Indigenous child health checks: the view from the city

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To the Editor: The Medicare item for annual child health checks (CHCs) for Aboriginal and Torres Strait Islanders involves taking a comprehensive health-related history from the antenatal period onwards, recording growth parameters, performing a medical examination, identifying new diagnoses and commencing management, which may include advice, referral, vaccinations and treatment. The CHC has had little evaluation as a primary health care tool in the urban setting; indeed, outside remote regions, it has barely been taken out of the toolbox. Although 76% of Aboriginal and Torres Strait Islander people live in urban or regional areas,[1] we are unaware of any published research on CHCs outside remote areas. We therefore aimed to evaluate the role of the CHC for 0–14-year-olds at Inala Indigenous Health Service, an urban primary care service in a suburb of Brisbane.

Ethics approval was obtained from the University of Queensland's Behavioural and Social Sciences Ethical Review Committee and Metro South Health Service District Human Research Ethics Committee at the Princess Alexandra Hospital. The local Inala Elders Aboriginal and Torres Strait Islander Corporation supported the project. Descriptive statistical analysis was conducted using Stata, version 10 (StataCorp, College Station, Tex, USA).

Of 867 eligible children, we completed 786 CHCs from May 2007 to December 2009. We excluded 245 "subsequent" CHCs (31%) in children who had already had a CHC in the study period, and 109 of the remaining 541 (20%) that were not accompanied by a research consent form, leaving 432 CHCs available for analysis. The children (234 male [54%]) were Aboriginal (394, 91%), Torres Strait Islander (9, 2%) or both (29, 7%).

Reported health risk factors included living in households with a smoker (75%), parental unemployment (67%), exposure to domestic violence (29%), never having been breastfed (32%) and not having teeth brushed twice daily (46%), although more than half the children (57%) exercised at least 30 minutes every day. New diagnoses made at the CHC (40%) were primarily dental caries (36%) or conditions involving the skin (18%) or ears (10%). During the CHC, 63% of parents were given health advice, 24% of children were referred for follow-up and 22% were vaccinated (Box).

From May 2006 (when CHCs were introduced) to June 2009, 4610 Indigenous CHCs were reported by Australia's 54 metropolitan Divisions of General Practice, comprising just 4.3% of the eligible population.[2] This contrasts with the 14 500 CHCs (89% coverage) completed in prescribed remote areas by the Northern Territory Emergency Response (NTER).[3] A recent report highlights the low number of CHCs

Health risk factors (reported by parent or carer), new diagnoses and interventions from child health checks of 432 Aboriginal and Torres Strait Islander participants attending Inala Indigenous Health Service, May 2007 – December 2009*

Variable	No. (%)	Variable	No. (%)
Maternal substance use during pregnancy		Adolescent (12–14-year-olds) behaviour ($n = 65$)	
Tobacco ($n = 432$)	156 (36%)	Consumes alcohol ($n = 54$)	5 (9%)
Alcohol ($n = 432$)	70 (16%)	Current smoker ($n = 54$)	4 (7%)
Cannabis ($n = 431$)	36 (8%)	Sexually active ($n = 51$)	3 (6%)
Intravenous drugs ($n = 431$)	16 (4%)	New diagnosis resulting from health check	
Household characteristics		Any new diagnosis ($n = 432$)	174 (40%)
Household with a smoker ($n = 416$)	312 (75%)	Dental caries ($n = 345$)	124 (36%)
Unemployed parent ($n = 432$)	288 (67%)	Skin condition, all causes ($n = 432$)	77 (18%)
Single parent caring for child ($n = 432$)	194 (45%)	Ear condition‡ ($n = 432$)	43 (10%)
Stressful event impacting on household ($n = 432$)	180 (42%)	Overweight ($n = 332$)	83 (25%)
Households with six or more residents (range, 6–12) ($n = 408$)	149 (37%)	Obese ($n = 332$)	36 (11%)
History of domestic violence exposure (past or current) ($n = 432$)	124 (29%)	Interventions ($n = 432$)	
Perinatal characteristics		Any health/lifestyle advice	270 (63%)
Premature birth (gestation < 37 weeks) ($n = 336$)	45 (13%)	Nutrition advice	119 (28%)
Perinatal complication ($n = 432$)	170 (39%)	Learning/behavioural advice	54 (13%)
Never breastfed ($n = 339$)	110 (32%)	Physical activity advice	54 (13%)
Childhood health behaviour		Smoking cessation advice	42 (10%)
Watch electronic media ⩾ 60 min/day ($n = 237$)	183 (77%)	Alcohol consumption advice	33 (8%)
Teeth not brushed twice daily ($n = 360$)	165 (46%)	Any referral ($n = 432$)	103 (24%)
Suboptimal physical activity† ($n = 215$)	92 (43%)	Paediatrician referral	31 (7%)
Parental/carer concerns about child's behaviour ($n = 264$)	81 (31%)	Dental referral	26 (6%)
Parental/carer concerns about child's learning ($n = 276$)	82 (30%)	Audiology referral	17 (4%)
		Dietitian referral	13 (3%)
		Vaccinations given on the day of the check ($n = 432$)	96 (22%)

* Denominators vary because of missing data. † ⩽ 30 min/day for < 7 days a week. ‡ Defined as having signs (eg, perforation, bulging) or a diagnosis (eg, otitis media, otitis externa) of ear disease in at least one ear. ◆

performed outside the NTER and the lack of timely follow-up within the NTER to address detected health problems. The report concluded: "It's clearly time to reconsider this failed health policy".[4]

However, a distinction should be drawn between the NTER CHCs — usually performed by "fly-in, fly-out" teams who are not in a position to provide ongoing care — and a CHC program embedded in a local clinic as a cornerstone of usual health care. In the wake of the NTER, the then National Aboriginal Community Controlled Health Organisation chairperson, Dr Mick Adams, said, "This is not to say that we do not want more child health checks [but we reject] the present way of doing them".[5]

Strengths of our study include the high proportion of our clinic's eligible population who had CHCs (541/867, 62%). Although our practice comprises only 0.8% of Australia's urban Indigenous children, our service completed 10% of the CHCs done in Australian metropolitan areas to June 2009.[2] Because the study was limited to the day of the CHC, we were unable to evaluate whether referrals resulted in attendances. Further research is required to document the success of follow-up resulting from CHCs, including referral attendance rates.

We have found that the Indigenous CHC, performed within the patient's usual primary care service, provides an important opportunity to make new diagnoses and to identify and initiate management of health risk factors. The CHC is an underused tool worth dusting off in primary care.

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