

L'expérience de l'Australie



uOttawa

L'Université canadienne
Canada's university

Jeanette Ward MBBS MHPEd PhD FAFPHM

Canada Research Chair

Policy Implementation in Population Health

Université d'Ottawa | University of Ottawa



uOttawa.ca

Aims

- To present three enablers of integration of research and training in public health practice in Australia
 - ❑ Legislation and political support
 - ❑ Operations-oriented science
 - ❑ Workforce needs assessment and performance management
- To commence a shared dialogue to find 'Made in Canada' solutions



uOttawa

Cette présentation a été effectuée le 23 octobre 2006, au cours du Symposium "La recherche et la formation comme fondements des actions efficaces en santé publique - Les expériences nationales et internationales" dans le cadre des Journées annuelles de santé publique (JASP) 2006. L'ensemble des présentations est disponible sur le site Web des JASP, à l'adresse <http://www.inspq.qc.ca/jasp>.

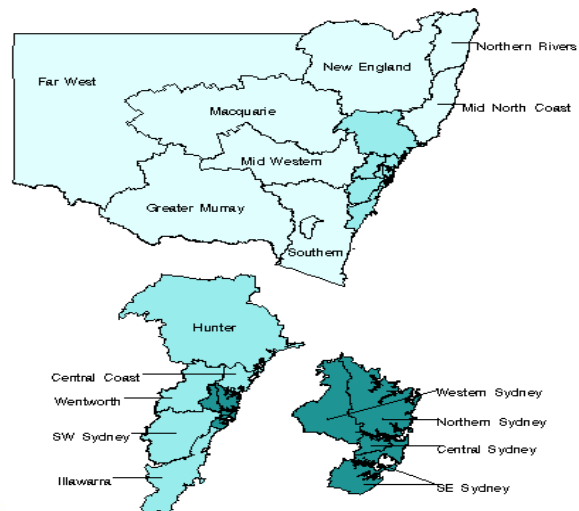
1. Legislation and political support

Health Services Act 1997 (updated Dec 2001)

The primary purposes of an area health service in its area are as follows:

- to provide relief to sick and injured persons through the provision of care and treatment
- to promote, protect and maintain the health of the community

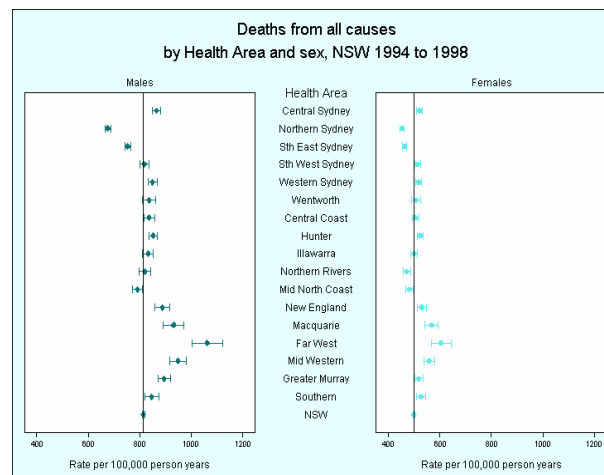
Organisation of health services in NSW



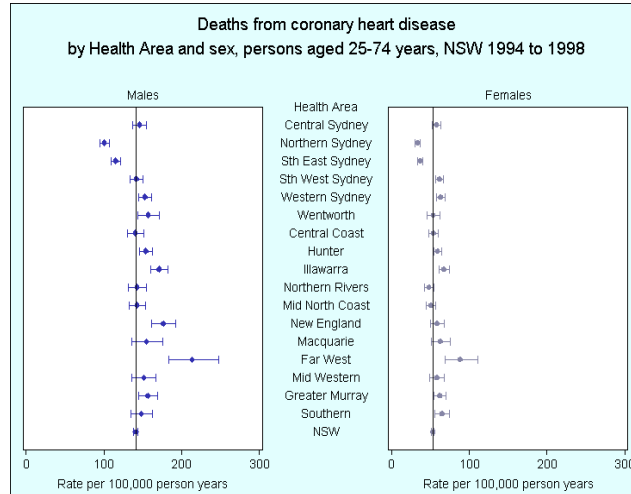
1. Legislation and support (continued)

- Annual Report of the Chief Health Officer
- Local health profiles including population indicators, equity indicators and access indicators
- Director of Population Health reports to CEO of the Area Health Service and contributes as a member of the Area Executive
- Heightened awareness of population and health system indicators

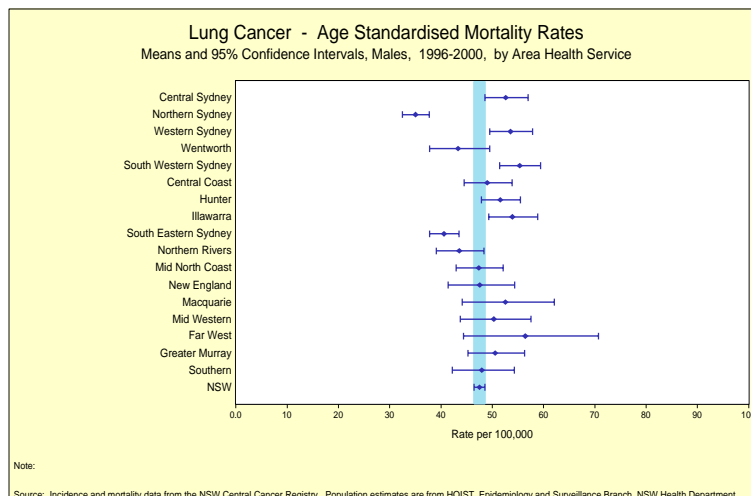
Reporting the 'health' of regional populations

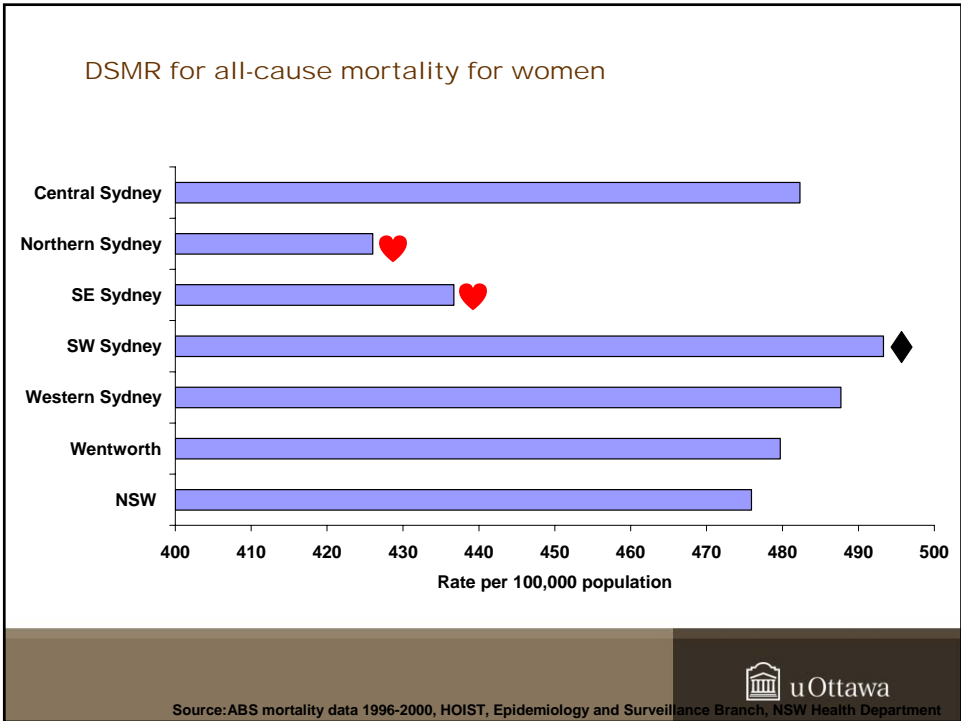
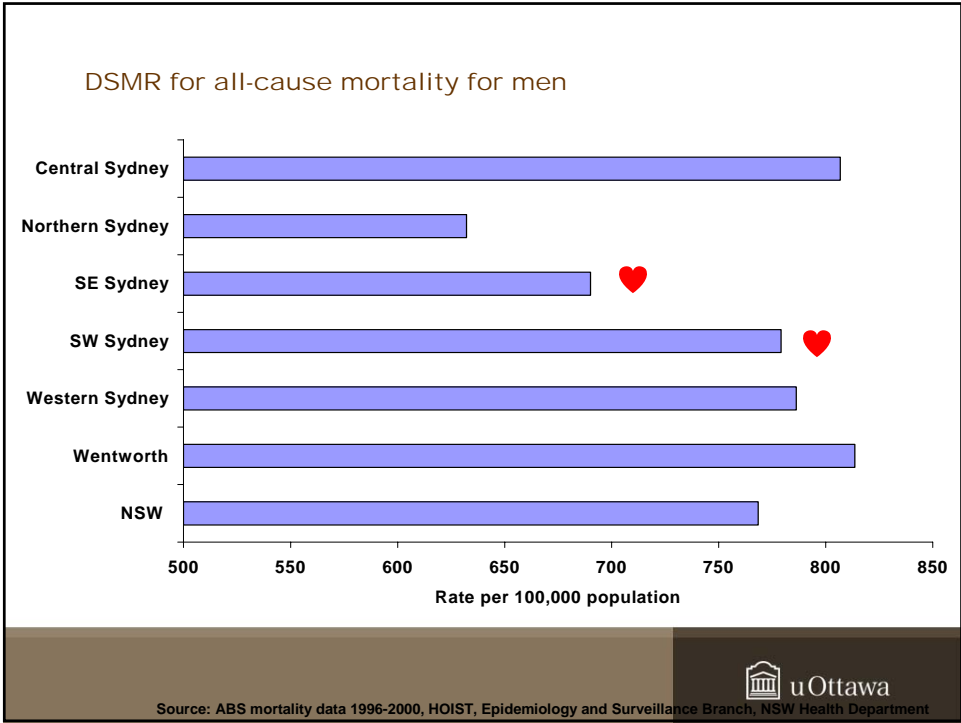


Reporting the health of regional populations



Reporting health of regional populations





1. Legislation and political support (cont)

Potential years of life lost (PYLLs)

By epidemiological convention, death before the age of 75 years is considered especially regrettable.

As a result of incessant advocacy, there is a broad recognition of the proportion of premature deaths in Australia that could have been prevented.

Preventable deaths (mortality)

How might deaths before the age of 75 be further classified?

- | | |
|------------|---|
| PAM | <i>Primary avoidable mortality</i>
That for which primary prevention (maintaining health before illness) would have made a difference |
| SAM | <i>Secondary avoidable mortality</i>
That for which screening and early detection to minimise disease complications would have made a difference |
| TAM | <i>Tertiary avoidable mortality</i>
That for which acute 'life-saving' intervention and end-stage chronic disease management would have made a difference |

Understanding PYLLs to obtain political support

Deaths due to road traffic accidents	PAM	.60
	SAM	-
	TAM	.40

In other words ...

60% of deaths from road traffic accidents can be prevented through public policy, road improvement, drink driving campaigns ...

40% of deaths can be prevented through prompt emergency responses and trauma services

0% of accidents can be screened for (therefore **0%** SAM)

PYLLs → PAM SAM & TAM

Deaths due to road traffic accidents	PAM	.60
	SAM	-
	TAM	.40

Deaths from cervical cancer	PAM	.30
	SAM	.50
	TAM	.20

Deaths from lung cancer	PAM	.95
	SAM	-
	TAM	.05

What proportion of deaths before 75 years are UNavoidable?
 What proportion are avoidable? (Australian data)

	<i>Males</i>	<i>Females</i>	<i>All persons</i>
<i>Unavoidable mortality</i>	35%	36%	36%
<i>Total avoidable premature mortality</i>	65%	64%	64%

What else do we know about the AVOIDABLE mortality?
 (Australian data)

	<i>Males</i>	<i>Females</i>	<i>All persons</i>
<i>Non-avoidable mortality</i>	35%	36%	36%
<i>Primary avoidable mortality</i>	38%	31%	35%
<i>Secondary avoidable mortality</i>	14%	18%	15%
<i>Tertiary avoidable mortality</i>	13%	16%	14%

Applying PYLLs locally

Major causes of potential years of life lost before the age of 75 years by sex (SWSAHS Equity Profile 2004)

	Males		Females	
	PYLL	%	PYLL	%
SWSAHS				
Cancers	27004	21.9	22824	33.0
Lung	6207		2995	
Colorectal	1959		1583	
Breast			5461	
Cervix			992	
Prostate	895			
Injury and poisoning	32783	26.6	9089	13.1
Circulatory disease	24490	19.9	11380	16.4
Perinatal conditions	7626	6.2	6370	9.2
Congenital anomalies	5680	4.6	4543	6.6
Other diseases	25640	20.8	15005	21.7
All diseases	123223	100.0	69211	100.0

Source: HOIST, NSW Health Department

2. Operations-oriented science

Intellectual progress is by no one trait so adequately characterised as by the development of the idea of causation

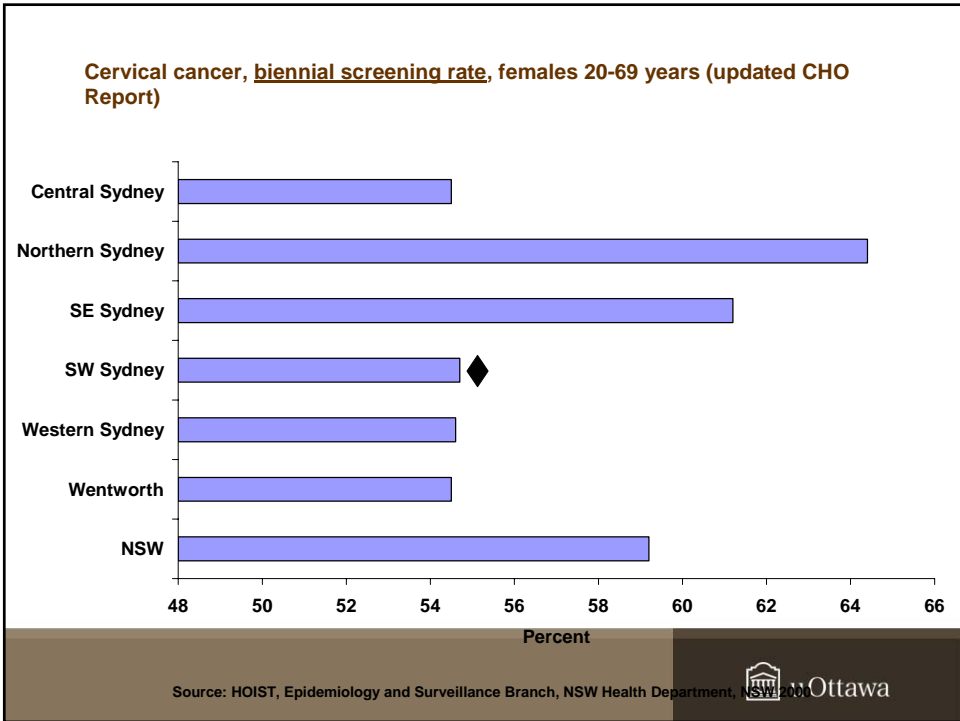
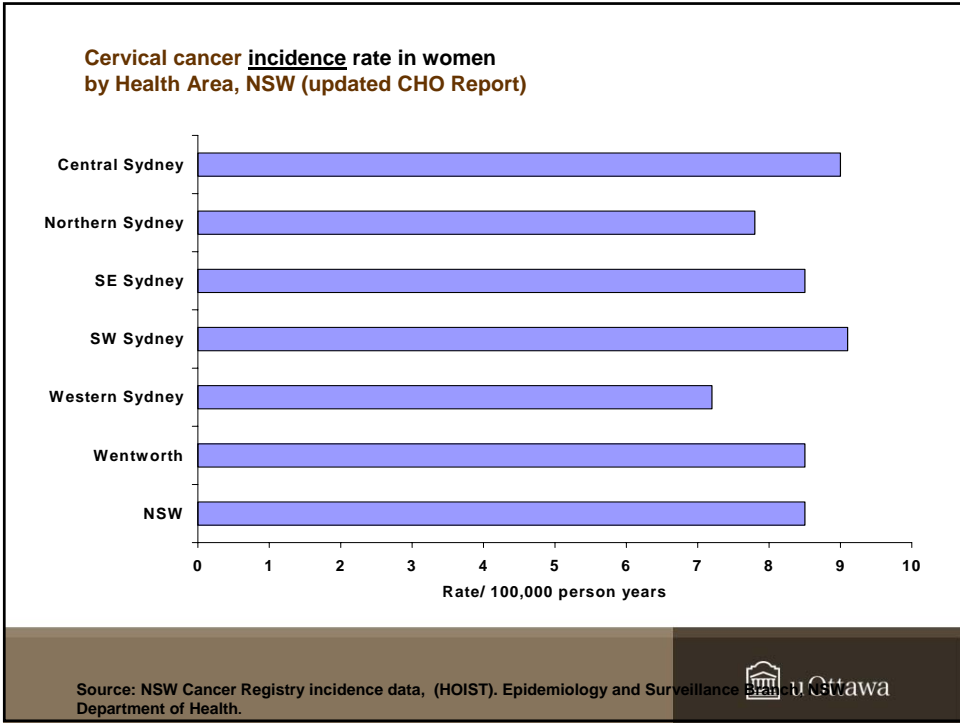
Spencer 1879

PROBLEM IDENTIFICATION

Unrealised potential to reduce premature avoidable mortality and morbidity due to cervical cancer



INTERDISCIPLINARY RESEARCH



What strategies already had been tested to promote recruitment by general practitioners of women overdue for cervical screening?

RURAL STUDIES

Co-location of women's health nurses
Community mobilisation
Academic detailing x 1
Personal health booklets
Mail-outs and mass media

URBAN STUDIES

Tagged medical records
Computerised reminders + GP CME

.... and????



Results of SEVEN studies obtained in a replicable manner (systematic retrieval)

RURAL STUDIES

Co-location of women's health nurses (effective)
Community mobilisation (effective)
Academic detailing x 1 (no effect)
Personal health booklets (no effect)
Mail-outs and mass media (no effect)

URBAN STUDIES

Tagged medical records (no effect)
Computerised reminders + GP CME (no effect)

We needed more science!



**An operations-oriented, community-based cluster
randomised controlled trial**

RANDOMISATION

- 19 practices (*INT*) (n=30 GPs)
- 20 practices (*COM*) (n=30 GPs)

BEHAVIOURAL MEASURE (pre/post)

Surveys of consecutive female patients about recent 'index'
consultation

All women should be asked about screening status

*Women overdue for screening should be so
advised*

Increasing cervical screening by FPs

- Intervention
 - ◆ Peer academic detailing visits x 3
 - ◆ Audit and feedback profile
 - ◆ Skills video & evidence summaries
 - ◆ Self-paced learning module
 - ◆ Preventive health checklists for women

Did it work?

Results

Unadjusted rates of recall by women of FP behaviour (%)

	INT	CONTROL
All women		
<i>Asked status</i>		
Baseline	13	21
Post	22	25
Overdue women		
<i>Asked status</i>		
Baseline	18	24
Post	22	22
<i>Advised re smear</i>		
Baseline	18	11
Post	20	19

Results (adjusted for baseline differences and clustering)

Recall of advice	INT v CON AOR (95% CI)	ICC
• All women		
– Asked status	0.65 (0.40-1.08)	0.05
• Overdue women		
– Asked status	0.92 (0.08-12.3)	0.06
– Advised re smear	2.13 (0.75-6.14)	0.03
– Given resources	0.34 (0.04-26.5)	0.02

Moratorium on this and similar programs!

3. Performance management

Division of Population Health comprises:

Population health policy and strategy

Health Promotion
Public Health
Community Paediatrics

Targeted clinical services moving towards greater balance

D&A services
Dental services
Refugee services

Surveillance, monitoring and research

Epidemiology, social sciences and training

Partnership

Aboriginal Health

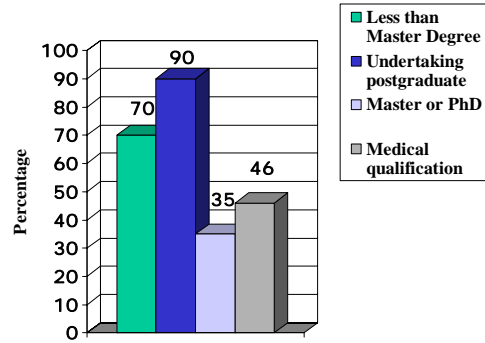


In a needs assessment survey, staff were asked:

<i>In current role, you need to...</i>	<i>Strongly agree / agree</i>
• access evidence?	74%
• understand <i>descriptive</i> evidence?	71%
• understand <i>interventional</i> evidence?	75%

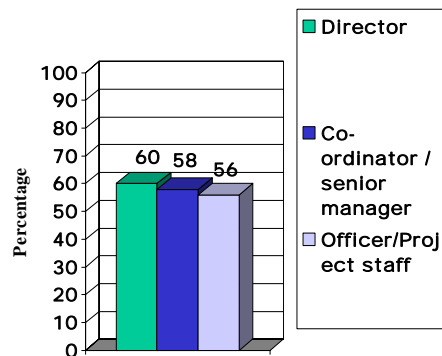


Overall, 55% perceived a need to increase own capacity for EBP but this need varied by status of graduate training



$\chi^2=9.60, 3df, p=0.022$

Overall, confidence in capacity was modest. Unit Directors no more likely to be confident than those they supervise!



$\chi^2=0.08, 2df, p=0.96$

EBP terminology (from 21 terms)

	Very confident	Not at all confident
RCT	26%	11%
Australian evidence taxonomy	17%	36%
Relative risk	17%	17%
Absolute risk	13%	18%
NNT	12%	41%
Odds ratio	15%	30%
Confidence intervals	21%	34%
CONSORT guidelines	1%	74%

Staff were asked

Imagine a proposed CRC screening program. Four statements provide data about effectiveness. Costs are identical. Please indicate how likely you are to consider it worthwhile to implement in this region.

Programme A reduced rate of CRC deaths by 17%

Programme B produced an absolute reduction in deaths from CRC of 0.4%

Programme C required 1000 people to be screened over 10 years to prevent one additional death from CRC

Confirmation of 'framing effect'

RESULTS

	<i>Strongly agree / Agree</i>
Programme A [relative risk reduction]	60%
Programme B [absolute risk reduction]	24%
Programme C [NNS]	12%

To whom do staff turn?

Referrals for EBP support at least once in previous 12 months
(% respondents)

• Immediate manager	80
• Peers	71
• Staff in head office	56
• Division's Epidemiology Unit	40
• Academics	38
• Senior manager in Division	36

Possible strategies

	<i>Very useful (%)</i>
❖ Infrastructure for relevant research	54
❖ Users of evidence to be better able to discriminate 'good' from 'bad'	51
❖ More systematic reviews	50
❖ More commissioned research in response to knowledge gaps	26
❖ Greater rewards from management	12

Leadership for an organisational culture of learning and improvement was key

ORGANISATIONAL DEVELOPMENT

- EBP competencies
- EBP guidelines and intranet website resources for staff

WORKFORCE DEVELOPMENT

- EBP training programs derived from competency gaps
- *Get a GRIPP* forums:
 - Evidence updates
 - Specific problems/ planning
 - Reflection sessions
 - GAPS sessions
 - Celebrations
- Performance management forms

Levels of EBP competencies

Level

- Staff who need an understanding of the principles of EBP and its value to Population Health (16%)
- Staff who need an understanding of the principles of EBP and the application to their own practice (40%)
- Staff who plan, implement and manage programs (29%)
- Staff who are accountable for implementation of EBP (8%)
- Staff who generate evidence for population health policy and practice (7%)

Each level has specified unit(s) of competence and observable elements

Rationale for integration

Barriers discouraging an evidence-based approach

Lack of training

67% agree

9% strongly agree

.... But

Barriers discouraging an evidence-based approach

Lack of training

67% agree
9% strongly agree

Contradictory policy

30% agree
4% strongly agree

..... integration of research and training with policy and programs is crucial!

Ensemble ...

- ✓ To present three enablers of integration of research and training in public health practice in Australia
 - ✓ Legislation and political support
 - ✓ Operations-oriented science
 - ✓ Workforce needs assessment and performance management

- To commence a shared dialogue to find 'Made in Canada' solutions