Impact Assessment Family:
past rifts, and prospects for better relations

Keynote address
3rd Asia and Pacific Regional Health Impact Assessment Conference
University of Otago, Dunedin
New Zealand
17-19 November 2010
Those tatoos will look great when you’re 60!

Yeah right!
Those tatoos will look great when you’re 60!

Yeah right!
(I don’t think so!)
If elected I promise bigger tax cuts, improved health care, more police, better education, improved roads, a four day working week, no traffic jams, free beer, world peace, hot air hostesses.

Yeah right.
The missus walked into a door

Yeah right.
Go South Africa!

Yeah right.
“Problem gambling’s not a problem, and it’s certainly not a health problem”

(1997)

Yeah right!
“If we want to save lives, we’d better clean up the winter smog”

Yeah right!

(2003)
Is there evidence that hospital admissions are linked to winter conditions?

CDHB – child hospital admissions with respiratory infections compared with average temperatures for Christchurch City
Is there evidence that hospital admissions are linked to winter conditions?

*(CDHB admissions data)*

<table>
<thead>
<tr>
<th>Diagnosis Group</th>
<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>E62   Respiratory Infections/Inflammations</td>
<td>201</td>
<td>239</td>
<td>625</td>
<td>427</td>
</tr>
<tr>
<td>E69   Bronchitis and Asthma</td>
<td>550</td>
<td>756</td>
<td>871</td>
<td>718</td>
</tr>
<tr>
<td>E70   Whooping Cough and Acute Bronchiolitis</td>
<td>161</td>
<td>216</td>
<td>1237</td>
<td>509</td>
</tr>
<tr>
<td>E75   Other Respiratory System Diagnosis</td>
<td>104</td>
<td>175</td>
<td>433</td>
<td>258</td>
</tr>
<tr>
<td><strong>Total: Respiratory diagnoses</strong></td>
<td>1278</td>
<td>1672</td>
<td>3506</td>
<td>2229</td>
</tr>
</tbody>
</table>
Has cleaning up the air ever been shown to improve health?

[Improvements in health indicators associated with reductions in PM$_{10}$ concentrations in Dublin (The Lancet, 19 October, 2002)]

- Average concentration decrease of ~36 microgrammes per cubic metre (µg/m$^3$) in Dublin after a ban on coal sales.
- Respiratory deaths decreased by 15.5% and cardiovascular deaths decreased by 10.3%
Reflections (1)

- Often, ‘rifts’ arise from institutional arrangements and arbitrary distinctions of responsibility.
- Participatory assessment methodologies can be effective in permeating these ‘rifts’.
Memberships?

International Association for Impact Assessment (IAIA)?

Some HIA professional association?

Another professional grouping as well?
Your HIA role?

HIA practitioners?

Commission others to do HIAs?

Provide institutional support for HIA?
The IA family

Poverty and Social Impact Assessment (HWA)
Health and Wellbeing Assessment (PSIA)
Recreation Assessment (RA)
Noise Assessment (NA)
Risk Based Impact Assessment (RBIA)
Cumulative Effects Assessment (CEA)
Youth Impact Assessment (SEA)
Strategic Environmental Assessment (YIA)
Environmental, Social and Health Impact Assessment (ESHIA)
Human Rights Impact Assessment (HRIA)
Ecological Impact Assessment (EIA)
Tourism Impact Assessment (TIA)
Integrated Impact Assessment (IIA)
Landscape and Visual Impact Assessment (LVIA)

Social Impact Assessment (SIA)

Health Impact Assessment (HIA)

Economic Cost Benefit Analysis (UIA)
Urban Impact Assessment (ECBA)
Gender Impact Assessment (GIA)
Cultural Heritage in Impact Assessment (CEA)
Biodiversity Impact Assessment (BIA)

Sustainability Assessment (SA)
Cyber Environmental Impact Assessment (TIA)
Social Impact Assessment
  Human Impact Assessment
    Youth Impact Assessment
    Human Rights Impact Assessment

Environmental Impact Assessment
  Health Impact Assessment

Cultural Impact Assessment
  Landscape and Visual Assessment
    Cultural Heritage Impact Assessment

Economic Impact Assessment
  Sustainability Assessment
IAIA 2000 – Back to the Future

Where will IA be 10 years hence? (2010)

Better integration between modes;
Participation in assessment;
Empirical data/case studies.
For Health/HIA – what is the objective?

Increasing awareness/profile of health matters and health issues?

OR

Increasing effectiveness of HIA in planning and policy processes?

Are these the same?
For Health/HIA – what is the objective?

Increasing awareness/profile of health matters and health issues?  
OR  
Increasing effectiveness of HIA in planning and policy processes?  

Are these the same?  Yeah right!
Who’s operating in the ‘health’ space in IA?

- HIA
- SIA (physical & mental health, health services, lifestyles, environment)
- Water Quality
- Air Quality
- Dust
- Odour
- Noise
Who’s operating in the ‘wellbeing’ space IA?

- HIA
- SIA (education, housing, employment, safety, social support, identity, social attachment, ....)
- Recreation
- Transportation/accessibility
- Landscape
- Urban design
Reflections (2)

There are some well-established methodologies which should be of interest to HIA practitioners.

..and vice versa

Are we involved in a zero-sum game for IA?

Is it better to promote IA across a range of relevant issues OR promote an range of specific and discrete IA products?
“In this Act, “sustainable management” means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing and for their health and safety while –

(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and

(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment”
“In New Zealand, project-level impact assessment is based on an integrated model under the Resource Management Act”
“In New Zealand, project-level impact assessment is based on an integrated model under the Resource Management Act”

Yeah Right!
What sort of HWB effects have been considered in a range of SIAs?

- **Urban development case (ex-post) – Aranui**
  - Social isolation; Access to health services (elderly); community identity,…

- **Urban development – town centre proposal**
  - Urban form and active transport; Provision of community facilities (youth); Better access to employment opportunities; …

- **High Voltage Transmission line**
  - Quality of working environments; EMF risks; Hazards to aircraft; …

- **Windfarm proposal**
  - Noise-related amenity loss and health risk; recreational opportunities/displacement; income security; …
HPSTED matrix categories
(Health Promotion & Sustainability Through Environmental Design)
A common framework

**HPSTED matrix categories**

- Active lifestyles
- Housing stock
- Neighbourhood amenity
- Food security
- Public services
- Transport accessibility
- Resource minimisation
- Natural capital
- Community safety
- Economic development
- Social & Community capital
- Equity
- Cultural diversity

**SIA wellbeing elements**

- physical & mental health
- opportunities for leisure & recreation & access to quality outdoors/open space
- quality of housing, shelter, neighbourhood and living place
- access to goods
- access to services
- access to public facilities, transport, communications
- opportunities for education & lifelong learning
- quality of the physical environment
- influences on personal safety, public safety, autonomy & freedom from too much risk
- opportunities for income, employment and the quality of working life
- influences on family life, social attachment, social contact, interaction & support
- influences on participation in community and society
A common framework

**HPSTED matrix categories**

- Active lifestyles
- Housing stock
- Neighbourhood amenity
- Food security
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**Social wellbeing elements**

- Physical & mental health
- Opportunities for leisure & recreation & access to quality outdoors/open space
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- Influences on participation in community and society
OTTAWA CHARTER

Principles for Action-oriented Health Promotion
Five broad elements

Building Public Policy     Creating Supportive Environments

Strengthening Community Action     Developing Personal Skills

Re-orienting Services
# Prospects for better relations? HIA & SIA

<table>
<thead>
<tr>
<th>Similarities &amp; Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope of effects assessed</strong></td>
</tr>
<tr>
<td><strong>Domains</strong></td>
</tr>
<tr>
<td><strong>Applications</strong></td>
</tr>
<tr>
<td><strong>Equity issues</strong></td>
</tr>
<tr>
<td><strong>Budgets</strong></td>
</tr>
<tr>
<td><strong>Time frames</strong></td>
</tr>
<tr>
<td><strong>Emphasis on Scoping</strong></td>
</tr>
<tr>
<td><strong>Information sources</strong></td>
</tr>
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Prospects for better relations?
What could SIA learn?

<table>
<thead>
<tr>
<th>From HIA</th>
<th>To SIA</th>
</tr>
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<tbody>
<tr>
<td>Health determinants</td>
<td>Enhanced social and community profiling</td>
</tr>
<tr>
<td>More in-depth analysis of specific health effects; better definition of health parameters</td>
<td>Refined analysis</td>
</tr>
<tr>
<td>Empirical data sets on health and well being; correlations with health determinants</td>
<td>Clearer articulation of pathways of effect; improved monitoring framework</td>
</tr>
<tr>
<td>Health promotion frameworks</td>
<td>“managing change’ under uncertainty, not just assessment of effects</td>
</tr>
</tbody>
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Prospects for better relations?
What could HIA learn?

<table>
<thead>
<tr>
<th>From SIA</th>
<th>To HIA</th>
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<tbody>
<tr>
<td>Phased/iterative approach to assessments; more emphasis on Scoping</td>
<td>Enhanced focus of subsequent assessment; enhanced legitimacy</td>
</tr>
<tr>
<td>Varied approaches to stakeholder engagement</td>
<td>Enhanced levels of participation</td>
</tr>
<tr>
<td>Dealing with qualitative and quantitative data systematically</td>
<td>Validating data of different kinds</td>
</tr>
<tr>
<td>Focus on managing change under uncertainty</td>
<td>Promotes on-going stakeholder involvement post-assessment</td>
</tr>
</tbody>
</table>
Reflections (3)

- Health issues are being picked up in other modes of IA
- As well as they should be? Yeah right!
- Some well-established methodologies in other IA that should be of interest to HIA practitioners
- And vice versa
Integration?

Particularly in the context of Impact Assessment

Lots of rhetoric

An emerging ‘science’
‘Integrative functions’ – what is the essence of integration?

Integrative functions:
4+1 = 5-part classification

Descriptive integration = empirical description;
Evaluative integration = evaluation;
Strategic integration = strategy development;
Contextual integration = ‘policy’ context; community setting;

Mutual integration = combining the 4 into the assessment process
What are the ‘parts’ being combined?

<table>
<thead>
<tr>
<th>Integrative function</th>
<th>‘Parts’ being combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive integration</td>
<td>Multi-disciplinary sources of knowledge; Partial descriptions of the system of interest</td>
</tr>
<tr>
<td>Contextual integration</td>
<td>Perspectives and interests of stakeholders; Institutional setting</td>
</tr>
</tbody>
</table>
## What are the ‘parts’ being combined?

<table>
<thead>
<tr>
<th>Integrative function</th>
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<tbody>
<tr>
<td>Evaluative Integration</td>
<td>Predicted impacts;</td>
</tr>
<tr>
<td></td>
<td>Explicit criteria or specified outcomes</td>
</tr>
<tr>
<td>Strategic integration</td>
<td>Alternative project designs or policy prescriptions;</td>
</tr>
<tr>
<td></td>
<td>Analytical values subject to adjustment or trade-off</td>
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What are the ‘parts’ being combined?

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<td>Mutual (functional) integration</td>
<td>The processes required to achieve the other 4 integrative functions</td>
</tr>
</tbody>
</table>
Descriptive integration?

- How do team members build up a common understanding of the proposal and its social and environmental setting? (do they ever?)
- What are the most important cause-and-effect relationships occurring when viewed from ecological, social, public health or economic perspectives?
Contextual integration?

- What aspects of policy context (social, health, economic) are most relevant and likely to be most influential to decision makers?
- What are the communities of interest for the proposal being assessed?
- How will you select stakeholder representatives to work with?
Evaluative integration?

- Do all team members adopt a consistent set of assumptions in making their assessment?
- Do economic gains come at the expense of public health, social and environmental costs?
Strategic integration?

- How are health, environmental, social and economic considerations applied to the search for an optimal set of outcomes?
- Are there particular (explicit) optimisation techniques that could be used to refine the proposal?
Mutual (functional) integration? Making it happen

- Who’s responsible for ensuring integration occurs?
- Does the assessment team have the necessary range of skills, knowledge and experience to cover environmental, social, health and economic aspects?
For details, go to

- [www.tba.co.nz](http://www.tba.co.nz)
- Projects
- Public Science Projects (FRST funded)
- Institutions for Sustainable Development
- Outputs
- “Getting on with Integrated Impact Assessment: one set of guiding principles - many methods”
Reflections (4)

- Room to be innovative in IA applications – guiding principles + pluralism of methods
- Creating opportunities for this requires client/agency support
Issues of evidence

“Evidence-based!”

Yeah right!
Issues of evidence

- Relevance?
- Different standards of evidence – planning vs medical treatment
- Evidence on +ve wellbeing ‘pathways’ or co-relations
- Equally applicable in SIA as in HIA?
Reflections (5)

- Explain the relevance and significance of evidence to decision makers
- Need a big push on correlations with positive health outcomes
- Accessible library/databank of social, health and wellbeing data
"Working better, working smarter" – key challenges?

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Aspects of response?</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA seen as ‘environmental mgt’ tool</td>
<td>Needs an agency-level response Practitioners are not the gatekeepers</td>
</tr>
<tr>
<td>Regulatory agencies and other IA practitioners lack health expertise</td>
<td>Won’t easily fix agency competencies What level of health expertise is needed for HIA? Current training?</td>
</tr>
<tr>
<td>Inter-disciplinary efforts compromised by lack of communication/collaboration</td>
<td>Learn what ‘integration’ involves, and get on with it!</td>
</tr>
<tr>
<td>Stakeholders/affected communities want to see health issues incorporated into decision making</td>
<td>They don’t really care which mode of IA delivers this, so let’s improve across the board</td>
</tr>
<tr>
<td>Little recognition of wider ‘determinants of health’</td>
<td>Terminology? Communicating relevance - to others!</td>
</tr>
</tbody>
</table>
### “Working better, working smarter” – key challenges?

<table>
<thead>
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<th>Challenge</th>
<th>Aspects of response?</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIA needs to re-consider how to engage affected communities in prioritising health issues</td>
<td>Recognise that expert-led assessments only part of the picture. Recognise ‘expertise’ of lay people</td>
</tr>
<tr>
<td>Health issues in SIA – limited context and lacking substantive assessment</td>
<td>Achieve HIA/SIA collaboration Incorporate aspects of HIA method Overcome limitations of empirical data</td>
</tr>
<tr>
<td>Dominance of gatekeeper professionals in RMA processes</td>
<td>Needs an agency-level response Educate the gatekeepers, so they see the advantages of better addressing ‘health’ in the assessments</td>
</tr>
</tbody>
</table>
Thank you

www.tba.co.nz
Questions for the workshop this afternoon

- Is it better to promote assessment of health effects as part of a thorough, integrated assessment OR better to promote a range of specific IA products (HIA, SIA, EIA, ESHIA,....)
- Demarcation issues – does it matter who addresses health issues and effects?
- Is terminology important? (common, plain language)
- Responses to ‘key challenges’
- Responses to ‘reflections’