

## E-health and natural disasters: planning, communications, mitigation and recovery

Mukesh Haikerwal<sup>1</sup>

<sup>1</sup>National e-health Transition Authority



Dr Mukesh Haikerwal is a practising general medical practitioner, Commissioner to the National Health and Hospitals Reform Commission and Professor in the School of Medicine in the Faculty of Health Sciences at Flinders University in Adelaide, South Australia. He is currently working with the National e-Health Transition Authority (NEHTA) as the National Clinical Lead, leading a team of health care providers from multidisciplinary backgrounds, to assist in NEHTA's liaison with the health care community and to provide input into the development of the NEHTA work program to deliver e-health for Australia.

In 2011 Dr Haikerwal was made an Officer of the Order of Australia (AO) for distinguished service to medical administration, to the promotion of public health through leadership roles with professional organisations, particularly the Australian Medical Association (AMA), to the reform of the Australian health system through the optimisation of information technology, and as a general practitioner. He was the former head of the Federal AMA that is responsible for national policy development, lobbying with federal parliamentarians, coordinating activity across the AMA State entities and representing the AMA and its members nationally and internationally.

Good afternoon. I'd like to thank the President of the Rural Health Alliance, Dr Jenny May, and Gordon Gregory and Helen Hopkins, for the kind invitation to come and speak with you today in this plenary and to participate in the following panel discussion. As is customary, I'd like to acknowledge the traditional custodians of the land on which we meet, and pay my respects to the elders, past and present. I also recognise many of my friends and colleagues in the audience, and in particular, Sabina Knight, who was with me in that commission, and the lady that put me there, my local Member, the Honourable Nicola Roxon MP.

Ladies and gentlemen, colleagues all, as I pondered my brief, some days ago, about how to bring this talk together, it all seemed to be coming together. As I set pen to paper however, or as is more accurate, finger to the keyboard, I felt the need to depart a little bit from the title that I have, but I will relate to it, so I apologise in advance if it's not completely what you expected. We have heard the horrors of the stories of Black Saturday in Victoria and the ghastly floods in Queensland and Lockyer Valley, and indeed, Brisbane itself. Following that, we had Cyclone Yasi in far North Queensland, fires here in Western Australia, and other natural disasters of biblical proportions. In Victoria we even had the locusts. The wet of course followed the great dry of many years of drought. We had the past history of the Boxing Day tsunami in 2004, following the tsunami in 1998 that struck coastal villages in New Guinea, the more recent devastation in Haiti, and of course, there are many, many disasters. I could spend my whole time here simply listing them.

As with most people in the audience, I heard the great sigh of relief as the waters that we talked about earlier and have seen pictures of, started to recede, and I marvelled at the spirit of mankind, in particular, our Australian compatriots, as they club together to make good, the damage of those terrifying days. Then we heard the horror of the horrendous earthquake in Christchurch and surrounding areas of the beautiful South Island of New Zealand. With our 24-hour news cycle, it's hard to miss the words and pictures and the internal emotions conjured up by the devastation and human tragedy that followed. As a human being, it's hard to deal with these phenomena, to rationalise them. We want to get up and get out there and help, but how? Last week, in fact on Friday, I was here in Perth at a clinical senate meeting, just around the corner, on St Georges Terrace.

I was so embroiled in that—as we all are, in our daily lives—that it was only on the flight home, that my wife alerted me to the unfolding catastrophe in Japan: the horror; the anguish; the human loss; the suffering; the stories of areas being wiped out; the areas of human endeavour and the attendant buildings with the history and tradition and—all being destroyed, and the equipment—and the markers of peoples' progress and achievements, but most important of all, the unbelievable loss of thousands of people; the displacement of hundreds of thousands of others; the overwhelming feeling of this being surreal, and the might of nature and our inability to do much in nature's way.

I don't think that there is a pecking order or grading of these disasters. Each has its casualties; each its devastation; each its story of interventions, and then each a planned road to recovery. What pervades all, is a coming together of people to drive the future from despair to survival and then to resolution and ultimately, through normality, to progress. I will be upfront. Through a deep feeling of shock—and what my mother would say in Hindi “gebrath” something hard to translate, but roughly meaning “anxious”, but more in the place of being unsettled and disturbed; through the feelings that come with the unfurling sequences of events and a complete powerlessness comes the feeling to follow human instincts and to do what we can do to help. The proposition I put to you, however, is that these feelings of nervousness, of heightened anxiety, “gebrath” if you will, are normal; are natural; are important to recognise as acceptable and very reasonable to share with others. My own feeling here in this matter is really quite miniscule, when compared to that pain and suffering and anxiety and depression and helplessness and uncertainty, by those felt in the middle of the fury of nature.

What can I add to this? What I can add is a personal experience of recovery. From a near fatal encounter, albeit caused through violence, but the pain is the same; the question is the same; the feeling of anguish and violation are the same; the need for safety, security and comfort, support, advice, and knowing somebody cares, are all the same. The sharing and the understanding that this brings, allows us a coping and a resolution process upon which we can build. What I would like to emphasise is that, ultimately, the strength of the human spirit will continue to burn brightly. It does need kindling and fanning and the fuel of support, in whatever form it takes, but it will prevail.

What we have heard from my colleagues today, on the dais, is this business of resilience. The word oft used in this situation dates back to about the 1620s and is derived from Latin, “resiliens” present participle of “resilire”, to rebound or recoil.” There is a medical, believe it or not, definition, too, and this is the capacity of a strained body to recover its size and shape after deformation, caused especially by progressive stresses, and also an ability to recover from, or adjust easily to misfortune or change. One of my great heroes said, “Inside of a ring or out, ain't nothing wrong, with going down. It's staying down is a problem.” That's Mohammed Ali.

There is yet another piece I want to share with you, from Warren Bennis, who is a great person who talks a lot about leadership, and has advised many US Presidents, and he said this,

The leaders I met, whatever walk of life they were from, whatever institutions they were presiding over, always referred back to the same failure, something that happened to them that was personally difficult, even traumatic; something that made them feel that desperate sense of hitting bottom—as something they thought was almost a necessity. It's as if at that moment, the iron entered their soul; that moment created the resilience that leaders need.

This resilience can be the difference between getting through and overcoming, or not. It recognises that like supervening illnesses, such as anxiety, depression, post-traumatic stress disorder, this has to be overcome. The hardness is intrinsic to this, and this is something that is supported by good support around us, good social structures, as well as good professional services.

Being resilient means being able to recover or bounce back from adversity, difficulties or change, with the ability to function at least as well as before. Resilience involves successful adaptation, despite being exposed to challenging and adverse circumstances. Despite this exposure, good outcomes result. Resilient people effectively cope with an adaptive stress and challenging circumstances. Resilience means dealing with challenges that make us grow and make us stronger, better prepared to face the challenges ahead.

And that was a quote from an article about Dr Karen Wreivich—she also writes on “resilience.”

Like everything else, there is science around this, and you can go to 70, you can go to more than that, different sorts of ways, that resilience actually works. I won't go there, but you can go with the science or you can sit and say, “What is reality teaching us?” and you can hear that from my colleagues, just here. What that really means is, getting out, and as Nike said, “Doing it.” The theory is fine, but different people react in different ways. Most of all, they must be allowed and encouraged to confront and allowed time to resolve. The basics of a healthy society are the connected community with good support systems, with external resources, with necessary grass roots.

It may not be possible for the access to support to be in person all the time; sometimes technology, such as video-conferencing, may bring us all a little bit closer. Mental illness is pervasive in Australia, as in the rest of the world. Care for this is constantly being advocated for. Systems we have, include access to psychology support services, and they are strained and pressurised, as are others including GPs and other primary health providers that work in that area. Demand for these services is high. I would argue it unearths a need which often was neglected in the past. Some of these services previously inaccessible are now accessible online. Adversities on the scale noted today and previously, add to the scale of need. It would be a great disservice to remove a key support for those of us who look after people with a mental disorder, and more so, increasing loads on families and carers that also help look after them.

The mental health care of carers, in my case, the doctors of Australia, is pretty concerning. As Chair of the beyondblue Doctors' Mental Health Program, we have noted the need for doctors in particular, of addressing the way in which they could deal with these stresses of daily life. Facing adversity daily and its outfall does have sequelae, and these have been noted, and these we're actually working on.

In more local aspects of health care and health delivery, there is emerging a personally controlled electronic health record. I will read from an article by Dr Regina Benjamin from the New England Journal of Medicine, on 13 July 2010. She is currently the Surgeon General in the US, and was a GP in the New Orleans, where of course they had Katrina—well, Hurricane Katrina. I quote, "The day after Katrina hit, I drove through the" — sorry, if anyone has come from Toowoomba—I read this to you over there, a few weeks ago, so I apologise for that. "The day after Katrina hit, I drove through Bayou La Batre, a small fishing village on the Gulf Coast, where I practised medicine for 23 years. The damage didn't look so bad when I pulled up to my clinic. However, when I opened the door I nearly fell sick from the smell of dead fish and crabs. Furniture had been tossed around the office every which way. All the patient information—all the paper records—were ruined. I remember thinking that I had tried to prepare for this kind of crisis, and recalling that I had strongly considered moving to electronic health records (EHRs). But money was tight, as it was for many small practices throughout the country, and it eventually came down to a choice: I could either install an EHR system or pay the electricity bill. Searching for a source of courage, I recall the reasons why I had chosen to become a family physician.

Like many physicians, I believe strongly in primary care. My mother, father and brother had all died of preventable diseases. As a National Health Service Corps scholar, I now had the privilege of making a difference in a small community."

So the first hurricane she faced was in 1998 when she actually had a flood where she had her records destroyed, and these were dried in the sun outside. The second one in '05 was Katrina, and they had rebuilt their clinic at that time on stilts, and it was miles away from what they thought was going to get wet, but unfortunately, the records got wet there again. But they rescued them and dried them out in the sun, but they had a fire on 1 January the following year, and they lost everything. So the words she used are, "Whereas I previously decided against installing an EHR system because I couldn't afford one, I now realised I couldn't afford **not** to have one." And she said at the end, "Until the day we turned on our EHR I was still using pens with waterproof ink. It is a very good thing—for both me and our patients—that my fellow physicians and I don't need to use those pens any more

There are examples like this in the UK where they had floods in York, and the next day they had systems up and running and clinics nearby, to give people the help that they needed. In our floods in Brisbane, the National E-Health Transitional Authority offices in Southbank were flooded. The basement was where all the data was housed. It flooded up to the first floor above that, but we had time and warning to get that information transferred down to Sydney, so we didn't lose much information. The technology and access to information make for better continuity of care. Pick some stories of the transfers of patients from Cairns Hospital, which my friend, Helen Willem, was telling me about recently, were quite desperate. Paper records were being transferred by helicopter, and these were floating in the wind as the people were being transported in the helicopters and think of transferring that information electronically.

We are in a brave world. We're in a great world. Lots of things are going to happen in this space very soon. National Broadband will also help, especially in regional, rural and remote Australia. We need to make sure that even if a wire passes by; it actually gets tapped into for those communities. I heard a horror story yesterday, talking to nurses in Queensland about how sometimes they could get access, but other times they can't get access, because there isn't a feed from the big fat cable passing by their front door. Our emergency

services in Australia and internationally rely on this good information, on equipment to give them a good steer to rescue, but also to protect themselves and plan for the future. I'm sure there will be a—over the next—the inquiries we're having, more information about how to do this better.

Today I wrote a note to my colleagues at the Japan Medical Association. When we were their guests in 2004, the Delaware Assembly, we had both an earthquake and a typhoon. In my room in the hotel tower I was swaying, which was a surprise to me, because I hadn't had anything to drink. The point I wanted to make is that in that country, they had reinforced the hotel and it was designed to withstand that earthquake. So technology and ingenuity of man can provide some counter to the fury of nature. Also, the early warning system that was in place in Japan gave some warning and saved massive numbers from death. Again, we can't overcome nor tame the power of nature, but we can harness technology and provide some protection.

This of course was not available to us when we had the tsunami in Banda Aceh; it was all but razed to the ground. My message to the Japanese was simple, "We're thinking of you. We offer our support, and let us know what we can do." As I said earlier, I had the privilege to go to Toowoomba recently and saw what I guess was a reflection of what was happening across the nation. People just wanted to get back to normality. Working hard, but also working for others, supporting one another. This community, this conference, the people at this conference, par excellence, demonstrate that *corp d'esprit*, the way in which we can do things together. Engendering that coming together of all parts of the community is something I have noticed over and over again, in my travels to regional, rural and remote Australia. Many words are used here, but it's deeds and action that lasts. The deeds and action seen over the passage of time in our country and across the world show that we can and do meet challenges before us, but based on core human drivers and values of generosity, community spirit, thoughtfulness, respect, giving and receiving health and support. It's called *camaraderie* in France. In Australia it's called *mateship*.

Thank you.

