

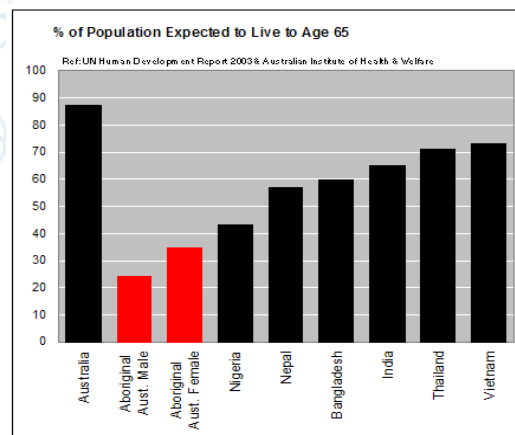
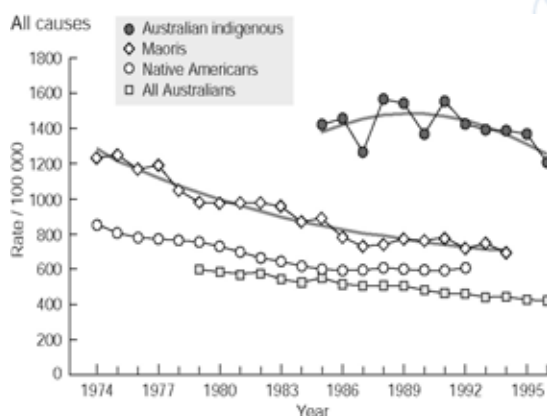
Subverting the chronic disease paradigm – an innovative workforce initiative across northern Australia

Janie Dade Smith, RhED Consulting, and Faculty of Medicine Health and Molecular Sciences, James Cook University, **Christine Connors**, **Jenni Judd**, Preventable Chronic Disease Program, NT Department of Health and Community Services, **Robyn McDermott**, Faculty of Health Science, University of South Australia

INTRODUCTION

It is great to be presenting this paper not only at the National Rural Health Conference, but also in the Northern Territory, as this part of the country is where some of this project, which I am going to talk to you about today, was born.

Chronic disease is currently responsible for sixty per cent of the disease burden globally. This is expected to rise to eighty per cent by the year 2020 and as the population ages (1). It is therefore one of the greatest challenges facing health care systems throughout the world. The specific chronic diseases I refer to here today are – diabetes, renal disease, cardiovascular disease and chronic obstructive pulmonary disease. The World Health Organization is now labelling these diseases as the “diseases of lower socioeconomic groups” (1). We therefore find internationally and nationally that a much higher incidence is found in Indigenous groups. However, while we have found that mortality levels have been dropping within most Indigenous populations in other first world countries in the past 20 years, Australia is the striking exception. As we can see in this SLIDE 1, by Ring and Firman that indicates the standardised mortality levels between Native Americans, the Maoris, All Australians and Indigenous Australians (2).



SLIDE 2 Yet when we compare the percentage of Aboriginal Australian men and women who can expect to live to the age of 65 years with populations living in those very poor countries, found in this slide from the United Nations and published by the AIHW in 2003, we find a striking inequity (3). Whereby only 23 per cent of Aboriginal Australian men and 33 per cent of Aboriginal women can expect to live to 65 years. Whereas in Nepal, Vietnam, Bangladesh, India, Thailand, Vietnam, some of the countries to whom Australia sends aid, these mean and

women they can expect to live much longer. I find this slide particularly concerning, yet it paints a powerful picture onto this incredibly inequitable landscape.

THE PROJECT

Today I want to tell you about a chronic disease project that occurred last year SLIDE 3, which looked at a workforce strategy to implement the Northern Territory (NT) and Queensland's (QLD) Preventable Chronic Disease Strategies (PCDS), across northern Australia. NT and Qld had developed their strategies in 1999 and 2001 respectively and had a common three-point framework of prevention (in preference to cure), early detection (as a way to prevent complications) and best practice management based on the available evidence. This is the state and the territory that have the second and third highest population of Indigenous peoples respectively and the two which also have the dubious honour of having the worst health statistics recorded in the world on some indicators, in particular diabetes and renal disease (4).

The partners

The project was funded by the Australian Government through its Public Health Education and Research Program (PHERP). It involved seven partners – 3 universities, two health departments and two Indigenous organisations – Menzies School of Health Research, James Cook University, University of Queensland, Queensland Health, the Northern Territory Department of Health and Community Services, Apunipima Cape York Health Council and Aboriginal Medical Services Alliance of the Northern Territory.

Aim

The ultimate aim of the project was to reduce the impact of these preventable chronic diseases, among high-risk populations in Northern Australia through an improving the capacity of rural, remote and Indigenous health workforce and services (5).

Who did it target?

SLIDE 4. The project targeted all of the remote and rural health workforce – doctors, nurses, Indigenous health workers, allied health professionals and program managers.

The challenge was how best to educate the health workforce, in practical ways, to ensure the strategy was sustainable, reached its desired outcomes, and that the health care needs of the communities were being addressed in a systematic way.

Educating the workforce – acute vs chronic

SLIDE 5. Yet when we examine the way in which we educate and structure the health workforce in Australia is not designed to meet the unique needs of chronic disease, especially in rural and remote areas.

Historically, the workforce has been structured to provide health care services, largely based on an acute medical model of care SLIDE 6 CHRONIC Vs ACUTE, which originated from the infectious disease model – dealing with the patients episodic and urgent problems. By this I mean – where there is an acute onset of illness, with an accurate prognosis, a short-term treatment, and where a cure is usually likely. Additionally, the majority of the workforce has been, and continues to be, trained in large tertiary teaching hospitals and universities that promote this medical model of care, and the graduating workforce have become comfortable

working in this way. I make the point here, that this is with the exception of Indigenous health workers, who are the only health workforce who are truly educated in a primary health care model.

Yet what is required in remote and rural areas is not so much an acute care workforce, who are often dealing with the acute results of chronic illness, but a workforce who can work in the different ways required to prevent, detect and manage the current epidemic of chronic disease that prevails across northern Australia. SLIDE 7. As we know, chronic disease is often gradual, with multiple causes, uncertain prognosis, and a relatively impossible cure and lifelong duration. Therefore a new way of working was required – a paradigm shift that would introduce a systematic approach that places the patients as the experts in their own illness (6,7).

So what does this all mean? It means that the preparation and education of the workforce needed to be reviewed and restructured to accommodate these chronic disease ways of working, to ensure they became comfortable in using a systematic and population based approach. The additional challenge was how to do this in a remote context whereby there are significant workforce shortages, difficult geographic conditions, difficult transport, within a cross-cultural environment where people are trained in a medical model of care, dealing with the worst health status in the world on some indicators and have an expectation that they will work within their extended clinical roles comfortably. Change is never easy, but why is this really important to do?

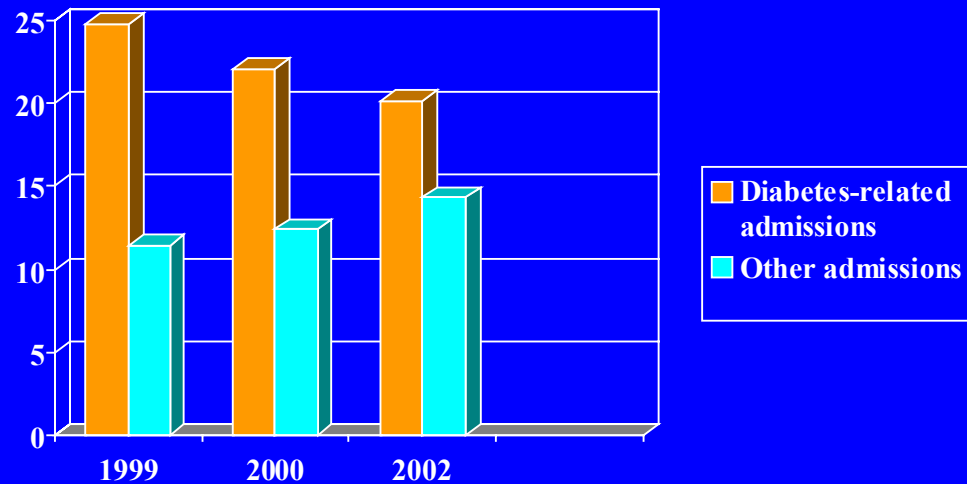
Why was this important to do?

The evidence that has emerged over the past decade tells us that using a systematic population wide approach will result in different and improved health outcomes for the people who suffer chronic conditions as opposed to trying to improve the health of individuals (6,7). SLIDE 8 Key features of how to best organise care for chronic disease includes – attention to behavioural and information needs of patients; access to specialist expertise; and supportive information systems. In the NT, the importance of individual self-care, family support, community education, and community ownership were also recognised, as was the need to base the strategy on prior initiatives addressing tobacco, alcohol and nutrition. In short, they needed systems that support self-care (7,8).

Here is an example of such a process, whereby a systematic population health approach to diabetes was implemented in the Torres Strait Islands and resulted in a 32 per cent reduction in preventable diabetes related hospitalisations in 2001. The 3 year follow up audit showed that these improvements had been sustained and improved blood pressure control and preventable hospitalisations had further declined (Slide 9 McDermott 2003). So it is easy to see that developing a systematic approach was actually going to work.

Hospitalisation of people with diabetes, Torres Strait, 1999-2002:

Proportion of diabetics hospitalised in previous 12 months



The methodology

There were three main phases. I used a triangulated approach that included 76 semi-structured interviews with key informants, 35 surveys of remote staff across NT and NQ, and a literature and resources searching to support the work. A total of 111 people or groups participated. These included all stakeholders involved from community controlled health organisations, to policy makers, NT and Qld Health staff, clinicians, to remote health staff covering all disciplines. With the target group being nurses, doctors, IHWs, program managers and allied health professionals gave the project great breadth.

The findings

The good things I found were some great, passionate, committed and really interesting people who were working exceptionally hard in genuinely trying to make a difference. Most knew of the preventable chronic disease strategy and what it was about. It was clearer in NQ about how to implement the strategy than it was in the NT, mainly due to what they call their Enhanced Model of Primary Health Care used. Though it was much clearer in the NT what the PCDS was, as it was written and easily accessible. Most people knew of, and used, the CARPA and Standard Treatment Manuals and protocols. I found lots of fantastic resources, literature, research papers and reports. I found the budding out of a variety of systematic approaches to manage chronic diseases, some of which were working well. There were 7 different computerised record systems being trailed but none were reportedly working really well, mostly due to access to lines.

There were some significant increases in staffing levels and dedicated staffing to address the chronic disease issues, particularly in the NT. Though I do question the wisdom in employing largely nurses into these positions, as many are falling into nursing type roles when they are in communities, which include on-call demands and acute care work. This made me question why we aren't we making more use of, and really supporting, the most sustainable and appropriate workforce in remote Australia – Indigenous health workers? In NQ there were several health workers who are the health centre manager and these were working well. Badu

Island in the Torres Strait has an excellent model to examine if anyone is particularly interested. I am aware that very recently the NT is working hard to recruit AHW managers who might look at specific program areas and different ways of working to get around some of the very stressful issues that health workers face in dealing with their own families and communities in this very challenging area.

I suppose the key thing I found was that there was little difference between the disciplines – nursing, medicine, Indigenous health work and allied health, in terms of education and training needs. As we know it is the ‘rural and or remote context’ that makes the difference, not so much the ‘content’ of what we are teaching (9). Which made me question why we continue to educate the disciplines in their own silos, when remote Indigenous health is all about multi-disciplinary teamwork. Again this is to do with the way in which such things are structured, and therefore funded, within our political system. There is also an excellent ABCD project being conducted in the top end of the NT which is auditing chronic disease systems; and feeding back to numerous pilot communities, the outcomes of their activities. Also chronic disease was starting to be viewed as ‘everybody’s business’.

The more challenging findings

The remainder of what I found was actually quite distressing. I found incredible inequities between rural, remote and urban – more than usual. SLIDE 11. In terms of education and training, I found orientation and professional educational programs that were as good as the people who were conducting them. In fact in Queensland there was a perception that we need to know that people are going to stay first, before we orientate them, which demonstrates the lack of commitment of the health department to invest in the education and preparation of remote health staff. Consequently, there were reports of some people attending orientation programs 12 months after employment! Many remote nurses in the Cape in North Queensland were also agency staff on short-term contracts. Medical services are provided by RFDS and there are few remote doctors ie 3 compared with 38 in NT. Hence the turnover rate continues to be enormous in most communities in the Top End of the NT and North Qld. Yet the continually high staff turnover rates do not occur so much in Central Australia, where the Pathways Orientation and Professional Development Program is being very successfully conducted. They reported well sustained staffing levels with even a waiting list of people wanting to work there, plus only having to recruit twice yearly. This, I believe, is purely to do with structured orientation and professional development programs and an underpinning philosophy that places value on employee.

SLIDE 12. I asked the participants what they thought were the greatest training needs of the remote health workforce and these were their responses. There was a generally poor understanding of the links between chronic disease, health transitions, population health and the social determinants of health; and the medical model of care strongly prevailed across both the NT and Qld. I draw your attention to no 4 on this list, ‘respect’, which was noted by all Indigenous respondents. The others not listed included managing chronic disease, seeing health in the social context, care planning and knowing about evidence based medicine, which was about 4th last!

SLIDE 13. This is one of the comments from one interviewee.

The focus is strongly on the medical model of blood tests and disease rather than wellness and primary health care approaches. Health Promotion has been bastardised...what this is about is dealing with chronic disease in Aboriginal Australia...why aren't we making Aboriginal people the solution (28)

People seemed to also not be able to relate the application of those factors that determine whether we will be healthy or not – the social determinants and their roles; and educators had difficulties in applying the content to the remote practice in practical and easy ways.

SLIDE 14. I found that there was a very strong focus on the ‘management’ of chronic disease rather than the early detection and prevention – which was seen as the ‘hard end’. The survey revealed that practitioners on the ground were spending only 9 per cent of their time on preventing chronic disease, 9 per cent on early detection and the remainder of their time is spent on managing chronic disease, and acute care (often as a result of chronic disease) and administration. This was amid an environment of poor recruitment and retention practices, lack of a co-ordinated approach, especially due to continual restructuring processes across both the NT and Qld; and a distinct lack of understanding about the role of the Indigenous Health Worker in many places. I found this particular issue very concerning.

SLIDE 15. Perceptions of success. The survey asked the respondents how well they thought they prevented, detected and managed chronic disease in their communities.

- 93% rated their prevention it as between poor and OK
- 73 % rated early detection – it as between poor and OK and 27 % rated it as good
- 31% rated their management of chronic disease as between poor to fair; 56% as OK; 9% as good and 4% as excellent. This slide of course helped identify the training needs.

I also found genuine attempts at putting into place a systematic approach to managing chronic disease, which was working really well in some places, but the usual old scenario of remote practice prevailed...as soon as someone left things fell in the proverbial hole. We all know what happens when we get tired and disillusioned we fall back into our old habits and practices, where we feel most comfortable...the medical model. There was a distinct lack of sustainability built into most approaches and acute care always predominated.

The most concerning thing I found, was that the health status was much lower than I had seen it 20 years ago when I was working in remote clinical practice in the NT. And this was evident amid a disempowered health workforce, particularly, Aboriginal and Torres Strait Islander Health Workers.

THE PROJECT CHANGES

Now the original intent of this project was to develop a curriculum and training resources to support the workforce, and to pilot them in a couple of remote communities. Yet the issues were so broad, and common across the disciplines and in the NT and NQ, that we decided that a single or a couple of resources or workshops would provide little change in assisting the required paradigm shift. What was required was something far more strategic and radical.

Principles

Therefore, in May 2004 the project steering committee, which included a Commonwealth representative, endorsed an innovative process that changed the way in which we approached this project. We took it more broadly and strategically and come up with 6 principles to manage this project.

- 1 Prioritise the areas with the populations suffering the greatest burden of chronic disease – remote Indigenous communities – leaving urban and rural communities can adapt the curriculum to suit their particular communities particular needs.
- 2 Develop a curriculum framework SLIDE 16 that is population and outcomes based, focuses on those factors that can affect health – the social determinants, that integrates prevention, early detection and management into those things that everyone practices – the domains of remote practice SLIDE 17 domains
- 3 Develop an implementation strategy SLIDE 18 that could be integrated into all workforce training – undergraduate, post graduate, professional development across the disciplines who work in remote – and list the expected roles and responsibilities of all players from community to policy makers
- 4 Target those who prepare and educate the health workforce, as this will have the greatest impact – health educators across the disciplines. SLIDE 19 Therefore a three-day workshop of 35 educators from NT and NQ occurred in August 2004. They represented a cross section of all health disciplines and industry groups who attended a workshop in Darwin. They discussed how they could refocus their orientation, professional development and accredited training programs towards a comprehensive, integrated and population based process, which would equip their staff to deliver the primary health care components of the NT's and Qld Chronic Disease Strategies. This workshop proved very successful and followed-up by teleconferences with group participants.
- 5 Develop any resources to support the educators and the workers in a sustainable way that will be updated – annotated bibliography managed by the NT chronic disease network and a self-assessment tool in chronic disease for new and experienced remote practitioners.

OUTCOMES

In February 2005 the final plain English document was printed and disseminated to educators and other key stakeholders interested in conducting and developing new professional development, undergraduate, post graduate programs across the disciplines – universities, institutes, NGOs, community controlled health education sector.

This project has resulted in:

- 1 *A comprehensive report* on the identified training needs
- 2 *A curriculum framework* that is comprehensive, practical, integrated, outcomes based, and focused on those things we can affect using a population health approach
- 3 *A list of core expected outcomes* for all remote and rural primary health care professionals who work in the prevention, early detection and management of chronic disease
- 4 *An implementation model* that can be incorporated in all workforce education and training across the disciplines
- 5 *A web-based annotated bibliography* that describes useful educational tools and resources and will be maintained and updated by the NT Chronic Disease Network as new resources are developed.

- 6 The document also comes with some useful tools and resources in plain English for the practitioner and educator about:
- what are the social determinants of health
 - how to use a population health model
 - what is health promotion and
 - the chronic care model.

Recommendation – We are strongly encouraging and recommending that all disciplines to consider this document: *Educating to improve population health outcomes in chronic disease*, and its core expected outcomes in the development of any new and existing programs.

Many of the recommendations from the curriculum framework are already being implemented into professional development and undergraduate programs. In particular the Indigenous health worker representatives have mapped the curriculum expected outcomes against the National Health Worker Competencies; the Centre for Remote Health have also mapped them against its multi-disciplinary Masters in Remote Health Practice Program and James Cook University have included elements into their undergraduate 2nd year nursing program. A joint NT and NQ workforce group have met several times and face to face just this week, to ensure the cross boarder communication regarding implementation continues. The Northern Territory have launched their first NT wide *Pathways to Professional Development Program* in February this year and have included many of the core expected outcomes from this curriculum into this unique program, which is a world first. They have also established an evaluation steering committee and discussions are under way to have the Pathways program accredited to link with tertiary programs. I believe one of the professional medical rural bodies are currently examining the framework to integrate it into their existing population health programs.

I think one of the unspoken outcomes of this project is that it indicates that a group of committed individuals can have an impact across the health professions when they work collaboratively and generously with each other toward a common goal of improving workforce capacity and health outcomes in remote Indigenous communities; and that this can be done in really practical and creative ways that are sustainable in the long term.

This project will be monitored, supported and evaluated throughout 2005 to monitor the impact it is having on the education of the remote and rural health workforce.

For those who might be interested in receiving a copy of the document, they are free of charge and can be accessed by either filling in one of these flyers and sending it to Menzies for a hard copy, or downloadable from Menzies, DHCS, Qld Health websites. SLIDE websites 19.

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PRESENTER

Janie Smith is a rural health professional and educationalist, who has worked for more than 30 years in rural, remote and Indigenous health across three states, five disciplines, and a broad range of public and private organisations. She has worked extensively in curriculum, resource and policy development at national, state and regional levels. Janie is well published and is the author of *Australia's Rural and Remote Health: a social justice perspective*. For the past four years Janie has been Associate Professor, and Consultant, to the Medical Faculty at James Cook University and now runs her own national consulting business – Rural Health Educational Development Consulting, or RhED.