

Aboriginal Health

Jonathan Carapetis

I begin with a few caveats. As a non-Aboriginal Australian, I am careful to avoid joining the legions of whitefellas who tell Aboriginal people how to live their lives. Nor do I portray myself as an expert in Aboriginal health. I do not have the solution(s) to achieving equality in the health and wellbeing of Aboriginal compared to non-Aboriginal people, and anyone who claims they have is deluded, dangerous, or both. My expertise is in the role of research, and my passion is the importance of ensuring that policy and practice decisions are based on the best available evidence or, where the evidence is inadequate, the importance of getting better evidence.

My aim in this chapter is to convince the reader of the imperative to bring evidence and objectivity to an agenda that is dominated by ideology and dogma. In so doing, I will highlight just how difficult it is to plan to reduce Aboriginal disadvantage, and to suggest that the inevitable approach — breaking it down to elements that can be systematically tackled — can be done in a more coherent fashion, but only if it is seen to be everyone's business, and not just government's. If Aboriginal health and wellbeing remains a job for government alone, then accelerating progress towards equality, and equity, will be impossible.

The surge of attention to addressing Aboriginal disadvantage that began in July 2007 with the Howard Government's Northern Territory Emergency Response and has continued with the Rudd and now Gillard Government's Closing the Gap initiatives has brought about the acceptance that significant

change will take a generation, at least. But the Australian Government is faced with an unenviable dilemma. It is to be congratulated for, finally, facing up to the disastrous circumstances in which many Aboriginal people live their lives, especially in rural and remote locations. It is also welcome that government programs are trying to tackle the astoundingly complex array of influences that determine whether an individual tracks during their life on a course towards good health, happiness and productivity or, as is the case for so many Aboriginal Australians, towards ill health, substance misuse, violence, incarceration, poverty and early death. Yet in trying to reach its Closing the Gap targets, government also has to propose solutions. How do you do this when there is no silver bullet, when the causes have been germinating for many decades and permeate every aspect of life, culture and community (and I don't mean just the lives, cultures and communities of Aboriginal people)? Achieving the Closing the Gap targets would require a radical fast-tracking of reforms that would amount to a re-engineering of today's Aboriginal society and of how the systems of service provision and social supports are delivered.

I do not think that reaching these targets in the proposed timeframe is possible. But, like the Millennium Development Goals (more about them later), the Closing the Gap targets serve their purpose. They force us to think more carefully about the elements that make up Aboriginal disadvantage, and how each might be changed. They have led to an allocation of resources that is starting to be in the ballpark of what is needed. And they will hopefully lead to some reductions in the life expectancy gap even if not as dramatic as everyone would like. But, like the Millennium Development Goals, there will have to be several re-thinks as time passes and the deadlines loom. It is important that, rather than being portrayed as evidence of failure, regularly revisiting the targets is seen as an opportunity to monitor progress and alter approaches in response to the evidence about how things are tracking and what is likely to make the biggest difference. We have to be in this for the long haul.

These are heady topics, and will overwhelm many who tackle them. The enormous complexity of the problem and the potential solutions, the difficulty in demonstrating progress, and the setbacks and often-personal attacks along the way, make it very disheartening for many — Aboriginal and non-Aboriginal people alike — who work in this field. Some suggest that the best way to cope, and to give further impetus to the attempts to improve Aboriginal health and wellbeing, is to focus on the positives, to seize on advances, however small, and use them as evidence that we are making progress. The advantage of this approach is that it gives hope. And it also allows us to deconstruct the chaos of the challenge, by concentrating on individual elements. But there is also a risk of wallpapering over the real cracks, so we must be careful to highlight only advances that are real, and to maintain a balanced perspective about overall progress.

Planning to improve Aboriginal health

We have had a number of plans, frameworks and strategies over the years. I won't specifically address documents such as the Bringing Them Home Report and the subsequent Stolen Generations' Working Partnership, Pathways to Community Control, the Overcoming Indigenous Disadvantage reports, the UN Declaration on the Rights of Indigenous Peoples, the Little Children are Sacred report, the recent Bath Inquiry into the NT Child Protection System, the Close the Gap Statement of Intent and its Indigenous Health Equality Targets, the Aboriginal and Torres Strait Islander Social Justice Commissioner's Social Justice Reports, and many other relevant documents. But two are worth a few moments' consideration here. The National Aboriginal Health Strategy of 1989 (National Aboriginal Health Strategy Working Group 1989) focused on health service delivery and the importance of Aboriginal community control and an Aboriginal health workforce, along with reforms to the funding models. Other elements including environmental health and health promotion were also identified. Although this Strategy was pivotal in

stimulating the expansion of community-controlled primary health care organisations, most recommendations were not properly implemented or funded.

The National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003–2013 (The National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003–2013 Working Group 2003) took a broader view of health, with a prominent focus on environment, education, employment (and poverty) and community cohesion as critical determinants of health and wellbeing. There are implementation plans for this Framework, but in the initial phase these were not well-resourced, nor was there a clear mechanism for accountability and monitoring across the different agencies of government involved. Of course, the NT Emergency Response and the Closing the Gap strategies have arisen during the implementation of the National Strategic Framework, so it is not currently clear how much of the current approaches are driven by the Framework or if it has been largely superseded.

And now, of course, we have a range of agreements and strategies that are brought together under the Closing the Gap umbrella. These include The National Indigenous Reform Agreement, which in turn includes the six Council of Australian Governments (COAG) targets (see Table 1) and seven ‘Building Blocks’, elements that need to be addressed to reach those targets: early childhood, schooling, health, economic participation, healthy homes, safe communities, and governance and leadership. For each of the targets, ‘indicative trajectories’ have been proposed, in order to track whether progress is being made as expected. For example, the life expectancy gap for males should reduce from 11.5 years in 2006 to 9.2 years in 2011, 6.9 years in 2016 and so on, until reaching zero in 2031. And there are performance indicators also identified for each target. For example, progress in achieving the under-5 mortality target is to be monitored against the child under 5 mortality rate (and excess deaths), mortality rates (and excess deaths) by leading causes, tobacco smoking during pregnancy, child under 5 hospitalisation rates by principal

Table 1
The Six COAG Closing the Gap Targets

Health	<ul style="list-style-type: none"> • To achieve Aboriginal and Torres Strait Islander life expectancy equality with a generation. • To halve the mortality rate of under-5 Aboriginal and Torres Strait Islander children within ten years.
Education	<ul style="list-style-type: none"> • To halve the gap in reading, writing and numeracy achievements for Aboriginal and Torres Strait Islander children within a decade. • To halve the gap for Aboriginal and Torres Strait Islander students in Year 12 attainment or equivalent attainment rates by 2020. • To ensure all Aboriginal and Torres Strait Islander 4-year-olds in remote communities have access to early childhood education within 5 years.
Employment	<ul style="list-style-type: none"> • To halve the gap in employment outcomes between Aboriginal and Torres Strait Islander and non-Indigenous Australians within a decade.

diagnosis, proportion of babies born of low birthweight, and access to antenatal care.

The National Integrated Strategy for Closing the Gap in Indigenous Disadvantage contains seven Indigenous-specific National Partnership Agreements (NPAs) to address these building blocks, although there is a range of other NPAs that also affect Aboriginal health and wellbeing. Each of these NPAs contains a number of initiatives, each with a number of outputs, and each is measured using a range of different indicators.

It is very difficult to understand how all of this fits together. I have tried, and at times succeeded in comprehending certain parts of the whole equation. But because those seven building blocks cut across virtually all aspects of life in a complex, modern world, it is very difficult to get a sense of the whole picture, given that there are multiple government programs under the Closing the Gap Umbrella, often originating in different agencies but targeting similar endpoints or population groups. As an example of the complexity of the service environment, preliminary calculations suggest that there are currently more than 900 different services provided in the Northern Territory for children aged 0 to 15 years (personal communication, V Nossar).

And here I get to the point. Although attempts to deal with Aboriginal disadvantage go back many decades, arguably the

first time it was taken seriously was the NT Emergency Response (NTER, Table 2). Suddenly, the Commonwealth Government intervened in the NT in a way that most would never have dreamed of, implementing measures which have variously been interpreted as revolutionary or draconian, but which undoubtedly signaled an intention to provide much more funding than had previously been available (although one can still argue whether it is enough) and to implement drastic policy reforms if needed. But despite the fact that Aboriginal disadvantage had been present for decades, the fact that the intervention was an 'emergency response' may have limited its ability to be effective. It signaled an intention to act quickly and for governments (Australian, NT, and even in other states) to be seen to be doing big things straight away. This same sense of emergency response was continued with the introduction of the Close the Gap campaign. Indeed the Rudd Government retained the same name of the NTER.

Table 2

Main Initial Elements of the Australian Government Intervention in the Northern Territory (Subsequently Known as the Northern Territory Emergency Response)

- Alcohol, kava and pornography bans
- Quarantining welfare payments
- Linking school attendance to welfare payments
- Meals at school at parents' cost
- Child health checks
- 5-year leases to acquire townships
- Increased policing
- Work for the dole community cleanups
- 'Improved housing', market based rents, normal tenancies
- Scrapping permit system for common areas
- Appointment of business managers to communities

Note that subsequently, expanded measures were rolled out, as detailed in the report of the NTER review board, (NTER Review Board, 2008) categorised under six measures:

- Welfare reform and employment
 - Law and order
 - Enhancing education
 - Supporting families
 - Improving child and family health
 - Housing and land reform
 - Coordination
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As a result, the imperative to develop new policy has often left coordination, evidence and collaboration in its wake. Perhaps the best example was the plan announced at the start of the NTER to introduce compulsory child health checks for all NT Aboriginal children living in remote areas, with a view to detecting signs of sexual abuse. Proceeding with this approach would have been a tragic mistake. The evidence is that, even when performed by the most experienced professionals on children with a high suspicion of abuse, the findings of medical examinations are poor tools for predicting whether or not sexual abuse has occurred. In the NT, it was proposed that this procedure be done on all children (therefore, not within hours or days of sexual abuse occurring, when most such examinations would normally be conducted), by medical practitioners without specific forensic paediatric training. This would have seen thousands of young children subject to a traumatic examination, resulting in over-diagnosis of signs of sexual abuse in those who underwent examinations, with the attendant individual, family and community repercussions, and potentially the compulsory nature of the process could have driven many victims further from protective services.

Fortunately, the Australian Government quickly realised its mistake, and the Child Health Checks became voluntary and were no longer to include routine examination for signs of sexual abuse. But the Child Health Check approach — formulated as classic ‘policy on the run’ — remained. Since then, thousands of children in remote NT communities have been examined by teams of general practitioners, working with teams of other primary care staff, largely imported from other jurisdictions and in many instances functioning independently of the existing, routine health services in those communities. This process has cost many millions of dollars, and has resulted in a profile of child health in remote NT communities. (Australian Institute of Health and Welfare and Department of Health and Ageing, 2009.)

So what’s the problem with the Child Health Checks? Well, first, the health profile from the Child Health Checks is

flawed. In many instances, the data are just wrong. For example, the Child Health checks found that 30% of examined children had middle ear disease and 43% had oral health conditions (40% with caries). In fact, rigorously conducted research over the last few years by the Menzies School of Health Research in multiple NT communities found that approximately 90% of children have middle ear disease, and 61 to 64% have untreated caries (Morris et al., 2005; Slade et al., 2010). So as a tool for developing child health policy, the Child Health Check data are unreliable. Moreover, we already had good data telling us what the health problems of remote children were (Condon et al., 2001; Li et al., 2007). Although the NTER was seen widely throughout Australia as a mechanism to deliver health services to communities for the first time, the truth is that dedicated health professionals have been working for decades in these communities, and data collected by the NT Government as well as health researchers provided much more reliable information about the state of child health. I cannot think of a single reliable fact produced by the Child Health Checks that we did not already know.

The other rationale often cited for the Child Health Check program is that it provided a mechanism to identify health problems in individual children and deal with them. The mechanism for dealing with the health problems came through Phase II and Phase III of the NTER (with the health checks included as part of Phase I). Phases II and III included specific interventions to deal with oral health (each child aged under 16 years would be offered a dental screen, with special attention to be paid to those identified as having caries by the CHC teams) and ear disease (a program of visiting surgeons and audiologists would offer treatment to those found to have ear disease, and there would be extra resources to reduce paediatric ENT waiting lists in the NT), as well as substantial additional funding for primary health care. It is difficult to argue against resources for better treatment of disease, and no doubt many of the children referred to specialist services have benefitted. But many of the referral processes, for oral and ear health, for

example, provide once-off screening or treatment for problems that are chronic and recurrent. This is an ‘ambulance at the bottom of the cliff’ approach. The high rates of caries and periodontal disease in remote communities are due to many factors including lack of water fluoridation, poor diet, and poor oral care. The determinants of ear infections include overcrowded living conditions, lack of early diagnosis and treatment, and potentially other factors relating to nutritional status, immunisation, and hygiene. The only component of the NTER that may have any potential to lead to longer-term improvements in ear and oral health is the funding for improved primary health care. This aspect is welcome, but the other components of Phases I, II and III, while potentially addressing some acute health issues in individual children in the short term, are based on little evidence that they would lead to long-term change, and came with a price tag that has not previously been seen in Aboriginal child health service provision.

So how could it have been done differently?

What was the imperative to treat the NTER as an ‘emergency response’, to act so quickly and decisively? Although the stimulus was the publication of the *Little Children are Sacred* report documenting the appalling problem of child abuse and neglect in remote Aboriginal communities of the NT, (Wild & Anderson, 2007) there are many aspects of the response that are difficult to relate to child abuse. Moreover, it was predictable, as has eventuated, that the elements of the NTER would be unlikely to lead to a rapid reduction in child abuse and neglect. The problem had been present for a long time, and the causes were complex and unlikely to be addressed with any quick fixes.

As time has passed, it has become clear that the motivation was as much political as humanitarian. But let us not deny that there was a humanitarian motive amongst all the rhetoric. There was, and remains, a genuine desire on the part of the NT and Australian governments, politicians and bureaucrats alike — to reduce Aboriginal disadvantage. However, what began as

a series of hastily constructed, politically motivated strategies encompassed in the NTER has evolved to an even more confusing list of 'programs', some devised as over-arching solutions to the challenges of bringing Government services from different agencies together (e.g., the Integrated Child and Family Centres, and the Remote Service Coordination Partnership Agreement).

Yet, underlying all of these programs, has there been the careful thinking required to determine what are the interventions most likely to achieve each of the Closing the Gap targets? And has each of the existing programs been carefully planned in the knowledge that it will make a specific contribution in some way to achieving one or more of the targets, so that its progress in doing so can be rigorously evaluated? I do not think so.

Indeed, there is no way of determining whether most of the strategies in the NTER have worked, are working, or may work in the future. When the NTER was announced, the Australian Government expressed no interest in ensuring that it could be properly evaluated. Little consideration was given to ensuring that appropriate baseline data were available so that change due to the NTER strategies could be measured, or even to determining the objectives of each of the strategies, so that indicators of success could be developed. For example, what was the objective of the alcohol, kava and pornography bans? Was it to reduce the use or consumption of these materials, to reduce their abuse, to reduce antisocial behaviour related to their use or abuse, to reduce the impact on health of their use or abuse, to reduce child abuse and neglect or domestic violence related to their use or abuse, or something else? And how could each of the agreed objectives have been measured, so that we could get a sense subsequently of the impact of this component of the NTER?

Because this thinking was not done in any great detail, and there was no desire to ensure that appropriate evaluation was incorporated into the strategy, we have little idea of the positive or negative effects of the NTER as a whole, or its individual

elements. There are no reliable data on how the alcohol, kava or pornography bans may have affected the use of alcohol, kava or pornography, let alone any further impact of their use. The educational objectives can be evaluated only by the crudest attendance data. The impact of the broad range of strategies aimed at reducing social disharmony cannot be measured accurately using any current routine data collection.

The official evaluation report of the NTER commissioned by the Australian Government relied almost entirely on the subjective opinions resulting from consultations with individuals and organisations, which resulted in some interesting conclusions about the acceptability and desirability of a number of the measures (NTER Review Board, 2008). But the report was breathtakingly devoid of data, so that no definitive conclusions could be drawn about the objective effectiveness of any of the measures. Of course, this is not the fault of the Review Board — they were constrained to using the information available to them. Indeed the report noted: 'It was clear that little or no baseline data existed to specifically evaluate the impacts of the NTER.' As a result, it has been largely left to the research sector to contribute the small amount of data that are available to help determine the effectiveness of the NTER measures. The Menzies School of Health Research published data in the *Medical Journal of Australia* suggesting that income management may not be leading to significant changes in purchasing patterns in remote communities (Brimblecombe et al., 2010), yet the Australian Government has rejected those findings, choosing instead to highlight the findings of a purely qualitative evaluation conducted by the Australian Institute of Health and Welfare (Australian Institute of Health and Welfare 2009). The fact is that neither evaluation provided sufficient evidence to conclude the income management is a success or a failure, but the Menzies data raise sufficient concerns to warrant a more detailed, quantitative as well as qualitative evaluation of this policy.

A more evidence-based approach is possible. A useful example comes from the approach taken to improving child

health in developing countries. A few years ago, a group of eminent individuals carefully reviewed the evidence about what works to reduce mortality in children aged less than 5 years. They published the result in the 'Lancet Child Survival Series' (available at http://www.who.int/child_adolescent_health/documents/lancet_child_survival/en/) and presented a package of 23 interventions that had been proven by high-quality research to save children's lives. If all of these interventions were to be made available to children around the world, 63% of child deaths would be prevented immediately (Jones et al., 2003). These essential interventions have formed the basis of the World Health Organization/UNICEF 'Child Survival Strategy'.

In 2005 the WHO Regional Committee Member States of the Western Pacific Region including Australia, endorsed the WHO/UNICEF Regional Child Survival Strategy, based around implementing these interventions. The Regional Child Survival Strategy describes strategic approaches that are necessary to ensure delivery of the essential package including: improving leadership and governance, consolidating partnerships, improving efficiency and quality of service delivery, engaging and empowering families and communities, and ensuring health care financing. Critically, the Regional Child Survival Strategy recommends one coordination mechanism, one national plan for each country and one monitoring and evaluation process and the need to mobilise for advocacy and financial resources to improve child survival. The Regional Child Survival Strategy includes Australia, where it is recommended to implement the essential package for child survival with targeting of the socio-economically underprivileged and marginalised, presumably focusing on Aboriginal children in particular.

I am not arguing that the Child Survival Strategy is the solution to Aboriginal child health problems, although one of the Closing the Gap targets is to address child mortality, and it is not clear that the essential interventions outlined in the Child Survival Strategy have formed the basis of approaches to achieve the child mortality target. However, the major issue for Aboriginal child health is not survival, but prevention of morbid-

ity and promotion of wellness. I also recognise that the implementation of the Child Survival Strategy in individual countries has had its problems, often due to limitations in the available workforce to deliver the package of interventions. But we have a lot to learn from the general approach to the Child Survival Strategy — developing a package of interventions that, based on the best available evidence, is most likely to improve health, and then undertaking a coordinated, systematic response to ensure that policies and programs are driven by the need to deliver these interventions, and monitored and evaluated accordingly.

How can a research approach help?

The most that researchers can usually hope for is to undertake research that is relevant to improving health, and to see the evidence from their research incorporated into policy and practice. This happens occasionally, and better approaches to ensuring that the findings from research are used to good effect (known variously as research transfer or knowledge translation) have become an increasing focus, particularly in Aboriginal health. But there are examples where research can actually lead the way, where interventions and service delivery have arisen from a foundation in research, and indeed where researchers are becoming more hands-on in ensuring that their findings are implemented. In Table 3, I highlight two examples in Aboriginal health that I am particularly familiar with, because they come from my own institution.

The point here is that research, of course, can provide the evidence on which to base interventions. This must be the minimum that we expect from service delivery — that it bases its activities on what is known to have the best chances of working, while causing the least harm. The term ‘evidence-based medicine’ has become somewhat hackneyed in recent years, but at its heart it remains valid. I would argue that one of Australia’s most pressing health needs — improving the health and wellbeing of Aboriginal people — makes evidence-based health practice even more essential.

Table 3
Hands-on Translation of Research in Aboriginal Health

Development of a programmatic approach to disease control: Rheumatic fever

For most of Australia, rheumatic fever (RF) is a disease of the past, a relic of the early 20th century. Yet the Aboriginal and Torres Strait Islander population of northern and central Australia has among the highest rates in the world of rheumatic fever, and its severe, and often fatal, sequel, rheumatic heart disease (RHD). Prior to the mid-1990s, the problem of RF/RHD had been alluded to in a few publications from the NT and Western Australia, largely limited to individual communities or retrospective hospital audits. But in 1994, the Menzies School of Health Research began a program of research to document the size of the problem in the Aboriginal population of the NT, to highlight deficiencies in managing and preventing this disease, and to point out where the evidence suggested that interventions could make a difference. Out of this work, coordinated control programs for RHD were established first in the Top End of the NT, then in Central Australia, culminating in the National RF Strategy announced in 2009. This strategy includes core funding for control programs in the main affected jurisdictions (NT, Qld, WA) and a national coordinating centre that is charged with supporting the jurisdictional programs, providing ongoing monitoring of progress, and developing useful educational and training materials for disease control. The Menzies School of Health Research is the lead agency for this coordinating centre (known as RHD Australia), in partnership with Baker/DI Heart and Diabetes Institute and James Cook University. The most recent data suggest that disease rates are starting to reduce, and that good health services are increasingly being provided to people with RHD.

Research into practice — Continuous Quality Improvement

In 2002, a research project was established at the Menzies School of Health Research, known as Audit and Best Practice for Chronic Disease (ABCD). This project developed tools for Continuous Quality Improvement (CQI) by primary health care services providing for Aboriginal clients. The aim was for services to regularly audit the provision of services, as well as health outcomes for individuals, as well as the systems used by that service to provide those services. This process of audit and systems review is done regularly, usually every 12 months, with baseline results allowing services to assess current client needs and to 'stock-take' existing models of care and systems of delivery. The staff of the service review the data and critically evaluate their own service, implement new strategies, and then re-evaluate their effectiveness in continuous cycle of quality improvement. Tools were initially developed for chronic disease care, but have since been expanded to encompass child and maternal health, mental health and rheumatic heart disease, among others. The approach has been successful and welcomed by health staff. The ABCD approach was initially encompassed in a national government program called Healthy for Life, and CQI is now an integral part of primary Aboriginal health care in most jurisdictions. Menzies' role continues, with a new arm (entitled One21seventy) offering support for services and jurisdictions to implement CQI approaches, on a fee for service basis. A program that began as a boutique research project is now a national standard of care.

Yet I often hear research derided by those who practise in Aboriginal health. Comments about the Aboriginal population being the most intensively researched group in the country (or even the planet, I have heard), yet having no benefits to show from it are often thrown around. It is not clear to me that there is much truth to these statements, although one has to acknowledge that there have been examples of inappropriate

research, largely from the past. But it would also be an enormous mistake to deny Aboriginal people the benefits of research advances and of evidence-based practice while the rest of the population gains. Australia's most pressing health problems require our best minds, our most intensive efforts, and the highest quality evidence on which to base interventions.

Are current national approaches to Aboriginal health based on the best available evidence?

It is difficult to provide a single answer to this question, partly because of the necessary breadth of the national response to Closing the Gap (as outlined above) but also because the process by which the current approach was arrived at has not been clearly articulated to the public. In other words, it is not clear that each of the targets has been the basis of a careful review of the available evidence to determine the interventions most likely to make the biggest difference.

Take the under-5 mortality target as an example. Of the six performance indicators, three are measures directly of deaths or serious illnesses (mortality rates overall, mortality rates measured by individual cause, and hospitalisation by individual cause) leaving three that address causative factors of child deaths — tobacco smoking during pregnancy, the proportion of low-birth-weight babies, and access to antenatal care (note that this does not include measures of quantity or quality of care). There is no doubting the importance of these three factors, but is addressing these three likely to lead to the greatest reductions in child mortality, when measured against other potential interventions? None of these three appears as the subject of a specific, proven intervention in the Child Survival package, for example. A detailed analysis of the causes of Aboriginal child deaths in various settings, considered alongside the evidence about how to best ameliorate those causes, could ensure that policies are developed, implemented and monitored according to how they deliver the interventions that have the best chance of preventing children dying before their fifth birthday.

As time passes and governments prepare regular report cards of their progress towards Closing the Gap, the focus will inevitably converge on the performance indicators. If, as is probable, reducing rates of tobacco smoking in pregnancy, reducing the proportion of low birth weight babies, and improving access to antenatal care will, in themselves, only lead to relatively small reductions in overall under-5 mortality, and if there are other equally, or more, important factors contributing to child mortality not addressed in this list, we may find that the report cards demonstrate good progress against the identified contributory factors without substantial reductions in the measures of death or serious illness.

I have chosen to highlight one of two targets among six that should be the easiest to remedy. In this day and age, with all of the evidence we have around child mortality, it should be possible to reduce child deaths with concerted and well-resourced strategies. The other target that should be successfully reached with sufficient resources is providing access to early childhood education for all 4-year-olds in remote communities. Indeed, this target seems somewhat at odds with the others, given that it is a means to achieve an outcome (e.g., improved educational attainment) rather than an endpoint in itself.

Reaching these targets should be easier than, for example, eliminating the gap in life expectancy. The risk factors listed among the performance indicators for that target are smoking rates, risky alcohol consumption, overweight and obesity, levels of physical activity and access to health care. Again, all of these are critical — indeed in the Northern Territory, one study suggests that high body mass and physical inactivity are responsible for 11% each of the disease burden, followed by tobacco (8.1%) and alcohol (4.5%; Zhao et al., 2010). The only risk factor more important was low socio-economic status (26.8%). However, nobody expects that addressing them alone will be enough to eliminate the life-expectancy gap. Moreover, basing interventions around the identified risk factors doesn't necessarily translate to an ability to alter them, and thus reduce their ability to cause early death.

Indeed, the available evidence suggests that the most effective approaches to improving life expectancy are not in the remit of the health system at all. The health of an individual is partly due to their biology and to health care, but more important is environment and the social determinants. Eliminating poverty (including reducing unemployment), improving education, and providing high-quality living conditions will all have more impact than anything within a government health portfolio. And of course this is recognised in the Closing the Gap approach, which is why education, employment and even housing (a big ticket item in terms of government funding, even if not encompassed directly in the Closing the Gap targets) are important parts of the mix. Yet, by trying to reduce the life expectancy performance indicators to a handful that are more easily addressed and measured than the social determinants, there is a risk that the bureaucracy increasingly concentrates on the indicators by which their performance and progress will be measured, rather than the target and all that goes to meeting it.

And what of the educational targets? To date, the response to these targets has been haphazard, and overly focused on school attendance without due attention to the myriad of other factors that are needed to ensure that children are well educated. Issues such as parenting, family and community cohesion, attitudes to Western education, teaching workforce, resourcing of schools, curriculum, pedagogical techniques, making schools welcoming for Aboriginal students, targeting youth issues such as sexual and reproductive health and substance misuse, etc, are not being approached in a systematic or necessarily evidence-based way.

Not that it is easy to be evidence-based when it comes to Aboriginal education. There is an over-reliance on descriptive studies in educational research in Australia, with little in the way of rigorous, controlled intervention studies. There is an urgent need for education researchers, probably working in partnership with health researchers, to develop a higher-quality research agenda and to inculcate practitioners and policy-makers alike with the concept of evidence-based education, much as has

happened over the past few decades with evidence-based health-care. When it comes to Aboriginal education, with its even greater challenges of low achievement levels, remoteness, and language and cultural considerations, the paucity of evidence is appalling. Hence, the identification in the ‘Territory 2030’ 20-year strategic plan for the Northern Territory (available at <http://www.territory2030.nt.gov.au/>) of the need for ‘An Institute for Child Development and Education’ is welcome.

So where to now?

I have argued that the current national approach to addressing Aboriginal disadvantage, particularly all of the programs that fall under the label Closing the Gap, is characterised by incredible complexity, incoherence, and a lack of careful planning or consideration of the evidence of what is likely to work best. Let me reiterate, however, that governments — Commonwealth, State or Territory — should not necessarily be ‘blamed’ for this. Aboriginal disadvantage is a whole-of-society issue, and it cannot be eliminated by government policy. It is unfortunate that the part of the country where the disadvantage is the greatest and where the initial attention of Closing the Gap has been concentrated, the Northern Territory, is also the jurisdiction most dominated by government in all aspects of life. In the Territory, if there is a problem, it is up to government to fix it.

It is time to pause and reconsider what is happening. We have a unique opportunity right now to take advantage of the unprecedented national attention on ‘the Gap’, the willingness of governments and others, including industry and philanthropy, to commit funding at levels not previously seen, and the widespread goodwill on behalf of most Australians to rectify the national disgrace that is embodied in the health statistics of Aboriginal Australians. Yet, if we continue along the current path I predict that, in the next five years, report cards will document an increasing differential between the indicative and actual trajectories towards achieving the Closing the Gap targets. The inevitable frustrations that will arise should this happen, on the part of Aboriginal people, service providers,

governments, indeed everyone involved, will raise questions about the whole Closing the Gap strategy. Given the intensely politicised nature of the issue to date, one can imagine the tit-for-tat arguments that will follow in parliament and the media, the rolling out of alternative policy proposals, and the gradual unraveling of the whole program.

An alternative approach would have us constantly monitoring, revisiting and, where necessary, revising the targets. This is the thinking that is happening right now with the Millennium Development Goals (MDGs). It is accepted that the MDGs have succeeded in encouraging a global political consensus, provided a focus for advocacy, improved the targeting and flow of aid, and improved the monitoring of development projects (the parallel with the Closing the Gap targets for at least the first two points is clear). Yet, the MDGs are also increasingly recognised to have their shortcomings, such as being too narrowly focused, and thus failing to realise the synergies between education, health, poverty, and gender; lacking clear ownership and leadership; and being tools to increase inequities within countries (e.g., if the aim is to get a proportion of the population over a particular 'bar', such as by achieving a certain reduction in rates of child mortality, it is often easier to make minor improvements for those relatively close to the bar already than to target the most disadvantaged in a society). And as we get closer to 2015, the MDG deadline, it becomes increasingly unlikely that new strategies implemented so that a country can reach its MDGs will have long-lasting effects. In other words, setting a goal (or target) seems like a great idea when the deadline is far away, but as the deadline approaches, and the goal is not being achieved, the usefulness of that goal in leading to sustainable change may steadily reduce. If we recognise this, and choose to revisit and reframe the MDGs based on progress to date and emerging evidence, then we not only benefit from the advances that many countries have made but also ensure that the strengths of the MDGs will continue beyond the deadline (Waage et al., 2010).

This is the thinking we should be doing right now for the Closing the Gap targets. They should become the basis for an

ongoing dialogue, based on an open process of monitoring, evaluation and real-time collation of evidence about what is likely to work, what is working (and what is not), by how much, and how current strategies could be changed for the better. This can't be done entirely by government. Governments don't work that way — their lives are too short and by nature they are not designed to be able to embrace solutions that will take a generation or more.

A partnership approach may be possible, in which governments, non-government organisations, other service providers, community representatives, business and academia work together to develop evidence and policy, to monitor implementation and progress and to alter approaches in response to new evidence, evaluation findings, community responses, and so on. Although this may sound unrealistic, vague and impractical, I argue not only that we have no other choice, but also that we have an evolving example in the Northern Territory. At the Menzies School of Health Research, we are partnering with the Northern Territory Government in a range of areas (Substance Misuse, Child Protection and Indigenous Education) in a model that has researchers and policy makers jointly developing research agendas, working together to draft evidence-based policy documents, and ensuring that new programs have high-quality evaluation embedded from conception. Community bodies and service providers are increasingly joining this mix. This is a new way of functioning, and it serves as a small-scale model of what is needed if we are to address Aboriginal and Torres Strait Islander disadvantage in Australia.

References

- Australian Institute of Health and Welfare. Report on the evaluation of income management in the Northern Territory, 20 August 2009 (http://www.fahcsia.gov.au/sa/indigenous/pubs/nter_reports/Documents/nt_eval_rpt/NT_eval_rpt.pdf)
- Australian Institute of Health and Welfare and Department of Health and Ageing. Progress of the Northern Territory Emergency Response Child Health Check Initiative: Update on results from the Child Health Check and follow-up data collections (Cat. no. IHW 28). Canberra: Australian Institute of Health and Welfare, 2009.

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- Brimblecombe JK et al. Impact of income management on store sales in the Northern Territory, *Medical J Aust* 2010;192:549-554.
- Condon JR, Warman G, Arnold L. (2001), *The Health and Welfare of Territorians*, in Territory Health Services Epidemiology Branch (ed.), (Darwin: Northern Territory Government).
- Jones G et al. (2003), How many child deaths can we prevent this year?, *Lancet*, 2003;362 (9377), 65-71.
- Li SQ et al. *From infancy to young adulthood: health status in the Northern Territory*. Darwin: Northern Territory Government, 2007.
- Morris PS, Leach AJ, Silberberg, P. (2005), Otitis media in young Aboriginal children from remote communities in Northern and Central Australia: a cross sectional survey. *BMC Pediatrics* 2005; 5:27.
- National Aboriginal Health Strategy Working Group. *National Aboriginal Health Strategy*, available online at <http://www.naccho.org.au/resources/nahs.html>. Canberra: Australian Government, 1989.
- NTER Review Board. *Northern Territory Emergency Response: Report of the NTER Review Board*. In: *Housing Families, Community Services and Indigenous Affairs*. Canberra: Australian Government, 2008.
- Slade GD et al. Effect of health promotion and fluoride varnish on dental caries among Australian Aboriginal children: results from a community-randomized controlled trial. *Community Dent Oral Epidemiol* 2010.
- The National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003–2013 Working Group. Canberra: Australian Government, 2003.
- Waage J et al. The Millennium Development Goals: a cross-sectoral analysis and principles for goal setting after 2015 *Lancet and London International Development Centre Commission*, *Lancet* 2010;376 (9745):991–1023.
- Wild R, Anderson, P, Ampe Akelyernemane Meke Mekarle: 'Little Children are Sacred'. Report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse. Darwin: Northern Territory Government, 2007.
- Zhao Y, You J, Guthridge SL. *Burden of disease and injury in the Northern Territory 1999–2003*. Darwin: Northern Territory Government, 2010.



Jonathan Carapetis is a paediatrician, infectious diseases and public health physician, with particular expertise in Indigenous child health. He is Director of the Menzies School of Health Research, Professor at Charles Darwin University, Consultant at Royal Darwin Hospital and Honorary Distinguished Research Fellow at the Walter and Eliza Hall Institute of Medical Research.