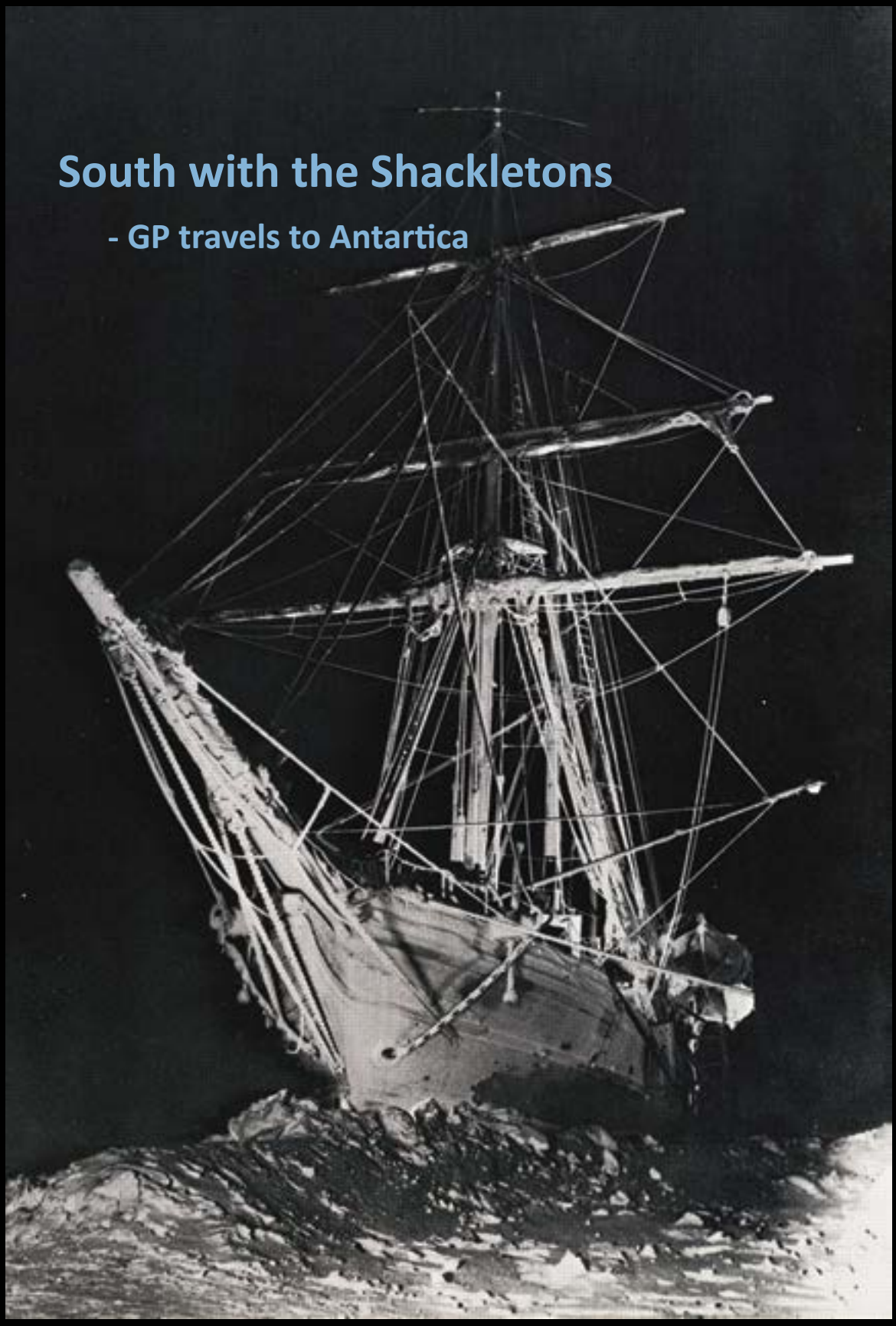
GPSpeak



South with the Shackletons

- GP travels to Antartica

In this issue:

GPSpeak

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IN THIS ISSUE

Front cover: Sir Ernest Shackleton's ship Endurance trapped in Antarctic ice in August 1915. This classic picture, taken by Australian photographer Frank Hurley (pictured at left with his expedition leader), is one of the famous Hurley images reproduced in *From Snowdrift to Shellfire* by David P. Millar (David Ell Press, 1984). Review copy and permission to reproduce photos was given to GP Speak editor at the time of publication. Our travel contributor in this issue, Dr Ruth Tinker, met relatives of Sir Ernest on her recent - and considerably less challenging - trip to Antarctica... see story on page 28

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Editorial

"Do not go gentle into that good night,
Old age should burn and rave at close of day;
Rage, rage against the dying of the light.
...

And you, my father, there on the sad height,
Curse, bless, me now with your fierce tears, I pray.
Do not go gentle into that good night.
Rage, rage against the dying of the light."

Do not go gentle into that good night
Dylan Thomas, 1914 - 1953

The Pap smear is gone. Welcome the CST (Cervical Screening Test). December 1 marks the change over to the new system. General practitioners have been inundated with information about the new test but on page 23 Dr Ruth Tinker gives the one page guide for the busy GP.

Change in medical practice happens slowly but the understanding of the biology of human papilloma virus and the advent of early virus detection together with a nationwide vaccination program will further reduce the mortality from this deadly disease. The management of positive results will be addressed in a subsequent article.

NRGPN Chairman, Dr Nathan Kesteven, has a long standing interest in obstetrics and works two weeks per month as a GP/obstetrician in rural Queensland. On page 21 he reports on the state of obstetric care in New Guinea where he visited Port Moresby General Hospital recently. The terrible infant mortality rate reflects the lack of staff and facilities for even rudimentary antenatal and perinatal care in most of the country.

Training programs to increase the supply of midwives and doctors are in place but resources are very limited. Dr Kesteven highlights the dedication of two Australian obstetricians working tirelessly to improve the situation. Support for this work is crucial and the "**Send Hope, Not Flowers**" organisation and accompanying **video** highlight the needs while also providing a mechanism to contribute.

Mental health disorders and substance abuse are frequent fellow travellers. This has long been recognised by psychiatrists and Australian health authorities through their **Comorbid mental disorders and substance use disorders** model which dates back to 2003. GPs are reminded of the association on an almost daily basis.

This combination of these medical problems is most acute for Aboriginal people. Adding in institutionalised disadvantage can make for a toxic environment which social and medical services have so far been unable to successfully address.

On page 15, we report on a Commonwealth funded trial taking a more holistic approach to this mix of problems. The $100,000 pilot project for Aboriginal clients in the Richmond Valley is being run through Rekindling the Spirit and the Jullums Aboriginal Medical Service, Lismore with support from the North Coast Primary Health Network.

Addressing the social determinants of health is the key to progress in this difficult area. If the pilot is successful there is the option of expanding it more generally on the North Coast. Progress is urgently needed and the results are anxiously awaited.

The Victorian Voluntary Assisted Dying Bill 2017 has **passed the second reading** in the Upper House. As in the rest of the community the debate was passionate on both sides and the vote was close at 22 to 18. Death of a loved one is a near universal experience for all adults and personal experience shapes one's views more than politics or religion.

Supporters of physician assisted suicide include **many prominent Australians** from the law, business, the arts, the media, scientific research and both sides of the political spectrum. Dying with Dignity promotes physician assisted suicide through its chapters in **Victoria** and other States.

The RACGP features on the **home page** of the **NSW Dying with Dignity website**. The **College**, like all groups in the debate, supports excellence in palliative care and stringent safeguards to prevent coercion of either the patient or the doctor being asked to participate in physician assisted suicide. Support for this within the College is far from universal, however, with the doyen of general practice in Australia, **John Murtagh**, bitterly opposed and threatening to resign from the College.

Hope Australia is the organisation co-ordinating opposition to euthanasia. It too features prominent Australians with strong views on the subject. The current and two former prime ministers, Malcolm

Turnbull, Tony Abbott and Paul Keating, all oppose physician assisted suicide, highlighting the diversity of political views on this most contentious issue.

Also opposed, after some internal debate, is the AMA. It's **position paper** recognises that the Australian parliaments will ultimately make the laws on assisted dying but, if passed, the AMA requires regulations and guidelines protecting patients, physicians and the health system as a whole. The position paper also makes the point that requests for physician assisted suicide may be associated with "depression or other mental disorders, dementia, reduced decision-making capacity and/or poorly controlled clinical symptoms" and that these factors must be addressed in the first instance.

Optimal palliative care will go a long way to relieving the suffering that patients, and their families, experience at the end of life and will often obviate the need to consider assisted suicide.

In this issue of GPSpeak well known Tweed Heads anaesthetist, Ian McPhee, puts the yes case for voluntary assisted dying. Ian has seen end of life issues from both sides of the doctor / patient relationship and recounts his own experience of incurable cancer.

Jane Barker, general practitioner and academic, after a life time of primary care, puts the No case and argues for improved palliative care. Giving adequate pain relief and other treatments that may result in a shortening of the patient's life is to be considered good care and not assisted suicide. However, this treatment is clearly distinct from actively ending the patient's life which she, like the majority of Australian physicians, still oppose.

Our own experiences shape our views. Improving palliative care, in which general practitioners play a pivotal role, will lessen the burden.

Death of a parent is a poignant event in everyone's life. On the eve of Easter this year, my father died after a short illness. Throughout his life he was never a rager, until the very end.

Chairman's Report 2017 - Whither the NRGPN?

Dr Nathan Kesteven became Chair of the Northern RIvers General Practice Network in December 2016. This Chairman's report outlines the current focus of the Network and his vision for the organisation in the coming year.

The Board meets every couple of months to further the aims of the NRGPN and comprises myself, David Guest, Chris Mitchell, Lynn Davies and Katie Evans. We have been working and thinking about ways to improve our reach and offer something to the wider medical community, especially in this leaner world of Primary Health Networks, one of which, the North Coast PHN encompasses our footprint and much more.

We see our primary aims as:

• facilitating communication within the GP community, as well as with the hospitals, our specialist colleagues, allied health and our local communities,

• facilitating education

• advocating for our members and general practice.

Our regular magazine, GPSpeak is sent to all the GPs and specialists from the Tweed to the Clarence and to doctors at the private hospitals on the Gold Coast. It always contains great articles about a whole range of subjects for our education and enlightenment.

We have had a couple of meetings with some of the new specialists at Lismore Base Hospital about how to improve GP/specialist communication. Following these discussions we are looking at setting up a closed Facebook page similar to the highly successful #GPDU.

North Coast GP Training, like the NRGPN, is no longer a government funded organisation. However, again like the NRGPN, it has some assets that could be used to improve general practice care on the North Coast. The two organisations are in talks to see if they can work together towards this common goal.

In short, we are looking at ways to improve what we do. However, we would really appreciate your help and suggestions as to what you think we could and should do in the future.

We would love you to come to an information night to discuss the future direction of the NRGPN and get your feedback. This will be held at **St Vincent's Hospital Education Centre** Lismore on 14 December at 7.00 p.m. immediately following the NRPGN's Annual General Meeting at 6.30.

Finally to all members and readers of GP*Speak*, we wish you a Merry Christmas and Happy New Year 2018, and please take care on the roads over the Summer break.

Best regards

Nathan Kesteven
Chairman NRGPN

A letter to my colleagues

by Dr Ian McPhee

Dr Ian McPhee has both personal and professional experience of incurable cancer and its treatment. He reflects on his own journey and advocates for the Yes case.

Life takes many turns, for us, just as for our patients. Wellness for most is a fleeting state, punctuated by crises of varying impact on ourselves and those we love.

When a busy life had been slowly curtailed by years of ongoing fatigue I was more puzzled than distressed. I was frustrated by not being able to 'keep up', but accepting that, for whatever reason, this was how it had to be. Little doubt you can imagine that I struggled through with 'eczema' being pitched as a primary cause. Four years on from an initial eczema diagnosis, and after more than one 'opinion', a skin biopsy revealed that there was a little more to this malady that had largely taken over my life. Suddenly I was confronted with the potential reality of a rare, rapidly progressive lymphoma.

'Rare' however comes with myriad implications. The first was the question: where might a pathologist be found who would make a call on the histology? And to think we all regard the radiologist's emblem as a fence depicted suitably encircled by the obligatory 'Latin'? Indeed, it was exactly so for a pathological opinion. But it didn't end there. Where next to find expert haematological assessment and ongoing care?

Suffice to say that over a period of some weeks, and following multiple investigations, via Royal North Shore, I found myself at Melbourne's PeterMac where a diagnosis of Sézary Syndrome was confirmed. Unfortunate? Well, yes. But to be in the hands of one of the world's leading researchers in the area of Cutaneous T-cell Lymphoma (CTCL) was somehow comforting. Perversely it was also reassuring to hear that 'eczema' it was not!

The year that followed saw three attempts to achieve remission fail. A mAb, interferon and finally a retinoid - the latter received on 'compassionate grounds' from the parent company in America, each only had no, or short-lived effects.

Now, attendance at the nation's preeminent multidisciplinary CTCL clinic meant that all options for intervention were able to be considered. Amongst these was Bone Marrow Transplant (BMT). Even while other treatments were underway, work up for a possible transplant was begun. It was the case then, after a third failed drug, that BMT was seriously considered.

By this time, with transient responses only to interventions that each brought with them a grab bag of side effects, I had had ample opportunity to contemplate my predicament. I believe that I experienced during this period a true existential crisis. It lasted many weeks. I read Frankl, Levi and Gawande. I conversed with colleagues interested in end of life matters. It passed, and I was able to confront BMT comfortable in the knowledge that I may not survive the intervention, much less it's potential for inducing ongoing, significant pathology, such as graft versus host disease.

I mention this now because it is critical in my own considerations of end of life and my views on assisted dying. I had accepted not just the diagnosis, but the reality of limited life expectancy. Bound up with this was the knowledge that death will be preceded most likely by sepsis and multiple organ failure. At a point midway through treatment, for better or for worse, I had been invited by my treating team to sit in on an annual CTCL clinical forum at the PeterMac. The cases presented were not something abstract. They were me!

And so, to the transplant. The match was good. Hopes were high. Things however did not go well. I developed overwhelming EBV and CMV infections and, as a consequence, multiple organ failure. The 'single-organ' specialists were called in and a liver biopsy was ordered. Late on a Friday afternoon, after the biopsy, I bled and had a hypovolaemic arrest. There was a 12-unit transfusion, 15 minutes of CPR, 'coiling' of the offending bleeder, and a three-day ICU stay.

Engraftment ultimately failed.

I endured a further two months of total body skin electron beam therapy before we made our way back home after ten months in Melbourne. To everyone's surprise, at my last clinic visit before leaving, everything indicated a remission.

It was more than six months however before I began to feel part of the world again, by which time skin symptoms had begun to return and bloods confirmed a relapse.

There will be further attempts to contain symptoms but there is nothing on the horizon available that might assist in achieving remission. The fanfare over CAR-T relates to B-cell lymphoma only, and even there, when closely examined, the data aren't all of that encouraging.

✧ ✧ ✧ ✧ ✧ ✧ ✧

Having more than glimpsed the reality of end of life with Sézary, I have sought, with my family, to give consideration to what the choices are for me. There is no shortage of commentary in the medical literature, and in the main stream media, on assisted dying. A career in critical care and acute pain had shaped my own views long before the events of the last few years. I will have the choice to be assisted to die.

While respecting the concerns of the thirty percent of the community who are either unsure, or definitely opposed to assisted dying, it remains that scrutiny of real-world experience demonstrates that laws can be enacted to ensure that those few who are unable to be relieved of physical, and or existential suffering in the face of an imminent death, can take their own lives with medical assistance.

The debate, though misconstrued by many of our colleagues as such, is not about assisted dying at the expense of improved palliative care. These are not mutually exclusive. Importantly, participation by medical practitioners is also not mandatory. Arguments suggestive of a 'slippery slope', of random killings at the behest of who-knows-who, and of failure of technique are ill founded.

Despite the best efforts of a small, unrepresentative cadre of prominent clinicians, it is clear that a majority agree with the view that the matter of legislation to allow Voluntary Assisted Dying is ultimately a matter for society and Government - State

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To my colleagues

continued from P5

Government. The Commonwealth does not have jurisdiction in this area and will not intervene.

So, as with every intervention that we entertain for our patients, it behoves us to be as familiar with the issues as possible, to be informed. In this regard, amongst the sometimes purely emotional, there exist a number of definitive pieces on end of life choice. On the matter of not just the existing role of a clinician, but critically also, the language of discussion, the Victorian Civil and Administrative Tribunal **judgement** in the case of Syme v. Medical Board of Australia holds so much of significance.

For those who maintain an opposing view there is an important contribution to discussion in a **BMJ piece** that offers an insightful and very personal experience of a physician altering his view. And the experience and questions of an American physician, a year on from the introduction of California's 'End of Life Option Act' are outlined **here**.

Combining issues of language and physician appreciation of assisted dying with an immensely powerful patient story is, in my view, key to coming to an understanding of one's own stance. Again, there are many stories, but few to equal that of Canadian, John Shields, and his doctor, Stefanie Green, as told to the **New York Times**.

Twenty years on from the introduction of assisted dying in Oregon, 2016 saw a little under 'four tenths of one percent' of those who died in the State use this option. It is for us then to truly focus on ideals addressed by my friend and erstwhile colleague, Ken Hillman, in his recent monograph **'A Good Life to the End'**. These are not matters of 'all or none', they are matters for consideration, and ultimately, choice.

I wish you all well as you ponder what your own end of life wishes might be.

Ian

Dr Ian McPhee MBBS FANZCA is APS Clinical Lead, The Tweed Hospital

The 'No' case for euthanasia

by Dr Jane Barker

Politicians in two main states are working to legalise euthanasia under defined guidelines, but it's doctors who would have to implement their policies. Dr Jane Barker discusses her reasons for opposing physician assisted suicide.

As we will be the ones expected to write the scripts, administer the medications and make the final decision within the boundaries of the law, the euthanasia debate is our debate, yet we have not adequately engaged in it. How will we respond if pressurised by patients or family members, or accused of lacking in compassion?

By definition, physician assisted suicide (PAS) is a medical issue, but the question of whether we as a group, or as individuals, wish to play this role, and the regulatory parameters, has not been fully discussed with us.

Legalising euthanasia

Last week a bill supporting physician assisted suicide was passed in the Victorian State lower house. It will now go for debate in the Victorian Senate. NSW is also preparing to debate the subject.

Several countries have legalised voluntary euthanasia, including The Netherlands, which was the first country to do so, introducing it in 1984 and fully legalising it in 2000. As such, there is extensive literature about the practice of euthanasia.

Others, including Canada and some American states, have legalised physician assisted suicide.

In Australia euthanasia was legalised in the Northern Territory for a short period before the bill was overturned. There have been robust and recurrent debates in many states. In South Australia alone the death with dignity bill was rejected for the 15th time last November.

Both in the media and in the parliament we have heard highly emotional stories. These indeed invoke compassion in us all, but they do not lead to the informed debate that is needed.

The bill passed in Victoria has very strict and well formulated guidelines limiting the availability of PAS to those in severe pain - but only if over 25, not cognitively impaired and likely to die in the next 12 months.

Of concern is how these conditions could be expanded over time. There are ethical concerns in the Netherlands because of an increase in the number of people choosing euthanasia because of mental health issues. In 2010, 2 people with insufferable mental health conditions chose euthanasia, by 2017 this number had increased to 56 (1). Some of those people seemed very young. What constitutes "unbearable suffering" is very subjective and making such decisions would be complex. In other countries which have brought in euthanasia laws, while the initial laws have been tight they have subsequently been expanded for instance to cover patients with dementia, disability and mental illness, and also to cover children. This is what we risk if euthanasia becomes legal in Australia.

Society & profession divided

Just as there is a diversity of opinion within the community so there is division within the medical profession.

Studies have found that a higher percentage of the general public agree to euthanasia compared to doctors interviewed. Attitudes varied amongst doctors working in different specialties. Importantly those working in palliative care, perhaps at the 'coal face of dying', were least likely to agree, in some studies unanimously disagreed. Of those who did agree, a very small proportion felt that they themselves would perform this task.

A 2016 AMA survey found 38% of doctors think euthanasia should be legalized. In Australia there is an acceptance that death hastened by treatment to alleviate symptoms does not constitute euthanasia. Indeed, this is what is currently practiced in palliative care in the final phases of life. However, the AMA states that "doctors should not be involved in interventions that have as their primary intention the ending of a person's life".

Globally, 107 of 109 national medical associations affiliated with the World Medical Association have stated opposition to PAS.

"Debates on euthanasia and ways of reducing futile treatment may both have their answers in effective, accessible palliative care".

The 'no' case

While I may have some questions, there is a resounding "No" from my heart; a strong negative reaction in my body. It is not something I could do, nor do I think I should be expected to do it. If that is the case how could I ask another to do it?

I chose this profession to attempt to bring relief to suffering in life, not to take that life. It has been generally accepted by the public, by the government and by the profession that doctors are the appropriate professionals to work with those who wish to die prematurely to relieve their pain, be it by euthanasia or by physician assisted suicide.

I have over the years cared for many people dying. I have clear memories of a 4-year-old dying of leukemia whom I treated as a houseman. The little fellow laughed merrily at me riding my bicycle ... and later that week died peacefully.

More recently I helped in the care of a 2-year-old with an inoperable brain tumour. He loved cows and whenever he was well enough would say "cows" and his beautiful family would take him to the fence where he seemed to find those big brown munching creatures in some way healing.

Did I prescribe pain relief and sedation when it was needed? Of course yes. Could I have even considered euthanasia for those little people? The very thought sends shivers down my spine.

Better palliative care

The proponents of euthanasia would say that those opposing it are disrespectful of patients' autonomy and dignity and that choosing their way of dying is a basic human right. They would say that to deny

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'No' case to euthanasia

continued from P7

this right is lacking in compassion because we are asking that patients continue to suffer in pain.

Having witnessed many deaths from medical causes, some of those prolonged, others accompanied by severe pain and many by loss of autonomy, I still feel there are other ways to bring greater dignity into dying.

One of the other important ethical issues facing medicine currently is so called "futile treatment" where life is prolonged for inappropriate reasons. There are times as doctors when we share in hard decisions to withdraw care and allow the dying what nature has decreed.

Debates on euthanasia and ways of reducing futile treatment may both have their answers in effective, accessible palliative care.

The science of palliative care increasingly understands ways to effectively treat pain and other symptoms associated with dying which in the past have had the potential to cause untold suffering and generated fear for both the patient and their carers.

Pain control in palliative care is not euthanasia: it aims to improve the quality of life experienced in the process of dying and to help patients to retain their dignity. In my experience doctors are not afraid to give increasing levels of pain relief or sedation to reduce suffering.

We are grateful if there has been discussion in the form of advanced care directives that can assist in decision making, but these need to be more effective, universal and readily accessed perhaps through a central controlled and confidential data bank. Priority needs to be given to researching and funding effective symptom control for people dying, so that some of the fear may be removed, making euthanasia less needed.

It should be noted that there is strong association between requests for euthanasia and depression, as indeed there is between chronic disease and depression. Although the public tends to thinks of such requests being in response to intolerable pain or fear of such pain, studies (for instance in Oregon) show that the most common reason behind such a request was loss of the ability to do the things they enjoyed and a loss of autonomy.

While in many ways it is fear of the unknown, in my experience it is the dying that people fear and not death itself.

Taking time to explain how the patient may be helped, who may assist and answer questions as truthfully as possible may allay fears.

The suffering of those with mental health issues cannot and should not be underestimated. Nor should the suffering of those who feel lonely and isolated, or that of carers watching their beloved partners, children and family in their illness.

Does the answer to these problems truthfully lie in euthanasia, or is it time that we as a profession and as a society develop more compassionate solutions?

I fully respect other physicians' beliefs, but for me the answer as to whether euthanasia should be legalised is firmly 'No'.

I do not believe it is right and I do not believe I should be asked as a doctor to do it. It is not that I lack compassion rather that I believe there are more loving ways to support the dying.

The myths and challenges of smoking cessation

by Dr Andrew Binns

"James Packer takes a deep draw of his menthol cigarette and for a few moments stares out the window at the lush polo field..."

- Damon Kitney, "I was terrified", Weekend Australian Magazine, Oct 21-22 2017.

Among the many misconceptions that smokers have about their habit is that weaker/milder cigarettes are "better", although there is no evidence for this. Indeed, they can be worse because of increased inhaling to build up nicotine levels. As for mentholated cigarettes - first developed by Lloyd "Spud" Hughes of Mingo Junction, Ohio in 1924 - evidence shows that the cool (or 'Kool') ingestion of menthol causes an increased metabolism of nicotine.

Regardless of the scientific evidence about the damage that smoking causes to human health - the practice has a 68% death rate, a statistic that few smokers are aware of - there are many myths about consumption, and even more challenges about quitting.

Not the least of these challenges is the one faced by smokers who have tried but not succeeded. Whose fault is it? That of the smoker, addicted to a substance that causes more dependency than, say, heroin? Or the cessation methods that are often found not to 'work'?

Studies consistently show that the great majority of smokers wish to give up, and regret having ever started. That said, smoking rates in Australia are now about 14.5% according to the National Health Survey 2014-15, low on the global stage, especially compared to neighbouring countries such as Indonesia and China where control measures are only starting to be introduced. In both of these massive countries a smoking-related cancer tsunami is now gathering.

Sadly, smoking rates are considerably higher among Australians with the most socio-economic disadvantage. In 2014-15, 21.4% of people living in areas of the greatest disadvantage smoked daily, compared with 8.0% of people living in areas of the least disadvantage. Further, about 42% of Aboriginal and Torres Strait Islander people smoke, although it is heartening to know that this prevalence is decreasing at the same rate as the overall Australian smoking population.

At a recent Australasian Lifestyle Medicine Society conference a renowned leader in the field of smoking cessation, Professor Renee Bittoun gave an illuminating talk with many take home messages.

Many old methods and guidelines may need to be reviewed to deal with the smokers who have already had many unsuccessful attempts to quit. Here are some of the tips presented.

Cutting down and advising to do so may be counterproductive because people tend

to compensate by inhaling deeper and smoking more of the cigarette (down to the filter butt).

The timing of the first cigarette of the day is useful information to ask our patients. If within 5 minutes of arising this indicates high dependency and it is harder to quit.

People can be fast or slow metabolisers of nicotine. Fast can decay nicotine in 5 minutes and they tend to be strongly addicted, smoke more and have an increased risk of lung cancer. They do not do so well with nicotine replacement therapy (NRT) patches. They also have higher carbon monoxide (CO) levels if measured by a Smokerlyzer CO breath test monitor.

Caucasians are faster metabolisers compared to Asians. Japanese people are slow metabolisers and have high rates of smoking but lower lung cancer rates. European people are faster metabolisers.

The younger that smokers start the harder it is to withdraw. Hence the need to try to reduce taking up smoking in adolescent years.

There is no evidence that weaker/milder cigarettes are better. In fact they can be worse because of increased inhaling to build up nicotine levels. Also the menthol in some cigarettes causes increased metabolism of nicotine.

There is no evidence that hypnotherapy, acupuncture, or laser creams help quitting.

There is good evidence for combination NRT therapies such as patches with chewing gum, lozenges and there is no risk of overdose of nicotine.

People can continue to smoke whilst using the patches; nagging or advising a quit date has not shown to be effective.

There is evidence for separating smoking from habits such as having a cup of coffee, or an alcoholic beverage – advise smoking outside houses and cars.

Smokers drink twice as much alcohol as non-smokers. Alcohol induces liver enzymes which alters nicotine metabolism and increases its use.

Nicotine reduces anxiety and depression and has a short half-life (40mins to 2 hours) - when the effect wears off these symptoms return. Smokers manage stressors better when on NRT. After cessation they are calmer and less reactive but this may take time (up to 3 months).

Nicotine has some cough suppressant effects and the combined use of cannabis and nicotine is common and exaggerates the somatic, psychological and social consequences of each drug. It potentiates co-dependency and blurs the withdrawal from one or the other drugs. This increases the risk of relapse and reduces motivation to care, making the therapeutic process of smoking cessation harder.

Smoking produces polycyclic hydrocarbons that enhance liver enzyme inductions.

Caffeine intake is double in smokers and caffeine toxicity is common in withdrawals. Hence the need to halve caffeine intake during quit attempt. Smokers need more insulin, pain relievers, anti-psychotics, anticoagulants, caffeine and alcohol for them to be effective. Quitters need less of these and this needs to be monitored and adjustments made to doses.

Nicotine toxicity and overdose is rare – nicotine withdrawal symptoms are common.

Evidence-based pharmacotherapy for cessation

1st line – NRT, Bupropion (Zyban), Combination of all NRTs, Combina-

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Smoking cessation

continued from P9

tion of NRT and Bupropion, Varenicline (Champix), Combination of Varenicline and NRT

2nd line – Nortriptyline (registered for this use in New Zealand), Naltrexone

Combination therapies often succeed when single therapies fail, particularly for fast nicotine metabolisers.

NRT

As blood levels vary most smokers are under-dosed with single 21mg patch and combination NRTs or more than one patch at a time may be needed (can cut them into halves if needed to increase dose). There is no evidence for cutting down (21 to 14 to 7 mgm). They are safe in all forms except pregnancy where the 24-hour patch should be taken off at night.

If not pregnant, patches should be put on at night so that the slowly absorbed nicotine is on board after waking in the morning. Expired carbon monoxide can be monitored with a Smokerlyzer in some smoking cessation clinics and it can provide useful feedback for both patient and therapist.

Smokers trying to quit can alternate pulsatile NRT (i.e. the fast acting gum, lozenges, spray or inhaler) and still smoke to replace the nicotine and therefore the urge to smoke tobacco. When starting use of patches it is safe to continue to smoke to allow craving to gradually subside. Smokers realizing that they can manage without tobacco for a few hours provides them with increased motivation to quit. There is no danger of overdose by smoking whilst using NRT and patients tend to be unaware of this and therefore fail and wrongly assume the patches don't work.

NRT use in pregnancy

NRT should be recommended to all nicotine dependent pregnant women who have been unable to quit using non-pharmacological approaches because this is less harmful that continuing to use tobacco with all its many toxic products and carcinogens.

Intermittent NRT (gum, lozenge and inhalant) is preferred as it more closely mimics nicotine levels from smoking and delivers a lower overall dose. However, intermittent NRT may not be tolerated by some pregnant women as the higher peaks of nicotine may be associated with side effects such as gum and throat irritation and worsening of pregnancy-related nausea. For these women, transdermal patches should be recommended and used for 16 hours rather than 24 hours.

Varenicline

Ingest tablet with food to avoid nausea. Space the two daily tabs 8 hours apart (no longer) to avoid sleep disturbances. Don't confuse withdrawal symptoms with side effects from Varenicline. May need to keep taking it up to 6 months after cessation to prevent withdrawal symptoms – may need to wean down dose during withdrawal. Adding NRT (usually pulsatile or patch) at some stage for short term urges, even weeks after abstinence may be needed to prevent relapse.

Summary

We owe it to our smoking patients to provide a non-judgmental service to help them deal with their addiction to nicotine, using the pharmacotherapy available to reduce harm to health from the many toxic products in tobacco. There is a role for one-to-one advice as well as referral to appropriate smoking cessation clinics.

Smoking cessation support in our area: Northern NSW Local Health District Contact:

Christine Sullivan
Phone: 02 6674 9517
Mobile: 0417 474 417
Fax: 02 6674 9599

Lismore's grand gallery is open

Purpose-built at a cost of $5.8 million the Lismore Regional Gallery and Quadrangle project off Keen Street opened in late October 2017 with a range of exciting, innovative and high-profile works. These included original paintings by Margaret Olley (after whom one of the exhibition galleries is named, others honouring former Mayor Jenny Dowell and patron Vicki Fayle), modern Bundjalung and other Aboriginal works and historical artefacts, and local woodworker Geoff Hannah's astounding timber and shell inlay cabinet, valued at more than $1.0 million.†

The two-level building replaces the 'temporary gallery' in Molesworth Street that was the City's only public art space from 1954 until this year.

"We have four times the space; a climate controlled, flood-free storage area for our permanent collection of more than 1000 pieces; and a friendly and welcoming environment for visitors and locals," said director Brett Adlington.

Lismore Mayor Isaac Smith said the new gallery expects to greet 55,000 visitors annually, boosting Lismore's economy by $1.8 million. It was designed by Bangalow architect Dominic Finlay-Jones, who also designed the award-winning Lismore City Hall refurbishment.

It was funded with $2.85 million from the federal government's Stronger Region's Fund, $120,000 from the Lismore Quadrangle Pledge Campaign, $410,000 from the state government, $126,800 in other public donations, and a $500,000 donation from the Margaret Olley Arts Trust. Lismore City Council funded the remainder with borrowings of $1.9 million.

Lismore Regional Gallery has free entry and is open Tuesday and Wednesday 10am to 4pm, Thursday 10am to 6pm, and Friday/Saturday/Sunday 10am to 4pm.

With the Lismore Library as a backdrop, café patrons are framed by Leora Sibony's work 'Basic Forms' (found objects, metal, wood, 2017), part of her exhibition Industrial Relations.

† A fundraising campaign is being conducted in the hope of purchasing Geoff Hannah's unique creation and keeping it in Lismore.

Cracking the wayward walnut

by Zbys Klich

Not the normal phone call. As part of general preparations for my seventh decade, I'd decided on 21 November to have routine blood tests done, and the usual response from my GP to the annual check up results in the past has been, "Same old...if all my patients were like you I'd be out of business".

I ran a lot, ate well, went to the gym, and drank good wine occasionally.

But this time it was different: "You should come in, we need to talk".

In his rooms the doctor added, "Everything else is great, however you have an elevated PSA level". He smiled, but seemed cautious.

"In fact, it is substantially elevated".

He was being helpful, but tentative. "In the past it has been 0.5 to 0.9, but this result is 44".

Not good, obviously.

"There may be a number of explanations, but you should be aware that the PSA level is often used to detect early signs of cancer".

So, gently but purposefully, at last we'd got to the reveal: the big C.

Crisis, maybe. But I've always been healthy. Not one sick day in 45 years of work.

Now the insert: "I'd like to do a rectal examination". The initial reaction in my head is 'are you serious? I have laughed with Billy Connolly and Rick Gervaise on YouTube about this, now me?'

But good sense and politeness prevailed, and I lay sideways while a gloved and gelled practitioner's digit interrogated my rear end.

"There is some irregularity there, and I'd like you to see the urologist".

My wife was away visiting family, so that night, with a combination of shock and indignity, I took time to think, reflect, and Google everything I might find on the prostate. It is about the size of walnut, and while 1-in-5 men will get prostate cancer (PC) by age 85, increasingly fewer die from it. 3102 men died from it in Australia in 2014. Death? Clearly it's not a social disease. I need to take this seriously.

After three days it's an ultrasound at the hospital, and two days later it's the urologist. Things are moving at warp speed.

Mary and Zbys Klich, photo by Peter Derrett

"I'd like to do a rectal examination". Again? What the hell is up there? My rectum is a medical magnet!

The dance of the seven veils continues, and more facts are clear: I have a high PSA level ("actually it's significantly higher than normal"); the prostate gland appears to be enlarged; and there are some nodules on it.

"It would be really useful to get a biopsy done".

So in rapid fire succession, it's an MRI scan at the hospital, followed less than a week later by the biopsy under general anaesthetic where needles are inserted into the prostate and samples taken to determine if there are any cancerous cells and how aggressive they might be.

Some blood in the urine after the biopsy and general discomfort in the nether regions help to distract attention while waiting for the results, which, when they arrive a couple of days later, are not heartening.

Three weeks after the initial conversation we know in detail that it is prostate cancer, that it is present in both parts of the prostate and in 18 of the 26 samples taken, and that it is very aggressive (Gleason score of 9, out of a worst possible 10).

My walnut is riddled with cancer, so why not remove it?

The urologist points out that surgical removal cannot be done until six weeks after the biopsy, to allow everything to settle down as there are important adjoining nerve bundles. Surgery can also have serious side effects like erectile dysfunction and incontinence, so best not to rush. He immediately phones an experienced surgeon who advises a new kind of scan called a PSMA PET SCAN, which will show more precisely where the cancer may have spread.

Soon, with my son for mortal support, I am in a Gold Coast laboratory swallowing some kind of nuclear juice after signing a form that acknowledges this procedure is not yet approved in Australia (but which the surgeon said had been used effectively overseas for several years).

Christmas is three days later, and around this time a great deal of care and thought needs to go into what and how to tell my three adult children. The seasonal festivities feel a little muted.

In the first days of the New Year, amidst our annual family beach holiday, we drive up to meet with the expert urological surgeon, who has the super-scan results in front of him. The prostate is lit up like a Christmas tree. But there are some glowing bits elsewhere in the area as well.

He too wants to do a rectal examination (why not, feel free) but this is someone doing serious exploration looking for treasure up the Khyber Pass. We go through the case history since early December (time flies when you are having fun) and review all the various sources of information (latest PSA results; MRI scan; Biopsy results; PSMA scan report and glowing Aurora Borealis pictures).

His considered advice is that there are various kinds of PC: slow growing, progressive, and in some cases aggressive. Doctors get concerned over a PSA of 5 or more: mine has gone from 44 to 55 in four weeks. This now has to be classified as "very high risk", because all three individual risk indicators are all "high": the PSA results and upward velocity; the aggressiveness of the cancer; and spread of the cancer. Do nothing and you probably have a 50% chance of surviving for 5 years.

cont on P13

Navigating the Health Maze

by Dr David Guest

Almost every day North Coast GPs receive flyers, brochures, letters or faxes advising of a new practitioner in the area, or a new service being opened. The practice address book, even though it is electronic, is overflowing.

The North Coast Primary Health Network's Health Pathways addresses this problem to some extent. It combines local guidelines with a services directory. However, despite best efforts, recent information is missing and old data is soon out of date.

Government websites like the AHPRA directory state only the suburb and postcode of the practitioner. Commercial entities, such as Health Engine and myDr, have only limited information about practices and their services.

Frustrated by the difficulty in determining patient out-of-pocket specialist costs, Sydney GP, Dr Richard Zhu, has started his own website to collate this information. Seek-medi lists the clinician's physical address and website, if any, the fees for private patients and health care card holders, whether they bulk bill or not, and, if not, what the gap payment will be. Unfortunately, as a one man, private undertaking, Dr Zhu cannot keep the database fully up to date and it is far from complete.

Local GP, Dr Arthur Proudfoot, has also taken up the challenge to collate health data. He is setting up a website that will allow medical and allied health practitioners to advise of their specialty and subspecialty interests, their waiting times and fees. The web site is in the design phase but should go live next year.

In the interim the NCPHN is advertising for a part time clinical nurse adviser as another way of dealing with the problem. The new position has three roles; assist practices in navigating the healthcare system on behalf of their patients, strengthening the local practice nurse network and providing a practice nurse perspective to the North Coast Primary Health Network on local health issues.

The clinical advisor will work with general practices on North Coast Health Pathways to facilitate faster and more efficient care. The adviser will also be involved in the dissemination of information about other non-medical services available for patients on the North Coast.

The delay and waste of resources from incomplete knowledge of service availability has been a constant headache for GPs for years.

The ever increasing numbers of specialists and allied health workers on the Gold Coast and Northern Rivers only compounds the problem. Hopefully some of these new initiatives will bear fruit and help us out of the current medical maze.

The Wayward Walnut

continued from P11

In his view, surgery is no longer a good option as there is evidence that the internal alien has spread to surrounding lymph nodes, but not yet to any bones. My respect for him increases: how often does a carpenter turn down a job?

On his advice, I am referred immediately to an oncologist who says we need to act urgently, that because I am fit for my age we will proceed with severe chemotherapy which will be part of a four-pronged strategy based on the best available world-wide research: chemotherapy; bone protection infusion; two forms of hormone therapy; and radiation therapy to follow.

I need to be prepared for many months of austere procedures and unpredictable side effects, but he assures me it will be worth doing for the longer-term benefits.

He responds well to my request to be cited evidence for every choice.

On the two-hour drive home, my wife and I have a lot to talk about.

There seem to be an abundance of nasty and erratic side effects: is the treatment as bad as the disease?

I can be a person with a sickness or a sick person. I am not a statistic, though probabilities are worth knowing.

She states resolutely: "This is going to be the year of getting well".

Cracking the Wayward Walnut: Part 2

So here I am in this fast-paced Dickensian proctological drama: nearly 70 years old, I have just informed my children that I have aggressive prostate cancer, my oncologist says the months ahead will be filled with severe chemotherapeutic drugs and unpredictable side effects, to be followed by the joys and wonders of radiation: which bits that are left will glow at night? My worst nightmares are that I could be bald, need to wear incontinence nappies and a bra, never be able to get it up again, and worst of all, have a sore red rear like a chimpanzee.

In a (wal)nut shell, I'm not sure what lies ahead, but I do know that a positive attitude, a questioning determination to understand all aspects of the relevant knowledge base, and a quiet resolve to see the larger picture of human strength and frailty will help see me through this.

This is not Aleppo, this is not Alzheimers, I was not planning to have more children,

Zbys Klich at the gym (with Dave Hoffman)

I was fit to start with, and I have a loving partner and family. Get real. I will die of something, but I'm not dead yet.

As part of trying to learn as much as possible, I contact Rob Newton at Edith Cowan University in Perth, whose amazing work on "Exercise as Medicine" was featured on the ABC's Catalyst program. He is an old academic colleague, and from the other end of the country gives helpful advice on how to incorporate exercise around chemo and radio treatments to increase both their effectiveness and the recovery.

Eight weeks after the initial blood test, it's mid-January, and the chemo treatment begins. Get up early, run 5km for endurance, shower, drive for two hours, be needled and tubed. Watch with some uncertainty as the nurse puts on a purple outfit: not a fashion statement, just recognition of suitable safety for dealing with a deadly poison.

A second nurse checks everything before the treatment starts and the drips proceed. Machines beep and buzz over endless minutes that turn into a couple of hours. Then drive back, and later that day go to the gym for resistance and strength exercises. This happens once a week.

In the second week, I have another day surgery operation to insert a PowerPort just beneath the left collarbone: it's like a round rubber nipple beneath the skin which allows faster and more direct access for the drip and infusion processes, and protects the blood vessels in the arms which could otherwise get speared and scarred over the weeks of treatment.

My daughter comes up with me for company one week and says the insertion of the needle into the PowerPort is like watching the heart stab in Pulp Fiction - with a less dramatic reaction from the patient.

In the second week, they add Zometa infusion to start protecting the bones. And the hormone treatments begin about then also: one a day pills, plus a once every three months insertion of a slow release capsule under the skin on my stomach. I am a thinking, caring, pin cushion and pill repository, and this is the equivalent of chemical castration. Is this what happened to Alan Turing?

I was also given serious cortico-steroid pills to take the night before and the night after chemo, as well as prednisone daily, which apparently help to ameliorate side effects. They also get you somewhat hyped and don't help sleeping at all. You get to think and read at lot at night, and there are many crepuscular hours before dawn.

Three weeks in and the side effects become more evident: everything tastes metallic, your hair grows wispier, your fingers and nails start to tingle, and eventually by week 10, the nails start to suppurate and bleed as if they were fermenting, go blacker and fall out. I am told everyone is affected differently: my hair has gone but my moustache has clung on grimly for dear life.

Some side effects are more common than others, like going bald or losing taste. The odd day or two you get a huge spike in temperature and get taken to hospital to make sure you'll live to the next day.

The effects of chemo are heinous, but the PSA results are great: after 6 weeks it's down to 5.6; after 12 weeks down to 1; and after 18 weeks, at the end of chemo, it is down to 0.58.

Then it's a four-week break to the start of radiation, hallelujah, but you're coming off the prednisone, with skin eruptions and general discomfort and unease in lieu of disease.

Finally, or so it seems after six months down the rabbit hole, to the illuminating experience of inner radiance i.e. radiation administered daily for 45 treatments, except on weekends.

It is preceded by day surgery again to insert some metal beads into the prostate, and some tattoos to increase accuracy on the electronic dart board. It rapidly becomes

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The Wayward Walnut

continued from P13

a cumulatively more uncomfortable and internally acrobatic process of having a bladder almost full to bursting while ensuring everything else is completely empty at a pre-determined time each day, holding all that absolutely still while lying flat inside a large predatory moving mechanical creature (it has a head) that becomes so familiar it starts to acquire a personality.

At times I have meaningful intimate conversations with it as it buzzes slowly and quizzically, maybe even hungrily, around my middle parts each day for some twenty minutes, which felt much longer; and then the undignified rush for the loo. No one writes songs or poetry about this, not even Bob Dylan.

But that too has now passed, and my PSA level is 0.008, which is borderline measurable. I am officially off the endangered species list. No one says 'cured', but 'in remission'.

The chemo, the radiation, the sustained exercise regimen, all have contributed to what I am told is a stellar result from a bleak beginning.

But the unforeseen benefit, the outcome that makes me thank the capricious forces that randomly distribute life's jelly beans and cancers, has been the people along the way. Those fellow patients less individually fortunate who nevertheless saw humour in our group misfortune; the amazingly helpful staff who cared and found the right words for the difficult situation; those professionals who really knew the latest research and helped us to understand its applications; my GP, who has throughout been a steadfast advisor and anchor in times of turbulence; the friends whose actions spoke volumes; and above all, the family whose love never waivered.

And it all needs to be put in perspective. This is just one year, the 70th, in one life. At the same time, thousands of lives were impacted by the Lismore floods. But everyone found renewed strength, and responded.

Remarkable organisations like Opera Australia and the Barbarians came to assist, and what a magnificent community, our community, re-emerged from the flood-waters. Trump was elected: thank god we live in Australia with our healthcare system (and some people should lose their hair).

I met younger people with much worse forms of cancer and with younger families, who still smiled. I met someone for whom no form of treatment was available, despite all the research and technological progress. I met wonderful people who worked so hard to help raise funds for cancer sufferers in difficult personal circumstances.

Life is a gift, and precious, and the quest continues.

Emeritus Professor Zbys Klich is a distinguished academic whose positions included Pro Vice-Chancellor at Southern Cross University.

Positive signs from Indigenous AOD-mental health pilot

Lismore-based organisation **Rekindling the Spirit** (RTS) is reporting positive signs from a federally-funded pilot program aimed at better supporting Indigenous people with co-occurring alcohol and other drug (AOD) and mental health issues.

The Co-Morbidity Model is funded under the Commonwealth Non Government Organisations Treatment Grant Program. It is focused on trialling holistic care for Aboriginal clients in the Richmond Valley area of the Northern Rivers where to date around 56 people over 18 years of age (most in their late 20s - early 30s) have been assessed, supported through counselling and referred to specialist services.

If the final evaluation of clinical outcomes is regarded as successful, and more funding is provided, the model could be extended throughout the extensive footprint of the North Coast Primary Health Network (PHN), which is overseeing the trial of the model. The pilot program's initial funding of around $100,000 expires in January 2018.

The program is based on a comprehensive guidelines manual known as Comorbid mental disorders and substance use disorders issued by the Department of Health.

The pilot tailors the manual to the needs of local Aboriginal people who need help with concurrent AOD issues and mental health concerns that may not have been previously diagnosed, or are yet to be addressed through culturally appropriate care.

"Despite high rates of comorbidity among clients of AOD services, it is not unusual for comorbid mental health conditions to go unnoticed," the manual notes.

"This is mostly because AOD workers are not routinely looking for them. It is a recommendation of these Guidelines that all clients of AOD treatment services should be screened and assessed for comorbidity as part of routine clinical care."

What applies to the broader population is even more complex where Indigenous people are concerned, according to the RTS Comorbidity project coordinator, Sharmaine Keogh.

"Aboriginal people in general have been disenfranchised, displaced and marginalised. Colonisation has left its mark of entrenched prejudice, discrimination and transgenerational trauma. The historical removal of children has had a profound effect on Aboriginal People...

Comorbidity project coordinator, Sharmaine Keogh and Rekindling the Spirit Service Manager, Jeff Richardson.

"The cohort of clients that engage in the RTS program more often than not present with myriad and complex issues, laden with layers of trauma and grief...

"Coping often by self-medicating with alcohol, illicit drugs and gambling, more often than not they been living in a toxic environment, where violence, abuse and self-medicating with alcohol and other drugs are normalised."

Since the pilot began earlier this year, referred and self-referred clients have been assessed, counselled and supported in accessing GPs, Aboriginal Medical Services, detox and rehab, community and residential mental health, and other services.

A language-appropriate client leaflet has been circulated, asking questions such as, "Do you feel you are drinking too much? Are you using drugs", and "Is it making you feel crazy; depressed, can't sleep, thinking too much, feeling anxious, paranoid... Is your life out of control?"

Clients answering 'yes' to such issues are asked to make an appointment with RTS or Jullums AMS in Lismore.

"RTS looks more deeply into the issues, working towards the root causes," Ms Keogh said.

"The programs are holistic in their approach, looking at the social determinants that might be impacting on their mental and physical health, such as housing, employment/training/legal needs. The success of the Comorbidity Model depends on all stakeholders working together to support the client's treatment plan.

She added, "Counselling sessions are tailored to meet the individual's needs, using therapies that inform the client of their need to change: Narrative, Motivational, Compassion, Logo Therapy, Expressive Art Therapies, Invitation To Take Responsibility.

"Facilitation of groups also looks at deep seated issues that have contributed to their behaviors of self-destruction, self-sabotage and the impacts on partners, families and the Community."

RTS, whose core aim is "Keeping Families Together", believes that offering a 'one stop shop' that is both culturally sensitive and clinically targeted is shaping up as a successful way of helping address this complex physical and psychological challenge.

While the final assessment of the pilot is yet to be done, the results are encouraging, according to Jeff Richardson, RTS Service Manager, who said it is vitally important that clients are offered services that encompass Physical, Social/Emotional, Spiritual and Mental aspects of wellbeing.

"The guidelines on the management of co-occurring alcohol and other drug use and mental health conditions in AOD treatment settings provides an evidence based mode of treatment, that meets the desired criteria," Mr Richardson said.

"The project is an excellent example of an innovative and collaborative partnership between a Community, a Service Provider and a Funding Organisation, responding to the needs and wishes of the community," he added.

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Time to stop subsidising nicotine replacement therapies?

by Professor Simon Chapman

Nicotine replacement therapy has been portrayed as the best way to wean smokers off their habit. But as **Simon Chapman**, Professor of Public Health, University of Sydney, explains, NRT is not the cure-all it has been cracked up to be.

Nicotine replacement therapy (NRT) became available in Australia in 1984 (gum) and 1993 (patches), first as prescription-only items. From 1988, they started becoming available as an over-the-counter item, with patches available without prescription from 1997. Today, some forms of NRT can even be bought in supermarkets.

If prescribed, NRT attracts a government subsidy. In the 17 months from July 2013 to Dec 2014, data provided by the Department of Health show 199,818 NRT scripts cost the government A$8,617,804.

But 31 years later, what should governments do if data show that NRT is little better, or even a good deal worse, at helping smokers quit than if they try to do it cold turkey?

Globally, the pharmaceutical industry understandably wants to convince quitters to use their products as much as possible. The smoking cessation field has long been **dominated** by research and promotional activity on how to deter smokers from ever attempting to quit without pharmacological or behavioural assistance, despite this being the way that most smokers have always quit.

Claims have abounded for years that NRT can significantly increase a smoker's chance of quitting compared to placebo. These claims have overwhelmingly derived from clinical trials. But clinical trials differ markedly from real world use of NRT:

• clinical trials **exclude** many people who might purchase NRT, such as those with any mental illness

• there are major problems with **blindness integrity** (unsurprisingly, many smokers pickled in nicotine for years can guess if they have been allocated to the placebo arm of the trial)

• trialists are contacted an average of **7.6 times** by eager and supportive research staff trained to maximise retention of participants in the study

• trialists are often paid for their participation

• the drugs participants get are always free.

All this combines to produce an unreal situation and where trial participants do not represent all smokers and can be highly motivated to complete the trial to "please" the researchers.

So 31 years on, how does NRT perform away from clinical trials in the real world?

One of the world's most rigorous and important data sets on smoking cessation comes from the **Smoking in England** study. A recent paper from that project casts a pall over any impact of NRT, other than generating more expensive urine in most of those who use it.

The **paper** reported on 1,560 English smokers who had made at least one recent and serious quit attempt. At six months, 23% were not smoking on the day they completed the questionnaire.

Several things stand out from this important study. First, smokers who used NRT obtained over the counter had by far the worst quit rate (15.4%) of any of the methods used. Even quitting unassisted (without using any medication or professional support), much denigrated by the makers of NRT and many smoking-cessation professionals, saw 24.2% taking this approach quit: a rate 57% higher than in those using NRT obtained over the counter.

The authors of the paper speculate that this low rate of success for NRT may be explained by "inappropriate usage and low adherence in the real world".

Over the past three decades, NRT has been massively promoted via advertising and by pharmacists and doctors who have been heavily targeted by visiting sales reps. Doctors have been deluged with reprints of scientific articles on the virtues of NRT, and many have attended often lavishly catered educational meetings. Today, undying optimists still flying a flag for NRT still think there is hope that its users might one day start using NRT properly. Meanwhile, most who buy it keep smoking.

Second, the "most effective" method of quitting was also by far the least popular and acceptable. Using a prescribed medication (including NRT) and receiving specialised support for "at least six sessions" from one of England's dedicated smoking cessation services saw 38.7% quit. But while the authors emphasised this throughout the paper, they were silent on how this best rate multiplied by the relatively small numbers availing themselves of these services would make much impression on the national goal of significantly boosting England's quit rate at the population level. Any "most effective" way of quitting radically reduces in importance if few people are prepared to use it.

Only 4.8% of people attempting to quit were prepared to avail themselves of the "full monty" specialist cessation centres. These, even with the best success rate, contributed just 29 of the 359 who had quit using any method (8% of all quitters). This compared with 168 who had quit unassisted (a rate of 24.2%), yielding in this study nearly six times as many quitters as the specialist centres.

Third, having doctors write prescriptions for NRT or other prescribed cessation medications, and offering brief advice on quitting, produced a success rate only marginally higher than unassisted cessation (27.8% v 24.2%).

The fourth stand out message is what was not emphasised in the paper. If over-the-counter NRT (as it is mostly used), produces a far worse quit rate than smokers going cold turkey, where is the chorus of smoking cessation experts telegraphing this message to the community? How much worse would the data have to be before cessation experts declare its use-by date has arrived?

If the focus is on methods that yield high numbers of quitters throughout a population, this paper shows – as have many others – that cold turkey produced nearly 90% as many quitters (168) than from all other methods combined (191). Yet cold turkey is denigrated in pharmaceutical industry messaging like Pfizer's "Don't go cold turkey".

The **neglect** of serious study of the way most smokers actually quit may be keeping us from gaining important insights that could be useful in campaign messaging.

An **unedited version of this article** appeared first in The Conversation, and is reproduced by kind permission of the author.

Simon Chapman's most recent book, Smoke Signals: Selected Writing [Darlington Press, 2016] contains 71 of his essays published since 1985. It is free and open access.

Growth year for UCRH

The University Centre for Rural Health North Coast has experienced major operational growth in 2017, expecting more than 6,500 weeks of placements across the North Coast by more than 1,300 students from 21 universities.

UCRH's focus has expanded from the original emphasis on training medical students, and it now supports students from 16 health disciplines. Particular growth has been achieved over 2017 in allied health with innovative models of placements developed at aged care facilities and schools, which are delivering positive outcomes for students and their placement organisations.

In order to accommodate the increasing numbers, construction works have commenced on a new 30-bed student accommodation facility at UCRH's Lismore campus with completion due by mid-2018. Planning is also progressing on two additional student accommodation facilities in the Richmond and Clarence Valleys that will support a further 20 students training in the region.

Following a successful application for Commonwealth funding by The University of Sydney, the UCRH has been working closely with the NNSW Local Health District to establish a Regional Medical Training Hub at the Lismore Base Hospital. This Hub will increase the range and scale of specialist training that is delivered to doctors from Lismore and other Richmond Network hospitals, ensuring more doctors remain and build their careers in the region.

Following the devastating flood earlier in the year, UCRH researchers have embarked on a major study exploring how the community was affected by the disaster, including the impacts of the flood on mental health and wellbeing.

Supported by a number of community organisations, and state and local government, this study aims to help communities improve their preparedness, response and recovery to future disasters.

Other major research projects conducted within the UCRH this year have included:

• Leadership of the Centre of Research Excellence (CRE) in Integrated Quality Improvement, a national project aimed at improving Aboriginal and Torres Strait Islander primary healthcare;

• Participation in the CRE for Air Quality and Health Research, a collaboration conducting research on the impact of air pollution on health;

• A major study on potentially preventable hospital admissions for chronic conditions, aimed at improving measures of health system performance and reducing preventable hospital admissions; and

• Training health professionals to use e-mental health technologies and group therapy to improve Aboriginal and Torres Strait Islander mental health and suicide prevention.

• As well as running a busy education program for university students, the UCRH delivered 68 short-courses and symposia through 2017 to clinicians from the local community.

The CPD program included new courses in renal simulation aimed at improving the management of deteriorating patients on dialysis, and upskilling critical care doctors and nurses to better-manage medical emergencies.

Let's Be Safe

by Dr David Guest

Following last month's look at personal security on the net, David Guest, sees what's on offer for North Coast practices.

"The Internet, the last frontier: where men are men and women are men, and 14 year old schoolgirls are FBI agents."

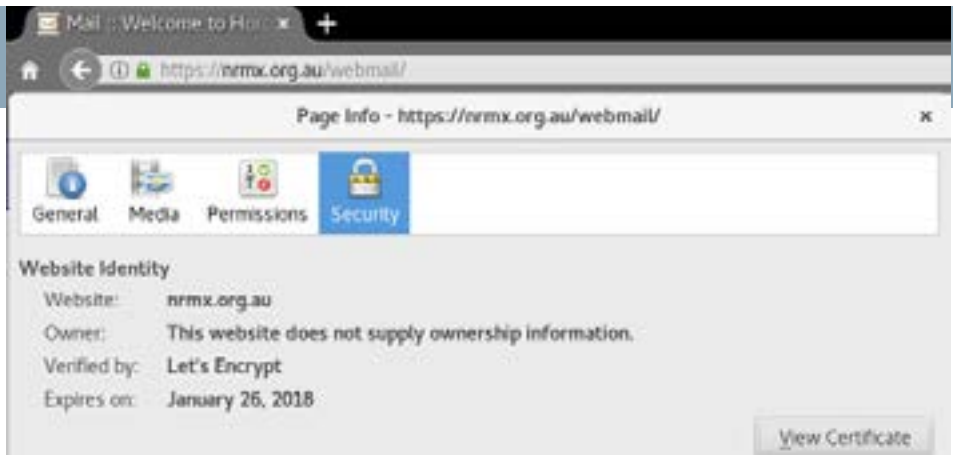
When the internet was being designed over 30 years ago, it was envisaged that it would be a glorious utopia where one would be able to communicate with friends and family on the other side of the world in seconds. The vision came true. Text only emails are passé now. Video conferencing with several family members is also old hat. (NBN permitting.)

What was not expected was the number of people trying to use your information for nefarious purposes. The potential to be hacked is a serious risk for everybody on the net and has spawned several billion dollar industries.

Previous articles in GPSpeak have recommended the use of two factor authentication and online password managers. While this adds delays and complexity to accessing your data, it is a significant improvement in security and well worth the extra work, as anyone who has had their data stolen will attest.

Communication involves two parties, however, and it is important that the websites to which you are connecting also take your security seriously.

This can be somewhat of a problem for large technology companies but at least they have the resources to manage it.



The Let's Encrypt security certificate information for NRMX displayed in Firefox. Note the closed lock at the start of the URL signifying a secured site.

Smaller organisations use third party certificates to secure their communications. Businesses will engage a certificate authority to check their credentials and, if they pass, will be given a certificate validated by the authority and accepted by end users' browsers and email clients.

Certificates can vary in price, but none are cheap and the good ones are quite expensive. Many small businesses and charity organisations choose to "go naked".

In an effort to improve their reputation Google, Facebook, Yahoo, Microsoft and Apple have worked hard at improving their security. These companies encrypt the data being sent from one to another, as well as encrypting the communication with their users. This is a clear Improvement but American law requires US security agencies to have complete access to all the data controlled by web based American organisations. The NSA and other US government security organisations intercept data at the inter company level. This is a major concern to many people.

In recent years a number of technology companies have rallied around the **Electronic Frontier Foundation** in an effort to improve security for smaller websites. They have formed the **Internet Security Research Group**, which has set up the **Let's Encrypt®** certificate authority. This went into production in late 2015.

The authority uses automated software to generate and deploy encryption certificates for most web servers. While not perfect, Let's Encrypt gives users the confidence that the website they are browsing has highly secure encryption and has undergone at least a basic level of authentication.

The **NRMX secure email system** used by North Coast health practices to transmit secure patient data has recently converted to Let's Encrypt, replacing the previous commercial certificates. Given the closed nature of NRMX community, users can be confident of secure and reliable message delivery.

Let's Encrypt is a free, automatic, secure open system to improve security on the web. Practices on the North Coast that take patient queries or collect online patient data need to secure their websites with encryption certificates. Using Let's Encrypt is a good choice.

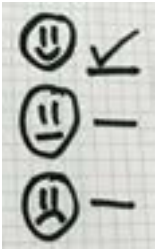
GP Engagement with PHNs - RACGP consultation

The Royal Australian College of General Practitioners is seeking feedback on GP's engagement with Primary Health Networks (PHNs).

A recent survey conducted by the College found that only 10% of members reported a significant presence or involvement with their PHN.

PHNs are the government's primary tool for developing and improving primary care in Australia. As general practitioners play a pivotal role in primary health care coordination, the College is seeking to better understand the GP's place in the current PHN structure.

Engagement with general practitioners is a long-standing problem for primary health organisations with the demands of clinical practice leaving little time for GPs to consider health system related issues. The North Coast Primary Health Network has worked hard to engage GPs both in their practices and through early and continuing development of the three Clinical Councils that cover the PHN's large footprint from the Tweed to Port Macquarie.



The College wishes to hear from GPs on PHN's Clinical Councils and also from other GPs on their experiences with their Primary Health Network.

Feedback can be sent to the College at **advocacy@racgp.org.au**.

After Hour docs respond to nudging

The Federal government's concerns about the rapidly rising cost of after-hours home visits by medical practitioners has led to using the increasingly popular 'nudge theory' in an attempt to change the behaviour of doctors making the highest number of claims.

The issue of rising budgetary costs - highlighted previously in GP Speak - is one of the issues being considered by the government's clinician-led Medicare Benefits Schedule Review Taskforce. The review has recommended that after-hours billing should only be allowed by GPs who normally work during the day and are recalled to work for management of patients needing urgent assessment.

Nudge theory is a concept in behavioural science that employs positive reinforcement and subtle messaging to seek compliance with desirable government policies or social strategies.

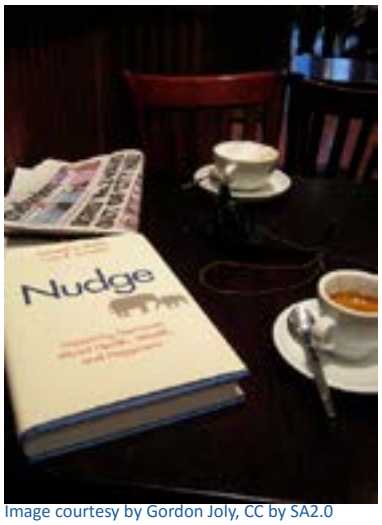


Image courtesy by Gordon Joly, CC by SA2.0

It is utilised by various governments, notably in the UK and USA, but also in Australia where it is employed by Behavioural Economics units in NSW and by a team inside the Department of Prime Minister & Cabinet. The ATO has a nudge program to encourage people to "join the millions of Australians who pay their tax to support our country and Australia's way of life".

This year's winner of the Nobel Prize for economics, Richard Thaler, is known as the 'father of the Nudge theory'.

In a story broken by The Australian it was revealed that the Department of Health had adopted the theory to send 'carefully worded letters' to 1200 targeted doctors who provide care at night, on weekends and public holidays.

According to internal documents accessed under FOI, "all health professionals who received the letter had significantly reduced their claiming of urgent after-hours items by 19.5 per cent," which equated to an estimated $11.7m in "behavioural savings (or $9750 per letter sent)".

PNG baby boom stretches system to the limits

PNG's rocketing birthrate and high maternal mortality is making Obstetrics a high priority for this nearby nation's medical system. ***Dr Nathan Kesteven*** *visited Port Moresby General Hospital to meet staff and mothers...*

Although Papua New Guinea is our nearest neighbour most Australians would have no idea that it has one of the higher maternal and infant mortality rates in the world. In Australia our maternal mortality rate (per 100,000 live births) is 6, in PNG it is 215!

The most common causes are post partum haemorrhage and infection - both related to poor access to birth support structures. In Australia less than 1% of women birth without trained staff present, in PNG that figure is probably around 55% (according to the Pacific Island Regional Development Goals, 2004). This means that most women birth without access to the basic and essential needs that prevent death and serious morbidity, outcomes that we in Australia very rarely see.

Recently I spent 10 days in the Port Moresby General Hospital (PMGH) observing how obstetrics is practised in PNG, at least in a hospital setting. PNG has a population growth rate of around 3% - this means that within 20 years the population will have doubled. This high level was reflected at PMGH - 40 births a day - that equates to 15,000 a year. By comparison, Lismore Base recorded 1155 births in 2016.

The labour ward is a large room divided in half with 12 cubicles on either side with curtains for privacy. There are 2-3 doctors on per shift, with around 4-5 midwives caring for the women who come in.

PMGH staff have access to all the essential obstetric medications / fluids that we have and next door is a theatre staffed 24 hrs a day. Interestingly the Caesarean section rate is only 6% (vs approx 30% here). Women, probably because of their younger age (most are around 25) and the need to avoid unnecessary surgery, are much more likely to have a normal vaginal delivery - this includes most twins and breeches.

A very important reason why sections are avoided is because many women may not come back to hospital if they get pregnant again and so are at risk if the uterus ruptures with subsequent labours.

The biggest common issue is dating pregnancies. A very large percentage of the women who came to PMGH present to Antenatal Clinic in their second or third trimester (and some presented to hospital in labour with no antenatal care at all). In these cases the EDC was a guesstimate taking into account the LMP and the quickening.

Very few women present to clinics in the first trimester or have a dating scan (private clinics exist but are costly) and the routine 20-week scan is an exception.

Nathan Kesteven in front of the start of the Kokoda track with the Owen Stanley Ranges in the background

The HIV and syphilis status was known for all women (the labour ward had access to Point of Care (POC) testing for these two infections). Sometimes the haemoglobin was known, but often not. There is a lab on the hospital grounds, however the turnaround time is several hours even in an emergency (the junior doctor has to take the bloods to the lab, on the other side of the site, and asks them to process it quickly).

Coupled with this is the very low stock of available blood. In fact while I was there a woman died from a massive post partum haemorrhage, despite having a hysterectomy. A major contributing factor in this case was the fact that she had only been given two units of blood when she needed at least six.

There is a dedicated antenatal ward, where women who are in early / spurious labour go, but there is a far larger postnatal ward. The issue of family planning is pushed very strongly with all women and every day there are at least 5 who have a tubal ligation. Marie Stopes run an implant service in the hospital (this gives around 5 years of contraception) and at least 10-15 women each day have one inserted prior to discharge.

PNG presently trains 80 doctors a year. However, there is a newly opened medical school in Madang. As one can appreciate with a population of 7 million and 80 new doctors a year there is a significant deficit of medical practitioners across most of the country.

The country has training programs for Obstetrics, Surgery, General Medicine and for the last couple of years Rural Medicine (This is run by an Australian, Dr. David Mills). The doctors who do obstetrics do a four-year Master's course and although they may not get the same degree of theoretical education as Australian doctors their practical experience is enormous.

On a final note, if you do feel like **donating towards the improvement of maternal health in PNG**, watch the video **"Send Hope, not Flowers"** - this charity funds another Australia doctor, Dr. Barry Kirby, who has developed a program to give women birthing kits. These can reduce maternal morbidity and mortality. You can also **donate to Dr David Mills's hospital in Kompian**.

University of Wollongong - Clarence Valley Regional Training Hub

advertorial

Joanne Chad and Jean Collie

Earlier this year, UOW was awarded federal funding for the establishment of a Regional Training Hub to identify and develop further opportunities for post-graduate medical training in the Clarence Valley. The additional resources delivered by this hub will boost the opportunities available for junior medical officers and registrars to complete more of their training in this region.

This hub will play a vital coordination role, connecting local clinicians, education and training providers, health service staff, GP clinics and the broader community to set up and manage-the arrangements required to enable local doctors to do more of their training locally.

Associate Professor Jean Collie has been appointed the Clarence Valley Regional Training Hub's Medical Director, and with her knowledge and experience as the former Director of Medical Services with Grafton Base Hospital and a lifelong interest in education of medical and health professionals, she will be able to navigate the complexities involved with establishing and facilitating this program.

Joanne Chad has been appointed Program Coordinator for the Regional Training Hub. Whilst working most recently at the University Centre for Rural Health in Lismore she worked closely with many university medical programs across NSW and QLD to coordinate medical teaching programs across multiple disciplines in hospitals and GP practices. This experience and knowledge will support her in the development and implementation of the training hub.

Jean and Joanne live and work in the region and their local knowledge and personal connections will also help to ensure the hub's success. The program aims to provide more opportunities to train in the Clarence Valley that will lead to more medical practitioners working rurally in future. Community engagement and developing strategies for attracting and retaining medical professionals in the region will also be a focus of the hub's success.

A/Prof Jean Collie and Joanne Chad are based at the Grafton Base hospital and can be contacted at jchad@uow.edu.au for further information.

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Practice Manager Andrea and student Tim Cordingley at McKid Medical Kyogle

Practice Manager Dianne Kerr and Student Lisa Miles at Goonellabah Medical Centre

Message from Joanne Chad

This week I had the opportunity to visit 8 of our GP Clinics who host the UOW longs stay students. All the clinics feel fortunate to have these kind, professional and community minded students joining their practices.

Each of the UOW long-stay students will complete a General Practice placement in the Northern Rivers region over the coming 12 months. During their GP placement students gain a good understanding of what it means to practice medicine in the community and the importance and strength of the relationship between patients and their family doctor. Patient responses to medical students in the practices have been very positive.

The new cervical screening protocol

by Dr Ruth Tinker

A new cervical screening began nationally on 1 December 2017. It will use an HPV DNA test rather than examining cervical cells on a microscope slide (Papanicolaou test). The sample is still collected from the cervix using a vaginal speculum to ensure accurate collection.

So from the point of view of the woman being screened, the process is the same. However because of greater accuracy, if negative, the screening interval will extend to five years. Practices will need to review their recall protocols to conform to the new program.

The program is based on an understanding that more than 99 per cent of cervical cancer is caused by HPV. This includes squamous cell and adenocarcinoma. A third type of cervical cancer, neuroendocrine or small cell cervical cancer, is often more aggressive, but accounts for less than 1 per cent of cervical cancers. Neither the Pap test nor the new Cervical Screening Test effectively detects neuroendocrine cancers.

All women who have symptoms still need investigation, regardless of when they were screened last.

The new test is reported to have 99 per cent accuracy in detecting the presence of HPV, an improvement over the current Pap test's 85per cent (in detecting abnormal cells). The sample is collected either with the cervical sampler, or if a spatula is used, it must be with an endocervical brush.

The sampler is vigorously swished in the liquid, which is sent to pathology. The request is for CST (Cervical Screening Test). If anything else is on the form, it may not have the correct test, and may not attract a Medicare rebate.

If the sample is positive for HPV, the pathology provider will then do a cytology test and the HPV subtype will be identified. The management pathway uses both of these results.

HPV types 16 and 18 cause more than 70 per cent of cervical cancers in Australia. The current HPV vaccine protects against both these types; however, it does not protect against other oncogenic types of HPV known to cause cervical cancer. Therefore, vaccinated women are still at risk of cervical cancer from these other high risk HPV types and need to participate in regular cervical screening.

The new HPV vaccine will cover more subtypes, but it is still important for all women who have ever been sexually active to have cervical screening.

The lead time from HPV infection to cancer is 10-15 years, so first testing is now not until age 25. There is an exemption for women sexually exposed under the age of 14 years and/or prior to HPV immunisation. "Early sexual debut" must be noted on the request form.

THE RENEWED CERVICAL SCREENING PROGRAM

- A five yearly Cervical Screening Test will replace the two yearly Pap test.
- Women who are already having Pap tests should have their first Cervical Screening Test when they are next due for a Pap test
- Women who have ever been sexually active should have a Cervical Screening Test every five years
- Women will be invited to start cervical screening from the age of 25 and continue screening until they are 74 years
- Women who have been vaccinated against human papillomavirus (HPV) need to have regular cervical screening as the vaccine protects against some high-risk types of HPV, but does not protect against all oncogenic types
- Healthcare providers will still perform a vaginal speculum examination and take a cervical sample, but the sample medium is liquid-based for partial HPV genotyping
- The new Cervical Screening Test will be supported by a new National Cancer Screening Register that will send invitations and reminder letters to women when they are next due, and follow up letters when women have not attended further investigations or tests

There are also some higher risk groups for whom there are slightly different rules including those who are immunosuppressed or DES (diethylstilboestrol) exposed in utero.

In addition there is now the possibility of a self-collected specimen to screen for HPV. This test is a flock swab from the vagina collected by the woman herself. It will be helpful for women who are unable to have a vaginal speculum examination (vaginismus or post sexual assault for example). It is less accurate (85 per cent) compared with 99 per cent from a cervical specimen. It only attracts a Medicare rebate for under and never screened women. They must be ≥ 30 years of age and at least four years from last screen or never-screened and decline cervical sampling.

This MBS item can only be claimed once in a seven-year (84 months) period. If positive they will still need a cervical sample, but may be more willing to attempt this if the HPV test is positive.

The new CST only attracts a rebate every five years (57 months). If there are indications other than routine screening, this will need to be noted on the pathology request. Details can be found at **cancerscreening.gov.au** .

Online training available from NPS attracts CPD points.

From 2013-14 figures, only 57 per cent of women in the target age group participated in the screening program within the recommended two year window. This increased to 70 per cent for three years and 82 per cent for four years.

If we combine this with increased sensitivity of the test, even fewer women should be developing cervical cancer. The new test will be used as women are recalled for their screening two years from their last test. So all women will be using the new regime within two to three years. It is expected that this will reduce the nation's rate of cervical cancer by a further 20-30 per cent.

As 80 per cent of cervical cancer occurs in unscreened or under-screened women, the highest yield will always be in those who are never or under-screened. In general practice, we may be able to recruit some of these women using the self-collected sample in the first instance.

Art is a key ingredient in paediatric care

With features such as bright play areas, a parents' lounge and an adolescent retreat, Lismore Base Hospital's new Paediatric Unit focuses on creating a visually appealing environment to complement its acknowledged high level of clinical care.

The unit, opened by visiting NSW Health Minister Brad Hazzard on Friday 8 September, is part of LBH's remarkable redevelopment in the past few years.

Helping celebrate the latest milestone was Lismore MP Thomas George, who will step down before the next state election in March 2019. There is no doubt he will be going out on a high note, with the once-outdated facility rapidly becoming a state-of-the-art referral hospital.

Minister Hazzard met with staff, patients and families who inspected a Unit that accommodates 20 children and has 14 private rooms, including three isolation rooms for infectious or immuno-compromised patients, all with ensuites.

"I congratulate the hospital staff, community members and local charities such as Our Kids, for designing such a bright, welcoming place for young patients and their families," Thomas George said.

Local artists contributed works for the new Lismore Base Hospital Paediatric Unit officially opened on 8 September. Pictured with NSW Health Minister Brad Hazzard (rear) and State MP for Lismore Thomas George (right) were (l-r) Joanna Kambourian, Erica Gully, Beki Davies, Jeremy Austin, Jeni Binns, Dougal Binns, Malcom Austin, and Anne-Marie Mason. At the front is Dr Sniggle of the Clown Doctors.Other artists (not pictured) were Justin Livingston and Rachel Stone.

"It really shows what can be achieved when people work together to deliver services that will benefit our community well into the future."

The Paediatric Unit is the second floor to open in the south tower in the $180 million Stage 3B redevelopment, which includes a helipad, new operating theatres, Women's Care Unit, medical imaging services and new inpatient units.

In June, the NSW Government announced $52.5 million towards the final Stage 3C of the redevelopment, which will include an enhanced Intensive Care Unit, new inpatient units and new education, training, research and administration facilities. The 12-level south tower is due for completion in early 2018.

Is PUF the magic dragon for Casino?

by Robin Osborne

It may be a long way from Vancouver, Canada to Casino, northern NSW but if all goes according to plan the "beef capital of Australia" may be set to rename itself the nation's cannabis hub.

In a statement on 27 September 2017 the listed Canadian company PUF Ventures Inc announced it would enter into a strategic partnership with Richmond Valley Council to construct a 1 million-square-foot (9.3ha) greenhouse operation that could become the southern hemisphere's largest cannabis operation.

Cannabis image CC by-SA 3.0

Along with growing some 100,000 kilograms of high quality cannabis a year - not to be confused with the low-THC hemp for fibre - the operation will include large-scale manufacturing, processing and office facilities for producing "medicinal cannabis and associated products".

The term 'associated products' hints of the company's ambitions beyond the newly emerging world of medicinal cannabis prescribing.

Near the end of its lengthy statement the company adds, "Assuming recreational cannabis becomes legal and with a population of more than 24 million people, roughly two-thirds of Canada's population, it is suggested that the cannabis market in Australia could grow to $9 Billion over the next 7 years".

Hence the relevance of its amusing moniker 'PUF' - no need for a final 'f' - and other names in its stable, including Weed Points Loyalty, which is in the process of developing Weedbeacon, a marijuana vape technology, Canopy Growth Corp, Craft-Grow, "a collection of high-quality cannabis grown by a select and diverse set of producers", and the online medicinal marketplace **Tweed Street** (silent 't'?) one of whose dried marijuana offerings is named 'Sun-Grown Boaty McBoatface' (oddly, this is the name of the lead underwater vehicle to be carried on the British Antarctic research ship **Sir David Attenborough**).

Back in the sober corporate world, the project announced it will operate through a new subsidiary named PUF Ventures Australia (PVA) led by Sydney based Michael Horsfall who has a background in business development and information technology, and Australian government programs.

> "Assuming recreational cannabis becomes legal and with a population of more than 24 million people, roughly two-thirds of Canada's population, it is suggested that the cannabis market in Australia could grow to $9 Billion over the next 7 years" - PUF Ventures

"We are continuing our strategy of global expansion by building a state-of-the-art, 1 million-square-foot facility which, when complete, will be the largest cannabis cultivation operation in the southern hemisphere and one of the largest in the world," the statement said.

"At full scale, the new facility will have the capacity to support annual production of 100,000 kilograms of high quality cannabis, which equates to an associated annual revenue generation potential of between C$800 million and C$1.1 billion (C$1 = AUD1.03) based on current pricing metrics in the Australian cannabis marketplace.

"We plan to leverage the expertise we have gained from the Canadian cannabis marketplace and the Health Canada ACMPR licensing process, to achieve our goal of becoming a large-scale cannabis producer in Australia as well as worldwide.

"Our analysis shows that the cannabis market in Australia is approximately where the Canadian market was 4 years ago. By entering this market through a strategic partnership with the local land owning government, we are positioning PUF to become a leader in both Australian and global cannabis production."

PVA said it had agreed to a purchase option agreement with the Richmond Valley Council for a 27-hectare parcel of land near Casino. The Council will provide the land for five years at no cost, with an option for PVA to purchase the parcel on favorable terms after that time.

Richmond Valley Mayor Richmond Valley Mayor Robert Mustow said Council would be supporting PVA's applications and while the project was still subject to Federal Government approvals, in particular from the Office of Drug Control, Council would be doing all it could to make sure it got across the line.

He said that at a closed Council meeting, all councillors were supportive of the company's "strategy and vision".

Council General Manager Vaughan Macdonald called the project "a game changer" that could create around 300 direct new jobs in the local economy.

Mr Macdonald added: "We are very excited by the prospect of working with an international company like PUF to support the development of this important new industry which will significantly add to our gross regional product, create approximately 300 direct new jobs in our local economy, and lead to other follow-on local and regional employment opportunities.

"This locally supported project will go a long way to meet our commitment to reduce unemployment through economic development and improve the prosperity of our community. We look forward to working closely with PVA to bring this project to reality and working to create a new agricultural industry of medicinal cannabis in our region and across Australia."

PVA said the largest medical cannabis facility in the southern hemisphere could draw other investments in research, education, manufacturing, tourism and more.

EXERCISE: HELPING BATTLE MENTAL HEALTH

Alysia Bonnett, AEP ESSAM

There are many documented benefits of a regular exercise routine, many of these are due to physical adaptations. However, have you ever considered the power of exercise for managing mental health and the positive impacts on the brain and mind?

Let's take a closer look at this.

Exercise increases blood flow to the brain, this helps you to think more clearly. Exercise increases the size of the hypothalamus – the area of the brain responsible for memory. Exercise also improves connections between nerve cells in the brain – which improve memory and reduces risk of injury and disease, such as dementia and Alzheimer's disease.

As you can see, a regular exercise routine is great for the mind and body and plays an important role in the management of many chronic diseases, including mental health conditions.

1 in 5 Australians will experience a mental illness each year. This impacts their cognitive, behavioral, and social functioning. Mental illness includes anxiety, depression, PTSD, schizophrenia, bipolar affective disorder and personality disorders.

Research shows exercise has a significant impact reducing depressive symptoms and makes a big difference in mood. Exercise triggers the release of chemicals in the brain: endorphins and serotonin, which improve mood. This makes exercise a fundamental part of any mental health treatment plan.

Exercise can also counteract the side effects of some medications such as reducing the risk of falling by strengthening muscles and helping control body weight and blood pressure.

How much exercise is required to manage mental health?

As with medication, if you only take one dose or take a single does every now and then, your results will be minimal at best. The prescription of exercise needs to be carefully considered. Frequency, intensity, and duration are all important factors to consider, to ensure the maximum benefit is achieved.

While there are specific guidelines in regards to exercise prescription it is important to remember everyone's fitness level will be different to start with and several other co-morbidities may be impacting the patient. For this reason it is recommended patient's seek the advice of an Accredited Exercise Physiologist for a tailored exercise prescription.

1 in 5 Australians experience a mental illness each year

Exercise triggers the release of chemicals in the brain, such as endorphins and serotonin, which improve mood.

30 minutes of moderate intensity exercise most if not all days of the week will have a positive impact on mental health

Exercise is vital not only for treating mental health conditions but also as a prevention tool and to promote good mental health.

Minister delivers $9.1M boost to Aboriginal health

Ice dependency, mental health conditions, suicide prevention and chronic disease are among the targets of $9.1 million federal government funding boost aimed at improving Indigenous health across the NSW North Coast.

Minister for Indigenous Health, Ken Wyatt AM, visited Ballina, Lismore and Casino on 6 November to talk with providers of innovative services in these areas, commissioned through the North Coast Primary Health Network (PHN).

Minister for Indigenous Health, Ken Wyatt AM at the podium in Lismore's arts precinct.

"The funding supports community driven projects, including mental health, alcohol and other drug services, where local Aboriginal people previously experienced challenges accessing support," Minister Wyatt said.

"This includes early intervention trial programs for people with co-existing drug and alcohol issues to encourage them to seek help early and remain connected with support.

"New residential detox services allow Aboriginal men to reconnect with their history, culture and community, and a new health partnership is seeing Aboriginal people trained to become community leaders in suicide prevention."

Minister Wyatt said collaborative, community based approaches were the key to delivering health services that would help close the gap in local Indigenous health.

The region has an average Aboriginal population of 4.5%, higher than many other areas of Australia, and the funding, distributed through the PHN, will enable 14 different service providers to deliver a range of services and programs.

Mr Wyatt praised the work being done by Aboriginal Medical Services.

"The nine Aboriginal Medical Services in the region, such as Bulgarr Ngaru, Jullums and Bullinah are doing some outstanding work to support their patients.

"This includes ensuring that community members with chronic disease get to see the health practitioners they need to, are provided with specialised medical aids where necessary and are assisted with transport to attend medical appointments.

"The tremendous work being done by the Aboriginal Community Controlled organisations such as Durri and Rekindling the Spirit, and the other organisations who have received funding, will go a long way to improving health and wellbeing," he said.

Key North Coast PHN Indigenous investments:

1. **Integrated Team Care**: $5.029 million (2016-18) to improve access to coordinated care for chronic conditions and culturally appropriate care.

2. **Drug and Alcohol Treatment Services for Aboriginal and Torres Strait Islanders**: $2.095 million (2016-19) to increase capacity of the drug and alcohol treatment sector though improved regional coordination and by commissioning additional drug and alcohol treatment services for Aboriginal and Torres Strait Islander people.

3. **Indigenous Mental Health Flexible Funding**: $2.006 million (2016-18) to improve access to integrated, culturally appropriate and safe mental health services that holistically meet the needs of Aboriginal and Torres Strait Islander people.

North Coast PHN Indigenous projects also include:

- **Headspace Grafton**: Funding for establishment and service delivery for new headspace facility.

- **After Hours Services**: To reduce avoidable hospitalisations for Aboriginal and Torres Strait Islander people by supporting carers of high-risk groups in providing home care after hours.

- **Aged Care Services:** Includes a Residential Care Improvement Program to improve referral processes and relationships between general practice and aged care facilities. Targeted support for Aboriginal Medical Services in the Tweed, Richmond and Clarence Valley regions to support patients at risk in winter, and preparation of a dementia services action plan and provision of dementia services information to local people.

Shackletons are aboard!

by Dr Ruth Tinker

Antarctica has been on my bucket list for many years. Earlier this year I ticked that box.

After meeting the group in Buenos Aires we flew to Ushuaia, the main departure point for the Antarctic Peninsula. Our ship Ocean Endeavour took 199 passengers but was dwarfed by the Princess cruise liner moored across the dock, and another expedition ship still bigger than our own.

We set sail through the Beagle Passage, and rumours soon circulated that we had "Shackletons aboard". Indeed, we did have some distant cousins of the famed Sir Ernest Shackleton, who were soon sharing stories of the great man's exploits. The journey became infused with the Shackleton influence with several of our landings linked to the story of the miraculous rescue of his crew from the Endurance.

One of our landing groups was named 'Shackleton', the others 'Crean', 'Worsley' and 'Wild' in recognition of some of his team.

The weather gods were kind and we had a very smooth crossing. I became quite proficient at spotting Fin Whales, but not being a twitcher, the varieties of albatross were lost on me. We had lectures from on-board experts about how to identify the penguins, whales and other wildlife we hoped to see. We also heard about some of the history of Antarctic exploration and politics.

On arriving at South Georgia we discovered we were the only ship on the island, so had our choice of what to see. We were in zodiacs or ashore two or three times each day. We were lucky enough to visit an albatross rookery on Prion Island. They only nest every second year and a large proportion of the Wandering Albatross in the southern ocean breed on this island. The birds are enormous, each wing spanning almost two metres.

Ruth and her cousin at Neko Harbour with flag showing the continent of Antarctica.

We walked slowly to the top of the island, carefully encouraging the seals to move off the walkway. At the top I was looking down into a gully and saw a large fluff-ball chick. A giant petrel approached. It didn't look good for the chick. Our guide was quick to point out that we could not interfere, which I knew anyway. Then a second petrel approached. I was getting worried. Until the first petrel started to feed the fluff-ball. Just as well the birds can tell a petrel chick from an albatross chick - I couldn't.

Salisbury Plain is home to a population estimated at 60,000 breeding pairs, around 250,000 King penguins in all during the moult. That's not counting the other birds or the seals. It is hard to describe the sheer size of the colony.

We had a few hours at Grytviken, an old whaling station, on Shackleton's birthday, and raised a dram of good Irish whiskey at his graveside to his memory. He was only 47 when he died, and his wife asked that he be buried at Grytviken. One of the Shackletons with us said a few words and read from the explorer's journal. Established in 1902 by a Norwegian captain for the Argentine Fishing Company, Grytviken was only finally abandoned in 1965, the rusting machinery eerily evocative of the whale slaughter that took place here October to March for all those decades.

In the whole of the Antarctica region some 1,432,862 whales were taken between 1904 and 1978, when hunting of the larger species ceased.

We then set sail for the Antarctic Peninsula. We arrived and sat off Elephant Island for an hour or so, its being too rough to do a zodiac closer inspection. This is where Shackleton landed his men after they had

Shackleton's grave

Antarctica explored

been in the boats for five days, and 497 days since they had stood on dry land. It is an exposed bare rock. The island is most famous as the desolate refuge of Ernest Shackleton and his crew in 1916.

Following the loss of Endurance in Weddell Sea ice, the 28 exhausted men reached Cape Valentine on Elephant Island after a harrowing ordeal on drifting ice floes. After camping at Cape Valentine for two nights, Shackleton and his crew moved 11 kilometres (7 miles) westwards to a location which offered better protection from rock falls and from the sea, and which they called Point Wild.

They hunted for penguins and seals, neither of which were plentiful in autumn or winter. Many of the crew were already ill and frostbitten, and they were now also in danger of starvation. On August 30, 1916, after four and a half months, one of the men spotted a ship. The ship, with Shackleton on board, was the tug Yelcho, from Punta Arenas, Chile commanded by Luis Pardo, which rescued all the men who had set out on the original expedition. It was the fourth attempt to rescue them.

Remnants of whaling at Grytviken

We stepped ashore on a couple of islands to spend time with glaciers, and more penguins. We finally landed on the mainland at Neko Harbour, thus completing my full set of seven continents.

The ship moored three nautical miles into the harbour because the captain was worried about the ice in the bay and the glaciers. We had a 20 minute run in the zodiacs to land. We came in under the face of the glaciers. The clefts in glaciers and icebergs are a deep azure blue.

I could hear a rumbling sound like an approaching train, followed by a sound like a gunshot, but couldn't see where the glacier was cracking.

One of the crew pointed out one spot on the face, and soon after, with the next gunshot sound, I saw a small hunk break off into the bay.

The zodiacs headed to sea and everyone moved further away from the beach. The first wave was about 30cm high. As it retreated the water drew back as well. The second wave was about half as big again. Again followed by the water receding. The third wave was almost a metre high. The chunk I saw was only small. I would not have wanted to be there if a larger berg had calved off the glacier. We had been warned to head up the hill, to follow the penguins if they ran up hill.

Antarctica is a fascinating place. All ice, rock, bergs and glaciers. South Georgia was more about the wildlife and the history. The days at sea were a great opportunity to process what we had seen and learned. As a holiday both restful and stimulating, I thoroughly recommend Antarctica.

- Ruth Tinker

Ruth Tinker's travel route in Antarctica

Shackleton's expedition to the Antarctic

In 1914, at the age of forty, the Irishman Ernest Shackleton embarked on what he considered the last great expedition left on earth, the 1800-mile crossing of the Antarctic on foot. The expedition ship Endurance - named after the Shackleton family motto - reached the ice-encrusted waters but just one day short of its destination on the Antarctic coast became stuck in the polar ice of the Weddell Sea.

The Australian Frank Hurley's remarkable plate photo of this disaster graces our cover.

The pack ice dragged the ship north for ten months before being crushed, forcing the crew to camp on the ice in miserable conditions.

Months later, Shackleton took five of his men and sailed 800 miles in a lifeboat to South Georgia where they crossed a frozen mountain range to reach a whaling station, astounding the rough company of whalers. There have been several attempts to match this feat using modern equipment, and no one has managed to do it any faster.

Immediately, Shackleton - 'The Boss' as he was known to his team - launched a rescue effort to retrieve the remaining crew, all of whom were found to have survived.

While he never planted a flag on the South Pole, nor made the fortune he had hoped, Shackleton was feted (and knighted) on his return to England for displaying a leadership style that still makes him a case study in global management.

In the book Shackleton's Way - Leadership Lessons from the Great Antarctic Explorer the authors write, "His tools were humour, generosity, intelligence, strength, and compassion. That's Shackleton's way."

- Robin Osborne

What the Proposed Housing-Based Super Contribution Initiatives Offer

The proposed schemes, the ***First Home Super Saver*** and ***Contributing the proceeds of downsizing to superannuation***, are both pieces of legislation that are an attempt to bring into action proposals from the 2017 Federal Budget.

The proposals aim to:

1. assist first home buyers to save a deposit through their superannuation, and
2. assist retirees to use some of their superannuation money from downsizing their present living arrangements.

First Home Super Saver (FHSS)

The budget proposed that from 1 July 2017 eligible first home buyers would be able to contribute up to an extra $15,000 per year, up to a total maximum of $30,000, into their superannuation that would then be able to be released if used to buy a home. However the contributions still count towards the annual concessional and non concessional caps and are not in addition to those caps.

Eligibility is limited to those aged 18 and over who have not used the FHSS before and have never owned real property in Australia. If you are purchasing with another person who already has property, you would not be disqualified from using the FHSS.

However, there can only be one request for a release of the amounts held in superannuation. If you withdraw less than the total $30,000 plus earnings in an initial release you cannot later seek to withdraw further amounts.

Contributing the proceeds of downsizing to superannuation

The second proposal has two aims — one, to assist older Australians to downsize their living arrangements, and two, to increase the supply of housing to first home buyers thus reducing some of the supply constraints that are keeping housing prices high.

Who is eligible?

To be eligible under the proposed policy:

- a person must be aged 65 or older
- the property sold must have been held by the person for at least 10 years and been their principal place of residence for that period
- the property must be in Australia and cannot be a houseboat, caravan or other mobile home
- the contribution must be made within 90 days of the disposal of the dwelling, or such longer time as allowed by the Commissioner
- the individual must choose to treat the contribution as a downsizer contribution, and notify their superannuation provider in the approved form of this choice at the time the contribution is made, and
- the individual cannot have had downsizer contributions in relation to an earlier disposal of the main residence.

Key Points of Interest

- You can contribute up to $300,000 from the sale of the home as a non-concessional contribution into superannuation savings. The amount is $300,000 per person, so a couple will be able to contribute up to $600,000 out of the sale of their residential home.
- The new rules apply to the proceeds of contracts entered into on or after 1 July 2018.
- Downsizer contributions are not tax deductible and can be made for an individual in relation to one sale of the main residence.
- While the amount from selling the home under the scheme is limited to $300,000, there is no restriction on the person making other contributions from the sale of their home into superannuation. These further contributions will however not be under the scheme and be subject to the contribution caps.
- In order to encourage people to take up the scheme, the contributions eligible under this proposal will not count towards the new contributions cap.
- What if the property was owned in the name of one spouse rather than both? In this circumstance, the spouse who is not on the title would still be able to claim the 10 year ownership period with their spouse.
- Another advantage of the proposal is that it will not be subject to the work test or an age limit.
- One factor that may restrict the benefit of this proposal, and thus play on the minds of older Australians on whether to sell their homes, is that the contributions will still count towards total pension assets tests. This means that older Australians will be moving funds out of an exempt asset (their home) into a non-exempt asset.

It will be interesting to see what, if any, affect the proposals have on the supply of housing and easing pressure on housing affordability. As always it may be better to talk to TNR before using one of these proposed reforms.

TNR® Thomas Noble & Russell
Accountants | Auditors | Business Advisers

If you have any questions regarding the above or other financial or accounting advice please call us on **02 6621 8544** or visit **tnr.com.au** or **tnrwealth.com.au.**

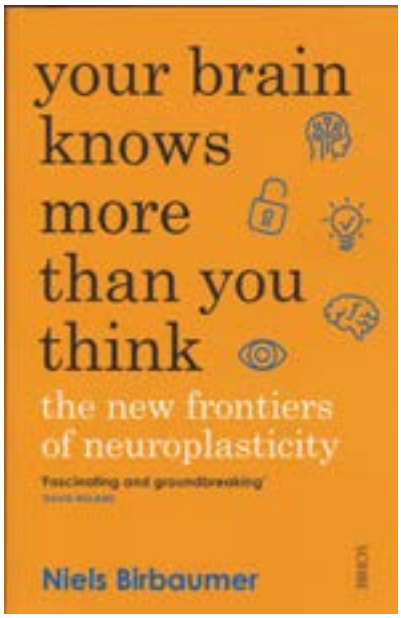
TNR® WEALTH MANAGEMENT

Book Review

Reviewed by Robin Osborne

Your Brain Knows More Than You Think - the new frontiers of neuroplasticity

Niels Birbaumer (Scribe 262 pp)



Lamenting how society ascribes 'immutability' to our brains, psychologist and neurobiologist Niels Birbaumer sets out to explain how the latest brain-machine interface (BMI) technology can help address a range of severe conditions, and in so doing mounts a strong case against euthanasia.

While he may be just the latest author to explore neuroplasticity, "the virtually limitless capacity of the brain to remould itself," he takes a different, i.e. more technological, tack to the likes of the great Norman Doige (*The Brain that Changes Itself*, and *The Brain's Way of Healing*).

The main difference is the use of BMI, which in various forms creates a 'neurofeedback' loop in a series of steps, from the brain to MRI signal reception, thence brain-image transfer and signal analysis by computer program, transfer of processed brain activity to the BMI software and finally, feedback of blood flow in the brain.

"This book explains why neither locked-in patients nor those with depression, addictions, or anxiety disorders, and neither hyperactive fidgets nor ruthless psychopaths, are frozen forever in their behavior patterns, immune to any attempt to influence them," Dr Birbaumer explains.

Unexpectedly, he starts out by recounting how he worked to change his own brain, and as a result the anti-social behavior that had seen him join a youth street gang in Vienna and face arrest for stabbing a rival with scissors.

"Brains have a tendency to repeat actions they are particularly good at," he writes, "without the involvement of the conscious mind to consider the possible consequences of those actions."

Lucky to avoid prison, he finished school and went off to university studies in London.

Noting that the brain "desires effects that it assesses as emotionally positive," and that "it is open to anything as long as it achieves a desired effect", he describes his team's clinical work in such fields as dementia, Parkinson's, stroke, epilepsy, ADHD, mental health issues, behavioural disorders including psychopathy, and more.

Regarding epilepsy, he reports that one-third of adult subjects in one trial became totally seizure-free.

In a timely reference to the debate about state-sanctioned euthanasia, he examines how enhancing neuroplasticity has helped to stabilize, or even boost, the quality of life for patients suffering various conditions that cause the brain to lose control over movement and other functions.

In the case of amyotrophic lateral sclerosis (ALS), many patients are plagued by thoughts of suicide in the early stages of illness, especially doctors who are aware of the coming physical decline but "never previously considered how to deal with this challenge mentally."

In the chapter "The No Case for Euthanasia", he writes that his clinic usually refuses requests to help end patients' suffering: "We do this not out of high-handedness or lack of sensitivity, but because... we know how great the chances are that they can still attain a high quality of life.

"This is because their brain will adapt to receiving only very few eternal stimuli, and by the same token, those stimuli will be experienced as particularly intense and positive, as long as the patient is well cared for."

As to why neurofeedback is not more widely practiced, he blames the lack of interdisciplinary thinking: "Doctors and neurologists are taught that physical conditions require physical - that is, medical mostly pharmacological) treatment. Psychologists are taught that psychological behavior disorders require mental, and therefore social and psychological, treatment.

"This simple logic seems convincing, but it is wrong.... Many physical diseases of the nervous system, such as epilepsy, often respond better to psychological interventions, while mental and psychological disorders react better to medical treatment (e.g. medication to treat schizophrenia, or ECT for depression)."

The extent of this unfortunate dichotomy is reflected by health insurance companies, which refuse to accept the fluidity of the neuroplastic frontiers.

My Health Record - Can we make it better?

Australian health researchers are investigating the use of the Australian Government's My Health Record (MyHR). They are using an online survey to better understand Australian medical practitioners (GPs and Specialists), practice nurses and practice managers' use and views of the MyHR.

Chief clinical investigator, Associate Professor Bronwyn Hemsley from the University of Newcastle, has a long standing interest in the use of internet technologies to improve patient care and hopes the research will elucidate the barriers to more effective use of the MyHR.

The survey takes under 10 minutes to complete and has 5 demographic questions, followed by 12 MyHR questions. Participation is private and confidential.

The research is funded by the National Health and Medical Research Council of Australia and has Ethics Approval Number H-2014-0041.

The survey closes **22 January 2018**.

By the University of Newcastle - Clinical Investigators

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Women, with or without private health insurance are seen usually within a week of referral and clinic letters are emailed or faxed to the referring GP, on the day of their appointment.

Dr. Graeme Walker

BSc, MBChB, MRCOG, FRANZCOG

Gynaecologist :
Special interest in Oncology
Clinical Director of Gynaecology, GCUH

Dr. Walker specialises in:

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- Gynaecological Cancer
- Laparoscopic Surgery
- Colposcopy/Outpatient LETZ
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- Post Menopausal Bleeding
- Menorrhagia

To arrange an appointment for your patient at the Gold Coast Private Colposcopy Clinic, please contact:

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Gold Coast Private Hospital
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