Bulletin. We hope that the new production process will improve the Bulletin's timeliness, enable authors to reach a wider audience, give messages in the Bulletin greater penetration, and link readers to the broad public health literature. We look forward to receiving your comments about any of these new features.

### References

1. Centre for Epidemiology and Research and Hunter Valley Research Foundation. Better Health Graphs (Volume 1): A report of an experimental study of interventions for improving graph comprehension. Sydney: NSW Department of Health, 2006.

## **EDITORIAL**

# Strengthening learning opportunities to promote the capacity of the public health workforce

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A skilled workforce is the major strategic resource for any industry. The articles in this issue propose ways to provide effective and accessible learning opportunities for the public health workforce in NSW and consider the potential contribution of standards to monitor population health practice including sustaining workforce capacity.

Problem solving skills in complex situations are particularly valued by health services and we need to develop this ability within the public health workforce. Research by Breen for the UK National Health Service found that effective workplace learning had three characteristics: it involved problem solving, occurred through group work and had the support of management.1 Problem-based learning (PBL) is well established in undergraduate and medical education, where it has been demonstrated to develop problem solving skills, critical thinking, teamwork and an ability to deal with complexity. Schmidt has shown that it helps medical students to acquire competencies relevant to professional practice.<sup>2</sup>

Two articles 'Problem-based learning in public health workforce training: a discussion of educational principles and evidence' and 'Using problem-based learning in public health service based training' examine PBL methods and their potential application to workplace learning. Together these articles seek to answer whether PBL can be applied in postgraduate public health education that is delivered within the service environment.

Trevena reviews the literature describing the use of PBL in health education, and public health education in particular. Despite the benefits and growing application of PBL in health education there is a scarcity of literature describing its application in public health, particularly at the postgraduate level. This paper was used to inform discussions to develop a PBL approach for the NSW Public Health Officer Training Program. Heading, Lyle, Fuller and Madden describe an outcome of these discussions, a PBL workshop developed by The Broken Hill University Department of Rural Health in partnership with public health professionals from the Greater Western Area Health Service and the Training Program. The evaluation of this workshop found that participants like this way of working and learning. These findings were applied to a second PBL workshop for the Training Program, developed by the Northern Rivers University Department of Rural Health and public health professionals from the North Coast Area Health Service.

There is a growing appreciation of the potential contribution that telehealth can make to education, training, mentoring and administrative functions for public health. The use of communication technologies offers one way to increase equity of access to learning opportunities between locations and in particular for isolated practitioners in rural and remote settings. Twenty-six percent of the NSW population live in rural and remote areas and these populations generally have lower health status than the rest of NSW. The NSW Telehealth Initiative was established in 1996 to improve access to health services for these people. Since then it has sought to both expand existing services and encourage innovation in the application of the technologies to support the health of the people of NSW. The NSW Telehealth Initiative is now one of the largest

integrated telehealth networks in the world with 270 sites across NSW.

However, the capacity of the public health workforce to engage with these resources has been restricted by their knowledge of communication technology and how and when the different techniques are best applied. The article 'Use of communication technologies by the public health workforce in NSW' describes the findings of a study undertaken in partnership with the NSW Telehealth Initiative. This survey of a small sample of public health workers explored their current understanding and use of communication technology for both training and general communication purposes. Resources like the Bug Breakfast Delivery Manual (a brief description of which follows the telecommunications article) are designed to help the workforce use communication technologies efficiently.

Two of the standards included in the recently developed Population Health Standards for Area Health Services are that there is an appropriate workforce to undertake population health activities and that the area health service has training and support systems in place to optimise and retain its workforce. The article 'Influencing population health performance: introduction of standards for area health services in New South Wales' describes the development of these standards by the NSW Department of Health and the subsequent piloting of these standards in the Greater Western Area Health Service. These standards are seen as a way to improve organisational performance in population health and complement the development of similar standards at a national level and by other countries.<sup>3</sup>

The medical teams from Australia that responded to the tsunami that occurred on Boxing Day 2004 included many public health professionals. The final article in this issue 'Health surveillance among Australian health workers assisting tsunami victims in Aceh, Indonesia' describes the measures taken to protect the health of the first medical team that went to Aceh in Indonesia following the tsunami. This article offers suggestions for how to prevent illness among a workforce located in a difficult environment.

Since 1990 when systematic public health structures in NSW were considerably augmented, NSW Health has continued to develop a public health infrastructure and workforce. Growing the capacity of this public health workforce, helping them to acquire knowledge and skills to meet both existing and emerging workplace issues while also recognising their passion and commitment, is a challenge. The articles in this issue offer innovative ways to achieve this.

#### References

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