applying the framework.

Applying the framework

Since the CPHFs were published in 2000 the NPHPG has been undertaking further work to develop public health performance indicators and public health expenditure categories to progress the application of the CPHF framework. They experienced difficulties in the development of these measures including:

- The CPHFs as written included a confusing mix of both the results (the whats) and the methods (hows) of public health activity, some contain multiple “whats” within the one function
- Much, if not the majority of both public health activity and public health expenditure categories fit within the one core function, “prevent and control communicable and non-communicable disease and injuries”.
- It was difficult to match the CPHFs and activities on a 1:1 basis with the organisation and delivery of public health services.
- Similarly it was difficult to match public health expenditure categories with CPHFs on a 1:1 basis. Some individual public health expenditure categories matched to many CPHFs and vice versa.
- Five of the 9 CPHFs were largely unmatched against public health expenditure categories
- There was no common classification system that could be used to measure expenditure as well as organise performance measurement so that performance and expenditure were disjunctive.

These differences seemed to suggest the need for some major revision of the framework if it was to be used for the purposes it was intended, developing indicators that could measure performance and inform policy decisions on best buys for public health gain. A review of the CPHFs is part of a much largely project currently underway, the Public Health Classifications Project, (National Public Health Information Working Group, 2004).

In 2002 the Western Australia Centre for Public Health used the nine CFPH to assess the current situation in providing public health services in rural Western Australia. They found many of the core function practices were not currently being performed adequately. Those core functions best covered appeared to be functions 2 (prevention and control of disease and injury), 3 (promotion and support of healthy lifestyles and behaviour) and 8 (healthy growth development across the lifespan). It was of note that less than 5% of respondents had heard of the CPHFs.

The study yielded only indirect information of the usefulness of the core functions and practices. The authors had very little comment on the extent to which their findings might reflect shortcomings in the delivery of public health in rural Western Australia, or alternatively to what extent the results might reflect the failure of the core functions to adequately capture what public health action is/ should be in this particular context.

One useful aspect of the study was identification of a number of preconditions considered necessary to provide the foundation for implementation of core public health functions. These included a public health mandate with relevant legislation and policy; finance for programmes that are public goods; a multidisciplinary workforce with adequate numbers and skill; effective information system; good leadership and management of public health organisations; dedicated resources with accountably systems; and supportive health sector regulation.

They also stressed the importance of what they term “good information relationships”. These relationships must create links within and between public health organisations, within and between relevant organizations in the health sector and between sectors. Relationships are defined in terms of the parties that are linked by the relationship, the purpose of the relationship and the functionality of the relationship.

The importance of both of these elements are picked up and elaborated on in work undertaken in the Western Pacific Region.

For more information read: W.A. Centre for Public Health, “Locational Disadvantage: Strengthening the Capacity of the Rural Public Health Workforce” (July 2002)
2.5 EPHFs for the WHO Western Pacific Region (WHO/WPR)

The WHO: WPR framework is of special relevance to the New Zealand context. As a member of the Western Pacific Region, New Zealand attended a WHO sponsored consultation on developing EPHFs for the Western Pacific Region held in Fiji last December. The meeting endorsed the concept of EPHFs as an excellent tool to strengthen public health in the Western Pacific region and acknowledging that there are current limitations in implementation, recommended the continued development and use of EPHFs at a regional, country, provincial and programme level.

Developing the framework

The WHO: WPR project was initiated to develop and pilot an EPHF framework in three countries (Fiji, Viet Nam and Malaysia) with a longer-term objective of applying the learning in other countries in the Western Pacific Region. The work was driven and developed by an International Project Team (IPT) made up of researchers and Ministry personnel from the three countries and a WHO staff member responsible for guiding the project.

The first step in this project was to identify an appropriate EPHF framework for the study. This task was undertaken during an initial planning meeting and included identifying preconditions and critical links/relationships that could add to the framework’s robustness.

The framework was developed after considering various bodies of work including the WHO Delphi study, the Australian and US frameworks and the PAHO study. The WHO framework and the Australian frameworks were excluded at an early stage of development since to date neither had developed measurement instruments. While both the US and PAHO frameworks were developing measurement tools, the PAHO framework became the model for developing the WHO: WPR EPHFs because of the addition of the management of emergencies and disaster function, considered an important issue for the WPR.

The most basic components of the framework are:

- 9 EPHFs, each with an outcome statement, and a set of tasks
- the tasks are defined in terms of a set of practices (assess, investigate, analyse, negotiate)
- these practices are the collective processes through which public health inputs are applied to deliver the functions
- the practices result in outputs (programmes and services) intended to improve health status.

The EPHFs (including the tasks, practices and services) must be delivered in a relevant context of governance and stewardship with consideration of appropriate preconditions, links, relationships and supports to be effective. The configuration of various services would depend on the context of each country.

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<th>WHO: WPR Nine EPHFs</th>
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<tbody>
<tr>
<td>1. Health situation monitoring and analysis;</td>
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<tr>
<td>2. Epidemiological surveillance/ disease prevention and control;</td>
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<tr>
<td>3. Development of policies and planning in public health;</td>
</tr>
<tr>
<td>4. Strategic management of health systems and services for population health gain;</td>
</tr>
<tr>
<td>5. Regulation and enforcement to protect public health;</td>
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</tbody>
</table>
6. Human resource development and planning in public health;
7. Health promotion, social participation and empowerment;
8. Ensuring the quality of personal and population-based health services;
9. Research, development and implementation of innovative public health solutions.

Included as an attachment to this paper is a copy of the complete framework.

Applying the framework

To provide some practical and meaningful information on the framework in action it was decided to use a case study approach rather than a pure research approach. The case studies set out to:
- Describe the extent of EPHFs in each country and their governance and stewardship
- Identify a proposal(s) for ensuring the sustainable delivery of EPHFs in the WPR as a whole
- Identify the impact on the proposal(s) from potential changes in the health sector and beyond.

Data gathering (contextual information, a stock take of EPHF activity and development of proposals for delivery) was largely qualitative. It was undertaken in each country by a small multidisciplinary team supported by a reference/advisory group. Each research team however undertook a different methodology to suit their individual, distinctive culture.

Given the differences between the three countries any comparisons and statements on common threads need to be made with caution. This said, some findings for all 3 countries were:
- Many of the EPHFs were well established
- The mandate for the core business of public health was well established in national planning documents.
- Public health leadership was vested in the Ministry of Health and its officers at lower levels in the health system.
- Academia was an important player in public health.
- There were problems with the legal frameworks for public health.
- Steps to improve accountability and transparency were underway.
- Methods were in place to encourage the effective participation of civil society throughout the health systems.
- There was investment in information infrastructure, education and communication.
- The public health workforce lacked the competency to deliver on some of the key tasks and functions, and this posed a threat to the sustainable delivery of EPHFs.
- There was a need to strengthen links and relationships to improve EPHF implementation.
- The key structural approach for EPHF delivery was integration into primary health care.

For more information read: WHO; Regional Office for the Western Pacific, Essential Public Health Functions: A three-country study in the Western Pacific Region, (2003). The full framework is included as an attachment to this paper.

2.6 Summary of EPHF/ CPHF development
Over the last decade and a half a considerable body of work has emerged on EPHFs/ CPHFs. There is a high degree of confluence among the functions. The process has been incremental, each framework borrowing aspects and elements from previous frameworks to add to their own. Certainly there is a clear developmental path from the US study through to the PAHO and WHO: WPR (and to a somewhat lesser extent to the Australian) frameworks. While echoes of the WHO: Delphi study are also found in all these frameworks it probably resonates loudest in the Australian work.

The frameworks then are highly synergistic but not homogeneous. Their differences are found in;
- geographical spread (global, regional, or individual country)
- study methodology  (Delphi consensus or working parties)
- notion of essential (minimum standard or capacity building)
- notion of function (inclusion or exclusion of services and programmes)

Underpinning these differences is the key issue of the framework’s intended use or application. Most EPHF frameworks like those developed in United States, and Australia and by the PAHO were designed and are now being used for building public health capacity. To achieve this, the initial frameworks are being used to develop lengthy self-assessment tools and organisational competencies. The WHO Delphi framework with its global focus however was only ever designed to set minimum standards and shore up resource requirements in countries facing rapid change. Instruments for measuring performance have not therefore been developed.

A good summary of EPHF/ CPHF development as a recurring theme around the world can be found on the Ontario Public Health Association web site [www.opha.on.ca/corecompetencies/litreview](http://www.opha.on.ca/corecompetencies/litreview)
3.0 Applying EPHFs to achieve public health outcomes

This section considers how EPHF frameworks might be applied to achieve public health outcomes. It draws on the content of three key papers delivered last December at a WHO workshop on EPHF development for the Western Pacific Region. The papers provide some useful pointers to how New Zealand might set about the business of using the EPHF framework to benefit public health outcomes here. A paper delivered by Dr Tony Lower describes how EPHFs could be used to develop guidelines, tools and indicators to evaluate monitor and strengthen public health infrastructures. A second paper presented by Dr David Phillips discusses how EPHFs have the potential to provide a significant unifying concept and stimulus to the development of the public health workforce. The third paper is presented by Dr Gillian Durham and discusses ways in which EPHFs can strengthen and define the central role of the Ministry of Health.

3.1 Identify the types of guidelines, tools and indicators, based on EPHFs, that would be useful in assisting Member States to evaluate, monitor and strengthen their public health infrastructures.
Dr Tony Lower (Secretariat of the Pacific Community)

Starting points:
- To improve something we must be able to control it, to control it we must be able to understand it, and to understand it we must be able to measure it.
- To apply this maxim to the complex range of activities described by EPHFs is clearly more complicated than traditional surveillance of infectious disease or behavioural risks.
- The assessments of EPHFs to date have been problematic.
- If EPHFs can be identified, evaluated and enhanced they will place countries in an improved position to respond to both the re-emergence of old threats and the challenges posed by new ones.

An EPHF evaluation should take the following factors into account to maximise a positive outcome.
- It is vital to identify a group of people that can lead any evaluation/monitoring process. This needs to involve not only high level input into evaluating and monitoring EPHFs but also individuals working closer to the public in delivering services.
- Information collected must be utilised to further grow the existing health infrastructure not as a one-off evaluation.
- Many staff may already be feeling anxious after on-going health reforms and lack enthusiasm for “more change”.
- The concept of EPHFs is new and will require some discussion/training particularly with respect to its application.
- Some frameworks have favoured the use of a checklist approach, but a disadvantage to this approach is its reliance on the quality and validity of the checklist and it does not provide any quality measures.
- An option to progress evaluation of EPHFs might be a phased approach using a matrix to reflect cost/benefits, available resources.
- Self-reporting measures need to be validated through reference to advisory groups and multiple data sources.
- A first assessment of EPHFs might for pragmatic reasons be undertaken within the auspices of the ministry/department of health.

Once data has been collected on EPHFs, action can then be taken to strengthen their implementation. Ten approaches are identified as key ingredients to strengthening EPHFs;
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<tr>
<td>1</td>
<td>Developing the public health workforce, including training and continuing education</td>
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<td>2</td>
<td>Strengthening primary health care</td>
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<td>3</td>
<td>Integrating vertical programmes</td>
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<td>4</td>
<td>Strengthening health policy development and legislative frameworks</td>
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<td>5</td>
<td>Improving data sources, collection, collation, analysis and dissemination</td>
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<td>Strengthening research capability and capacity</td>
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<td>Improving information technology</td>
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<td>10</td>
<td>Adequate funding and transparency of financial management and accountability</td>
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The paper poses eight key questions that would need addressing if EPHFs were to be further developed in the countries of the Western Pacific Region.

1. Who are the key stakeholders that may influence public health and how could they best be engaged in evaluation and monitoring EPHFs?
2. How may health reforms contribute to the evaluation and monitoring of EPHFs?
3. Would the development of a checklist system be useful to assist in defining the EPHFs system? If yes, how could it best be used?
4. In relation to the EPHFs what are the current strengths and weaknesses of the public health system?
5. What strategies may be useful when conducting a first assessment of EPHFs that would maximise the quality of assessment?
6. What systems are currently available (or easily adapted) that could be used to monitoring on-going progress on the EPHFs?
7. What local resources may already be available to strengthen EPHFs?
8. What is the system for approval of externally funded programmes and how can it be tapped to ensure the EPHFs are considered in these proposals?

3.2 Identify approaches to promote the reorientation of health professionals, managers, policy makers and government institutions towards public health, in line with the development of EPHFs

Dr David Phillips (Population and Environmental Health Programme, Institute of Environmental Science and Research, NZ).

Starting points
- The development of institutional capacity for training and education of the public health workforce is clearly a key strategic action in all EPHFs
- EPHF 6 in the WHO; WPR framework (Human resource development and training in public health) is not merely one more function but rather the one without which the other functions could not be performed.
- EPHFs have the potential to provide a significant unifying concept and stimulus to the development of the public health workforce
- Organising this from an educational and training perspective will be a real challenge.
The paper explores the inter-relationship of EPHFs and the public health workforce and highlights some of the challenges involved in incorporating EPHFs into training and educational programmes. It makes suggestions as to the possible reorientation of these programmes towards public health using the EPHF framework. It is suggested that this be undertaken through the development of a Public Health Workforce Development Plan (PHWDP).

Using an EPHF evaluation to inform the development of a PHWDP will be of particular interest to the Public Health Directorate of the NZ Ministry of Health given that it is currently developing a Public Health Workforce Action Plan to provide a strategic framework for public health workforce development in this country for the next 3-5 years.

A particular benefit of an evaluation of EPHFs for workforce development would be to facilitate the development of public health competencies derived from, and based around, EPHFs. Some specific objectives of such a development might be;

- Educational development of the workforce based on the required competencies for a given workforce group
- Improved management of the public health workforce
- Clarifying educational and workplace processes of the public health workforce, including frameworks for certification and accreditation

Such an approach challenges traditional and established approaches to workforce planning and cuts across the performance of particular activities by particular workforce groups. Key features;

- Stronger collaboration between groups from the public, voluntary and private sectors and across jurisdictional boundaries
- Recognising that traditional approaches to training are not the only approach
- Moving from a curriculum based on taught subject toward the learning of performance-based competencies emphasising demonstrated skills and behaviour.

When using EPHFs to develop competency-based curricula careful consideration needs to be paid to;

- Analysis of performance problems of EPHFs
- Definition of priorities amongst the EPHFs
- Identification of specific areas of competence for improvement
- Definition of criteria for performance evaluation
- Definition of knowledge, skills and attitudes for specific competencies
- Educational evaluation

Public health competencies should be seen as evolutionary and there would need to be a formal mechanism to update competencies to reflect changing priorities and external environments. There would also need to be a differentiation made between competencies critical to all public health practitioners and those critical to specific organisational settings.

Some caution is urged. While it has many advantages, if applied inappropriately a competency approach can result in a focus of minimum acceptable standards, increased administrative burden and a reduction in the educational content of programmes.

3.3 Discuss ways in which EPHFs can strengthen and define the central role of the Ministry/Department of Health
Dr Gillian Durham (Deputy Director-General, Sector Policy, NZ MOH).
Starting points

- EPHFs are a vehicle whereby stakeholders can increase the trust they have for a Ministry of Health. A trusted Ministry will have a central role in government and in the health sector.
- Optimum performance on EPHFs provides a tool for measuring performance and demonstrating competence.
- EPHFs can provide the foundation for taking responsibility and demonstrating caring.

The paper discusses 3 ways in which EPHFs can strengthen and define the central role of the Ministry

1 EPHFs in health system development

Health system development concerns the institutional set-up of the health sector and the way in which the functions of the health system are organised and are being performed. Defining, implementing and evaluating EPHFs as part of the steering role of Ministries/Department is a key area and primary objective of health systems development.

A matrix is used to show how optimum performance of the 9 EPHFs (as applied in the three-country study), contributed positively to effective planning and providing for future challenges and longer-term consequences (as measured by Nunn’s “Seven Revolutions” (population, hyper urbanisation, resources, technology, information, time and distance and war and conflict).

In this way an EPHF framework can be used to strengthen and define a Ministry’s central role by demonstrating the ability of our health system to address current and future challenges.

2 EPHFs and improved health outcomes

A similar matrix is constructed to demonstrate a positive relationship between the EPHFs and “managing for outcomes”. This latter phrase refers to the selection of the few vital outcomes Ministries/Departments identify as highly desirable to achieve and the key interventions needed to attain them. The matrix demonstrates how optimum performance of the 9 EPHFs as applied in the three-country study correlated positively with successfully managing for outcomes.

In this way an EPHF framework can be used to strengthen and define a Ministry’s central role by strengthening the performance of health systems and aligning management systems to achieving improved health outcomes. It is noted however that this approach has yet to prove its effectiveness.

3 Trustworthiness of a Ministry/Department of Health

There are many benefits for a Ministry that is trusted by their staff, their government, the Treasury/Minister of Finance, the health sector, development partners and the public. Being a trusted institution is essential to being ascribed a central role by these stakeholders.

A trusted Ministry/Department of Health is one in which stakeholders have confidence that the “right things will be done and the “right” things” will be done “right”. Trust reduces complexity and the need to plan for innumerable contingencies. To the extent that trust can be sustained it is efficient and reduces the need for costly arrangements.
EPHFs are a vehicle for creating trust. They can provide the tools for measuring performance whether by benchmarking, or monitoring indicators or targets and for demonstrating competence. EPHFs also provide the foundations for taking responsibility and demonstrating caring. To illustrate this relationship the paper presents a table showing how trustworthiness drew heavily on the EPHFs used in the three-country study.

Thus an EPHF framework can be used by a Ministry to demonstrate their own trustworthiness and the competence of the overall health system.

### 4.0 Moving the EPHF discussion forward in New Zealand

EPHFs have been developed in many countries/regions of the world and are being used there to ensure public health infrastructures are better positioned to respond effectively and efficiently to broadening public health demands and challenges.

So is it Carpe Diem time for EPHFs in New Zealand? This question can only be answered through a wider discussion among public health stakeholders. Certainly our public health sector needs to be better informed on EPHFs and how they might be used to benefit public health objectives here.

It is recommended that this discussion take place and that it begins with a consideration of the WHO/WPR framework. The development of EPHF frameworks has for the most part been incremental with a clear, developmental path from the US framework through to the WHO/WPR model.

Getting started with the discussion could involve three key questions.

1. Are there benefits or opportunities in adopting or developing EPHFs for New Zealand
2. Should we be looking at adopting the WHO/WPR framework or adapting it?
3. How might the work best be progressed?