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A Template of Indigenous Primary Health Care Service Delivery for use in Economic Evaluations

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Abstract
Economic evaluations are an increasingly important determinant of resource allocation decision-making. Yet economic evidence specific to the Australian Indigenous population remains deficient. A major reason is lack of Indigenous-specific data on the efficacy or effectiveness of health interventions, which is a prerequisite for economic evaluations to occur. This work is attempting to develop a template of "best practice" primary health care service delivery for the Indigenous population, based on the Aboriginal Community Controlled Service (ACCHS) model of comprehensive primary health care. This Indigenous Health Service Delivery (IHSD) Template details the additional costs of providing primary health care services from ACCHSes compared to mainstream health services, as well as changes to utilisation and adherence rates. The IHSD Template can then be applied to efficacy evidence obtained from mainstream to allow its evaluation as if the intervention was delivered from an Indigenous setting, thus making evaluations more relevant to Indigenous preferences.

Background
• The results of economic evaluations are an important input to resource allocation and decision-making.
• Data on the efficacy or effectiveness of interventions is required for economic evaluations to be performed.
• Due to the relatively small Indigenous population in Australia, there is a lack of effectiveness data pertaining to this group. As a result, there is a corresponding lack of economic data specific to Indigenous settings.
• The lack of Indigenous specific effectiveness data means that resource allocation decisions for Indigenous health are either based on mainstream economic evidence which may not be relevant, or not based on economic evidence at all.
• The health of Australia’s Indigenous population is significantly worse than that of non-Indigenous Australians. Mainstream healthcare services have been inadequate in attempts to address the issue.
• Qualitative evidence suggests the ‘best practice’ model of primary healthcare for Indigenous populations is based on self-determination and community control, and is epitomised by the Aboriginal Community Controlled Health Service (ACCHS) model of comprehensive primary health care.

Objective
• To develop a template of “best practice” primary healthcare service delivery (An Indigenous Health Service Delivery – IHSD - Template) for the Indigenous population based on ACCHSes, for use in economic evaluations.
• This will allow data obtained from mainstream to be economically analysed as if the intervention was delivered from an Indigenous setting, and thus overcome some of the data deficiencies.

Methods
• A framework of the additional components that are involved in the delivery of an intervention from an ACCHS compared to a mainstream GP based health service has been determined.
• The magnitude of these differences has been calculated using quantitative data inputs.
• Sources of information for determining the template components and data inputs has been from the publically available literature, and from direct input from experts in the field.
• Validation is currently in progress via interviews with key informants with experience in the delivery of Indigenous health services.

Results
• This is a work in progress presentation
• A framework of components that differentiate ACCHSes from mainstream GP based health services has been determined:

IHSD Template framework components

- Basic intervention components
  - Consultations and equipment
  - Home visits
  - Role substitution
  - Ongoing training activities
  - Compliance management and paperwork
  - Case conferencing

- Population health activities
  - Health promotion
  - Community development and advocacy
  - Other consultative services
  - Social connectedness

- Administration and governance activities
  - Office space, consumables and overheads
  - Community management boards
  - Political administration of multiple grants
  - Practice management

- Other service components
  - Patient transport services

- Remoteness adjustment
  - Outreach services
  - Emergency services
  - Provision of housing for staff

Differences in rates of Indigenous utilisation of services and adherence to treatment between ACCHSes and mainstream health services

- Differences in the magnitude of cost-offsets (cost savings) for future treatment of Indigenous patients compared to non-Indigenous

Following determination of the IHSD Template framework components, the differences in the magnitude of these components between mainstream GP services and ACCHSes needs to be quantified, in terms of their costs and differences in effects.
• The differences in costs are collated as the additional costs of providing an intervention via an ACCHS.
• Costs are attributed to interventions as a form of joint costs, by calculating the “additional costs per patient encounter” with a health service provider.
• Subgroup analysis according to whether services are remote or non-remote in location has been performed.
• Uncertainty in point estimates has also been included by providing a range of template values (in report).

Preliminary results:
IHSD Template values (average across all services)

<table>
<thead>
<tr>
<th></th>
<th>Mainstream GP services</th>
<th>ACCHSs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short consultation</td>
<td>$ 30.85</td>
<td>$ 45.03</td>
</tr>
<tr>
<td>Indigenous utilisation rate</td>
<td>27.0 % (cf. non-Indigenous)</td>
<td>32.9 %</td>
</tr>
<tr>
<td>Indigenous adherence rate</td>
<td>77.8 % (cf. non-Indigenous)</td>
<td>95.7 %</td>
</tr>
<tr>
<td>Cost-offsets ratio</td>
<td>1.19 (Indigenous:non-Indigenous)</td>
<td>1.19</td>
</tr>
</tbody>
</table>

Discussion
• The results show the costs of providing consultations in ACCHSes are higher than in mainstream, primarily due to the comprehensive nature of these services.
• In addition, rates of Indigenous people’s utilisation of health services and adherence to treatment are higher in ACCHSes than for mainstream GP services.
• Cost-offsets are greater for the Indigenous population irrespective of which health service type is used, indicating greater disease treatment costs for Indigenous compared to non-Indigenous patients.
• Following further validation and refinement of the IHSD Template, the next stage of this research will be to pilot test and apply the template values to economic evaluations.
• This will allow the evaluation of interventions as if they are delivered from an ACCHS, even if effectiveness data from this setting is not available.

Conclusion
• It is hoped this research will benefit both decision-makers and those affiliated with ACCHSs by:
  • Improving the evidence base on cost-effective interventions for the Indigenous population
  • Indicating the additional resources required to appropriately deliver interventions to Indigenous populations and thus indicate funding levels required
  • Via a feedback loop to those assisting in the development of the template, informing regarding the methods used in economic evaluations, the interpretation of results, and improve understanding of potential uses.

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