

Reorientating health services in remote north Queensland to better address Indigenous health

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BACKGROUND

Australia may be a wide brown land but it is also one of the most highly urbanised countries in the world, with 70% of the inhabitants clustered in the major metropolitan centres along the coastal strip.¹ The remainder of the population is spread across a diverse range of regional (13.5%), rural (13.5%) and remote (3%) locations.^{2,3} The health status of Australians living in rural and remote areas is measurably poorer than that of their urban counterparts and declines along a continuum as one moves away from the capital cities.^{4,5} Health issues relate to living conditions, social isolation, cultural diversity and distance from health services.^{6,7} However, the single largest contributor to this differential is the very poor health status of Indigenous persons. The proportion of Indigenous residents increases as locations become more remote, from 1% of metropolitan to 20% of rural populations.^{4,8}

The Australian population in general is one of the healthiest of any developed country. Yet the Indigenous Australian population is one of the least healthy in relation to comparable developed countries.⁹ They have less access to health care, a life expectancy some 20 years younger, a higher burden of disease, and hospitalisation and death rates between two and four times higher than their non-Indigenous counterparts.^{10,11} The United States, Canada and New Zealand have narrowed the difference between Indigenous and non-Indigenous life expectancy to 4-5, 5-7 and 8 years respectively. In contrast Australia's gap has not changed appreciably in 20 years, if anything it has widened.¹²

Queensland Health Northern Zone

The Northern Zone is an administrative region of Queensland Health which stretches for some 750 000 square kilometres from the East Coast to the Northern Territory border and from Moranbah in the south to the Torres Strait in the North. It has a population of almost 600 000 people of whom six per cent are Aboriginal, two per cent are Torres Strait Islander and one per cent are both Aboriginal and Torres Strait Island. At nine per cent, the Indigenous population is significantly higher than the state average of three per cent.¹³ The all-cause mortality rate in the Northern Zone is 15% higher than for Queensland as a whole.¹²

The Northern Zone has 11 Health Service Districts. Four Far North Queensland Districts with high Indigenous populations were chosen as priority sites for this program.

- Cairns – 9.5% Indigenous population
- Mount Isa – 22% Indigenous population
- Cape York – 50% Indigenous population
- Torres Strait – 74% Indigenous population.¹³

These Districts contain 34 discrete Indigenous communities where Queensland Health is the sole or predominant health service provider, allowing them to take the lead in modifying service delivery models.

THE MODEL

In early 2000 the District Manager of the Northern Zone participated in a Cape York Partnership meeting, where a range of government departments met with peak Indigenous organisations to discuss actions and plans for responding to Indigenous health issues in the Cape York Peninsula. It became clear that Queensland Health lacked a strategic approach for dealing with emerging health issues and needed to begin by developing an internally focused strategy. While the importance of an intersectoral process was acknowledged, this was considered a longer term objective as true partnerships are based on trust and so take time to be established. This paper focuses on the internal process undertaken by the Northern Zone.

Queensland Health staff began work on identifying key activities required to achieve improved health for Indigenous people in the rural and remote areas of the Zone. It was recognised that changing models of service delivery would have minimal impact if the systems in which they operated were not supportive. This led to the concept of the Enhanced Model of Primary Health Care (EMPHC), and an Inputs-Activities-Outputs framework (Figure 1) was developed to describe the key elements of this social health model.¹⁴

In determining how to move from the current status (inputs) to the desired status (outputs) the Zone drew heavily on existing consultative documents to inform its choice of activities. These included:

- the Queensland Health Aboriginal and Torres Strait Islander Health Policy which identifies seven key directions for improving Indigenous health:
 - community control of primary health care services
 - participation
 - culturally appropriate service provision
 - needs based criteria for service provision and resource allocation
 - workforce planning and development
 - information, monitoring and evaluation
 - across government approach to the provision of key social and infrastructure services to the Aboriginal and Torres Strait Islander population.¹⁵
- the Queensland Health Indigenous Workforce Management Strategy which aims to ensure that Queensland Health will be better positioned to:
 - work with Indigenous peoples to improve their health status
 - build increased diversity and capacity for innovative thinking across the workforce generally
 - demonstrate commitment to the spirit of participation
 - assist all employees to learn to identify and manage difference and so improve their cross-cultural confidence and practice.¹⁶

The Zone also utilised current best practice evidence including relevant local research. The Well Person's Health Check,¹⁷ a cross sectional study conducted from 1998–2000 in many of the

EMPHC communities, provided community specific health data and quantified many risk factors. The Torres Strait Cluster Trials demonstrated that relatively simple changes in work practices could have a significant impact on health outcomes.¹⁸

Figure 1 The Enhanced Model of Primary Health Care Framework

INPUTS	ACTIVITIES	OUTPUTS
Current health status	Planning in partnership <ul style="list-style-type: none"> • Community groups • Key Indigenous bodies • Other government and non-government services 	Shared understanding of health needs
Current program activity	Evidence based programs <ul style="list-style-type: none"> • Acute care • Chronic Disease Strategy • Referral and rehabilitation 	Improved health outcomes
Community identified needs	Support systems <ul style="list-style-type: none"> • Leadership • Health Information and data systems • Quality Approaches 	Sustainable quality health systems
	Appropriate workforce <ul style="list-style-type: none"> • Recruitment • Orientation • Training and development 	Appropriately skilled workforce
		Increased Indigenous employment in health

The following key activities were identified:

- planning in partnership
- evidence based programs
- support systems
- appropriate workforce.

In mid 2001 the Clearing House for Rural and Remote Projects (CHIRRP) was developed to oversee the strategic planning, information sharing and project management required to implement the EMPHC in 49 facilities across the four targeted Districts. Some of the activities currently being co-ordinated by the CHIRRP Unit include:

- Indigenous Health Co-ordinators are working with District staff to improve the District capacity to engage in partnerships with community and key Indigenous organisations in order to advance planning and the adoption of Indigenous health policies
- the Better Health Outcomes Project is implementing Ferret, a computer-based patient information and recall system
- the Chronic Disease Strategy Team is reorienting clinical practice through the Chronic Disease Strategy

- the Crime Prevention Program is working with communities to reduce the impact of alcohol and substance misuse
- the Healthy Women's Initiative is developing a service delivery model to improve Indigenous women's access to and utilisation of health services, in particular to screening programs
- a Men's Health Project is facilitating the development of Men's Groups and working to increase the engagement of Indigenous men in the health process.

WORKPLACE IMPACT

Remote health facilities in the Northern Zone are run by multi-disciplinary teams of Nurses and Health Workers with either resident or visiting Medical Officers. Visiting teams may include Allied Health and other professionals delivering specialist services. Health service provision has predominantly occurred in an acute care, biomedical, patient initiated model, which has not effectively integrated the population health needs of the communities.

The implementation of the EMPHC as a comprehensive primary health care model has involved a significant amount of organisational change. It has required the reorientation of the health service from a clinical biomedical to a primary health care model in terms of both philosophy and service delivery.

Prior to implementation, information sessions were held for District staff and community organisations, and each District Manager signed an undertaking to participate in this change process. Each District was asked to appoint a Director of Primary Health Care to take the lead in this change management process through the provision of leadership, co-ordination, communication and perseverance. They acted as the link between the CHIRRP Unit and the District and the contact point for the project teams offering training around changed work practices and models of service delivery. Minimal additional resources were available to support the change process, which was perceived by most Districts as a Zonal initiative.

There have been a number of significant changes to work practices required by the implementation of the EMPHC. Three of these will now be considered.

Collaborative practice

Between and within Districts, staff at facilities operate in a range of workplace practice models. The handover of the responsibility for Indigenous health from the Department of Aboriginal and Islander Affairs to what is now Queensland Health in late 1989 and the devolution by Queensland Health of management responsibilities to Regions in 1991 saw the development of a range of new organisational structures. The Northern Region (including what is now Mount Isa District) maintained a centralised management, hospital focused structure with separate medical, community health, child health and Indigenous health sections. The Peninsula and Torres Strait region (now Cairns, Cape York and Torres Strait Districts) adopted an integrated approach in remote areas and combined these services into a single Primary Health Care Centre. Staff integration happened with varying degrees of success, and the professional relationship between Nurses and Health Workers often rested on the inclination of the incumbent Director of Nursing. The dissolution of the regions into Districts in 1996 resulted in further divergence of organisational structures and cultures. The clustering together of Districts into Zones in 1998 has resulted in an historically divergent mixture of workforce and service delivery models now being asked to align to a single model.

The EMPHC standardises working relationships by requiring all staff to work within a collaborative practice model, and for many staff this has required quite a cultural shift.

Collaborative practice is the term used to describe the practice relationship between Registered Nurses, Medical Practitioners, Indigenous Health Workers and other health professionals... The collaborative practice relationship incorporates the dual notions of collaboration and delegation. The defining characteristics of the collaborative relationship are:

- Mutual respect and acknowledgement of each professions role, scope of practice and unique contribution to health outcomes.
- Clearly stated protocols and guidelines for clinical decision-making which comply with relevant legislation and are supported by the health facility and the health organisation.
- Clearly defined levels of accountability with an acceptance that joint clinical decision-making is an integral component of collaborative practice.
- A belief that the best health outcomes are achieved when well prepared health professionals work in collaboration and partnership in both the practice and educational setting.¹⁹

Operationally this promotes a functional multi-disciplinary team approach. Strategically it maximises the utilisation of existing human resources.

Chronic Disease Strategy

The Chronic Disease Strategy (CDS) was developed to reduce the impact of the increasing burden of chronic disease being experienced in Indigenous communities. Although increased prevalence of chronic disease is a world wide trend, the diseases and their complications are known to impact on Indigenous persons at a younger age than their non-Indigenous counterparts and there are more likely to be co-morbidities.^{11,20}

The CDS targets cardiovascular disease (hypertension, ischaemic heart disease, rheumatic heart disease), diabetes, chronic renal disease, chronic respiratory disease (chronic obstructive pulmonary disease, asthma), mental ill-health and sexual and reproductive health (sexually transmitted infections, cervical and breast cancers). Together these chronic conditions form the greatest burden of ill-health in the community, and fuel a growing demand for relatively ineffective, expensive tertiary care.¹¹ Yet, most of these poor outcomes are preventable.

In line with the strong, well established evidence base^{21,22,23} the strategy involves the three pronged approach of primary prevention, early detection and management within a life continuum framework.

Primary prevention

Primary prevention focuses on reducing population risk factors and risk conditions such as tobacco smoking, poor nutrition, substance abuse, low birth weight, poor housing, unsafe sexual practices, obesity, vaccine-preventable diseases and poor social and physical environments. It is undertaken in a consultative fashion with the communities and associated service providers.

Early detection

Many chronic diseases have an early, asymptomatic phase, where detection of the problem and appropriate intervention can lead to better health outcomes. These include sexually transmitted infections, hypertension, renal disease, diabetes and cancer of the cervix and breast. High risk behaviours such as tobacco smoking, alcohol abuse, poor nutrition, lack of exercise and sexual behaviours can be influenced by appropriate brief interventions.

The current status of the life continuum of early intervention is follows.

- 0–4 years: Growth Assessment and Action, a child screening and intervention program focusing on nutrition is implemented. A project has been approved to complement this program with a comprehensive standardised screening tool and set of guidelines.
- 5–14 years: A project is currently under way to develop a comprehensive standardised screening tool and set of guidelines.
- 15 + years: The Adult Health Check, a combination of screening and brief interventions modelled on the Well Person’s Health Check is offered to all clients 15 years and older.
- 55+ years: A project is being developed to enhance the Adult Health Check to better reflect the needs of this older age group.

Management

The Torres Strait Cluster trials demonstrated that evidence-based standard treatment protocols combined with community level registers and recall systems can improve outcomes for people with established chronic disease.^{18,24} This model was used when developing evidence based guidelines and care plans to direct best practice interventions for clients with established chronic disease. There is also mounting support for the incorporation of self management skills in chronic disease care.²⁵ The pre-conditions for these systems to operate effectively are:

- an appropriately trained workforce
- standard treatment protocols
- good information systems
- a relationship with the community which produces a shared understanding of the causes and best approach to major health problems.²⁶

This population health based approach to health care is quite different from the prevailing acute biomedical model and can be quite threatening for some staff. Suitable change management strategies for existing staff, appropriate recruitment and effective orientation of new staff, and ongoing training and development of all staff are required to ensure an appropriate, sustainable workforce.

Patient information and recall system

The Northern Zone has chosen to use a computer-based patient information and recall system, Ferret, in conjunction with the Chronic Disease Strategy. This program is very ‘user-friendly’ taking into account the varied levels of computer literacy amongst health staff. It is not a full electronic medical record and does not take the place of the client’s chart, which remains the medico-legal document.

As the community’s population register is entered onto Ferret, the program assigns a surveillance care plan to every resident based on age, gender, ethnicity and geographic location. These equate to the annual screening protocol appropriate for that person (for example the Adult Health Check). Additional care plans, related to diagnosed chronic diseases are assigned as required by the health staff. These are merged with the surveillance plan to provide an integrated recall schedule for each client. Ferret can then be used to perform a number of tasks:

- remind staff when clients need to be recalled for tests or treatments
- assist staff in planning individual client care
- retrieve chronic disease registers
- assist staff in planning service delivery at the facility level
- produce reports on the health status of the community for staff and community use.

Ferret is networked on the Queensland Health intranet, which allows staff in all facilities using the program to access client records, with consent, from another participating facility. This is particularly useful given the transient nature of our Indigenous population with many having a wide network of family links which sees them travel regularly between communities. External clinics with a large clientele from the target communities, such as the Cairns Diabetes Centre, can also access client records on Ferret, catering for the remote residents who need to access specialist services in adjacent regional areas.

OTHER FACTORS

Concurrent activities occurring in many of the targeted communities have also impacted on health service delivery and the implementation of the EMPHC.

In 2001 the Cape York Justice Study was undertaken in an attempt to determine the extent, reasons for, and possible solutions to criminal behaviour and alcohol and substance misuse in North Queensland Indigenous communities. Meeting Challenges, Making Choices, (MCMC), the Queensland Government's response to the study, was released in April 2002 and impacts on many of the EMPHC communities. Significant actions at the community level have included the formation of Community Justice Groups and Liquor Licensing Boards, and the introduction of Alcohol Management Plans which restrict the carriage, purchase and consumption of alcohol in communities. Queensland Health at an organisational level is involved in the priority areas of health; child, youth and families; and alcohol, substance abuse and rehabilitation. MCMC has also seen Government Champions, in the form of the Director Generals of state government departments, linked to communities. One of their roles is to facilitate Negotiation Tables, bringing together the lead agencies working in a community with community members to discuss local concerns and develop frameworks for action.

The Primary Health Care Access Program (PHCAP) is a Commonwealth funding program designed to increase the accessibility of primary health care services, align health care systems to Indigenous persons' needs and empower communities to take responsibility for their own health. It incorporates cross-government joint planning and resource allocation which builds on existing services to allow more efficient service provision. Many of the EMPHC communities have been, or are engaged in regional planning, or in the case of Cape York Whole-of-Health planning. These are community consultative processes designed to map local needs and gaps in existing services across the whole local health system. This information will be used to develop Regional Health Plans determining priority areas for access to additional PHCAP funding. The funding will support the development of comprehensive primary health care services, of which Queensland Health will be a part, but over which the communities will have a sense of ownership.

Within these processes Queensland Health has been provided with some excellent opportunities to engage in and develop partnerships with both community members and other

service providers in the communities. However, it can also be seen that the communities themselves are in a state of flux and that broader social aspects of health are also evolving.

CONCLUSION

Improving Indigenous health in remote communities has required a rethink of our approach to health service delivery. There is mounting evidence that a comprehensive primary health care approach is the most effective way to address Indigenous health needs in Australia.²⁰ Queensland Health Northern Zone's EMPHC has attempted to provide a systems based model of care within a primary health care philosophy for remote Indigenous communities. Three years since implementation began, it remains a 'work in progress' as components are added, developed and modified in the light of best practice evidence. For most District staff, both clinical and managerial, the adoption of this model has required a paradigm shift and many have found the process daunting.

Change management strategies need to be broad ranging and sustainable to successfully introduce such a sweeping change. It is easy to underestimate the change management requirements in a scenario such as this, where the change was orchestrated by a variety of project teams who each approached their task with a level of knowledge and enthusiasm that was rarely reflected in the recipients. These issues will be mitigated in the future by a more measured and co-ordinated approach to implementation on the part of the CHIRRP Unit. A lot more preliminary work is also being done at the District management level to ensure that the required structures and systems, such as community consultation, staff training and communication strategies, are in place prior to implementation. To be sustainable this model must be facilitated and supported at the local level in both the workplace and the community.

While a detailed overview of the implementation is beyond the scope of this paper briefly the process from the CHIRRP Unit perspective involves:

- community and health centre information sessions
- mapping of existing services and primary health care capacity
- identification of deficits in infrastructure, resources and staffing numbers and skills which need to be addressed
- planning with key internal stakeholders to determine an implementation strategy
- training of staff in programs and work practices to be adopted
- ongoing support with establishing changes as core business and communication of changes to community.

Sustainable health service reorientation at the macro level requires changes to attitudes as well as clinical practice and needs to begin in training institutions. It is untenable that remote Districts and facilities are required to struggle to recruit and then retrain staff on site because they are not being adequately prepared for the range of service delivery models now required to adequately support our diverse population. Until such issues are addressed at an institutional level we will continue to struggle to achieve equity of health status for remote and Indigenous populations.

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PRESENTER

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