

# POLICY OPTIONS

## Investigating the feasibility, acceptability and appropriateness of outreach case management in an urban Aboriginal and Torres Strait Islander primary health care service

February 2015

Askew DA, Togni SJ, Schluter PJ, Rogers L, Egert S, Potter N, Hayman NE, Cass A, Brown A

### Policy context

The disparities in health and life expectancy of Aboriginal and Torres Strait Islander peoples compared to non-Indigenous Australians are well documented [1], with the life-expectancy gap being evidence of one of contemporary Australia's most enduring equity, equality and social justice divides [2]. Chronic diseases (CD) are a leading contributor to these disparities, in both relative and absolute terms [3], and although the mortality gap due to respiratory and circulatory diseases has narrowed, this gap has widened when diabetes, cancer and kidney disease are considered [4]. Additionally, morbidity and mortality due to these CD remain significantly higher for Aboriginal and Torres Strait Islander peoples than their non-Indigenous counterparts [4]. Despite well-meaning intentions of governments, researchers and service providers, dating from the introduction of the Aboriginal Protection boards in the late 19<sup>th</sup> Century to the current Australian Government's Indigenous Australians' Health Program, these disparities remain [5, 6]. Why?

The health inequalities experienced by Australia's Aboriginal and Torres Strait Islander peoples compared to non-Indigenous Australians date from the time of white settlement and have been perpetuated by the continuing effects of colonisation, intergenerational trauma and widespread social and economic disadvantage [2, 5]. Aboriginal and Torres Strait Islander people suffer from reduced economic and education opportunities, limited physical infrastructure and poorer social conditions which further contributes to their inequitable health status [5-7]. To mitigate these limitations, alternative approaches are needed that are informed by the holistic and collective understanding of health of Aboriginal and Torres Strait Islander peoples. Models of care are needed that simultaneously deliver evidence based, best practice care and privilege Aboriginal and Torres Strait Islander peoples' understanding of health and health care needs.

Despite the high burden of CD among Aboriginal and Torres Strait Islander peoples, few intervention trials have sought to implement and evaluate novel approaches to reducing this disparity. Patient-centred, home-based, outreach models of CD management that are informed by the Aboriginal and Torres Strait Islander conceptualisation of health have the potential to improve the biomedical and psychosocial health status for Aboriginal and Torres Strait Islander people with CD. Therefore, we developed and implemented such a programme in an urban Aboriginal and Torres Strait Islander primary health care service and evaluated its feasibility, acceptability and appropriateness to Aboriginal and Torres Strait Islander people with CD and their primary health care service.

1. Brown A: Bridging the survival gap between Indigenous and non-Indigenous Australians: priorities for the road ahead. *Heart Lung Circ* 2009, 18(2):96-100.
2. Aboriginal and Torres Strait Islander Social Justice Commissioner: Social Justice Report: 2005. In. Sydney: Office of the Aboriginal and Torres Strait Islander Social Justice Commissioner; 2005.
3. Australian Institute of Health and Welfare: Contribution of chronic disease to the gap in adult mortality between Aboriginal and Torres Strait Islander and other Australians. Cat. No. IHW 48. In. Canberra: AIHW; 2010.
4. Australian Health Ministers' Advisory Council: Aboriginal and Torres Strait Islander Health Performance Framework 2012 Report. Canberra: AHMAC; 2012.
5. Australian Indigenous HealthInfoNet. Overview of Australian Indigenous health status, 2013. In.; 2014.
6. Indigenous Health [<http://www.health.gov.au/internet/main/publishing.nsf/Content/Aboriginal+and+Torres+Strait+Islander+Health-1lp>]
7. Marmot M: Social determinants and the health of Indigenous Australians. *Med J Aust* 2011, 194(10):512-513.

## Policy options

The majority of chronic disease (CD) care occurs in the primary health care setting, and therefore effective models of CD care need to be integrated with this sector [8]. Primary health care based outreach case management is perhaps one such approach that can exploit the strengths of biomedical science in a culturally appropriate manner. Outreach case management is a collaborative process of care coordination that facilitates intensive multidisciplinary care for individuals in their home or other settings away from traditional health care facilities [9]. Although no universally accepted definition of case management exists, there is general agreement that it is comprised of six core functions, namely: assessment, planning, linking, monitoring, advocacy and outreach [10]. Case management has been demonstrated to be effective in improving clinical indicators, quality of life and functionality, patient satisfaction, adherence to treatment, self care and service use [11]. Inherent to case management is a holistic approach to health care, and recognition of the impact of the psychosocial factors on health. This conception and operationalization of health care appears more closely aligned to Aboriginal and Torres Strait Islander peoples understanding of health than many other conventional approaches.

The Home-based, Outreach case Management of chronic disease Exploratory (HOME) Study (2012-14) developed and implemented a home-based, case management model of patient-centred multidisciplinary care for Aboriginal and Torres Strait Islander people with complex CD. The model of care and the case managers (CMs), all registered nurses, were integrated within a primary health care service. The development of the home-based model of care was informed by the general principles of patient-centred care [12], outreach case management [10] and care coordination [13] in addition to Aboriginal and Torres Strait Islander peoples collective and holistic conceptualisations of health.

This early phase exploratory study evaluated the feasibility, acceptability and appropriateness of the HOME Study model of care for Aboriginal and Torres Strait Islander people with complex CD. Our model of outreach case management was highly valued by the participating patients, and by the primary health care service, and further research is required to determine the sustainability of the improvements in health and wellbeing and to more fully understand the features of value of the model of care for patients and for health service staff.

The positive outcomes of this study have far reaching implications, at the level of the individual patient, their family, the community and the primary health care system. Case management that addresses psychosocial and biomedical risk factors has provided direct benefit to individuals with CD, and to the primary health care service. Opportunities exist to broaden the scope of application of this model of care to high-risk and vulnerable populations across the country. This model of holistic, multidisciplinary patient centred care improved health and wellbeing and has the potential to limit the individual and population impact of chronic disease within Australia's most vulnerable populations. This exploratory study demonstrated that improvements can be made in the lives of Aboriginal and Torres Strait Islander peoples with complex health care needs.

The exploratory nature of our study precludes any definitive statements about the effectiveness of our model of care, however the high levels of satisfaction of both patients and the primary health care staff, and the improved health and wellbeing of patients are promising results. Further research in the form of an intervention trial is required to identify if this model of care is able to realise its potential as a culturally appropriate, effective and cost-effective mechanism to improve the quality of life and quality of care for Australia's Aboriginal and Torres Strait Islander peoples living with CD.

- Schmidt B, Wenitong M, Esterman A, Hoy W, Segal L, Taylor S, Preece C, Sticpewich A, McDermott R: Getting better at chronic care in remote communities: study protocol for a pragmatic cluster randomised controlled of community based management. *BMC Public Health* 2012, 12:1017.
- Huntley AL, Thomas R, Mann M, Huws D, Elwyn G, Paranjothy S, Purdy S: Is case management effective in reducing the risk of unplanned hospital admissions for older people? A systematic review and meta-analysis. *Fam Pract* 2013, 30(3):266-275.
- Huber DL: The diversity of case management models. *Lippincott's case management: managing the process of patient care* 2002, 7(6):212-220.
- Sutherland D, Hayter M: Structured review: evaluating the effectiveness of nurse case managers in improving health outcomes in three major chronic diseases. *J Clin Nurs* 2009, 18(21):2978-2992.
- Stewart M: Towards a global definition of patient-centred care. *BMJ (Clinical Research ed)* 2001, 322(7284):444-445.
- Goodwin N, Sonola L, Thiel V, Kodney D: Coordinated care for people with complex chronic conditions: Key lessons and markers for success. In. London: King's Fund; 2013.

## Key findings

This model of care was feasible, acceptable and appropriate in our setting. Of the 60 eligible patients invited to take part in this study, 41 agreed (68% recruitment rate).

The model of care was determined to be feasible as it was able to be implemented by the case managers (CMs) and the multidisciplinary primary health care team and integrated into the routine practice of the health service.

The interviews with patient participants and health service staff revealed that the model of care was uniformly acceptable to all interviewees (n=25). Patient participants appreciated the CMs visiting them in their own homes, being interested in them and their lives, providing holistic care and removing many of the everyday stressors and worries associated with living with complex chronic diseases for them and their family members. These participants recognised that the health professionals were working together as a team to address their health care needs, and that they themselves were key members of those teams. Patient participants spoke about the fundamental difference that the model of care had made to them, with one female participant saying...

*... [I am] a different person...my whole life has just basically changed around...one of my biggest achievements [is] that I don't need insulin anymore...*

Health service staff appreciated the patient-centred case conferences and the in-depth follow-up of patients, commenting that they "...worry less now..." because they know that patients are not falling through gaps in the health system. The staff also considered that the model of care enabled them to be more proactive "...so we weren't always putting out bushfires, but actually doing some work underneath it..." thereby increasing their professional satisfaction as well as the health and care of participants.

Improvements in participants' health status suggest that the model of care met, to some extent, participants' health and wellbeing needs. Table 1 presents key clinical indicators at baseline and six months. There were significant improvements in type 2 diabetes control, as measured by HbA1c, systolic and diastolic blood pressure, rates of moderate to severe depression and self-rated health status, but no change in measured BMI (p=0.57). However, information on BMI was only available from 14 patients as those with lower BMI were less likely to have their weight monitored on a regular basis and therefore more likely to have missing BMI values at six months.

Hospitalisation rates decreased, as did the ratio of general practitioner consultations for acute care compared with preventive care.

Table 1 - Key clinical outcome variables at baseline and six months

	Baseline	6 months
<i>Variables assessed from medical chart audit</i>		
HbA1c (%) (mean (range))	8.0% (6.0% - 12.6%)	7.6% (5.9% - 11.6%)*
Body Mass Index (kg/m <sup>2</sup> ) (mean (range))	35.4 (23.0 – 63.8)	40.0 (31.2 – 66.8)
Blood pressure systolic (mmHg) (mean (range))	134.4 (101.0 – 194.0)	121.7 (91 – 172)*
Blood pressure diastolic (mmHg) (mean (range))	77.2 (56.0 – 97.0)	74.0 (57.0 – 100.0)*
<i>Variables assessed during Home Assessments</i>		
Moderate to severe depression (assessed using adapted PHQ-9) (n/N (%))	21/34 (62%)	12/31 (39%)
Self rated health status (good, very good or excellent) (n/N (%))	11/32 (34%)	16/31 (52%)*

\* P < 0.001

The research reported in this paper is a project of the Australian Primary Health Care Research Institute, which is supported by a grant from the Australian Government Department of Health under the Primary Health Care Research, Evaluation and Development Strategy. The information and opinions contained in it do not necessarily reflect the views or policies of the Australian Government Department of Health.