Public Health Performance Project:
Report to the National Public Health Partnership Group

October 2002

National Public Health Partnership
Project Findings and Recommendations

Purpose
This report summarises the outcomes of the Public Health Performance Project. It makes 19 recommendations for consideration by the National Public Health Partnership Group (NPHPG).

Background
The terms of reference of the Public Health Performance Project are to:

- develop a set of key performance indicators for public health in Australia which fit within the health system performance tier of the National Health Performance Framework;
- direct a process for reaching agreement among jurisdictions and public health practice areas on the use of the key indicators for performance monitoring; and
- recommend mechanisms for reporting the key performance indicators including a key set through the National Health Performance Committee.

The project began work in January 2002 and is supported by a reference group with membership nominated by the National Public Health Information Working Group (NPHIWG). The membership of the Reference Group is provided in Appendix 1.

The consultation process of the project included meetings in each jurisdiction, the CDHA and the AIHW; and a discussion paper that was widely distributed to key stakeholders. In undertaking this consultation process, the project explored the context for performance measurement in public health in Australia as well as some challenges to performance monitoring in public health.

At the consultation meetings, indicators of system performance were discussed for each of the 9 core functions of public health in Australia. The dearth of system performance indicators currently being used in Australia that have any utility for quality improvement meant that the discussion focussed on ideas for improving indicators currently being used, suggesting alternative new indicators or identifying areas of activity requiring indicator development.

The discussion paper is included as Appendix 2. In addition to proposing performance indicator sets, the discussion paper raised some broader issues around developing indicators, including consideration of the utility of the National Health Performance Framework and the Statement of Core Functions of Public Health. Thirty-six responses to the discussion paper were received, and these are summarised in Appendix 3. A full transcript of responses is included as Appendix 4.

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Performance Monitoring in Public Health in Australia

There is a need to establish a more comprehensive and coordinated system of performance monitoring for public health in Australia.

The National Health Performance Committee provides the Australian Health Ministers’ Conference with comparative analysis and information on national health system performance. The NPHP contributes to this process through representation on the NHPC. This has been a fruitful collaborative arrangement.

Recommendation 1: That NPHP continues to be represented on the NHPC.

The National Health Performance Committee produces regular reports on the performance of the health sector. The National Public Health Partnership, initially through the Population Health Taskforce on Performance (PopToP) and later through direct representation on NHPC, has made a significant contribution to the development of indicators for the health status and outcomes, and determinants of health tiers of the framework. The indicators in the determinants of health tier presented in the latest NHPC report are shown in table 1 below. Many are closely related to public health activity.

<table>
<thead>
<tr>
<th>Table 1: Determinant of Health Indicators reported in the NHPC National Report on Health Sector Performance Indicators 2001.</th>
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<tbody>
<tr>
<td>• Environmental tobacco smoke: children under 15 years who live in a house with a smoker.</td>
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<tr>
<td>• Environmental tobacco smoke: workplace smoking restrictions.</td>
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<td>• Notification rates of Ross River virus by State and Territory.</td>
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<td>• Differentials in death rates across socio-economic quintiles.</td>
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<td>• Carer activity.</td>
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<td>• Voluntary work participation rates.</td>
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<td>• Proportion of adults who are current smokers.</td>
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<td>• Proportion of adolescents who are current smokers.</td>
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<td>• Proportion of adults insufficiently active to obtain a health benefit.</td>
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<tr>
<td>• Proportion of persons obese or overweight.</td>
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<td>• Proportion of persons with high blood pressure.</td>
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<td>• Low birth weight babies of Indigenous mothers and non-Indigenous Australian mothers.</td>
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In the same report, indicators of system performance for public health activity were limited to the areas of breast and cervical cancer screening and immunisation. The indicators for public health for the health system performance tier are shown in table 2 below.

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Table 2: Health System Performance Indicators for Public Health reported in the NHPC National Report on Health Sector Performance Indicators 2001

- Cervical cancer screening: proportion of females aged 20-69 years screened for cervical abnormalities in a 24 month period by age groups.
- Breast cancer screening: proportion of females screened through the BreastScreen Australia Program in a 24 month period for the target age group (50-69 years).
- Immunisation: proportion of children fully vaccinated at 12 and 24 months of age.

The Public Health Performance Project aimed to develop a set of key performance indicators for public health in Australia which fit within the health system performance tier of the National Health Performance Framework. The consultation process described above has led to the development of this indicator set, shown below in table 3.

Table 3: Indicators proposed for inclusion to NHPC for inclusion in next report on health sector performance indicator.

- The percentage of women screened through the BreastScreen Australia Program in a 24-month period for the target age group (50-69 years)
- The percentage of women having pap tests for cervical screening in a 24-month period for the target group (20-69 years)
- Proportion of children fully immunised at 1 year and 2 years of age.
- Proportion of people aged 65 years and over who were immunised for influenza in the previous 12 months.
- Proportion of injecting drug users, participating in surveys carried out at needle and syringe programs, who reported use of a needle and syringe after someone else in the month preceding the survey.
- Proportion of current smokers aged 12-15 years and 16-17 years who reported that they had personally purchased their most recent cigarette.

The proposed set has a number of limitations. The indicators do not reflect the breadth of public health activity, but rather those areas for which performance data is currently available, mostly in the area of preventive health services. However, recommendation of the set will broaden the areas of public health that are represented in future reports of the NHPC. The set can be modified as further work in the area of public health performance measurement produces more or improved indicators.

Recommendation 2: That NPHP recommends a set of indicators to the NHPC for reporting on system performance for public health in annual reports on health sector performance. The indicators proposed are in table 3 above.

Recommendation 3: That NPHP advises the NHPC that the recommended indicator set is limited with regard to the scope of public health activities that it covers, and that the set will be revised and improved over time.

In order to ensure consistency of data analysis and reporting over time, it is essential that technical specifications for the recommended indicators be developed. The AIHW knowledgebase provides a national clearinghouse for such technical specifications. The underlying data elements for these indicators should also be recorded and stored using standardised methods. The National Health Data Dictionary is the appropriate clearinghouse for data element specifications.

Recommendation 4: That NPHIWG leads the development of technical specifications for the indicators proposed for reporting by the NHPC, and publishes these on the AIHW knowledgebase.

Recommendation 5: That NPHIWG leads the development of an application to NHIMG for inclusion of data elements used in the proposed indicators in the National Health Data Dictionary.

There are a number of areas of public health practice that are currently not represented in the indicators proposed for reporting by the NHPC in reports on health sector performance. In order to make the set recommended more representative of public health action in the short term, some key areas have been identified as priorities for identifying indicators of system performance.

Recommendation 6: That NPHIWG collaborates with SIGNAL, SIGPAH, SIPP and the enHealth Council to identify one indicator for each area of practice for reporting in the system performance tier of the National Health Performance Framework.

Because reports of the NHPC report on system performance for the whole health system, there is limited capacity to include indicators for all aspects of each sector.

Some public health programs have well developed mechanisms for performance monitoring, in particular those program with PHOFA agreements. For many public health activities there is no national mechanism for performance monitoring. In addition, there are many areas of public health practice for which there are not good measures of system performance.

Under the Memorandum of Understanding to establish the National Public Health Partnership, the Commonwealth has the responsibility to “monitor, evaluate and report on the performance of national public health strategies and programs”, while the States and Territories have responsibility to “monitor health issues and outcomes and report on the performance of public health functions as agreed”.

The Public Health Performance Project identified broad support for the NPHP playing a central role in monitoring the performance of public health activities in Australia. There was agreement that the primary purpose of performance monitoring by the NPHP should be for quality improvement, rather than accountability.

Recommendation 7: That the NPHP considers adopting, as one of its objectives, “improving the quality of public health activities in Australia, through monitoring and reporting performance, and developing strategies for improvement.”
As well as identifying indicators for reporting by the NHPC, The Public Health Performance Project has identified a further set of indicators that are of particular interest to this NPHP. This set contains indicators that are unlikely to be of interest to the NHPC as well as indicators that are more developmental in nature. These indicators are listed in Appendix 5.

A number of options for reporting this extended set of system performance indicators for public health could be considered by the NPHP:

- reporting the indicators in the annual report of the NPHP
- production of a public health performance report, in collaboration with the NHPC and/or the AIHW
- approaching the AIHW to include the indicators in established reports such as Australia’s Health

In any such reporting, it is not intended that all of the indicators shown in Appendix 5 would be presented by jurisdiction. In some cases, reporting at the national level only is appropriate, while for others breakdowns according to populations of interest, such as indigenous persons, or by socio-economic status, would be preferred.

Some of these indicators have established data collections, while others require further refinement and the establishment of data collection and reporting mechanisms. This work will require collaborative work between NPHIWG and various other subgroups of the NPHP.

Recommendation 8: That the NPHPG consider mechanisms for reporting a broader set of system performance indicators for public health in Australia.

Recommendation 9: That subgroups of the NPHP actively engage in developing indicators of system performance in collaboration with NPHIWG. Subgroups may also choose to develop larger sets of indicators for reporting through other mechanisms (eg. web)

Recommendation 10: That performance indicator development, performance measurement and monitoring be part of the ongoing work plan on the NPHP and its subgroups. New indicators should be added as they are developed and revised. Indicators should continue to reflect current public health practice.

There are a number of other national groups and processes involved in performance monitoring of public health activities. The Report on Government Services dedicates a large section to breast cancer screening, as well as indicators for immunisation, cervical cancer screening and childhood infectious diseases. The Commonwealth Department of Health and Ageing, through Public Health Outcome Funding Agreements, monitors performance for a range of public health programs for which there is significant federal investment. Some jurisdictions have mechanisms for monitoring performance for some public health activities.

Priorities for indicator development

The Public Health Performance Project developed a number of new indicators of system performance. Many of these indicators, require further refinement or the development of agreed performance standards and tools for assessment against these standards. In addition to the development of technical specifications for these indicators, many will require the development of data collection and reporting mechanisms. The indicators, which are to be referred to various specialist groups, and the proposed actions, are shown below. Many of these indicators are the domains of NPHIWG, enHealth Council and SIPP. The indicators and the proposed actions are in Appendix 5.

Recommendation 12: That NPHIWG coordinates the further refinement and development of the indicators developed by the Public Health Performance Project that are shown in Appendix 5.

The Public Health Performance Project had difficulty in identifying system performance indicators for some areas of public health activity. In general, these areas were those which rely on community-based activity or are focused on partnerships with other sectors. These activities are generally more diverse in nature than preventive health services.

Priorities for indicator development should be identified by determining those areas of public health activity that would benefit most from an investment in quality improvement. In practice, the areas identified as priorities for indicator development are those in which there is significant investment as measured by the National Public Health Expenditure Project for which identifying suitable indicators was very difficult.

Recommendation 13: That the NPHP prioritises the following broad areas for the development of system performance indicators. That NPHIWG collaborate with appropriate NPHP subgroups to facilitate performance indicator development for these priority areas.

The following areas are proposed as priorities for indicator development;

- Primary prevention for non-communicable diseases (in particular public health nutrition, physical activity, injury prevention, and mental health)
- Communicable disease surveillance and response (excluding immunisation)
- Primary prevention for illicit and licit drugs
- System capacity and infrastructure (including workforce)
- Environmental health
Core Functions of Public Health

The Public Health Performance Project organised indicators of system performance around the nine core functions of public health in Australia. It proved to be a useful framework for ensuring that indicators were considered for a range of public health activities.

However the statement has a number of shortcomings as a framework for organising or developing indicators of system performance. Firstly, the organisation of the core functions and the activities to perform those functions cannot easily be reconciled with the way public health services are organised and delivered. Activities that would usually be performed by a ‘unit’ of a public health service are often described within multiple core functions.

Secondly, a great deal of public health activity fits within one of the core functions (Prevent and control communicable diseases and non-communicable diseases and injuries through risk factor reduction, education, screening and other interventions). It may be possible to further ‘unpack’ the activities in some areas to more comprehensively describe areas of significant investment and action, while perhaps merging some of the smaller functions.

Finally, it would be desirable to use a common classification system for public health that can be used for measuring expenditure as well as for organising performance measurement activities. At present the National Public Health Expenditure Project uses its own ‘definitions’ of public health activity5.

Recommendation 14: That NPHIWG undertake the development of a classification system for public health that can be used to further develop the categories used by the National Public Health Expenditure Project, for performance monitoring by the National Public Health Partnership, and to inform a future review of the core functions for public health.

National Health Performance Framework

The National Health Performance Committee led the development of the National Health Performance Framework to support performance monitoring across all sectors of health6. The framework consists of three tiers, health status and outcomes, determinants of health and health system performance. Each tier is separated into domains providing further structure to the Framework. The Public Health Performance Project was focussed on the third, health system performance tier.

The consultation process identified several issues in relation to using the National Health Performance Framework for developing indicators to assess system performance for public health services.

As much public health activity aims to reduce the prevalence of risk factors for ill-health, measures of these risk factors and in some cases health outcomes are important for monitoring effectiveness. There is considerable overlap among the ‘effective’ domain in the system performance tier of the Framework with the health

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status and outcome and determinant of health tiers, making considering each tier within the Framework separately difficult.

One way forward is to consider the degree to which factors outside the control of the health system influence the health determinant or outcome in question. To be considered an indicator of system performance, modifying the health determinant or outcome should be the specific purpose of the public health activity, and factors within the control of the health system should have a dominant influence on the determinant or outcome. Where there are external influences, these should be estimated and adjusted for where possible.

**Recommendation 15:** That the NPHP recommends to the NHPC that measures of health determinants or health outcomes be considered as indicators of public health system performance where modifying the health determinant or outcome is the specific purpose of the public health activity, and where factors within the control of the health system have a dominant influence on the determinant or outcome.

Another issue in using the Framework was the lack of any explicit link between indicators of system performance reported against tier 3 with those of determinants of health and health outcomes reported against tiers 1 and 2. One way to introduce linkages is to present indicators as matched ‘sets’ where appropriate. For example, if an indicator addressing enforcement of tobacco advertising legislation is reported against tier 3, the matching tier 2 (smoking prevalence) and tier 1 (lung cancer incidence rate) indicators would also be reported. Making explicit links between indicators of system performance and indicators of determinants of health and health outcomes may address the apparent disconnection between the tiers of the Framework.

**Recommendation 16:** That the NPHP recommends to the NHPC that, when reporting indicators against the National Health Performance Framework, the links between indicators of system performance and determinants of health and health outcomes be made explicit and the indicators grouped together.

The Public Health Performance Project did not aim to ‘populate’ each of the nine domains within the health system performance tier. The proposed indicators were however ‘fitted’ to these domains. This exercise raised issues associated with the utility of the health system performance domains and their descriptors for public health. Some of these descriptors reflect a focus on personal care services, and may be able to be modified to accommodate a range of health services.

**Recommendation 17:** That NPHIWG develops recommendations regarding ways that the framework could be made more useful from a public health perspective, and submits these as input into the NHPC’s 3-year review (due in 2004).

Despite public health having difficulty identifying with the system performance domains of the National Health Performance Framework, there was support for the continued use of the Framework for monitoring performance for public health activity. The benefits of using a common national framework across the health sector were highlighted in responses to the discussion paper.

**Recommendation 18:** That the National Public Health Partnership continues to use the National Health Performance Framework as a tool to assist monitoring performance of public health services throughout its work program.
Statement of Priorities and Goals for Public Health

One criticism of the process used in the development of key performance indicator sets by the Public Health Performance Project was the lack of objective priority setting for the inclusion of indicators. While the various national strategies that are available for some specific areas of public health practice provide some guidance to priorities within that area of activity, there is no national statement that identifies priorities for the sector generally.

The Public Health Performance Project Discussion Paper invited comments regarding the development of a national statement that sets out the short-, medium-, and long-term priorities and goals for public health in Australia. Comments were also invited on how such a statement could be developed.

The development of such a statement was generally supported. Some concerns were raised regarding the relationship with National Health Priority Areas and regarding the dilution of State and local priorities and activity. Clarifying the purpose of such a statement was suggested.

The NPHP was considered to be the appropriate group to lead the development of such a statement. Suggestions for how the statement could be developed were based around comprehensive consultation processes, including organisations such as the Public Health Association of Australia, other non-Government Organisations as well as key state-based strategic groups such as the NSW Public Health Forum.

Recommendation 19: That NPHP consider the development of a national statement that sets out the short-, medium-, and long-term priorities and goals for public health in Australia.