Savings in Chronic Disease Costs with Caring for Country

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‘Close the Gap’ session
Outline

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• Context
• Healthy country, healthy people

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• Caring for country measures
• Nexus data
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Economic analysis
• Economic analysis
• Economic results
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• Policy implications
Context


• Review request by traditional owners for impact assessment of *Fire Abatement Project*
Healthy Country, Healthy People

- Health benefits of being on traditional country
- Arnhem Land study to test the nexus between healthy country and healthy people (Garnett & Sithole 2007)
Caring for Country Measure

• Development of a composite measure of caring for country

• Index consisted of six activities:
  ▪ spending time on country,
  ▪ seasonal burning of annual grasses,
  ▪ gathering food and medical resources,
  ▪ performing ceremonies,
  ▪ production of art and craft works,
  ▪ protecting sacred sites (Burgess, et al. 2008)
Nexus data
(Burgess, et al. 2009)

- **Sample:** 298 (15-54 years) (target sampling: 23.2% of community)
- **Self reported caring for country scores**
  - Reported range 6-24 (mean = 15.2)
- **Adult health check:** Socio-demographic variables, clinically significant health behaviours, clinical & anthropometric risk factors & chronic disease
Relationship with Caring for Country

Risk of chronic disease

Units of caring for country
Economic Data

- Annual primary health care costs (Zhao et al 2006)
- Numbers with hypertension, type 2 diabetes & renal disease
- Risk coefficient (slope)
- Expansion coefficient
Economic Results

- Annual cost savings: \( \sim $250,000 \)
- Present value of cost savings over 25 years: \( \sim $4 \text{ million} \)

(discount rate of 4.075 based on the 10 year domestic bond rate)
Economic Analysis

Estimates are representative:

- Assumption of costs born by environmental benefits
- Cost data does not include overheads & assumes efficiency
- Other chronic diseases not included
- Hospital cost savings not included
- Greater productivity of a healthier population not included
- Economic assessment is post hoc
Policy Implications

- Growing evidence in support of health benefits of caring for country
- Economies of joint production & role of economic data
- Practical example: Contracted to Conoco-Phillips for greenhouse gas offsets
  - Delegation from Arnhem Land to Copenhagen
References


