

# Influencing population health performance: introduction of standards for area health services in New South Wales

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**Abstract:** Standards are a yardstick against which performance can be assessed and improved. Standards are well established in healthcare settings; however, population health standards have only recently been developed for area health services in NSW. This paper describes international and Australian population health standards, and presents the results of a pilot evaluation of the *NSW Population Health Standards for Area Health Services* against the Greater Western Area Health Service performance requirements. The findings revealed that the standards relating to the work of specialist population health staff feature in performance requirements; however the standards requiring the contribution of other health service staff do not. Population health standards have the potential to guide the health system towards population health goals.

The goals of the NSW health system encompass a commitment to improve the health of the whole population and to reduce health inequalities between population groups.<sup>1</sup> These goals can be realised by embedding a population health approach at both strategic and operational levels. Key elements of this approach include:

- use of population health data to inform service planning,
- utilising the best available evidence to inform policy and program development,
- addressing the determinants of health and their interactions,
- collaborating across sectors and involving stakeholders to achieve tangible outcomes,
- building and maintaining capacity for action through workforce development and budgetary investments and
- being accountable to the public for what health outcomes are achieved.

A population health approach should therefore: be core business for health planners and population health practitioners; be integral to the work of primary health care providers; and influence the operations of the acute care sector.

A set of population health standards which focus on the promotion, protection and maintenance of the health of the community is a potential means for improving organisational performance in population health and demonstrating that the NSW health system's obligations to the people of NSW have been met. Since the mid 1990s, there have been efforts to define and measure population health performance in Australia, the USA, Canada and the United Kingdom (UK). In 2004, the NSW Department of Health began developing the *Population Health Standards for Area Health Services* (the *Standards*).

This paper reports on the development of the *Standards* and assesses how well they are reflected in current area health service performance requirements.

## Development of population health standards

Peer-reviewed literature on this subject was identified through electronic databases (Medline, PubMed, Journals@Ovid Full Text). The grey literature was identified through Internet searching using Google and by searching specific websites including Public Health Agency of Canada, Department of Health (UK), Centers for Disease Control and Prevention (USA) and National Public Health Partnership (Australia). Additional literature was sourced from experts in the population health field and reference lists from relevant articles and reports.

### International experience

Most peer-reviewed literature in this field originates from the USA, where processes to develop and introduce a national set of performance standards for public health practice commenced in 1997.<sup>2</sup> In the USA, the term 'public health' is used rather than 'population health'. The USA standards are based on '10 Essential Public Health Services' and link to the core functions of public health: assessment, policy and assurance.<sup>3</sup> The standards apply to the public health system as a whole and recognise the influence of community members and partner organisations on health system performance. Three instruments covering State Public Health Systems, Local Public Health Systems and Local Public Health Governance are used to assess performance against these standards.<sup>4</sup>

In England and Wales, a new performance framework is being implemented, driven by *Standards for Better Health* which sets out the level that all organisations providing National Health Service care are expected to meet.<sup>5</sup> Standards for public health are included. A process for measuring performance using the standards was introduced in 2005–2006.

The Canadian government identified population health as a 'key concept and approach for policy and program development aimed at improving the health of Canadians'.<sup>6</sup> A population health template was developed that set out current understandings of population health, outlined processes required to implement a population health approach and gave guidance on assessing preparedness and capacity to implement. The template was presented as a resource for policy makers, program planners, health educators, evaluators, grant reviewers and writers, researchers and academics. It was not presented as a set of standards, although the conceptual model and content could have formed a basis for standards within the Canadian health system.

### Australian experience

In Australia, the former National Public Health Partnership facilitated discussion on improving the quality of public health practice<sup>7,8</sup> and produced resource documents.<sup>9,10</sup> The partnership commissioned the National Delphi Study on public health functions to identify a 'common reference point for any exercise where a standard definition of public health is needed, for example when developing performance measures and standards, or examining whether core functions are being delivered to acceptable standards'.<sup>11</sup> The study led to a statement of core functions for current public health practice in Australia.<sup>12</sup> The 2006 edition of the Evaluation and Quality Improvement Program (EQuIP) standards, produced by the Australian Council on Healthcare Standards, has for the first time, included one specific population health standard: 'the organisation promotes the health of the population'.<sup>13</sup>

### NSW developments

In 2004, the Population Health Division of the NSW Department of Health convened a group of population health experts to consider a range of documents on population health standards, performance management and program evaluation, and develop a draft version of the *Standards*. They used the Occupational Health Safety and Rehabilitation Numerical profile<sup>14</sup> and the EQuIP standards<sup>15</sup> as a guide for the structure. Comment was sought from stakeholders, including those from the NSW Department of Health, area health services, Senior Executive Advisory Board, NSW Public Health Forum and Australian Council on Healthcare Standards.

The final version of the *Standards*, completed in late 2005, consisted of 17 individual standards organised under six functions (Box 1). The Greater Western Area Health Service (GWAHS) agreed to conduct a pilot assessment and evaluation of the *Standards*.

### GWAHS pilot evaluation

GWAHS set up an evaluation group in March 2006 with representation from GWAHS, Broken Hill Department of Rural Health University of Sydney and the Centre for Chronic Disease Prevention and Health Advancement, NSW Department of Health. The relevance and acceptability of the *Standards* and practicalities of assessment were to be determined by:

- mapping the *Standards* to the 2005/2006 GWAHS Performance Agreement and Population Health Service Agreement and describing the degree to which these performance requirements address each standard (presented in this paper),
- describing the extent to which the *Standards* relate to the National Public Health Partnership Statement of Core Functions<sup>12</sup> and
- documenting the views of area health service staff regarding the *Standards*, their application to GWAHS and the assessment process (to be presented in a subsequent paper).

### Mapping the Standards to GWAHS performance requirements

Area health service performance agreements and service agreements specify the key roles, responsibilities and deliverables for the NSW Department of Health and area health services. Each standard was compared with the 2005/2006 GWAHS Performance Agreement and GWAHS Population Health Service Agreement. Three categories were used to describe the extent to which the *Standards* are reflected in formal performance requirements:

- high, i.e. standard is reflected in performance requirements;
- medium, i.e. standard is partly reflected through performance indicators/targets;

**Box 1. Population health standards for area health services (AHS)**

Function 1: Planning and evaluation	
Standard 1.1	Population health data informs Area plans
Standard 1.2	Best available evidence on interventions has been identified
Standard 1.3	Logic for recommendations and conclusions is explicit and justified
Standard 1.4	Plans are developed with involvement by stakeholders, including members of the public
Standard 1.5	AHS programs and services are evaluated for effectiveness and efficiency
Function 2: Surveillance and monitoring	
Standard 2.1	Area maintains sensitive systems for early detection and monitoring of health hazards and determinants
Standard 2.2	Effective infectious disease surveillance in place
Function 3: Health promotion	
Standard 3.1	Area undertakes evidence-based, priority driven, outcome oriented primary prevention activities
Standard 3.2	Area undertakes evidence-based, priority driven, outcome oriented secondary prevention activities
Standard 3.1	Area undertakes evidence-based, priority driven, outcome oriented tertiary prevention activities
Function 4: Health protection	
Standard 4.1	Outbreaks of illness, clusters of disease and health hazards are investigated and responded to in a timely and effective way
Standard 4.2	Health protection regulatory obligations are effectively and efficiently discharged
Standard 4.3	Arrangements for public health input to disaster management are in place, tested and are effective when deployed
Function 5: Effective partnerships	
Standard 5.1	AHS maintains effective partnerships to optimise service and program delivery
Function 6: Resource management	
Standard 6.1	AHS has an appropriate workforce to undertake population health activities
Standard 6.2	AHS has training and support systems in place to optimise and retain its workforce
Standard 6.3	Area population health budget is commensurate with population health needs and targets

- low, i.e. standard is not considered or indicators/targets do not enable assessment of performance against the standard.

Categories were initially applied by one of the authors (JL), then discussed and agreed by the evaluation group. Table 1 outlines the results.

Overall, the mapping process found that the *Standards* which are reflected in current performance requirements are those that relate most closely to the work of specialist population health staff (for example, surveillance and monitoring, health protection, and primary prevention). The *Standards* that require the contribution of other health service staff to be realised, for example, the *Standards* that related to planning, partnerships, resource management, secondary and tertiary prevention activities, and evaluation, are not so well reflected in current performance requirements.

‘Equity’ was referred to in all three documents but the indicators and targets that would be needed to monitor performance were lacking in the performance requirements. ‘Access’ was referred to in the performance agreement but not developed further and not considered in the *Standards*.

**Discussion**

Embedding a population health approach at both strategic and operational levels requires the commitment and involvement of health service staff throughout the system. If the population health approach of the NSW health system is confined to the work of specialist population health, then the twin goals of improving the health of the whole population and reducing health inequalities between population groups will not be met.

Standards can relate to infrastructure (such as personnel or budget), processes (such as services or interventions) or outcomes (such as mortality or morbidity).<sup>16</sup> Depending on the maturity of the system or organisation to which standards are applied, emphasis may be placed on infrastructure (for newly formed systems) or outcomes (for mature systems).<sup>17</sup> The *Standards* currently focus on infrastructure and processes. In contrast, standards applied to health care settings have shown a recent shift in emphasis to outcomes.<sup>18</sup> Future iterations of the *Standards* may follow the same trend. When using the *Standards* to assess performance at the organisational level, differences in organisational development also need to be acknowledged when interpreting, and in particular, if comparing, assessment results.

**Table 1. Extent to which *Population Health Standards for Area Health Services* are reflected in 2005/2006 GWAHS performance requirements**

<i>Population Health Standards</i>	<b>GWAHS Performance Agreement<sup>A</sup></b>	<b>GWAHS Population Health Service Agreement<sup>A</sup></b>
Planning standards (1.1–1.4)	Low	Medium
Evaluation standard (1.5)	Medium	Medium
Surveillance and monitoring standards (2.1–2.2)	Medium	High
Health promotion standards (3.1–3.3)	Medium	High
Health protection standards (4.1–4.3)	High	High
Partnerships standard (5.1)	Low	Low
Resource management standards (6.1–6.3)	Low	Medium

<sup>A</sup>Low, standard is not considered or indicators/targets do not enable assessment of performance against the standard; medium, standard is partly reflected through performance indicators/targets; high, standard is reflected in performance requirements

Standards in population health have been used for improving quality of population health services, for enhancing accountability and for strengthening the evidence base of population health practice.<sup>19,20</sup> If standards are to be used effectively for performance accountability, the following are required:<sup>21</sup>

- training and technical assistance to conduct assessments,
- suitable surveillance systems to collect and analyse assessment data,
- participation of community and partner organisations in assessment,
- direction on how to use assessment results to improve performance and
- ongoing research on relationships between infrastructure, process and outcome.

Standards need an underpinning conceptual framework which adequately defines components of the population health system and how they fit together.<sup>19</sup> The task of defining the system and its component parts is difficult when population health in Australia continues to evolve.<sup>22</sup> The Standards implicitly draw on the National Public Health Partnership *Statement of Core Functions* and understandings of a ‘population health approach’. The draft *Healthy People 2010: the Population Health Plan for New South Wales* sets out one framework.<sup>23</sup> Further work is required to refine the framework of the *Standards*, so that they fit with the NSW health system in a clear, relevant and meaningful way.

Area health services form only part of the health system in NSW. Population health standards are relevant to all parts of the system, including the NSW Department of Health. In the USA, public health standards apply at both state and local levels.<sup>4</sup>

The area health service performance agreements set down health system priorities. Population health priorities need to

be on that agenda and population health standards have a role in guiding that agenda. Standards which clearly describe where the system needs to be putting effort in population health, and the associated performance requirements, indicators and targets, would assist development of future performance agreements. Population health standards have the potential to focus debate, provide consistent language and lead to a system-wide and integrated approach to making population health ‘everybody’s business’.<sup>24</sup>

### Conclusion

Population health standards can assist in embedding population health in the business of the health system at the policy, operational and individual practice levels. However, international experience shows that to use population health standards on a system wide basis and to assess performance against these standards, considerable investment is needed to support implementation and to engage partner organisations and communities in the process.

### Acknowledgements

The authors wish to acknowledge Ross O’Donoghue and the members of the original working group who developed the *Population Health Standards for Area Health Services*: Peter Sainsbury, Jeanette Ward, Mark Ferson and Sarah Thackway.

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