***EMBARGOED UNTIL 3.30PM WED 11 JULY***

**HEALTH - A DIGITAL LAGGARD**

**DIAGNOSIS AND TREATMENT PLAN**

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Ernie Newman

Our health system is broken. The customer interface was designed for the 19th and 20th centuries and needs a complete re-engineering to take advantage of the revolutionary new opportunities of the digital era. We need to start with a new vision – not just of the health IT structures, but of a new customer service model enabling people to interact with health services using the vast capabilities of 21st century technology. That will require consumers to take charge of the agenda, with the active support of the health IT sector, clinicians, Minister and government.

**A BROKEN SYSTEM**
If the New Zealand public health service delivery system presented for medical treatment it would be sent straight to palliative care.

Diagnosis would show it as beyond hope. Its suffered through years of neglect and lack of preventive treatment. It’s been through a thousand screening programmes testing consistently positive, but any follow up has been half hearted and ineffective. Its complaints have been swept under the carpet. When it has screamed for attention its been put in a soundproof room. Every element is out of touch with the 21st century. Those who’ve given it treatment in the past have done so in isolation – there’s been no overall care plan. Its light years beyond Band Aids.

Its suffering long term malnutrition. For a decade it has been fed at a level barely capable of sustaining life. The symptoms are everywhere – crumbling buildings, a demoralised workforce, people dying on waiting lists, endless apologies in the media, and an environment where every thinking person with the financial resource opts out by paying for private health insurance.

Yet rather than focus on a cure, its caregivers have made great efforts to cover up the symptoms.

Meanwhile the environment is getting more challenging by the day.

Our aging population is placing unprecedented demands on the sector and the tsunami is beginning, not ending. Our population is increasing at an unprecedented rate through net immigration – so much so that we have nowhere near enough safe and healthy homes to shelter our people. That’s leading to illness and even more stress on the system. Medical science has developed to the point where people can be kept alive just about indefinitely if cost is no object and the public have an unrealistic expectation to receive the benefits as of right. Health professionals are aging too. We must get more from less. And yet there is professional resistance to any reallocation of responsibilities down the stack – from doctors to nurses, nurses to pharmacists and so on.

Some health services that were once accepted as core responsibilities of central government have been surreptitiously pushed across to an overstretched philanthropic or charitable sector to fund.

GPs increasingly have become salaried employees of corporations. That’s made them understandably less amenable to working weekends or accepting 24 hour callouts so people go to ED instead.

Our increasingly violent society has created a need for health service workers to be protected – double crewing of paramedic vehicles and even police routinely staffing hospital emergency departments.

**THE DIGITAL OPPORTUNITY**

Among all those challenges there is a shining light. The digital era has opened opportunities across the whole of society to make services of all kinds much more open to modernisation, automation, and consumer self-service. Nearly every sector except health has embraced this and re-engineered its customer interface.

Financial services are a great example – everything starts with the self-service option such as Internet banking or ATM machines. Banks in regional areas have disappeared and left prime real estate open for an explosion of 2 dollar shops. Aviation and travel have totally reinvented themselves – airline bookings, check-in, baggage tags and accommodation bookings are fully automated. Education has changed dramatically - the digital divide aside, most schools now teach digitally – they expect students to bring a digital device during the day and use it from home after hours to learn collaboratively or contribute to the class blog.

Every one of those sectors and more have achieved those gains by fully embracing the digital era. Crucially, they’ve re-engineered their customer interface from the start of the digital era, taking the view of a customer looking in rather than a service provider looking out. They have totally transformed the way we bank, travel, learn, and interact with government services. The efficiency gains and financial savings have been colossal.

Not so in health. Against the odds, many highly competent and committed people have delivered some highly successful health IT initiatives. But they’ve done it in an uncoordinated and random way. There’s been no clear destination, either for the health IT system or for the whole 21st century structure of health services.

Efforts to coordinate IT systems from bases developed by individual District Health Boards meeting their own needs in isolation, have resulted in tensions between local, regional and national imperatives that are almost beyond resolution. Especially so in the absence of an over-arching vision of the future state customer interface we are trying to achieve.

Health IT has been like solving a thousand-piece jigsaw without access to the picture on the lid, and without certainty whether the thousand pieces all constitute the same puzzle or are a mixture of 100 pieces each from ten different boxes. Again, absent a vision we are decades behind and despite the dedication of many good people we’re falling further behind by the day.

**WHY IS HEALTH FAILING TO MAKE PROGRESS?**

The sector’s failing because it continues to put digital Band Aids randomly on a system designed for the last century and totally unfit for purpose in the digital era. There’s no shared vision of the destination nor a master plan to get there.

Health service delivery and funding is a system of mind-boggling complexity. A mixture of public and private sectors, with a labyrinth of cross-subsidies, interactions and processes dating back to the time when the medicine man was the wisest and most revered person in the village – nobody would ever think of challenging him. Doctors today still hold that status in society - rightly so when it comes to the practice of medicine, but perhaps wrongly so when it comes to fronting the evolution of the customer interface, structure and funding of a 21st century health system. Clinical caution is admirable when they are wielding the scalpel, but when they are holding the key to the next generation of funding and service delivery it can quickly turn to ultra-conservatism, change resistance and patch protection.

Most sectors have become far more customer-centric in the digital era. Not so in health. Clinicians still refer to us as “patients” – a term that implies subservience, rather than adopting a more neutral term like “customer.” Clinicians in my observation genuinely believe they know what we as customers need better than we ourselves know.

Most sectors too, have fully embraced inter-connecting databases. Not so health. Even with the new Manage My Health patient portals, and despite the common link of a unique NHI number, updating my address doesn’t flow through between my primary practice and the local hospital a kilometre away. How dumb is that?

Compare that with banking, where the price of the latte I buy this morning in Paris has been deducted from my New Zealand bank account before I sit down at the table.

Today’s health consumers have a vast array of digital tools available to self-manage their health. It includes the output of personal digital devices, Internet advice, and numerous self-assessment tools. Commonly now customers have already self-diagnosed by the time they present to a practitioner and have a fair idea of the required treatment path. They seek affirmation or otherwise, and a course of treatment they have already mapped out. In many cases – not all – they should not require a full face to face visit to a GP. Delegation down the stack, a virtual consultation, or a mix of the two would be fully effective and resource saving.

A high percentage of consumers also have access to new communication tools such as video. Video has been amply proven to have a huge potential in some aspects of health services. Enough work has been done to give us a good sense of where it is effective and where it is not – for example we know it is highly effective in specialties like mental health and addiction where there is no requirement for a physical examination, and in circumstances where, because of isolation, the customer would otherwise not seek treatment. There have been numerous trials of video or Telehealth in various parts of New Zealand. Most have succeeded. Yet few if any have reached anywhere near their potential in terms of scale. Yet video’s as cheap as chips.

Why is video not available universally as a communications channel for use in appropriate circumstances?

Why can I only see a fraction of my health records in my patient portal?

Why are there pilots galore using 21st century communications technology all through our health system, many of them highly successful, yet few or none are being developed into scale?

**THREE ENORMOUS ROADBLOCKS:**

**Complexity**

The reasons in my opinion are threefold.

First, complexity. The system is so absurdly complex and convoluted that everyone is terrified to tinker for fear of unintended consequences. We have a Ministry that takes eye-watering sums of money from taxpayers which it redistributes through 20 DHBs, multiple PHOs, primary practices, allied health services, NGOs and more. Everyone takes their cut for administration - you wonder what percentage ends up treating a patient. It’s a 19th century structure completely unfit for purpose in a 21st century digital environment with the new dimension of customer self-service.

In any sector, getting full value from digital systems requires re-engineering the service model to fit around the technology, not fitting technology onto a creaking existing pre-digital structure. Our banks, airlines and others learned that 20 years ago. That’s a concept the health sector needs to embrace.

**Leadership Vacuum**

Second, lack of leadership. Sadly, recent health Ministers (I’ll exclude the current Minister David Clark as he arguably still hasn’t had time to make his mark) have been totally preoccupied with shutting down the debate we desperately need about the shape of services in the future. Their goal has been to keep health off the front page at a time when that is precisely where it needs to be. Of all the numerous services governments provide health stands alone as the most broken and most in need of fundamental re-design. The Ministry in turn focuses on eternally transforming its own internal structure, diverting its attention from the far more pressing and challenging imperative where the real rewards lie - transforming the whole sector.

Political “no surprises” and “no bad news” policies have come back to bite the very citizens to whom politicians are accountable. Ministers hang on grimly, hoping against hope that the inevitable meltdown doesn’t come until after the end of their watch.

The key role of a leader is to articulate a vision, unite people behind it, then make sure they have the empowerment and resourcing to implement it. Have we seen that from recent Ministers or the Ministry? In its absence, and in a climate of perpetual crisis management, the followers ­will naturally go off in a range of different and inconsistent directions.

**Absence of Customer Input**

Third, the lack of input to the debate by customers, or consumers. Most sectors at least go through the motions of asking customers what they want. Airlines for example put huge focus on qualitative and quantitative research before deciding on a new route to service. Sure, they ask their pilots for input, but they wouldn’t assume that the pilots speak on behalf of the customers.

Every time I book a hotel, attend a conference like this, deal with any professional, or go to a café I seem to get a request for feedback – whether from a hospitality worker or through an online form. Yet in my entire lifetime health journey I can never recall being asked for comment on how I felt about the treatment or experience. That’s a mindset thing - the people in health assume they know better than I do what is good for me. After all I am not a real “customer” – I am just a patient to be dealt to, not collaborated with.

So what needs to happen?

**A SHARED END POINT**In my opinion the starting point must be a shared national vision of the health system we want in 2030. I’m talking about a vision not just of the health IT system, but of the basics of how the customer interfaces with the health sector.

The Vision should be led by a consumer action group comprising well-informed consumers, with liberal consultation with the multiple sub-groups that constitute the health system’s customer base. It should be supported by access to clinical and technology people. It should work collaboratively with government but not be dominated by government – leaving it all to the government has failed.

This is the moment for the needs of customers to be determined by the customers themselves, rather than have the supply side of the industry decide in isolation what the demand side wants.

The consumer action group’s terms of reference should stipulate that it is not to be constrained by today’s system. The migration path is out of scope at this stage and can be developed later. However, the group needs to be realistic in recognising that health is a sector where there will never be enough money, so the focus should be on devising a customer interface that delivers more with less.

We already know quite a few things about what consumers want.

For example, earlier work by the National Health IT Board showed that consumers welcome the consolidation of their health data onto a single electronic file and in many cases have assumed that has been happening for years. They do want assurances about privacy, especially where sensitive conditions such as sexual or mental health are involved, or where individuals are sensitive about being traced, but that is readily achievable.

We know that telehealth or video consultations work in a wide range of settings and can represent a very cost-effective solution for people in isolated places.

We know that nurses and pharmacists are well trained, highly skilled professionals, trusted by consumers and capable of working at a level significantly higher than they are currently assigned. So we have a solid base of information and insight.

The task of the consumer action group would be to flesh that out into a consumer-centric health service delivery model which will serve well into the 21st century. It would look at questions like the respective roles of general practice, hospitals, pharmacies and allied health services. It would consider the utility of digital communication tools such as video, email and social media. It would assess a future model of support for our aging population including aging in the community, funding models, and personal health records. Out of all that it would articulate a vision of the fit-for-purpose health service interface that consumers would like to see.

Once such a national vision is adopted, every new service and IT initiative can be tested against it. The route from the current state to the new utopia, and the timetable can then be plotted, and the budgets drawn up.

Without that we will continue wallowing around in busy confusion. If all we do is look at incremental improvements to the status quo we will be condemned to eternal mediocrity. But if we lift our sights, we can achieve great things for Kiwis as well as moving toward world leadership in customer-centric, digitally based service delivery.

**THE GOAL**

The rewards will be immense. We have a robust health IT industry in this country which will blossom once the destination becomes clearer. New Zealanders will have the kind of health services to which we aspire. Unnecessary bureaucracy will be exposed and dismantled, and resources put back into patient services instead of being swallowed up on an obsolete money-go-round.

Envision, plan, fund, implement, and reap the rewards. Is this achievable? Of course! The banking sector did exactly that, with just as much complexity, late last century. Aviation and travel followed suit. So did just about every other sector.

Consumers aside, the people who best understand the opportunity are those professionals working in health IT. They are the people in this room.

So my challenge to the health IT profession is this. Put your weight behind supporting a consumer action group tasked with envisioning a re-engineered health customer interface. One that reflects the changed needs of today’s society and the massive potential of the digital age.

Are you up for it?

As Darwin said famously “It is not the strongest of the species, nor the most intelligent that survives. It is the one that is most adaptable to change.” Our health service delivery has left it dangerously late to adapt at a point in history when modernising has never been more important.

It’s not too late. We owe it to future generations to update our collective mindset. Let’s do this.

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Ernie Newman is a digital economy consultant based in Whakatane. Over recent years he has worked extensively on health issues including the consumer issues around online personal electronic health records, and implementation of telehealth. His clients have included several government agencies, four District Health Boards, and a Pacific Islands health organisation. Prior to that as CEO of TUANZ, he spent 12 years agitating for a competitive telecommunications sector and the development of broadband for economic and social gains.

www.ernienewman.com