

# USING NSW HEALTH SURVEY DATA FOR LOCAL PLANNING AND EVALUATION IN NSW

*Chris Rissel*

*Health Promotion Unit*

*Central Sydney Area Health Service*

The NSW Health Survey provides high quality data for a range of indicators of public health importance at a state and area health service level. The data can be used to advocate for local population health priorities; to measure changes in health status or health behaviours over time; and to evaluate local interventions. The survey process also can be used to develop local research priorities. This article describes some of the ways that data from the NSW Health Survey Program have been used for local planning and evaluation in the Central Sydney Area Health Service.

## USING HEALTH SURVEY DATA IN CENTRAL SYDNEY

### Advocacy for population health

The value of good local data for population health advocacy cannot be understated. It is now possible to accurately identify health issues within an area health service where the levels are better or worse than in other area health services or for the state as a whole. For example, Central Sydney has a significantly higher proportion of women with raised scores for psychological distress than all other area health services in NSW, and is the only area health service that has a statistically higher level than the rest of the state.<sup>1</sup> Another example is that Central Sydney has the lowest proportion of households that have restrictions on smoking indoors.<sup>2</sup>

It can be of great value for advocacy or to support planning strategies to compile a summary report of key population indicators or a profile of health behaviours for an area health service.<sup>3</sup> Experience in Central Sydney suggests that local staff refer extensively to or quote from such reports in strategic planning documents or funding applications.<sup>4</sup> Of course, findings of significant local variations need to be explored, confounders identified, and explanations sought. Consequently, conclusions from reports reviewing population health data often suggest that either more research is needed to better understand a significant problem, or that funding of effective interventions is necessary.

### Evidence-based public health practice

The ready availability of the data from the NSW Health Survey Program increases the capacity of public health practitioners to work according to evidence-based principles. Precise estimates of indicators means decisions about local priorities can be based on evidence, and also some of the factors associated with these priorities can be described. This is a major improvement on the past where there was no consistent or comprehensive statewide collection of population health data.

### Evaluation of local interventions

Another important use of NSW Health Survey data is for the evaluation of local interventions. For example, the smoking prevalence data collected in the 1997 NSW Health Survey is being used as a baseline for one aspect of the evaluation strategy of the Central Sydney Tobacco Control Plan.<sup>5</sup> The next round of data collection will indicate our progress on several key measures. Our analyses will also need to look at the rate of change in the rest of the state or other metropolitan area health services, and the NSW Health Survey data will provide the data to allow this analysis.

### Development of new interventions

The low proportion of smokefree homes in Central Sydney prompted further analyses of the data and the development of a community-based intervention.<sup>2</sup> Factors found to be associated with smokefree homes in NSW included having small children in the house, speaking a language other than English at home, having more than 10 years of education, being under age 35 years, and being employed in a smoke-free workplace.<sup>6</sup> A local intervention was developed to increase awareness of the importance of having a smokefree home. As resources for a rigorous evaluation were not available, a convenience sample of residents found good recall of the intervention message but no change in the proportion of smokefree homes compared with a non-equivalent comparison area.<sup>7</sup> However, this evaluation strategy may not have been sufficiently comprehensive to detect real changes and new data from future NSW Health Surveys will allow further testing of this evaluation question.

### Special local topics

The design of the NSW Health Survey Program allows for a short set of specific questions to be included that are only asked of respondents from within one area health service (or more if other areas share the same interest and also use the same question). The results of these questions can be linked to the main dataset for comprehensive analyses. For example, respondents from Central Sydney aged 41 years or more were asked extra questions on urinary incontinence, which has highlighted the high prevalence of urinary symptoms in older persons (53 per cent of men and 61 per cent of women).<sup>8</sup> By linking data with the main dataset, significant associations between urinary symptoms and factors such as psychological distress, poor self-reported health, and lack of private health insurance, were found.<sup>8</sup>

### Supporting research

Area health service-specific questions can also be used to further refine survey questions and are invaluable for collecting pilot data which can be used in support of research grant applications. The use of questions on sexual health behaviour administered over the phone to

randomly selected respondents demonstrated that it was feasible to collect such data, that there were very few respondents who refused to answer questions, and respondents provided data that was consistent with both the international literature and locally available data.<sup>9</sup> These pilot study results contributed to funding being awarded for a large national survey of sexual health behaviour using the methodology of the NSW Health Survey.<sup>10</sup>

## CONCLUSIONS

The quality of the data collected in the NSW Health Survey, and the convenience of having the data already analysed, is of great value to local area health service staff who do not have the resources to collect similar data. It indicates the maturity of the NSW public health system. I await the next round of data to assess changes, and to develop new area-specific questions to support emerging local priorities.

## REFERENCES

1. Public Health Division. *Report on the 1997 and 1998 NSW Health Surveys*. NSW Department of Health, Sydney, 2001.
2. Public Health Division. *Report on the 1997 and 1998 NSW Health Surveys*. NSW Department of Health, Sydney, 2000.
3. Rissel C, Winchester L, Hodge W, Puech M, Gupta L, Ward J. *Health outcome indicators for Central Sydney (1996)*. Camperdown: Needs Assessment & Health Outcomes Unit, Central Sydney Area Health Service, 1996.
4. Health Promotion Unit. *Into the 21st Century—Strategic Directions for Health Promotion 2000–2005*. Camperdown: Central Sydney Area Health Service, 2001.
5. Rissel C, Hua M, Mansfield A, Burgess G. *The second CSAHS tobacco control plan: 1999–2004*. Camperdown: Central Sydney Area Health Service, 1999.
6. Merom D, Rissel C. Factors associated with smoke-free homes in NSW: results from the 1998 NSW Health Survey. *Aust N Z J Public Health* 2001; 25(4): 339–345.
7. Bedford K, Wen LM, Hua M, Rissel C. ‘Smoke near me and I smoke too’: Evaluation of a smoke-free homes program in Central Sydney, NSW. Paper presented at the 1st National Tobacco Control Conference, June 12–15 2001, Adelaide.
8. Muscatello D, Rissel C, Szony G. Urinary symptoms and incontinence in an urban community: prevalence and associated factors in older men and women. *Internal Medicine Journal* 2001; 31:151–160.
9. Proude E, Rissel C. New sexual partners and condom use in Central Sydney—results from the 1997 NSW Health Survey. *Health Promotion Journal of Australia* 2001; 12(2): 140–143.
10. Smith A, Rissel C, Richter J, Grulich A. Australian Study of Health and Relationships. La Trobe University, Central Sydney Area Health Service, and the University of New South Wales; [www.latrobe.edu.au/ashr](http://www.latrobe.edu.au/ashr). Accessed 19 June 2001. ☒

## USING NSW HEALTH SURVEY DATA FOR ECONOMIC ANALYSIS

**Marion Haas**

*Centre for Health Economics Research and Evaluation  
University of Sydney*

Economics is the study of how resources are allocated in order to produce commodities (that is, goods or services) which people need or desire. It builds on theories about how individuals or groups behave when faced with choices. Thus, the activities or behaviours economists are interested in understanding and evaluating are:

- production (that is, the resources or inputs used);
- consumption (that is, the commodities or outputs that are of value to consumers).<sup>1</sup>

In economic terms, health and health improvement are commodities produced by combining inputs such as the time and knowledge of individual consumers, healthy food, exercise, the time and skills of health care professionals, drugs, and health care facilities. The process of using inputs to produce outputs is termed the ‘production function’. Economic analysis is used to examine the ‘production function’ in order to enhance the efficient production of goods and services. With respect to health care, the goal of economic analyses is to

investigate the extent to which interventions, services, or programs meet the efficiency and equity objectives of the health care system.

### HOW CHERE USES NSW HEALTH SURVEY DATA

During 2000–2001, the Centre for Health Economics Research and Evaluation (CHERE) has been using data from the NSW Health Surveys 1997 and 1998, and the 1999 Older People’s Survey, to explore and understand issues such as the prevalence of risk factors, health care provision, access, and utilisation. These data have allowed us to analyse the way in which inputs (for example, the provision of breast screening services) contribute to outputs (for example, the utilisation of breast screening services). Of course, there are other factors that affect the production function in health care. Providing breast screening services is no guarantee that those who have most to gain from using them will do so. Therefore, any economic analysis must also take account of personal (for example, socioeconomic status and age) and demographic factors (for example, place of residence), as well as any geographic or organisational differences in the way services are provided (for example, equity of access). The remainder of this article describes a number of proposed