



ASSESSING COST-EFFECTIVENESS IN PREVENTION

ACE-Prevention Media launch 8 September 2010

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ASSESSING COST-EFFECTIVENESS IN PREVENTION

- Australia ranks second world-wide in life expectancy
- Large improvements in health in last 40 years due to:
 - ↓ tobacco-related disease

 - ↓ injuries
- .. but large health gap for Indigenous Australians remains











ASSESSING COST-EFFECTIVENESS IN PREVENTION

- Health expenditure growing as % of GDP
 - ageing population
 - expensive new technologies
 - more demanding public
- Need to spend health dollars wisely
 - more on services that give good value for money
 - avoid spending on services that are not











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- Prevention better than cure?
 - often
 - ...but not necessarily so
- ACE-Prevention provides that information for:
 - 123 preventive services and 27 treatments as comparison
 - largest study of its kind in the world
 - holding up Australia's reputation as a leader in prevention
 - funded by National Health and Medical Research Council











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Results for 123 prevention measures:

- 23 net cost saving
- 20 very cost-effective <\$10,000 per healthy life year
 (DALY)
- 31 cost-effective \$10-50,000 per DALY
- 38 not cost-effective
- 2 more harm than good; 2 for which better alternatives
- 4 insufficient evidence of effectiveness











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Very cost-effective and large health impact:

- Tax alcohol, tobacco and 'unhealthy food'
- Regulation of salt content in bread, cereals and margarine
- Treating blood pressure and cholesterol but doing this more efficiently than we currently do
 - using cheaper drugs
 - better targeting who needs to be treated
- Gastric banding for the very obese (but expensive!)











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Very cost-effective and moderate health impact:

- Pedometers & mass media for physical activity
- Smoking cessation drugs
- Screen elderly women for osteoporosis & alendronate
- Screen diabetics for chronic kidney disease











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Very cost-effective and more modest health impact:

- Fluoride drinking water
- Hepatitis B vaccination
- A range of 7 measures to prevent mental disorders or suicide











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Other **cost-effective** measures:

- Increased Sunsmart effort
- HPV vaccination and Pap smear testing cervix cancer
- Screen for pre-diabetes + drug or lifestyle intervention
- Screen for chronic kidney disease + drug
- Diet and exercise for overweight people (but limited impact on weight loss)











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Not recommended:

- PSA testing for prostate cancer (more harm than good)
- Weight watchers
- Drugs for losing weight
- Most fruit and veg interventions
- Aspirin to prevent cardiovascular disease
- School based drug interventions
- Vaccination for shingles











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Insufficient evidence of effectiveness:

- Screening for vision loss
- Dental check-ups





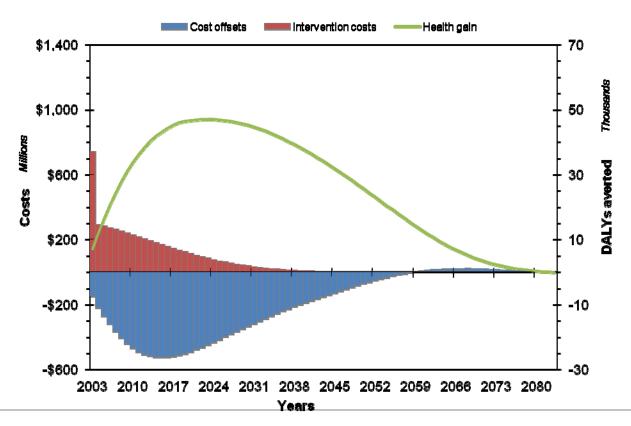






ASSESSING COST-EFFECTIVENESS IN PREVENTION

Combined impact 23 cost saving prevention measures







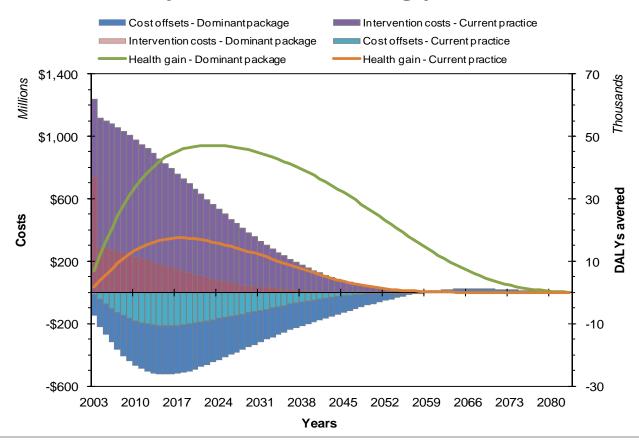






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Combined impact 23 cost saving prevention measures







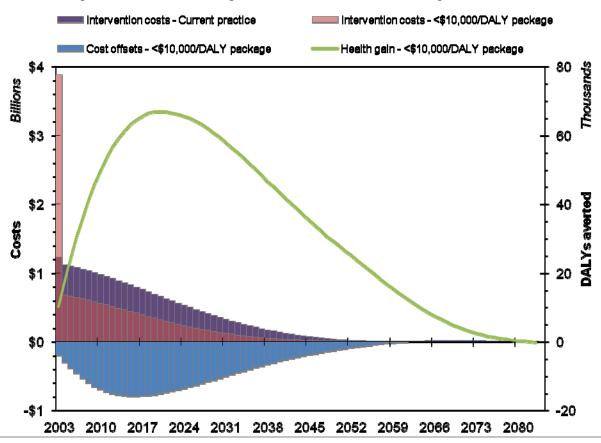






ASSESSING COST-EFFECTIVENESS IN PREVENTION

Combined impact 43 very cost-effective prevention measures







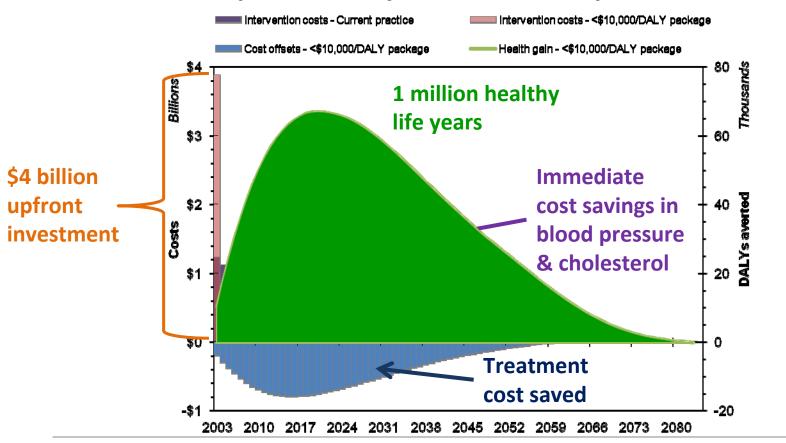






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Combined impact 43 very cost-effective prevention measures













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Blue print for governments:

- good investments in prevention that are affordable
- opportunities for large health improvement
- potential to reduce wasteful spending

Governments will need strong arguments to ignore the compelling evidence











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ACE-Prevention for Indigenous Health

- Different costs
 - delivering services to remote areas
 - greater cost of Aboriginal Community Controlled Health Services (ACCHS)
 compared to mainstream GPs
 - average cost short consultation \$113 versus \$31
 - average cost long consultation \$156 versus \$59
 - <u>BUT</u> better attendance (73% v 60%) and better adherence to treatments (96% v 78%) in ACCHS
- Different health outcomes
 - Indigenous health gap improvements more important
 - many diseases start at a much younger age











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IHSD Template service delivery component values

Component category	Additional cost per patient encounter at an ACCHS
Basic intervention components	\$16.67 per short consult \$31.57 per long consult
Population health activities	\$9.28
Administrative & governance structures	\$3.87
Patient transport services	\$47.01
Remoteness adjustment	\$5.50





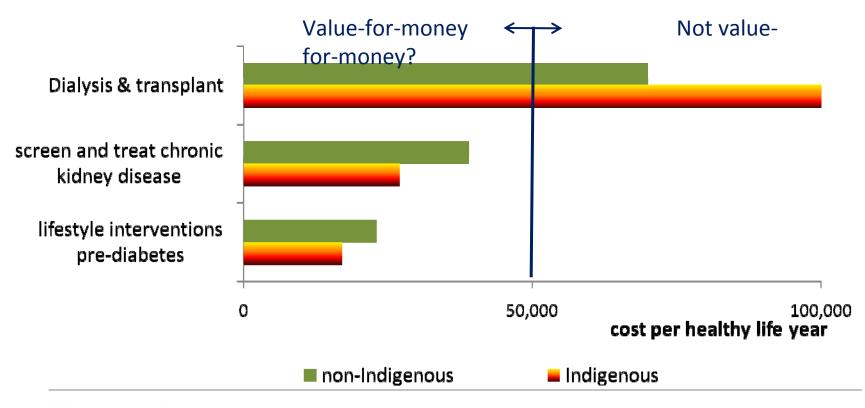






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Cost per healthy life year for selected interventions: Indigenous versus non-Indigenous







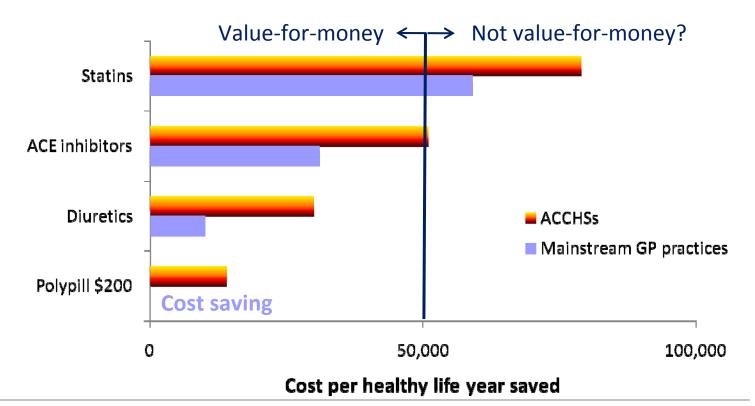






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Cost per healthy life year: blood pressure and cholesterol treatments mainstream GPs versus ACCHSs







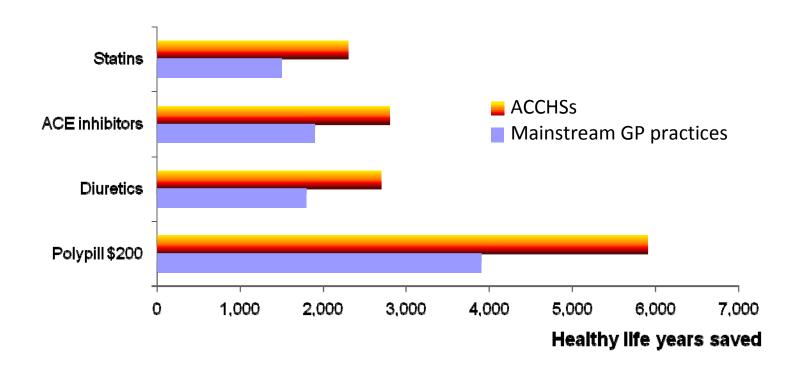






ASSESSING COST-EFFECTIVENESS IN PREVENTION

Healthy life years saved: blood pressure and cholesterol treatments mainstream GPs versus ACCHSs













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Conclusions on Indigenous health component

- The costs of ACCHSs are higher due to the comprehensive nature of these services + patient transport services
- > but utilisation of health services, adherence and health gain are all higher for ACCHSs than for mainstream GP services
- What weight should we give to social justice considerations ('closing the gap'): "should we be willing to pay 2, 3 ...4 times more for Indigenous health improvement"?
- Interesting work on equity weights and Indigenous concept of 'good health' commenced in ACE-Prevention





