# Rapid versus intermediate health impact assessment of foreshore development plans

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Abstract: Objective: To describe the main differences between conducting a rapid health impact assessment (HIA) and an intermediate HIA on foreshore development plans and their feasibility from a health service perspective. **Methods**: A rapid HIA and an intermediate HIA were undertaken on two foreshore development plans. **Results**: The main differences between the two HIAs were in the identification, assessment and decision-making stages of the HIA. **Conclusion**: While the rapid HIA was less resource intensive than the intermediate HIA, there are several factors that affect the feasibility of conducting this type of HIA within a short time period.

It has been reported that the design of urban environments has an effect on factors that influence health such as physical activity, food choices and social connections.<sup>1</sup> Features of the built and natural environment that have been suggested to be associated with physical activity as well as obesity include footpaths and cycle ways; street connectivity and design; land use and density; and transport infrastructure.<sup>2</sup>

Over the past two decades in Australia there has been an increase in the population living in non-metropolitan coastal areas.<sup>3</sup> This trend to the eastern seaboard of NSW is expected to continue over the next 20 years with population increases of over 50% in several coastal townships.<sup>4</sup>

The influx of people for lifestyle reasons has an impact on social, economic and environmental factors in coastal areas.<sup>3</sup> Coastal local governments face challenges in providing adequate physical and social infrastructure to meet the increase in the number of residents and visitors.<sup>3</sup>

In the Illawarra region, the Shellharbour local government area (LGA) is predicted to have a 12% increase in population and the Wollongong LGA a 16% increase by 2025.<sup>4</sup> Recently the Shellharbour and Wollongong City Councils developed plans for improving their foreshores for the use of residents and visitors. This article describes the difference between a rapid health impact assessment (HIA) and an intermediate HIA on these development plans, and examines the feasibility of conducting them from a health service perspective.

### **Methods**

South Eastern Sydney and Illawarra Area Health Service conducted HIAs of two development plans: the Shellharbour Foreshore Management Plan and the Wollongong Foreshore Precinct Project. Each HIA was conducted in partnership with the relevant local council. Both plans included a range of initiatives to improve the foreshore areas, such as improving cycle ways, public amenity and open spaces. A Steering Committee with members from the Area Health Service and the relevant council was formed for each HIA. The Committee conducted the five stages of HIA: screening; scoping; identification and assessment of potential health impacts; decision-making and formulating recommendations; and evaluation. Full descriptions of these two foreshore HIAs have been reported elsewhere.<sup>5–7</sup>

### Results

### Screening and scoping (stages 1 and 2)

The processes involved in screening and scoping for both assessments were similar. An intermediate HIA was conducted on the Shellharbour plan in 2004 and a rapid HIA was conducted on the Wollongong plan in 2006. Both HIAs explored the impact of the initiatives on physical activity and social cohesion and, in addition, the HIA on the Wollongong plan explored access to healthy food.

### Identification and assessment of potential health impacts (stage 3)

The intermediate HIA involved the collection of new data and more extensive use of available evidence than for the rapid HIA (Table 1).

## Decision-making and formulating recommendations (stage 4)

The intermediate HIA applied a typology of evidence to weigh the different sources of evidence.<sup>8</sup> The typology of evidence was used to assess how well the sources of evidence answered questions on appropriateness, satisfaction, salience, acceptability, effectiveness and cost-effectiveness of the proposed changes in the plan. Due to time implications, the weighting process was not undertaken for the rapid HIA. The process for ranking initiatives that were likely to have an impact on the health outcomes of interest was similar for both the rapid and intermediate HIA.

The findings from the two HIAs showed that the plans of both councils would have a positive impact on the health of local residents and visitors to the foreshore by increasing physical activity and social cohesion. The HIA on the Wollongong plan also found that the plan would potentially have a small impact on access to healthy food.

### Evaluation (stage 5)

The same approaches to process and impact evaluation were undertaken for both HIAs. Process evaluation involved consultation with members of the Steering Committee about the value of conducting an HIA of their foreshore plan. Impact evaluation consisted of follow-up telephone calls to the relevant council at six and 12 months after the completion of the assessment. Both councils considered the HIA process to be beneficial. They found the reports produced useful for applying for funds due to an increasing interest by funding bodies in the health benefits, as well as the economic, benefits associated with these initiatives.

#### Timeframe and resources

While the time taken for the involvement of each of the Steering Committee members in the HIA was not recorded, the overall length of time to conduct the rapid and intermediate HIAs was three and six months, respectively. Both HIAs had a dedicated full-time project officer. The main difference between the two types of HIA methodologies was the additional time taken by the intermediate HIA in the stages that involved the identification and assessment of potential health impacts, and decisionmaking. As the rapid HIA followed the intermediate HIA some of the resources developed for the intermediate HIA such as the literature review informed the rapid HIA.

### **Discussion and conclusion**

The main advantage of conducting an intermediate HIA compared to a rapid HIA is that the longer time period allows for greater collaboration between the health service and the council, which can enhance these organisations' understanding of each other's business. An intermediate HIA usually involves collecting new data that can provide a greater insight into the effect that the plan can have on specific aspects of health within the context being assessed. However, the short time period of a rapid HIA has the potential to align more closely with local government planning timeframes.

While the rapid HIA is quicker and has fewer resource implications than the intermediate HIA, from the authors' experience a rapid HIA is only feasible if:

- the health service has a relationship with the proponent of the plan or the ability to form one in a short time-frame
- there is management support from both the health service and the proponent of the plan
- at least one member on the steering committee has experience in conducting a HIA
- relevant data are available in an accessible form, without the need to collect new data
- a literature review on the health determinants and outcomes of interest is available.

As local governments have an important role in creating environments that are supportive of health,<sup>9</sup> the HIA

Table 1.	Comparison of the types of information used for the intermediate health impact assessment of the Shellharbour	
Foreshore Management Plan (2004) and rapid health impact assessment of the Wollongong Foreshore Precinct Project (2006)		

Types of information	Intermediate HIA	Rapid HIA
Community profile	2001 Australian Census Population and Housing data	2001 Australian Census Population and Housing data
Health outcomes interest	NSW Health data on physical activity and social cohesion	NSW Health data on physical activity, social cohesion and access to healthy food
Policy review	State and local health policy documents	-
Literature review	Review of the relationship between the environment and physical activity and social cohesion	Information on the access to healthy food was added to the literature review done for the intermediate HIA
Recreational environmental audit	Conducted an audit of the existing facilities for recreation opportunities	-
Key informant interviews	Interviews with people who were familiar with the plan and represented different groups	-

process is a useful tool for ensuring that the potential impact of foreshore development plans on the health of residents and visitors is considered before the implementation of the plan. Health services need to be aware of the different types of HIA processes and their associated resource requirements before undertaking an HIA.

#### Acknowledgements

We acknowledge the contribution of Dian Tranter, Andy Goldie and Cate Wallace in the conduct of the Wollongong HIA and the contribution of Tuesday Wallin, Darren Mayne, Linda Campbell and Diane Hindmarsh in the conduct of the Shellharbour HIA.

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