

Additional file 1

Measurement and valuation of Indigenous Health Service Delivery Template components

Intervention delivery via Aboriginal Community Controlled Health Services compared to mainstream general practitioner services, combined across all remoteness locations

Component	Quantity (measurement)	Cost (value)	Additional cost per patient encounter	Sources
Cost of consultation in mainstream GP practices	-	\$30.85 short consult, \$58.55 long consult	-	Medicare Benefits Schedule 2003 [1]
Basic health intervention delivery characteristics				
Role substitution	Proportional substitution of general practitioner with Aboriginal health worker or nurse Longer average consultation lengths associated with different practitioners	Composite wage rate	\$11.75 per short consultation (including on-costs) \$26.65 per long consultation	Service Activity Reports (SARs) data 2003-04 [2] Econtech Pty Ltd, 2004 [3] Interviews
Compliance management	1.5 hrs/wk per full time staff member	Nurse wage rate	\$2.13	SARs data 03-04 [2] Econtech Pty Ltd, 2004 [3] Interviews
Home visits	10% of consults cf. 1.8% in mainstream	\$21.10 per home visit	\$2.79	Larkins, 2006 [4] Thomas, 1998 [5] MBS 2003 [1] Interviews
Paperwork/Case conferencing	Equivalent to mainstream	-	-	Interviews
Training activities	Equivalent to mainstream	-	-	Interviews
Management of complex medical conditions	Included in longer consultation lengths	-	-	Interviews
Opportunistic screening of family members	Included in total number of patient consultations in health service	-	-	Interviews
Population health, social and community activities				
Other consultative services	36% of all urban consults, 23% rural, 15% remote	Composite allied health wage rate	\$9.28 (including on-costs)	SARs data 03-04 [2] Econtech Pty Ltd, 2004 [3] Interviews
Service substitution	Not costed in study	-	-	No adequate source found

Health promotion/health education	Included in longer consultation lengths	-	-	Sibbald, 2006 [6]
Community development	Included under 'community management boards' component	-	-	Interviews
Community space	-	Not costed as does not incur significant health service cost	-	Interviews
Administration, management and governance structures				
Overheads	30% loading for existing staff 60% loading for new and remote staff	Composite wage rate	Included in 'role substitution' component	ACE-Prevention economic protocol [7]
Community management boards	Ne board per service	\$4000 per annum administrative expenses	\$0.29	Victorian Department of Human Services [8]
Management, Economic, Social, Human (MESH) infrastructure (Management capacity building)	Currently excluded from analysis as considered a start-up cost and not in line with 'steady state' assumption of analysis	-	-	Henry, 2003 [9] Houston, 2003 [10] ACE-Prevention economic protocol [7]
Additional management activities	80% full time equivalent management position	Management wage rate	\$3.58	Interviews Australian Industrial Relations Commission, 2005 [11]
Patient transport services				
Patient transport	50% patients cf. 7% in mainstream Distance: 20km urban areas cf. 32km in mainstream	\$2.12 per km cf. \$0.75 in mainstream	\$47.01	NSW Transport Planning and Management and Applied Economics, 2001 [12] SARs data 03-04 [2] Interviews
Provision of services to a large remote population				
Out of hours emergency care	52% remote ACCHSs Emergency equipment 20 hours overtime per service per week Annual staff training	\$3900 cardiac defibrillator Composite wage rate \$2000 training fee	\$1.31	Rural Ambulance Victoria, 2007 [13] Australian Industrial Relations Commission [14-16] Mole, 2006 [17] O'Meara, 2002 [18]
Outreach services	4 weekly visits of 9 hours duration	Composite wage rate	\$2.30	Battye, 2003 [19] SARs data 03-04

	2.5 staff 60% on-costs Average 2.9 sites 170 km from main service	\$2.15 per km travelled		[2] Interviews
Staff housing and relocation	Housing for 4 staff per service 1 relocation grant 2 yearly	Housing \$219 per week Relocation grant \$20,000	\$1.89	Australian Rural and Remote Workforce Agencies Group, 2007 [20] Realestate.com.au [21]
Pharmaceuticals and pathology	n/a	60% pathology cost loading in remote areas	n/a	Interviews
Differences in Indigenous utilisation and adherence				
Indigenous rates of utilisation of health services	Indigenous utilisation of mainstream services 60% that of non-Indigenous based on BEACH (Bettering the Evaluation and Care of Health) data 22% improvement in Indigenous utilisation with culturally appropriate services based on local evaluation, therefore 73% of non-Indigenous utilisation rate in ACCHSs	n/a	n/a	Pink, 2008 [22] Katherine West CCT evaluation [23]
Indigenous rates of adherence to treatment regimens	Indigenous adherence in mainstream 78% that of non-Indigenous based on differing rates of vaccination coverage 23% improvement in vaccination rates in very remote areas compared to urban areas possibly due to presence of targeted services. Equates to Indigenous adherence in ACCHSs 96% that of non- Indigenous population	n/a	n/a	Hull, 2004 [24] Haynes, 2004 [25]
Cost offsets				
Cost offsets	n/a	Cost-offsets based on average case- adjusted inpatient treatment costs	1.19 ratio between Indigenous and non- Indigenous populations	Fisher, 1998 [26]

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