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Getting heard

AMA delivers election messages, p3

INSIDE

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Managing Editor: John Flannery

Editor: Chris Johnson

Contributors: Maria Hawthorne
Simon Tatz

Graphic Design: Streamline Creative, Canberra

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42 Macquarie St, Barton ACT 2600
Telephone: (02) 6270 5400
Facsimile: (02) 6270 5499
Web: www.ama.com.au
Email: ausmed@ama.com.au

AMA LEADERSHIP TEAM

President
Dr Tony Bartone

Vice President
Dr Chris Zappala

In this issue

Cover pic: Dr Bartone meeting separately with (clockwise from top left): Independent MP Kerryn Phelps, Health Minister Greg Hunt, Treasurer Josh Frydenberg, Opposition Leader Bill Shorten, Shadow Health Minister Catherine King, and Finance Minister Mathias Cormann.

Political leaders told health is the election issue

In the lead-up to this year's federal election, the AMA is making its presence felt with political decision makers to ensure that health issues are front and centre of the policy debate.

AMA President Dr Tony Bartone and other senior members and executives of the Association have spent the past weeks engaged in regular high-level talks with political leaders.

The message being delivered to Capital Hill is that Australia needs its governing powers, and all those who aspire to them, to detail a health policy vision for the nation and to commit more funds to ensuring the vision is realised.

An election is expected in May, since Prime Minister Scott Morrison brought forward this year's Federal Budget to April.

The AMA has focused on the upcoming Budget, having delivered its *2019-20 Pre-Budget Submission* to Treasury and repeating its recommendations in the context of an election.

"We would like to see money spent on public hospitals; we want to see an improvement in general practice funding in the primary care space; and of course, we also want to see the shortfall of funding that is in the aged care space (addressed)," Dr Bartone said recently.

"Our population is ageing and is subject to increasing number of chronic diseases and complexity. When we really look at the whole of the health portfolio, of course, mental health is a key component of that.

"We know that medical technology is becoming increasingly more expensive, and we know that when you've taken money out of the system, as we have with the Medicare freeze which is money for patient rebates, essentially, over the last nearly four, five years, that something has got to give.

"We're talking about putting at least that money back in and more to cope with the growing population and the growing complexity and demands of illnesses in our population.

"Clearly, primary care, which is the cornerstone of the health system in Australia... has to be our number one priority.

"Public hospitals are the other things that Australians really depend upon. They love their hospitals and they want to see that the investment in those hospitals continue, to allow the access that we regard as first class right across the world; and we want to see that enshrined going forward."

Dr Bartone has met with political leaders across the spectrum and has made it clear that significant new funding is needed to bolster Australia's health system into the future.

He has called for political bravery and clear vision.

And he said the AMA is ready for the election and prepared to critique the health policies put forward by all sides.

"We hope it is a genuine contest of ideas to make our health system better and properly resourced," he said.

The AMA will release its Key Health Issues manifesto for an election campaign once the Federal Election is announced, following the Federal Budget.

CHRIS JOHNSON

Readership survey winners

Two lucky AMA members have each won a Microsoft Surface tablet for participating in the *Australian Medicine* reader survey. The winners are **Dr Reza Davari Farid** in Hobart, and **Dr Basil Lau** in Canberra. AMA President Dr Tony Bartone randomly drew the winners' names from the more than 400 survey respondents. Survey findings will appear in an upcoming edition of *Australian Medicine*, as will pics of our lucky winners. Thanks to everyone who participated in the survey.

Voters concerned about health as election nears

BY AMA PRESIDENT DR TONY BARTONE

The AMA has been particularly busy since the start of the year in the media, in the corridors and offices of Parliament House meeting with senior Ministers and Shadow Ministers, including the Opposition Leader, and in communities across Australia talking about the importance of good health policy and improving access to quality health care for all Australians.

It is our job to ensure that our political leaders make health a priority issue at the Federal election, which now is almost certain to be in mid-May.

To raise the profile of health policy in the minds of our politicians, we must help educate and inform and communicate with the Australian public – our patients.

It is their experiences in the health system – and the experiences of the hardworking doctors and other health professionals who treat and care for them – that inform AMA policy and, in turn, influences and shapes Government and Opposition health policy.

Every day since the last election, the AMA has been active in promoting better policies for private health insurance, Medicare rebates, aged care, mental health, asylum seeker health, Indigenous health, general practice, rural health, medical workforce, the broad range of public health issues, and public hospitals – to name just a few.

Our advocacy is getting results. We have seen recent Government responses in aged care, mental health, health care costs for families, and private health.

At the same time, we are seeing clear signs that the general public – the voters – see health as a key issue, if not the key issue, that will determine who forms the next government. The most recent example is polling conducted by JWS Research, which was published in the *Australian Financial Review* earlier this month.

The poll showed that hospitals, health care, and ageing had overtaken cost of living concerns as top-of-mind for voters, with 60 per cent of Australians rating health as the biggest issue.

Of that 60 per cent, women and older adults were the categories of voters with the greatest worries about health services and facilities.

At 57 per cent, cost of living remains a significant factor for voters.

Interestingly, the issues that the Government has been highlighting in order to drive points of difference with the Opposition – namely immigration and border security; the environment; energy; and defence, security, and terrorism – rate much lower with voters at 36, 33, 31, and 23 per cent respectively.

Nevertheless, senior media commentators in Canberra firmly believe that the Government will run very hard on these issues at the election, ahead of issues like health, education, and social services.

Private party polling and focus groups will determine election strategy for the major parties more than the public surveys, especially in some electorates with interesting three-way contests.

That is why the AMA must and will increase the volume and frequency of our health policy advocacy and lobbying in coming months.

The first big test is just weeks away with the Federal Budget on April 2. The Budget – and the Budget response – will provide some clarity about how much prominence (and new funding) the major parties will promise the electorate.

The second big test is the election campaign itself – five or six weeks of furious activity that we will monitor closely and respond to announcements as and when necessary.

We hope it is a genuine contest of ideas to make our health system better – and properly resourced.

Now, more than ever, we need a clear enunciation of a vision for health – one that charts a course through a changing paradigm of increased longevity, growing chronic disease burden, and efficient new models of delivering health care, while maintaining our reputation as a world leader in health care, equity, and access.

The stark reality is that new funding is needed, a lot of it, and in many areas of the health system. And we need clever allocation of the funding and resources. I repeat – this will require vision. And political bravery. These are things that have been missing from health policy for some considerable time.

The AMA will stand ready with our Key Health Issues manifesto for an election campaign that should kick off just days after the Government has determined how well its Budget promises and largesse have been received by the media and the voters. Good health policy wins votes.

The case for medical leadership – part two

BY AMA VICE PRESIDENT DR CHRIS ZAPPALA

Effective frontline clinical leadership has been shown to facilitate open discussion of patient safety issues, implementation of quality improvement and patient safety initiatives, staff retention, and efforts to redesign health care delivery systems[1].

Not surprisingly, there is a growing body of evidence that medical leadership plays an important role in improving organisational performance, including the quality of care, patent safety and cost efficient care[2]. Furthermore, medical leadership is necessary for overcoming the divide between medical and managerial logics in hospitals that hampers improvement in healthcare. Medical leadership differs from general leadership, as it includes a balancing between clinical and organisational objectives to safeguard both the quality and efficiency of care[2]. A medical background therefore appears crucial for optimally conducting these boundary-spanning roles.

The requirement for expert leadership is perhaps best filled by doctors. Expert leaders combine knowledge, experience and technical competence with innate ability and leadership training. Such doctor leaders in psychiatry, where this concept has been defined, are viewed as being more credible by their peers[3]. Following on from a dispute in the South Australian Industrial Relations Tribunal which reinforced clinical directors as being responsible for the total management of regional mental health services there has been improved patient care in South Australia e.g. halving of emergency waiting times[3].

Good medical leadership is vital in delivering high-quality healthcare, and yet medical career progression has traditionally seen leadership lack credence in comparison with technical and academic ability. Individual standards have varied, leading to variations in the quality of medical leadership between different organisations and, on occasions, catastrophic lapses in the standard of care provided to patients[4]. The Goodall report was one of the first to show that there was a strong positive association between ranked quality of a hospital and whether the CEO was a physician ($p<0.001$)[5].

Furthermore, there is evidence at the hospital unit level that medical leadership improves efficiency and patient outcomes e.g. in intensive care. In one study, length of stay decreased and efficiency/cost improved along with the relative risk of death by ensuring an intensivist led care, as opposed to any alternate model involving use of guidelines alone [6].

A survey of 19 OECD countries (not Australia) published in 2016 showed doctors were increasingly involved in hospital management and fulfilled a broad scope of managerial roles, but only partly accompanied by formal decision-making responsibilities. Doctor managers having more formal decision-making responsibilities in strategic hospital management areas is positively associated with the level of implementation of quality management systems[7]. Thus, a critical factor may not be the uptake of managerial tasks by doctors in itself, but also giving them credible and meaningful decision-making responsibility in strategic management[7].

A recent systematic review of sixteen studies looking at whether hospitals and healthcare organisation perform better when led by doctors, is helpful[8]. Twelve studies found that there were positive differences between medical and non-medical leaders, and eight studies correlated these findings with hospital performance or patient outcomes. The authors conclude that a modest body of evidence supports the importance of including doctors in the composition of governing boards to improve organisational performance.

Around the world clinical professionals have increased their involvement in the management of health services. In studying the impact of clinicians appointed to the boards of directors of English NHS hospital trust, Veronesi G et al concluded –

1. There was a significant and positive association between a higher percentage of clinicians on boards and the quality ratings of service providers, especially where doctors are concerned. This positive influence is also confirmed in relation to lower morbidity rates and tests to exclude the possibility of reverse causality (doctors joining boards of already successful organisations).
2. We do not find the same level of support for clinical professions such as nurses and other allied health professions turned directors[9].

It is suggested this effect of doctors on NHS boards is due to increased understanding and credibility and better communication. Physician leaders can shape the hospital's quality vision and directly influence decisions about implementation and cost-quality trade-offs. These medical leaders can also promote new innovations in the design of services[9].

The benefit of doctors on boards has been also clearly elucidated in the USA[8]. The top performing hospitals in the USA are chosen based on previous year's risk-adjusted patient mortality and complication rates, severity-adjusted average

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Vice President's message

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patient lengths of stay, expenses, profitability, proportional outpatient revenue, and asset turnover ratio. Conspicuous among the winners are physician-led organisations[10]. The obvious examples of this are the Mayo clinic and the Cleveland Clinic. Mayo has a rich tradition of partnering physician leaders with administrators and tapping the business management techniques and expertise the non-physician brings[10]. Better management = better medicine. Medical leadership is normalised, not seen as an inferior occupation or 'the dark side'. We need this to be a universal view among the Australian medical profession also.

Medical leadership, like other leadership roles, must have passion, courage, vision and an ability to scan the horizon for health care policies which may affect health services directly or indirectly[11]. Medical leaders often have the skills to look at the problems in a longitudinal manner and have a broader perspective in understanding dynamics of policy[11]. Leaders' relational and organizational skills as well as process-management and change-management skills are considered important to improve primary care integration. In this, general practitioners are regarded as the most appropriate leaders[12].

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MBS report recommends more GP investment

The AMA welcomes calls for greater funding for general practice, as outlined in the draft report of the Medicare Benefits Schedule General Practice and Primary Care Clinical Committee (GPPCCC).

It is also giving cautious support to a number of other recommendations of the draft report, however, the AMA is stressing the need for proposals to be fully costed.

Cutting any rebates at all must be matched with reinvestment into general practice.

AMA President Dr Tony Bartone praised the approach to reform adopted by the GPPCCC, which has focused on GP stewardship of the health system.

He said it was strengthening the concept of the 'usual doctor', and supporting comprehensive, patient-centred, multi-disciplinary care.

"The report recognises that high-quality, patient-centred primary health care is key to improving effectiveness of care, preventing illness, and reducing inequality, variation, and health system costs," Dr Bartone said.

"The GPPCCC's call to strengthen general practice and primary care is based on the best available international evidence.

"While the GPPCCC makes some recommendations that would see some MBS rebates cut, it makes it very clear that not only should these savings be reinvested in general practice, they also need to be backed by additional new funding.

"Any failure to do so will not only be a breach of trust with the Australian community and the patients who doctors care for, but a callous disregard for the centrality of general practice as a lynchpin of our world class health system."

The AMA rejects, however, the GPPCCC report's suggestion that time thresholds be included for standard GP consultations and GP chronic disease management plans.

"With an increasing focus on value, using volume-based measures like time is simply not a useful measure of a consultation," Dr Bartone said.

"The AMA priorities for investment in general practice are detailed in our 2019 Pre-Budget Submission. We call on all major parties to release their general practice policies well ahead of the next election."

CHRIS JOHNSON

AMA concern over new website plan

A proposed Government website allowing people to search specialists' fees will do nothing to inform patients about their likely out-of-pocket costs unless it also lists what patients can expect back from Medicare and their private health insurance fund.

> "…the AMA was actively involved in making sure that people have informed financial consent about the costs of their treatment…"

That is the AMA's response to the Government's announcement it will launch a website as part of its strategy to try and tackle what it has described as excessive out-of-pocket costs by some specialists.

AMA President Dr Tony Bartone said the AMA was actively involved in making sure that people have informed financial consent about the costs of their treatment, and that includes knowing what health funds are prepared to pay their customers for particular treatments.

"The AMA has contributed to the Minister's advisory committee, and will continue to work with the Government to ensure that Australians get what they want and need – transparency on their out-of-pocket costs before they have treatment," Dr Bartone said.

"But let us be clear about why we have out-of-pocket costs in the first place. The three contributors to out-of-pocket costs are: 1) the doctor's fee; 2) the Medicare rebate; and 3) what the health fund will pay. Let's also be clear that 87 per cent of services are billed under a no-gap (zero fee to patient) arrangement.

"The AMA supports and actively encourages full transparency of doctors' fees, and unreservedly condemns egregious billing, which occurs in a very small percentage of cases.

"But that transparency must extend to both the size of the MBS rebate and the private health insurance contribution to the cost of treatment.

"While it appears that this website will include information about MBS rebates, will it show the specific rebate for a given procedure, or just the average out-of-pocket cost in tiers?

"Will it also inform patients that MBS rebates for specialist services – paid for by their taxes – have failed to keep pace with inflation for more than three decades?

"Most importantly, will it show what health funds are prepared to refund to their customers for years of premium payments?

"Health funds have argued that the complexity of their many different insurance policies makes it unworkable for them to provide their rebates for a comparison website.

"We agree that health insurance policies are unnecessarily complicated and opaque. Each insurer sets the rebate amount that they are willing to pay. If the insurer's rebate is low, the out-of-pocket cost to their customer will be high.

"Even when a doctor charges the same fee every time, and even when the patient has good private health coverage, out-of-pocket costs can vary by thousands of dollars because of the variation in what the insurer chooses to pay as a rebate.

"For example, my predecessor as AMA President, Dr Michael Gannon, an obstetrician, has to have 17 different fee schedules for the same procedure, simply so that he can comply with the 17 different rebates paid by health funds to meet their no-gap requirements for that one procedure, to make sure that his patients are not left out of pocket.

"If a patient doesn't come under a no-gap scheme, they are entitled to an estimate of likely costs, and the AMA is absolutely clear on this.

"Informed financial consent requires total transparency. Unlike the growing range of privately-funded fees websites that now exist, a Government-developed website must be impartial and backed by the Commonwealth's extensive data set.

"However, a website that does not have the full information is not in anyone's interests.

"While the Government is saving money with the continuing freeze on MBS rebates for specialist procedures, allied health consultations, and diagnostic imaging, the growing gap between rebates and the cost of providing care is passed on to the patient.

"We welcome the announcement that the Government will fund an education campaign about health financial literacy and informed financial consent. This is critically important to navigating Australia's complex health system.

"This education initiative must be broad enough to equip consumers to make informed choices about their health insurance products, as well as their choice of doctors."

MARIA HAWTHORNE

CAS converging on Canberra

Professor Murphy and Dr Bartone

The CAS forum held in Canberra

The AMA has hosted a forum in Canberra for all medical Colleges, Associations and Societies (CAS) to discuss important issues facing the medical profession.

Presenting to the session were the Australian Government's Chief Medical Officer Professor Brendan Murphy, Medical Board of Australia Chair Dr Anne Tonkin, Director of Everymind Jaelea Skehan, and AMA President Dr Tony Bartone.

The well attended forum discussed a number of issues, including the national medical workforce strategy; professional performance framework and national training survey; tackling mental ill-health in doctors and medical students; out-of-pocket costs and informed financial consent.

Discussion and questions from the floor were invited, all leading to an informative day for attendees.

Dr Bartone said as a profession, great things are achieved when the various CAS members work together.

"With health at the centre of the political debate, we have a challenge and an opportunity," he said.

"We can influence outcomes of the conversation on out-of-pocket expenses, to move it past a doctors' blame game.

"But only if we are united. If we speak with many voices, if we all have different messages, we will be ignored.

"If we speak with one voice, if we are united and cohesive, we can and will be heard."

Dr Bartone stressed that Australia's health system relies on the balance between the public and private sector.

CHRIS JOHNSON

Remote doctor appointed to Federal Government Committee

Darwin based GP registrar Dr Georgina Taylor has been appointed to the General Practice Training Advisory Committee (GPTAC), for a three-year term.

GPTAC is a Federal Health Department committee established in 2015 to provide valuable advice to the Government in regards to maintaining and improving general practice training in order to deliver high quality primary health care to all Australian communities.

Dr Taylor joins the Committee as a representative of the AMA Council of Doctors-in-Training.

"I've been involved with the Council of Doctors in Training for a couple of years now and I will bring that focus to the Committee," Dr Taylor said.

"As the Northern Territory representative on the Council I will have that perspective in the Committee too.

"Quality general practice training is a big focus for the AMA and we need to get the voice of GP registrars heard. I think that's really important and it is great that the Advisory Committee is a forum that gives GP registrars a voice.

"General practice is a fairly hot topic and I am pleased to be able to contribute. The offer came late last year for interest and I joined my first Committee meeting by teleconference in Melbourne (early in March)."

Dr Taylor spends half of her week travelling to remote communities to provide primary health care.

She travels to one community by plane and to another by ferry.

"I have an awesome job where I get to visit a couple of remote communities each week and provide GP services as part of my role with the Northern Territory Department of Health, Primary Health Care branch," she said.

Dr Georgina Taylor, who provides remote GP services is now also a member of the General Practice Training Advisory Committee.

The rest of the week, Dr Taylor is involved in academic research and teaching at Flinders University Darwin campus.

CHRIS JOHNSON

Talking health and climate change

AMA President Dr Tony Bartone met recently with Doctors for the Environment Australia (DEA) to discuss the health implications of climate change. The lengthy meeting focused on climate change as a health issue, sustainability in health care, and the forthcoming federal election.

Topically, the AMA heard that heat kills more people than any other natural phenomenon, and about the urgent need to act on emissions reduction. Pictured with Dr Bartone are Dr Laura Beaton, Professor Kingsley Faulkner (Chair) and Dr Eugenie Kayak.

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Inquiries into mental health

Two significant inquiries into mental health are currently underway: a Productivity Commission Inquiry that is considering the role of mental health in supporting economic participation, enhancing productivity and economic growth; and the Victorian Royal Commission into Mental Health.

Submissions to both inquiries will be forthcoming from the AMA. In 2018, the AMA released its Position Statement on Mental Health (https://ama.com.au/position-statement/mental-health-2018) and the NDIS (https://ama.com.au/position-statement/national-disability-insurance-scheme-2018) .

The former stressed that current appropriations and allocation of funding for mental health services, treatments and workforce needs to be overhauled and realigned. The AMA has said that funding has not been properly weighted between community-based mental health services, acute care and advocacy requirements.

The AMA wants to see all tiers of Government work cooperatively to change the current patchwork of fragmented, competing and overlapping services to one based on evidence, research, investment, and sustainable funding. The AMA position statement called for a multipronged strategy to improve access and care to Australians with mental health needs. This strategy should encompass:

- improved service delivery;
- significantly increased funding;
- improved coordination;
- robust workforce and infrastructure solutions;
- prevention, education and research; and
- e-health/ telemedicine solutions.

We welcome these new inquiries, but governments have a poor record of implementing recommendations and findings. In June 2008, the National Advisory Council on Mental Health (NACMH) was established by then Prime Minister Kevin Rudd. Its report, *A Mentally Healthy Future For All Australians* (2009) provided expert advice on mental health reform. NACHM detailed 21 priority areas for investment, including: mental health literacy; training; priority communities; community mental health programs; mental health in the workplace; early childhood, youth development and school services; families at high risk; mental health services for the elderly; and expanding community-based support and recovery models. Many of the NACHM recommendations have never been fully implemented or funded.

In 2008, the Senate Standing Committee on Community Affairs released *Towards Recovery, Mental Health Services in Australia*. This quality and comprehensive report produced 26 recommendations that would deliver a clear vision for mental health systems in Australia. Again, almost none of the recommendations have been implemented. The specific recommendations regarding funding of services and accountability have either been ignored or only partially acted on in the decade since the Senate undertook this inquiry.

In June 2009, the National Health and Hospitals Reform Commission (NHHRC), also established under the Rudd Government, developed a long-term reform plan for Australia. Titled *A Healthier Future For All Australians*, NHHRC listed a number of recommendations to ensure treatment and support services across the spectrum of care. It made 12 specific recommendations on mental health reform, of which perhaps only two or three have been partially implemented. Recommendations about housing, increasing social support services, vocational rehabilitation, have not be implemented in full.

In June 2010, the Senate Community Affairs References Committee released *The Hidden Toll: Suicide in Australia*. This report highlighted the enormous personal, social and financial cost of suicide and made 42 very important recommendations to reduce suicide in Australia. Some of the recommendations on data collection and collation, more standardised reporting, and awareness raising, have been acted on, however many of the 42 recommendations remain either partially delivered, or are ad-hoc and inconsistent.

Other reports have been issued by the Australian Mental Health Commission and the Fifth National Mental Health and Suicide Prevention Plan.

We can only hope that the recommendations of the Productivity Commission and Victorian Royal Commission are implemented, and that Commonwealth and State governments collaborate on funded, coordinated strategies that reform and improve mental health services in Australia.

SIMON TATZ
AMA DIRECTOR, PUBLIC HEALTH

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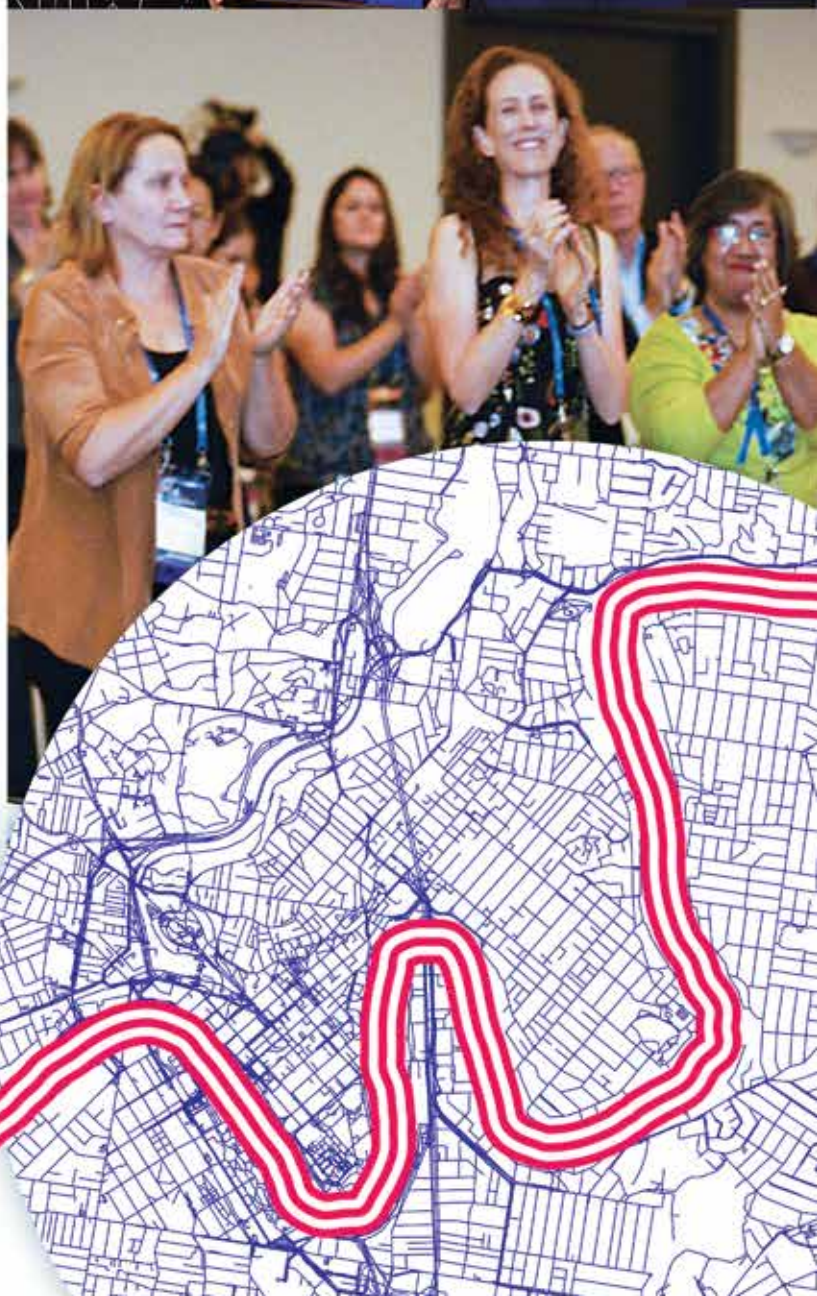

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Health on the Hill

POLITICAL NEWS FROM THE NATION'S CAPITAL

BY CHRIS JOHNSON

My Health opt-out numbers revealed

More than 2.5 million Australians have opted out of the My Health Record.

The Australian Digital Health Agency revealed the figure under questioning from Labor during Senate estimates in February.

Before the end of January, the hearing was told, a total of 2,517,921 opted out of the system.

That figure does not include an estimated 300,000 others who had records but cancelled them.

During estimates hearings in October last year, the Agency said almost 1.5 million people had opted out – 1,147,000 to be exact.

Shadow Health Minister Catherine King described the latest figure as a "dramatic increase" due to the public's lack of confidence in the system.

"Labor supports a national digital health record, which is why we created one when we were last in government," Ms King said.

"But the Government's rushed implementation of an opt-out model created a range of problems and severely undermined public support for a system that could deliver enormous health benefits for all Australians.

"While the Government adopted all of Labor's legislative reforms to the system last year, they failed to adequately address other lingering security and privacy concerns before the end of the opt-out.

"We maintain the Government should commission an independent Privacy Commissioner review of the system. If they fail to do so, a Shorten Labor Government will."

The Opposition wants a review to consider the appropriate balance between utility for clinicians, patients and others and privacy and security for individuals; the difficulty of ensuring informed consent in an opt-out model; changes to default access settings: protections for vulnerable people, including minors and families fleeing domestic violence; and further legislative, policy and system changes that are needed to achieve these aims.

Health Minister Greg Hunt said people could cancel their My Health Record any time and that the Government had strengthened privacy provisions under the My Health Record Act. He has previously said the Government was pleased with the number of people who chose to have a My Health Record.

Funds and programs in the battle against alcohol and drug misuse

Federal funding over three years to 2022 will see an extra $268 million given to Primary Health Networks (PHNs) and other organisations to help with the fight against alcohol and drug abuse.

PHNs, providers of residential and non-residential withdrawal management and rehabilitation programs, alcohol and peak drug organisations and other national activities already supported by our Government will receive the money to help Australians suffering addiction.

From July 1 this year, PHNs will receive $45 million a year for alcohol and other drug treatment services, which will provide stability to services and meet the needs of local communities.

Health on the Hill

POLITICAL NEWS FROM THE NATION'S CAPITAL

Withdrawal management and rehabilitation services currently receiving Government funding can apply for a share of $29 million a year in continued funding to provide evidence-based treatment services for individuals most in need.

Four national research centres will receive $24 million over three years to continue to undertake research into alcohol and other drug issues including the National Centre for Education and Training on Addiction, the National Drug and Alcohol Research Centre, the Centre for Youth Substance Research and the National Drug Research Institute.

Additionally, funding of $4.9 million a year will continue for alcohol and peak drug organisations and complementary national treatment sector capacity building activities.

Health Minister Greg Hunt said the funding announcement provides continuity of important drug and alcohol treatment and support services and complements state and territory funding.

As a new initiative, the Government has committed $7.2 million over two years to pilot a take-home naloxone (THN) program in Australia. Naloxone is a drug that can temporarily reverse opioid overdose.

In partnership with the States and Territories, a THN program will expand availability of naloxone to a range of additional settings frequently accessed by at-risk groups. Concurrent to the pilot, the Federal Government has provided more than $100,000 funding to the Burnett Institute to undertake research, with the National Drug Research Institute, into the key principles and features of a nationally consistent THN model in Australia.

Aged care diversity project unveiled

The Government has released Australia's first Aged Care Diversity Action Plan, to support older Culturally and Linguistically Diverse (CALD) Australians to overcome barriers they may face in accessing aged care services.

The new Action Plan will help guide aged care recipients and their families, while assisting providers to ensure their services are inclusive and culturally safe for all consumers in their care.

The plan links to resources to help senior CALD people and families express their needs when communicating with aged care providers.

In addition, people working in aged care—doctors, nurses, support staff and allied health workers—will find it valuable to understand the perspectives of CALD people.

Aged Care Minister Ken Wyatt thanked the Federation of Ethnic Communities' Councils of Australia, which held extensive consultations Australia wide.

"Australia's diversity is one of our greatest strengths and as our population ages our Government is determined to ensure equal access to high-quality, culturally comfortable aged care for people of multicultural heritage," Mr Wyatt said.

"Staying connected to your culture and being cared for by someone who understands your background, can make all the difference to a happier, healthier and more fulfilling life."

In 2016, there were 3.7 million Australians aged 65 years and over. One-third of those people were born in a non-English speaking country.

"It may be a lack of awareness and knowledge of services available, concerns over the complexity of the aged care system, language barriers or lack of CALD appropriate aged care providers that prevent senior people from easily accessing the right aged care services," the Minister said.

"Everyone in Australia has the right to access quality, inclusive and culturally safe aged care services that cater to their individual needs and respect their background and life experiences."

The CALD Action Plan is one of four distinct action plans developed under the Aged Care Diversity Framework.

The Aged Care Diversity Framework and the Aged Care Diversity CALD Action Plan is available at https://agedcare.health.gov.au/

More help for veterans' mental health care

A program aimed at providing Australian veterans with mental health support will be extended to all States and Territories, following a successful two-year pilot in Townsville.

Open Arms – Veterans and Families Counselling, will now roll out their Community and Peer program across Australia, Veterans' Affairs Minister Darren Chester said.

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"The primary aim of the Townsville Community and Peer pilot was to enhance the management of complex and high-risk clients in the region, particularly those vulnerable individuals considered to be at risk of suicide," Mr Chester said.

"The pilot demonstrated that 'lived experience' mental health peer workers within Open Arms could enhance the management of vulnerable clients.

"Some veterans are reluctant to reach out for help because they are unable to get over the stigma of seeking professional mental health treatment.

"Peers often have a good understanding of the challenges and issues they face, and can help provide a bridge between the veteran community and professional mental health support.

"Rolling out the Community and Peer program across Australia will provide a new pathway for clients who were previously unlikely to consider accessing or being referred to Open Arms services."

Patrick McGurrin, Chief Executive of Townsville Private Hospital, said: "A peer support can connect with vulnerable individuals on a more personal level than traditional mental health support, this can result in more timely and comprehensive care being provided by specialist mental health services to those in need."

The Community and Peer program also assists individuals and families who are currently accessing Open Arms services to connect to other services and initiatives in the veteran community. The Open Arms Peers also support a regional peer network coordinating mentoring and training for other peers working with the veteran community.

The Community and Peer program will be rolling out to all States and Territories throughout 2019.

More information about the Community and Peer program can be found at www.OpenArms.gov.au

$160 million for Indigenous health research

The Federal Government will provide $160 million for a national research initiative to improve the health of Aboriginal and Torres Strait Islander people.

The Indigenous Health Research Fund will be a 10-year research program funded from the Medical Research Future Fund (MRFF).

It will support practical, innovative research into the best approaches to prevention, early intervention, and treatment of health conditions of greatest concern to Indigenous communities.

The funding's first three flagship priorities, which aim to deliver rapid solutions to some of the biggest preventable health challenges faced by First Nations peoples, are ending avoidable blindness; ending avoidable deafness; and ending rheumatic heart disease.

Indigenous Health Minister Ken Wyatt recently announced the first project to be funded under the Indigenous Health Research Fund, being $35 million for the development of a vaccine to eliminate rheumatic heart disease in Australia.

Australia currently has the highest rate of rheumatic heart disease in the world.

Every year, nearly 250 children are diagnosed with acute rheumatic fever and 50 to 150 people die from rheumatic heart disease in Australia. Aboriginal and Torres Strait Islander people are 64 times more likely than non-Indigenous people to develop rheumatic heart disease, and nearly 20 times as likely to die from it.

The remaining $125 million Indigenous Health Research funding will be focussed on research projects that fall into five key areas – guaranteeing a healthy start to life; improving primary health care; overcoming the origins of inequality in health; reducing the burden of disease; and addressing emerging challenges.

An advisory panel comprising prominent Indigenous research experts and community leaders, co-chaired by Professor Alex Brown (South Australian Health and Medical Research Institute) and Dr Misty Jenkins (Walter and Eliza Hall Institute of Medical Research), will guide the Indigenous Health Research Fund investments.

It will be the first national research fund led by Indigenous people, and conducted with close engagement with Indigenous communities.

The Indigenous Health Research Fund will also seek

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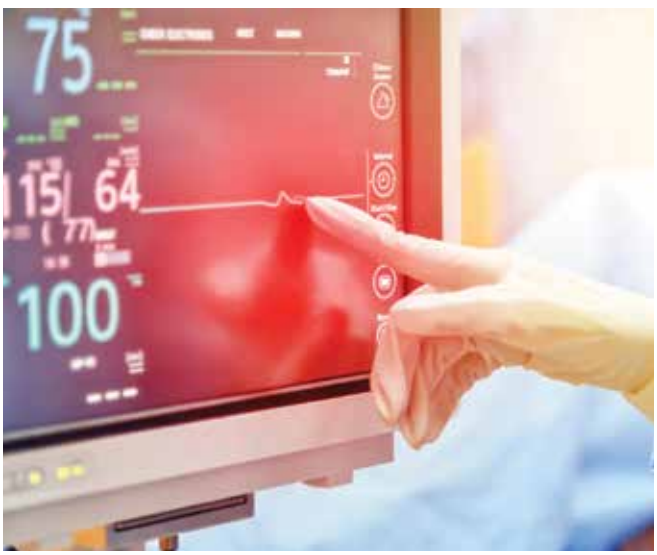
contributions from philanthropic organisations, State Governments, industry, and the private sector in order to increase the reach and impact of the fund.

"It is time to come together as a nation to work as partners in bringing equity in health outcomes" Mr Wyatt said.

"The Indigenous Health Research Fund will provide the knowledge and understanding to make health programs for Aboriginal and Torres Strait Islander people more effective and lead to lasting health improvements.

"This is key to closing the gap in health outcomes since, despite considerable investment by the Commonwealth in existing programs, Indigenous Australians currently have about a 10 year lower life expectancy and 2.3 times the burden of disease compared to non-Indigenous Australians."

Political will to tackle heart disease and stroke



Heart disease and stroke have captured the Government's attention, with a research project being launched in a bid to tackle the nation's two biggest killers.

Describing it as an "unprecedented" amount, the Government has committed $220 million for a 10-year effort called Mission for Cardiovascular Health.

The funding, awarded under the Government's Medical Research Future Fund (MRFF), will support Australian researchers to make game-changing discoveries, develop a global biotech industry and enable the implementation of changes in healthcare.

Cardiovascular disease is the underlying cause of 43,500 deaths in Australia.

One Australian dies of cardiovascular disease every 12 minutes, with one Australian experiencing a heart attack or stroke every five minutes.

In 2017 alone, more than 100,000 Australians experienced a heart attack or stroke and cardiovascular disease was the underlying cause of 43,500 deaths in Australia.

Health Minister Greg Hunt said those figures are telling, but they don't convey the tragedy of heart disease and strokes for individuals, their families and loved ones.

"The Mission for Cardiovascular Health aims to improve health outcomes through prevention strategies, earlier detection and improved outcomes for patients suffering a heart attack or stroke," he said.

"It will aim to reduce hospitalisations, develop clinical trials and new drug therapies, use the unique DNA of a patient to develop new therapies and also look into why people who don't lead an unhealthy lifestyle or have a genetic cause suffer heart attacks."

The Mission will be overseen by an appointed expert advisory panel chaired by Professor Gemma Figtree and will have a broad scope.

Open and contestable grant opportunities will stimulate new and emerging research to address heart disease and stroke.

This Mission includes the recently announced $20 million in funding to help defeat congenital heart disease by better understanding genetic causes and treatment options through the HeartKids Project.

The Government established the HeartKids Project to tackle childhood heart disease, which affects more than 65,000 Australians. In Australia, of the approximately 300,000 births each year, 2,400 to 3,000 babies are born with a form of congenital heart disease.

Politicians must grasp and act

BY **PROFESSOR STEPHEN LEEDER, EMERITUS PROFESSOR,** PUBLIC HEALTH, UNIVERSITY OF SYDNEY

With a federal election imminent there are matters relating to medicine and health that are within the grasp of national Government to act upon. The feds can't cover the entire waterfront and we should not waste time raising with them things that are out of range. But in relation to matters such as Medicare, general practice and national prevention programs, it would be good to know the options being proposed of those seeking our vote. We should use the moment of an election to say again what we are hoping the health system will achieve and what we might expect from it.

Health and medical care are so vast that radical change in their organisation and provision is extremely difficult to achieve and we should be sceptical of grand plans. Bill Gates of Microsoft, facing similar complexity in the world, didn't do strategic planning but waited for promising opportunities to present themselves. We don't need to tackle the entire system to improve it.

More than money and fees

'It's the economy, stupid!' may be true and politicians forget it at their peril, but for many voters there is a desire that politicians address us also at our deepest level, honouring our sense of destiny and moral commitment. This applies to health and health care as much as it does to immigration.

We want a vision of Australia's healthy future and we want to hear a story of our progress to date and what its next chapter might be, how things can be better in the future and how we can help. Only a positive view of the future, connected to our moral purpose and to how we want to live as a nation will lead to effective and inclusive policy.

Vision, of course, means looking forward. We do not need threatening and dire statements about how bad things are (they aren't). Imagine, a friend said to me recently, the outcome if Martin Luther King had announced 'I have a nightmare!' We need a dream that guides future developments. We also need policies to turn that dream into daytime reality.

Filling gaps

Between now and the federal election scheduled later this year, we have the opportunity to reflect on the changes – progressive and not progressive – in health care that have occurred in health in the past from years and where we wish the incoming national Government to provide more leadership. For example, how do we assess our recent intensive application of information technology to medical records, clinical care and health service management? What gaps need to be filled? How have we done in responding to the need for integrated care for older people with multiple chronic conditions? And what about rising out-of-pocket costs?

Why not send your local Member contestants an email outlining your views on these and other matters close to your heart?

We can have a vision and plan to transform it into action and results.

Effective policy requires input from the community, not just experts

But policies are not neat prose or detailed architectural plans. Brian Head, a policy expert from Brisbane, says policy decisions are not "deduced primarily from facts and empirical models but from politics, judgement and debate. Policy domains are inherently marked by the interplay of facts, norms and desired actions. Some policy settings are data-resistant owing to governmental commitments.

"Information is perceived and used in different ways, by actors looking through different 'lenses'. From this perspective, there is more than one type of relevant 'evidence'".[1] Head speaks of "three lenses" of evidence — political know-how, systematic research, and professional practice. "The three-lenses approach suggests that there may be importantly divergent perspectives on whether and how to increase mutual understanding and shared objectives."[1]

So policy may not yield all the results we seek, but we can at least be clear about what we, as health care professionals and Australian citizens value and wish to see enhanced in health. We can contribute. We can be at the policy table.

1 Head B. Three lenses of evidence-based policy. *Aust J Public Admin* 2008; 67: 1-11.

Collaboration the key to success

BY DR RICHARD KIDD, CHAIR, AMA COUNCIL OF GENERAL PRACTICE

With pharmacists seeking independent prescribing rights and nurse practitioners seeking independent billing rights, it is time we all start thinking about what is truly best for the patient and work collaboratively within the scopes of our practice – but with the clinical oversight from a GP.

General practice in Australia has steadily been embracing the concepts of the medical home model of primary care. Over the last decade or so we have seen the size of practices increase, not only in the number of GPs, but in the number of other health professionals that work with GPs within the general practice to support patient care. Certainly, for example, it would be uncommon now for a practice not to have a practice nurse. More than 63 per cent of practices have at least one. The *General Practice: Health of the Nation 2018* report indicating that 62 per cent of GPs reported their practice employed an allied health professional and 14 per cent reported their practice employed a pharmacist.

General practices are steadily building their multidisciplinary healthcare teams in order to meet the healthcare needs of their patients. Incentives such as the Practice Nurse Incentive Program (PNIP) and access to MBS items for specific allied health services have assisted practices to do this. The transformation of the PNIP into the Workforce Incentive Program (WIP) should enable this further. Accredited practices in all locations will now be able to participate and receive support for employing allied health professions, including non-dispensing pharmacists.

An integrated health care team spearheaded by the GP is best placed to improve health care provision for patients and to avoid fragmentation of care. Worldwide the evidence across a variety of models of care demonstrate that the key to success is a collaborative environment where the healthcare team works together, and not at cross purposes, to address the healthcare needs of the patient.

It is therefore, frustrating when calls to provide services at the edge of, or beyond, scopes of practice and outside of a collaborative framework are continually made and receive airtime. Worse still is that the claims made to justify it are often exaggerated or inaccurate.

The 'it would ease the burden on GPs' and 'GPs are difficult to access' are the common catch cries. Yet, the Productivity Commission recently stated that only four per cent of the population reported delaying or not visiting a GP in the previous 12 months due to cost. The Commission also reported that around three-quarters of patients could get a GP appointment within 24 hours, highlighting the access furphy for what it is.

Many practices set aside a number of appointments each day for attendances for an urgent or acute health problem, or are willing to squeeze patients in where necessary, and newer GPs to a practice often having more available appointments meaning patients will usually be able to access an appointment with a GP within their practice when they ask.

When it comes to easing the burden on GPs, fragmenting patient care is not the way. It only adds to the burden for GPs and contributes to unnecessary costs to the health system overall. Fragmenting patient care increases the chance of delivering poorer outcomes for patients through delayed diagnosis, inappropriate or unnecessary diagnostics or referrals, inappropriate or delayed treatment, culminating in preventable hospitalisations.

The provision of patient centred quality care should be paramount for all medical and health professions. By working together as a team, we can make the best use of our various skills and scopes of practice, to provide timely, pro-active, preventive and holistic patient care.

Certainly, we need appropriate funding channels to support this, and the AMA is working to secure a blended funding model that will support general practice in providing coordinated, quality and longitudinal care.

First and foremost, though, the centrality of general practice and the role of the GP must be recognised and reinforced to ensure clinical oversight is maintained as models of care evolve to make better use of the team in delivering care for our patients. It is reassuring to see this recognition underpins the MBS Review's General Practice and Primary Care Clinical Committee reforms as outlined in its draft report. It is likewise reassuring to see the Pharmaceutical Society of Australia talking about collaborative prescribing models.

Together, working within the paradigm of the Quadruple Aim, we can deliver better outcomes for patients and population health, greater satisfaction for the providers of care and reduced costs to patients and the health system overall.

AMA advocacy will continue to focus on the development of the medical home ensuring appropriate collaborative arrangements exist to support quality health care and the principles of continuity, coordination, comprehensiveness, accountability, accessibility and patient centredness are enshrined within.

Heroes

BY DR SANDRA HIROWATARI, CHAIR, AMA COUNCIL OF RURAL DOCTORS

A hero is someone who ignores the risk to themselves and runs headfirst into danger for a greater good. When we think of heroes, examples like the firefighters running into the World Trade Centre come to mind, but I'd like to acknowledge the unrecog-nised and unsung heroes of rural Australia. You do it so habitually you do not recog-nise this yourself, not until one of you is harmed because you ran headfirst into dan-ger. I'm talking about Australia's rural doctors.

Do you recognise yourself in one of the following stories?

It is a remote area town, not accessible by road in the wet, big enough to warrant four doctors. But there are only two doctors with no hope of backup. That means you are on a one-on-two emergency room rotation. You cannot leave the other doctor to work 24/7 so you work your 100-plus hours over a six-day period. So does she. It takes courage to wake up after two hours of sleep to try to attend to an emergency. Some would call it stupid courage. But we do not give up and we continue to hope that an-other doctor comes to the community. Are we heroes or robots?

I imagine the firefighters felt a bit of that stupid danger as they climbed the stairs in the World Trade Centre. Some of them must have felt the hopelessness, the dan-gers, knowing that there was little they could do. But it's what they do – it's what we do – in an emergency. Administrators, hiring agencies, hold yourself accountable to this inhumane roster. Ask yourself, what if there is a bad outcome to the community and the patients? Acknowledge the bad outcomes already occurring for the doctor: ulcers, insomnia and post-traumatic stress. Do not allow that doctor to self-recriminate because she could not keep up with an impossible roster, do not allow her to lose her self-esteem. Instead, see that her efforts are recognised, make sure she is debriefed and assured that this will not happen again. Use Telehealth, use phone consults, just let her sleep. Tell the daytime staff not to wake her for low acui-ty daytime patients. Working more than 100 hours over a six-day period would be il-legal.

Doctor, you know you have trouble with alcoholism, depression, thoughts of suicide. You try to find meaning in the practice of medicine. The urban rat race practice made you feel even more suicidal, so you changed. You set out on a new path full of risks, challenges and dangers – emergency medicine, trauma medicine, unexpected births. You put your wellbeing aside to help others in the most challenging circumstances.

The Beyond Blue survey found that doctors in general, but especially isolated rural doctors, were in greater danger of experiencing depression and substance abuse. Urban and Rural Colleagues, keep your eyes on that isolated doctor, they are fragile heroes, and may be lonely. Communities, take the doctor fishing, to a dance or a cor-roboree. Doctors are members of the community too.

You have a family in big city Melbourne, your spouse does not want to go outback, that is your calling, not theirs, so you fly-in-fly-out. You are providing a service to a community that no one else can or will. The danger is to your family, to your most im-portant relationships.

Rural workforce agencies need to recognise the impact on spouses and families of the pioneering doctor. Provide a stipend to visit their loved one in the outback, give the rural doctors plenty of opportunities for isolation relief. Community leaders, ask the doctors about their families. Even better, entice the family to live rurally, help them to plant roots in the community.

Fit and healthy healthcare worker, you need your exercise, but there is no gym or swimming pool, and the tyres on your bike won't survive the spinifex. So you go for a jog in the gathering dusk, Fitbit on your wrist, but out of nowhere a feral dog bites you right on the ankle. A few days later, you need a course of intravenous antibiotics to counter the cellulitis. You come back to the community, but now when you go running you carry two sticks, the dog batters.

Community leaders, rangers, Councillors, please control the dogs. Do not let them run wild, neuter them, make the communities own and tag each dog. Better yet, provide us with gym equipment. Rural incentive payments cannot be used on services that do not exist. We need the infrastructure to keep living our lives. We don't expect all the modern city life, we don't want that, but we need the basics. Hiring agencies, why not provide some gym equipment in our units?

Rural doctors, we love our vocation, but we want support. Governments of all levels need to recognise the risks the rural doctors face. It is hard to keep being heroic when you reflect on what it costs. Don't send us running into 100-plus hour work weeks, don't cut us off from our families, and don't send us out into that paths of fe-ral dogs. Acknowledge what we do, acknowledge the personal risk and sacrifice. Sup-port us in your communities. Recognise the heroism.

Midnight Oil

BY DR JOHN ZORBAS, IMMEDIATE PAST CHAIR, AMA COUNCIL OF DOCTORS IN TRAINING

The day starts like any other day. You wake up, get ready and head off to work at the Intensive Care Unit at Mount Saint Elsewhere Hospital. You head to morning handover, well rested and ready for the day. The same cannot be said for your other registrar.

Despite a well written rolling roster that provides time for recovery, a recent sick call and a few nasty consecutive shifts means their fatigue is starting to catch up with them. So, a plan is made to relieve this doctor by lunchtime, otherwise they'll hit their fatigue limits and will have to be sent home.

But that's OK, because there are enough other well-rested staff around them to fill the gap. The day will continue and the workload will be managed.

Except it's not Mount Saint Elsewhere and this isn't a happy article. It's 2019, it's Australia, and currently we live in a country where not only do we not manage fatigue in medicine, but we brazenly refuse to acknowledge that fatigue even presents a risk to ourselves and our patients.

I've roughly split the group in two now. Half of you are thinking "well of course, there's nothing new here, we know fatigue is a problem!". The other half are thinking "doctors aren't pilots John, and this isn't aviation". To the second group, I hope to make the case for why you're wrong. And to the first group smugly judging the second group, I'd like to point out that our inertia on this issue makes us as complicit as the second group.

Firstly, on fatigue and doctors. We're an odd bunch, us doctors. Like alcohol, fatigue will reduce your situational awareness. Like alcohol, fatigue will impair your ability to make and recall memories. Like alcohol, fatigue will reduce your performance insight and allow risk to creep up on you undetected. Like alcohol, fatigue will erode emotional control and lead to decisions and outbursts that you'll regret the next day (if there is a next day).

Hell, fatigue is so much like alcohol that we've even got research demonstrating that 17 hours of being awake is the psychomotor equivalent of a BAL of 0.05 per cent, an unthinkable way to present to work. But I don't want to talk about the quantum of harm. Every time we have that conversation, some smug little troglodyte says "well, where's the trial showing the effect on doctors?".

Instead of pointing out that doctors are indeed human too and bound by the laws of biology, let's engage in the following Socratic dialogue:

1. Increasing fatigue will lead to an increasing chance of medical error (i.e. there is an upper limit on being awake and functional);
2. Medicine in Australia has poor or non-existent controls around fatigue; and
3. Medicine in Australia allows for uncontrolled fatigue and therefore causes harm to both patients and doctors as a consequence.

We can argue the quantum of harm another day. Right now, I want to focus on changing a profession that uses the essential oil of resilience rather than vaccine of sleep. Let's say you're a believer. Let's say you acknowledge that fatigue management is a problem in medicine. Great; same page so far. So who needs to fix this? "Them!", we scream in unison. But who is them? Is it our hospitals and practices? Is it the colleges and societies? Is it the medical board? It's us, because we are all of the above.

Every time a doctor talks about fatigue, we share our collective "thoughts and prayers" on social media, we bemoan the fact that the system isn't better and we get back to business as usual. I'd argue that it starts with us. When doctors are falling asleep on the flight deck, the correct next step is not to refer the next patient. It's to recognise the true emergency here: that this doctor is too fatigued to provide safe and effective care to themselves or their patients, and they need time to recover.

The correct next step is to approach this as a profession, not as juniors and seniors, and demand or write rosters that prevent this from occurring. And

furthermore, we need to collectively recognise that fatigue is not a sign of physical or mental weakness. Sleep is a necessary bodily function, and it should cause no more alarm or drama than a meal eventually resulting in a bowel motion.

So far, medicine has been allowed to evolve and develop in a silo where sleep does not exist. We don't actively consider our prior sleep/wake behaviour. We don't prospectively predict and guard against cumulative fatigue. Rosters aren't written according to best fatigue management practices, including on-call time. There are no regular audits of our rosters to ensure compliance. Our culture actively ostracises those who discuss or declare fatigue.

There are no requirements to train doctors, or those who employ doctors, in fatigue management or fatigue recognition. There are no rules forcing doctors to acknowledge work at multiple employers and the effect that this will have on fatigue. In a lot of ways the naysayers are right. We're not like aviation. We're not that smart. Midnight oil is a fossil fuel and we're running out of it. It's time to wake up, smell the coffee and think about your fatigue management before you touch your next patient.

The realities of burnout

BY JESSICA YANG, PRESIDENT, AUSTRALIAN MEDICAL STUDENTS' ASSOCIATION

"I never thought I would say this, but I broke. I give up."

– Dr Yumiko Kadota, The ugly side of becoming a surgeon (February 4, 2019)

Dr Kadota's recent blog post, outlining her gruelling experience as an unaccredited registrar in a New South Wales hospital, has resonated with many doctors and medical students. Perusing the comments on her post reveals a sea of similar experiences, many tracing back to time spent as a medical student.

Medical students report high rates of burnout and emotional exhaustion, with demands of study, clinical contact hours and financial difficulties as the most significant stressors, according to Beyond Blue's National Mental Health Survey of Doctors and Medical Students.

Burnout continues after graduation. Half of all doctors are working hours that place them at risk of developing fatigue and burnout, with this risk being highest for junior doctors.

I recall my own experience on a two-month rotation last year, which required a reasonable 35 hours per week of clinical contact. Then, I added the 20 hours per week studying for the end-of-placement exam, and the 20 hours I worked part-time on weekends to support myself. Taking days off, even for illness, would mean having to remediate those hours on a weekend and having to forgo my weekly income.

To make matters worse, I was placed at a satellite hospital an hour away from our main teaching site, with only one staff member of our medical school trying their hardest to support the dozen students on the rotation.

A month into this placement, I went to the only local GP available after-hours. I was convinced I had developed narcolepsy as I frequently found myself on the verge of falling asleep throughout the day, most worryingly during my hour-long drive to and from the hospital. I never had the chance to go back to confirm a diagnosis. Perhaps I did have a temporary bout of narcolepsy... perhaps I knew it was the stress and lack of sleep, but I wanted a tokenistic title to my fatigue, because I didn't have time for anything else.

By the end of the rotation, I had developed acid reflux symptoms, daily headaches, sleep paralysis and an overwhelming feeling that despite the hours I was pulling at the hospital, I would fail and have to repeat the placement. I passed with a score of 54, a welcome surprise after having been yelled at by an examiner for misreading part of the exam prompt.

This is far from an isolated incident in medical school. 70 per cent of medical student respondents to the AMSA 2017 National Survey found that lack of sleep, financial pressures, and a large academic workload, were major factors contributing to poor mental health. If this is the environment in which we start our journey into medicine, what happens when we have the responsibility of patient safety on our shoulders?

Medical students are hopeful that culture is changing and are keen to be drivers of that change. Representatives from each of Australia's 22 medical schools voted on AMSA's 2019 National Priorities, with *improving medical student mental health and wellbeing* sitting at the top of that list. Medical schools across Australia are listening to feedback and implementing more rigorous support services for their students (see: AMSA's Mental Health Initiatives Guide for Australian Medical Faculties).

Dr Kadota's story is a disappointing but not a surprising reminder to the medical profession that there is still progress to be made.

AMSA is proud to have Dr Kadota as a plenary speaker at the upcoming National Leadership Development Seminar in May. AMSA hopes to normalise discussion on burnout and continue to advocate for the improvement of the working lives of Australian doctors.

Medical indemnity reforms

BY ASSOCIATE PROFESSOR JULIAN RAIT OAM, CHAIR, AMA COUNCIL FOR PRIVATE SPECIALIST PRACTICE

At the height of the indemnity crisis in the 2002, many practitioners faced uncertainty about the future of their practice, with some thinking about leaving the profession all together.

The AMA played a pivotal role in stabilising the industry by bringing the profession together, and working with Government, to design schemes that were more equitable and affordable for practitioners.

> "From an AMA perspective the schemes have been a resounding public policy success and we have advocated strongly that they should be retained largely as they are."

However, these protections looked to be under attack when the Abbott Government's national commission of audit indicated the need to review these schemes in early 2014. Subsequently, the Government cut these in schemes by $36 million in the 2016 Mid-Year Economic and Fiscal Outlook (MYEFO). Around the same time the Government also announced a full review of the schemes – which could have led to further funding cuts and increasing uncertainty for the entire medical profession.

Following extensive lobbying by the AMA, the reviews into the Medical Indemnity Schemes have been focused on maintaining stability, the importance of affordable indemnity insurance and affordable health care, and the precarious international experience of indemnity insurance.

From an AMA perspective the schemes have been a resounding public policy success and we have advocated strongly that they should be retained largely as they are.

In December for MYEFO 2018 19, the Government announced that they were accepting 17 of the 19 recommendations from the Review and maintaining funding at the 2016 levels.

The announcement from Government sees:

- No cuts to the Premium Support Scheme.
- No cuts to the High Cost Claims Scheme.
- Retention of the Run Off Cover scheme.
- A level playing field for Universal Cover arrangements.

The AMA has long been a champion of a secure medical indemnity industry – this is what has given certainty and protected doctors and patients alike for the past 16 years.

Accordingly, the AMA has welcomed this announcement, given that it provides the necessary stability for medical indemnity insurance into the future and allows doctors to continue to practice securely. The only savings arising from this Review will come from removing access to these schemes by non-medical practitioners (such as pharmacists) – a move strongly supported by the AMA.

There are a range of changes to the schemes arising from this review which include:

- The streamlining of administrative processes to modernise the schemes and make them more efficient.
- The maximum risk surcharge for medical practitioners will be limited to three times the premium amount – a positive outcome as a significant increase would have had a detrimental impact.
- The amended legislation will mandate a dispute body for universal coverage to come under the Financial Ombudsman Service, the details of this body will be prescribed in the rules and will mandate that medical practitioners will be on the review panels.

However, as with most Government announcements the real devil is in the detail of the proposed legislative and regulatory changes that will enable the reforms to take place. The AMA continues to work co-operatively with the Commonwealth to ensure that these reforms are limited to this announcement and that they will deliver continuing certainty for the medical indemnity insurance industry.

The Government is still proposing to introduce the required legislative changes to progress these reforms early in 2019 and is planning a meeting in March to discuss the draft amendments. This process will take eight separate pieces of legislation consolidating them into one single Act.

The system is under pressure

BY DR OMAR KHORSHID, CHAIR, HEALTH FINANCING AND ECONOMICS COMMITTEE

The Australian health system is under pressure. Our population is ageing and people are living longer. A boy born in 2016 is expected to live to 80.4 years and girls to 84.6 years. Statistically, people aged 65 years or older are admitted more often and remain admitted for longer than younger cohorts. Australia's population is also growing – on average increasing nationally by 1.6 per cent per annum and estimated to reach 25.2m in 2018. We are also getting sicker. Approximately half of all Australians now have a chronic condition – many have multiple chronic conditions.

Diabetes affects around 1.2 million Australians. Two-thirds of Australian adults are either overweight or obese. Alarmingly, more than 20 per cent of children are overweight or obese. Chronic respiratory disease and lung cancer combined affects seven million Australians (one in three).

There are signs and symptoms our health system is starting to crack under the pressure of an ageing, sicker population and an unrelenting squeeze on funding.

Public hospital performance continues to decline. Work on the 2019 AMA Public Hospital Report Card is underway, and the news is not good. The latest national data shows only 64 per cent of urgent emergency presentations were seen within the recommended 30 minutes and the proportion of patients that complete their emergency presentation within four hours is in decline.

Perhaps one of the most disturbing emergency statistics is the time that very sick patients wait to be transferred from the emergency department to an admitted ward bed. Across all hospitals, in all jurisdictions, Resuscitation and Emergency patients have a slightly better than one in two chance of transitioning from emergency care to a ward bed within four hours. On a bad day if the hospital is operating at over 100 per cent capacity, the very sickest patients categorised as Resuscitation and Emergency could wait 10 or 11 hours before they are transferred to an available ward bed.

Elective surgery performance is also in decline. Nationally, elective surgery waiting lists are growing at a fast rate than elective surgery admissions. In the twelve months to 2017-18 elective surgery admissions per 1,000 population was negative in all jurisdictions except NSW (0.1 per cent) and ACT (1.8 per cent). These statistics don't take account of the time patients wait between the date of their referral to the public hospital outpatient specialist and the date of their specialist appointment (the hidden wait list).

Jurisdictions have started to publish some rudimentary hidden waitlist data, but it is not consistent across States and Territories. The planned AIHW publication on hidden wait lists will be very welcome indeed.

While the most urgent elective surgeries do happen quickly, too often we see media reports of patients waiting too long for their specialist diagnosis and subsequent elective surgery. Many wait in pain. Many wait while their health condition deteriorates, and while they wait their opportunity of an optimal health outcome also diminishes. Waiting too long for public sector elective surgery is especially consequential for children where optimal health outcomes are most likely if treatment is received before physical or developmental windows close.

The original raison d'être of subsidising private health insurance (PHI) was to take pressure off the public hospital system. But this pillar of our health system is also under stress. Since the June quarter of 2015 when PHI membership was at 47.4 per cent of the population, there have been 13 successive drops in membership per quarter. Young healthy members are leaving and over 65s are joining. This creates an older and sicker pool of insured members who are statistically admitted more often and remain admitted longer compared to younger cohorts. An upward spiral in the age profile of the insured population will take premiums with it.

We have a world class health system, in large part due to the skill of the Australian medical workforce, the excellence of our medical researchers and our robust economy. However, it is beyond time that governments act on the clear signs of unmanageable pressures that are mounting on public hospitals. Pressures that must be alleviated at the hospital coal face but also up steam. We need more funding for evidence-based health promotion and chronic disease prevention and more funding for general practice. We need to arrest the declining financial viability in private health before more private hospitals close and premiums become unaffordable for all.

Closing the Gap report not good news

BY AMA PRESIDENT DR TONY BARTONE, CHAIR OF AMA INDIGENOUS TASKFORCE

The AMA is very disappointed that just two of the seven Closing the Gap goals are on track. This is one fewer than last year and is simply not good enough.

The 11th annual Closing the Gap statement highlights the urgent need to adopt the recommendations of the Close the Gap (CTG) Campaign to address the unacceptable gap in health outcomes between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians.

> "The lack of sufficient funding to vital Indigenous services and programs is a key reason for this."

Progress against Closing the Gap is not what we all hoped for. While more Indigenous children are entering early education, improvements to life expectancy, infant mortality, and employment rates are not closing.

After more than a decade, the lack of resourcing and investment in the health and well-being of Aboriginal and Torres Strait Islander peoples continues to see unacceptable gaps across a range of outcomes.

The lack of sufficient funding to vital Indigenous services and programs is a key reason for this.

We support the comments made by Ms Pat Turner, CEO of Aboriginal Community Controlled Health Organisation (NACCHO) who said: "While our people still live very much in third-world conditions in a lot of areas still in Australia ... we have to hold everybody to account."

Closing the Gap targets are vital if we are to see demonstrable improvements in the health and well-being of Aboriginal and Torres Strait Islander people.

The call for a justice target and a target around the removal of Aboriginal children should be considered.

We welcome the decision of the Council of Australian Governments (COAG) to agree to a formal partnership with us on Closing the Gap. This is a historic milestone in the relationship between Governments and Aboriginal and Torres Strait Islander peoples.

The AMA knows that outcomes are better when Aboriginal and Torres Strait Islander people have a say over their lives and matters that affect them.

We support the Coalition of Aboriginal and Torres Strait Islander peak bodies that has formed to be signatories to the partnership agreement with COAG, and for them to share as equal partners in the design, implementation and monitoring of closing the gap programs and policies.

The life expectancy gap is widening, in part because of inequitable expenditure on health, housing, and other issues. The proposed policy agenda will, if fully funded and implemented, provide a pathway forward for an incoming government to achieve tangible improvements in life expectancy and other key health indicators.

This includes support the Coalition of Aboriginal and Torres Strait Islander Peak bodies to progress a formal partnership with COAG on Closing the Gap; and ensuring more Aboriginal and Torres Strait Islander people are employed in the health workforce to ensure that primary health care and prevention measures are culturally safe, to avoid avoidable hospital admissions and premature deaths.

It also includes a $100 million minimum commitment towards a four-year Aboriginal Community Controlled Health Services capacity-building program as seed funding to fill the highest priority service gaps, noting that the amount needed, once fully costed, will be significantly higher and is dependent upon the service gap mapping exercise in the National Aboriginal and Torres Strait Islander Health Plan [Implementation Plan] being undertaken.

A commitment to a 'Good Housing for Good Health' strategy to improve home health and safety for Aboriginal and Torres Strait Islander peoples, including the 'Housing for Health' program to eradicate third world diseases, is also needed.

And systemic racism in the mainstream health system must be addressed by establishing an Aboriginal Health Authority to oversee service delivery, professional training and policy and accreditation processes that impact on Aboriginal and Torres Strait Islander health and health care.

A tale of two doctors

BY AMA VICE PRESIDENT DR CHRIS ZAPPALA, CHAIR OF THE AMA MEDICAL WORKFORCE COMMITTEE

I recently advertised for a full-time private specialist to join our team in Hervey Bay, where a couple of my colleagues and I conduct regular outreach clinics. I know that a new physician joining us would be immediately greeted with full books. The lifestyle is fantastic, the schools are very good and it's only a short commute to Brisbane. Still, no one is applying!

I honestly do not know what the problem is. Numerous advertisements have gone unanswered. We recently received an application from an overseas trained doctor who was in the process of completing his supervision and training period with the College to gain specialist registration. The hospital and I worked with this doctor for several months. Then he unexpectedly pulled out and is now somehow working full-time in the centre of a capital city. This is concerning when Australian trained physicians in some metropolitan areas are already scratching for a living.

By contrast, another physician colleague has completed his supervision period and now works (with his doctor wife) in a regional public hospital providing a vital service to the community. He is happy and the community has access to two highly-skilled medical professionals. The two doctors in these stories share many similarities: both have families, are of similar ages and were trained overseas, yet one ended up in a regional public hospital and one ended up in one of Australia's major cities competing with fourteen other like physicians at the same institution. It shines a light on the immigration of doctors and how effective (or ineffective) it is in filling the gaps of maldistribution.

In the regional centre I alluded to above, I noted the dearth of FACEMs in both the public and private emergency departments despite there being widespread agreement, including by the Commonwealth Government, that this specialty is in substantial over-supply. Interestingly, there were quite a few GP proceduralists in the emergency departments. This is fine, but I do wonder if that is exactly what the National Rural Health Commissioner envisages for his national rural generalist pathway graduates. No matter how we conceive of programs, doctors will always practice where and how they want – which so far is not helping us solve the maldistribution problem. Current solutions leave us dangerously exposed to more short-sighted role substitution or nefarious workforce solutions that rebound badly on the profession as a whole.

The AMA has proposed regional training networks as a potential solution, but I perceive we have not quite developed this hugely valuable concept fully. We need training to be focussed in regional areas with occasional attachment into the city, not the other way around. It is critical that the bureaucratic need for service delivery is conceptually separated from training requirements and workforce supply. Moreover, if we truly believe in specialist generalism (accepting that the rural generalist pathway will progress GP generalism) we need to foster additional acquisition in general specialty qualifications without compelling registrars to do dual training. For example, a general physician who can proficiently and expertly perform echocardiograms would be an incredibly valuable asset to many communities, while making the job more enjoyable and attractive to junior doctors considering their career.

General physicians and surgeons who can perform upper and lower scopes are not unusual, but we could be encouraging it more. They are definitely preferred to nurse endoscopists. There are international examples we could emulate: in the USA respiratory physicians do their own right heart catheter studies. We should encourage the Colleges to do more to make generalism a more appealing and diverse specialty for selected individuals based in regional training networks with a rural focus. We know that doctors who train (particularly at the end of the training) in rural and regional areas are more likely to remain there, so let's build these networks to encourage this.

Lastly, I perceive for non-GP specialists that the attraction of regional work depends on having a combined appointment to the public and private systems. While advertising for a physician in Hervey Bay I contacted management within the district and within Queensland Health to plead for funding for two or three sessions only so we could attract a full-time specialist to the region (remember Medicare billing would have helped to offset the salary costs). I got no help – in a region where the closest single respiratory and sleep physician is a full-time private physician 120km away and beyond this you need to travel for another 150km or so to reach another. There was no real risk here in funding the sessions I asked for to get a physician into the area for both the public and private system, yet I received no support. What are our local health district and services there for if not to take these small, measured risks to build a broader, credible service for the community? Too much managing up instead of managing down!

It strikes me that sometimes non-medical managers are happier to fund role substitution models than even pay for two or three sessions for a doctor. Perhaps our largest hurdle in solving the maldistribution problem is to have the States, Territories and Commonwealth work cohesively together (and with us) in the provision of regional training and appropriately remunerated employment opportunities in both the public and private sectors. Apparently small hurdles remain colossal impediments.

Research

BY CHRIS JOHNSON

Semi-identical twins in Queensland

In a world first, researchers from UNSW Sydney and QUT have used genetic testing to detect semi-identical twins during pregnancy.

Young Queensland twins, a boy and a girl, have been identified as only the second set of semi-identical twins in the world – and the first to be identified by doctors during pregnancy.

The twins, who are identical on their mother's side but share only part of their father's DNA, are the first case of semi-identical, or sesquizygotic, twins identified in Australia. They are the first worldwide to be diagnosed on genetic testing while still in the womb.

Fetal medicine specialist and Deputy Vice-Chancellor (Research) at UNSW, Professor Nicholas Fisk, and QUT clinical geneticist and Diagnostics Genomics course coordinator Dr Michael Gabbett, identified the twins in the paper *Molecular Support for Heterogonesis Resulting in Sesquizygotic Twinning*, published in the *New England Journal of Medicine.*

The now four-year-old boy and girl twins share 100 per cent of their mother's genes, but are like siblings on their father's side, sharing a proportion of their father's DNA.

"It is likely the mother's egg was fertilised simultaneously by two of the father's sperm before dividing," said Professor Fisk, who led the fetal medicine team that cared for the mother and twins while based at Royal Brisbane and Women's Hospital in 2014. Professor Fisk, a past President of the International Fetal Medicine and Surgery Society, worked alongside clinical geneticist Dr Gabbett.

"The mother's ultrasound at six weeks showed a single placenta and positioning of amniotic sacs that indicated she was expecting identical twins. However, an ultrasound at 14 weeks showed the twins were male and female, which is not possible for identical twins."

Identical twins result when cells from a single egg fertilised by a single sperm divide into two, so identical twins are the same gender and share identical DNA. Fraternal twins occur when each twin develops from a separate egg and the egg is fertilized by its own sperm.

Dr Gabbett said if one egg is fertilised by two sperm it results in three sets of chromosomes, one from the mother and two from the father. Three sets of chromosomes are typically incompatible with life and embryos do not usually survive.

"In the case of the Queensland sesquizygotic twins, the fertilised egg appears to have equally divided up the three sets of chromosomes into groups of cells which then split into two, creating the twins," Dr Gabbett said.

"Some of the cells contain the chromosomes from the first sperm while the remaining cells contain chromosomes from the second sperm, resulting in the twins sharing only a proportion rather than 100 per cent of the same paternal DNA."

Sesquizygotic twins were first reported in the US in 2007. The twins only came to doctors' attention in infancy after one was identified with ambiguous genitalia. On investigation of mixed chromosomes, doctors found the boy and girl were identical on their mother's side but shared around half of their paternal DNA.

Professor Fisk said an analysis of worldwide twin databases pointed to just how rare sesquizygotic twins are.

"We at first questioned whether there were perhaps other cases which had been wrongly classified or not reported, so examined genetic data from 968 fraternal twins and their parents," he said.

"However, we found no other sesquizygotic twins in these data, nor any case of semi-identical twins in large global twin studies."

At age four, the twins are healthy and have achieved all their development milestones.

"We know this is an exceptional case of intermediate twins, also known as a third type of twinning. While doctors may keep in mind that these types of twins are extremely uncommon, its rarity means there is no case for routine genetic testing," Professor Fisk said.

Research

Link found between brain size and body fat

The size of your brain's pleasure and reward processing sensors could be behind increased body fat in adolescents and potentially obesity later in life, new research by Monash University has found.

Published in *Nature Scientific Reports*, the study results showed there was a strong link between body fat and size of the *nucleus accumbens (NAcc)* – also known as the 'pleasure centre' of the brain – in adolescents.

An individual's body fat percentage was also found to correlate with the size of their *medial orbitofrontal cortex (OFC)* – a region at the front of the brain that is involved in reward processing of food cues.

As our brains become accustomed to the high rewards from impulsivity – the tendency to act on a whim without consideration of the consequences – body fat acquired from adolescence could develop into obesity with age due to a lack of behavioural change.

Led by Dr Naomi Kakoschke from the Monash Institute of Cognitive and Clinical Neurosciences (MICCN), this is one of the first studies in the world to examine the link between excess body fat and brain health in adolescents and adults.

Co-authors of the study included Professor Antonio Verdejo-Garcia, also from MICCN, and Dr Valentina Lorenzetti (School of Psychology) and Associate Professor Karen Caeyenberghs (Mary MacKillop Institute for Health Research) from the Australian Catholic University.

"We know that both reward-based learning and executive control are compromised in people who are overweight or obese. People with excess weight show heightened responsivity to highly palatable food cues, such as television commercials for food, and less ability to control those unhealthy urges," Dr Kakoschke said.

The study examined the association between body fat (an index of weight severity), impulsivity (a vulnerability factor for obesity) and brain structure in 127 people across the body mass index (BMI) spectrum. It also provides initial evidence of the link between BMI and NAcc volumes among adolescents using body fat as an indicator of obesity.

Findings showed that body fat was up to three per cent higher in adolescents who had a larger left NAcc than similar people in their age bracket. The volume of an individual's left medial OFC was also positively associated with an increase in body fat due to the role it plays in reward and emotion processing.

Previous research in children demonstrates that responsivity to food advertisements and higher NAcc volume are associated with genetic risk for obesity and higher body fat composition.

This also supports the early formation of unhealthy eating behaviours due to a combination of enhanced reward-related sensitivity in the striatum and impulsivity-related alterations in the structure of the prefrontal cortex.

"We know that excessive body fat accumulation increases the risk of developing chronic health conditions including cardiovascular disease, Type 2 diabetes and dementia, but we need to look at how the workings of our brain play a part in this body fat gain," Dr Kakoschke said.

"Studies have repeatedly shown that reward sensitivity is elevated in people with obesity, particularly for those with binge eating disorder. We hope future studies can point to brain health as being a more accurate indicator of body composition and body fat than BMI."

New research finds death rate higher for autism

The comparative mortality of people with autism spectrum disorder is twice that of the general population, an Australian-first study by a UNSW PhD student and her supervisors has found. The researchers call for a whole of health and disability systems response to this issue to improve outcomes for this group.

In the big data study, the researchers analysed large linked datasets on death rates, risk factors and cause of death of 36,000 people on the autism spectrum in NSW. The results

Research

were published in *Autism Research*. The study was funded by the Cooperative Research Centre for Living with Autism (Autism CRC).

"Our key finding is that people on the autism spectrum have elevated mortality across the lifespan – their overall comparative mortality rate is about twice that of the general population," said Professor Julian Trollor from UNSW Medicine and Chair of Intellectual Disability Mental Health.

"This is of course of great concern. While we only looked at NSW data, we'd expect to find the same patterns nationally.

"It's important to note the results do not point to elevated mortality for autistic people as a result of their being on the spectrum. Rather, the results indicate there needs to be a greater understanding of autism and co-occurring conditions within the health services sector, and that more equitable access to health services needs to be a priority for government and health service providers."

The study also identified factors that influence mortality risk.

"Risk of death was associated with autistic people's health needs – people with co-occurring conditions such as chronic physical illness, epilepsy and mental health conditions were at a higher risk of death. People who also had an intellectual disability had a higher risk, too.

"These insights are helpful because targeted strategies can be developed for those at higher risk.

"Unexpectedly, and different to the general population, we didn't find demographic factors such as gender and socioeconomic status to be predictors of risk of death."

The team also found that the top causes of death were different for people on the autism spectrum.

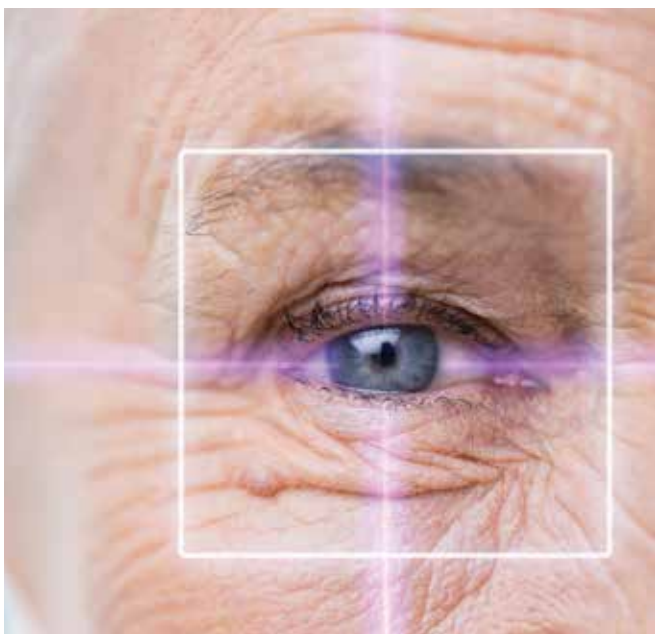
The team says they now want to take the analysis of the data further.

"While the top causes of death in the general population were cancer and circulatory diseases, for people on the spectrum we found that injury and poisoning – which includes accidents, suicide and deaths related to self-harm – was the single biggest cause of death, with nervous system and sense disorders (such as epilepsy) a close second," Professor Trollor says.

"Combined with the information about mental health being a risk factor for death, the higher proportion of deaths from injury and poisoning may point to unmet mental health needs that this group is experiencing. Overall the high risk of death in people on the autism spectrum is a troubling indicator of the range of health inequalities experienced by this population.

"Wed like to be able to take this data and work back to understand the broader health requirements and unmet needs of this group. More resources would allow us to analyse health service use, health conditions and outcomes of people on the autism spectrum – not just focusing on death but also on overall health and pathways."

Good news for glaucoma patients



The future looks brighter for Australians with glaucoma.

Recent advances in surgical treatment and upcoming improvements in drug delivery are likely to improve treatment adherence and efficiency for people living with glaucoma, according to the authors of a narrative review published in the *Medical Journal of Australia*.

Glaucoma is an irreversible progressive optic neuropathy for which the major proven treatment is to lower intraocular pressure (IOP). It is the most common cause of preventable blindness in the world, and the prevalence in Australia is estimated at three per cent, with perhaps half of that patient population unaware they have the disease.

Current management involves medical therapy (predominantly IOP-lowering eye drops), laser or surgery, depending on the underlying cause and stage of the disease.

Research

However, according to the review authors Professor Ivan Goldberg, Head of the Glaucoma Unit at the Sydney Hospital and Sydney Eye Hospital, and his colleague Dr Jed Lusthaus, compliance with eye-drop treatment is one of the toughest challenges in the management of glaucoma.

"Even in a study in which patients knew they were being monitored with an electronic device, they did not consistently take their drops in 45 per cent of cases," the authors wrote.

"There are multiple reasons for reduced treatment adherence, including medication side effects, poor understanding of treatment aims, poor instillation techniques (including physical barriers; eg, arthritis and tremor), and cost.

"IOP-lowering eye drops have evolved to improve adherence rates. There are now many commercially available fixed combination eye drops, which enable two agents to be instilled with a single drop ... improving convenience and thus adherence."

The latest surgical intervention techniques are becoming less invasive and are therefore being used earlier in management of the disease, the authors wrote.

There are novel drug delivery systems now in clinical trials, including drug-eluting punctal plugs, conjunctival ocular ring inserts, subconjunctival injections and implants, and intracameral implants.

The role of non-specialists, particularly GPs, is emphasised.

"Encouraging all patients to regularly seek review by an eye care professional every one-to-two years from 50 years of age facilitates earlier detection and treatment," they wrote.

"Risk factor identification in the context of increasing age should raise suspicion for glaucoma. These risks include family history, obstructive sleep apnoea, vasospastic syndromes (migraine, Raynaud phenomenon), systemic hypertension, and diabetes mellitus.

"Health care professionals, particularly general practitioners, can assist by encouraging management adherence."

Promising biomarker for vascular disease relapse revealed

Researchers at Okayama University, Japan report in the journal *Arthritis & Rheumatology* that monitoring a particular antigen can be used for predicting relapse of the vascular disease antineutrophil cytoplasmic antibody-associated vasculitis (AAV).

When a bacterial or viral pathogenic molecule is detected, an antibody neutralises it by binding to it. However, autoantibodies are sometimes produced against our own protein and cause autoimmune diseases.

For the autoantibody known as ANCA (antineutrophil cytoplasmic antibody) cause ANCA-associated vasculitis (AAV), at least two antigens exist: proteinase 3 and myeloperoxidase (abbreviated as PR3 and MPO, respectively).

Assistant Professor Haruki Watanabe and Associate Professor Ken-Ei Sada from Okayama University and colleagues have now investigated whether MPO-ANCA can be used as a biomarker for the relapse of AAV, a blood-vessel inflammation disease. The researchers' findings suggest that monitoring MPO-ANCA is useful for predicting relapse in patients with AAV.

The scientists looked at data for 271 MPO-ANCA-positive patients who had achieved remission (disappearance of the signs and symptoms) of AAV during six months after therapy was started. Levels of MPO-ANCA were measured at several times in a two-year period.

Assistant Professor Haruki Watanabe and Associate Professor Ken-Ei Sada from Okayama University and colleagues found that for 72 per cent of the patients, MPO-ANCA levels decreased to normal within six months after therapy began.

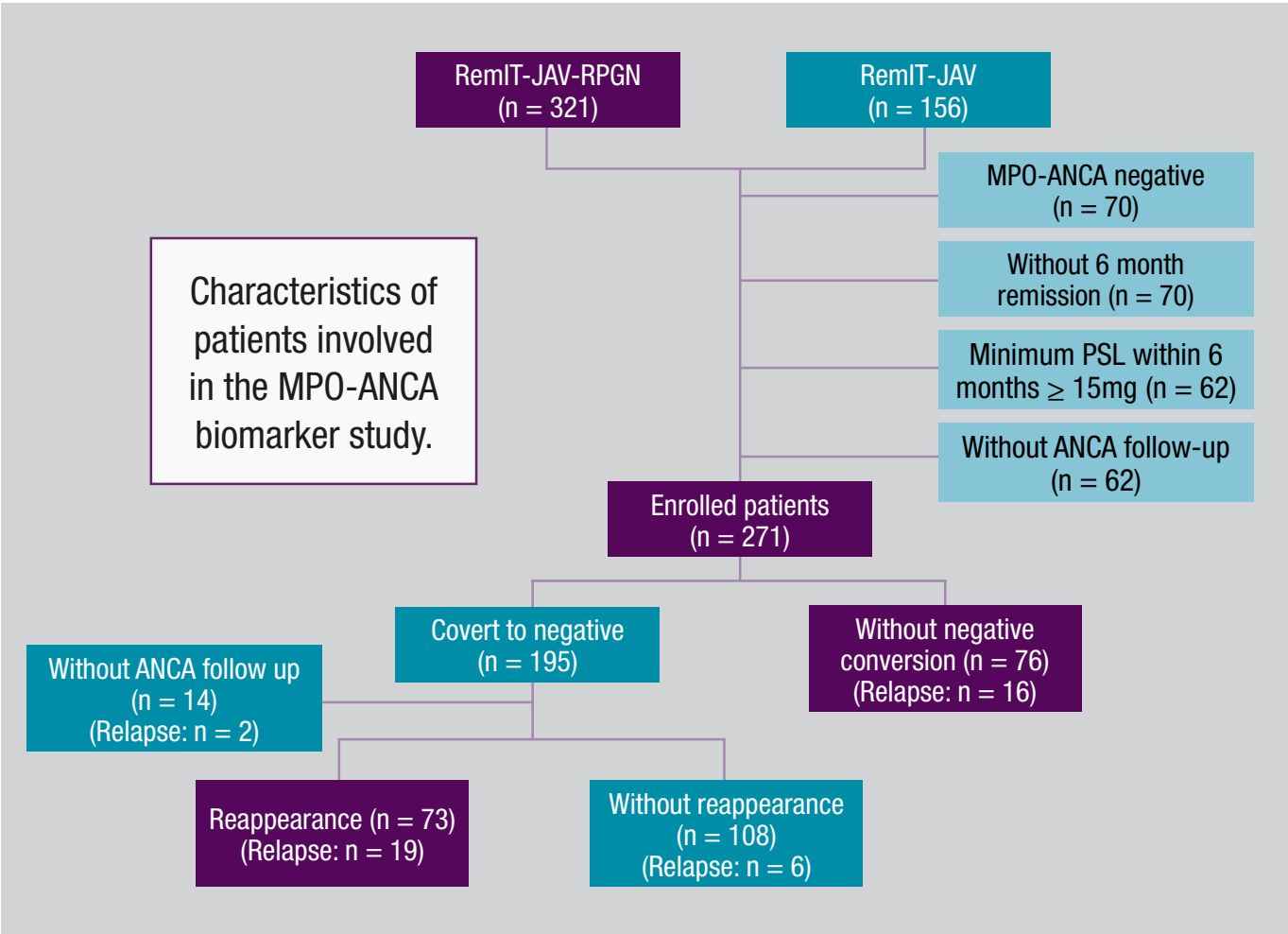
MPO-ANCA reappeared for 40 per cent of the patients for which there were complete follow-up data; this reappearance was associated with a relapse occurring simultaneously or later. The researchers therefore concluded that reappearance of MPO-ANCA is a promising marker for AAV relapse.

Assistant Professor Haruki Watanabe and Associate Professor Ken-Ei Sada from Okayama University and colleagues found indications that MPO-ANCA reappearance could be particularly useful as a biomarker for relapse of AAV with kidney involvement (renal AAV). Since only four patients without renal involvement experienced relapse, a larger study would be necessary to establish any link between MPO-ANCA reappearance and relapse of non-renal AAV.

The researchers point out that their study has some limitations: the data were obtained earlier, in the context of other investigations, and different participating institutions used different analytic procedures for qualitatively assessing ANCA content.

Nevertheless, the study was the largest so far, and also the first

Research



with case–control analysis (based on comparisons of patients with and without the disease relapse). Professor Watanabe and colleagues conclude that for patients recovered from MPO-AAV: "Routine MPO-ANCA monitoring should be implemented (to predict possible relapse)."

Background

Antineutrophil cytoplasmic antibody-associated vasculitis (AAV) refers to a set of diseases (granulomatosis with polyangiitis, eosinophilic granulomatosis with polyangiitis and microscopic polyangiitis), the characteristics of which are destruction and inflammation of small blood vessels. Clinical signs vary, and different organs can be affected, including kidneys, stomach, and lungs.

The study has now shown that for patients having had AAV, monitoring the presence of an antigen known as MPO-ANCA should help to predict AAV relapse.

Okayama University is one of the largest comprehensive universities in Japan with roots going back to the Medical Training Place sponsored by the Lord of Okayama and established in 1870. Now with 1,300 faculty and 13,000 students, the University offers courses in specialties ranging from medicine and pharmacy to humanities and physical sciences. Okayama University is located in the heart of Japan approximately three hours west of Tokyo by Shinkansen.

BY CHRIS JOHNSON

Got the message? Get rid of pagers

Britain's Secretary of State for Health and Social Care, Matt Hancock, is putting a bounty on pagers.

Well, not quite. But he is outlawing them in hospitals.

All National Health Service (NHS) trusts have been ordered to phase out the use of pagers so they are not used at all by the end of 2021. To make sure this happens, the hospitals must produce their plans and have infrastructure in place by September 2020.

The Conservative Party MP insists that it's long past time for hospitals to step into the 21st century and use modern technology. Staff will be required to use mobile phones and apps instead of the outdated pager system.

Mr Hancock says modern technology is a more accurate, reliable and cost-effective way for hospitals to communicate with their staff. In December last year, he banned the use of fax machines in NHS hospitals.

"Every day, our wonderful NHS staff work incredibly hard in what can be challenging and high-pressured environments," Mr Hancock said.

"The last thing they need are the frustrations of having to deal with outdated technology – they deserve the very best equipment to help them do their jobs.

"We have to get the basics right, like having computers that work and getting rid of archaic technology like pagers and fax machines. Email and mobile phones are a more secure, quicker and cheaper way to communicate which allow doctors and nurses to spend more time caring for patients rather than having to work round outdated kit.

"We want to build a health and care service which is fully able to harness the huge potential of technology. This will save lives, support hard-working staff and deliver the cutting-edge care set out by our Long Term Plan for the NHS."

In 2017, a pilot project was carried out at West Suffolk NHS Foundation Trust, which is in Mr Hancock's constituency and is one of the NHS's Global Digital Exemplar sites.

The results of the pilot are reported to have saved junior doctors an average of 48 minutes per shift and nurses 21 minutes per shift.

Ebola attacks in Congo

Aid group Doctors Without Borders suspended its work in the Democratic Republic of Congo following two separate attacks on its Ebola treatment centers there.

"When I send my teams I need to be sure that they are going to come back alive," said Emmanuelle Massart, the on-the-ground emergency coordinator for Doctors Without Borders in the region.

"The attacks were really, really violent."

In the first attack, up to 100 men converged on a treatment center in a rural suburb of Katwa.

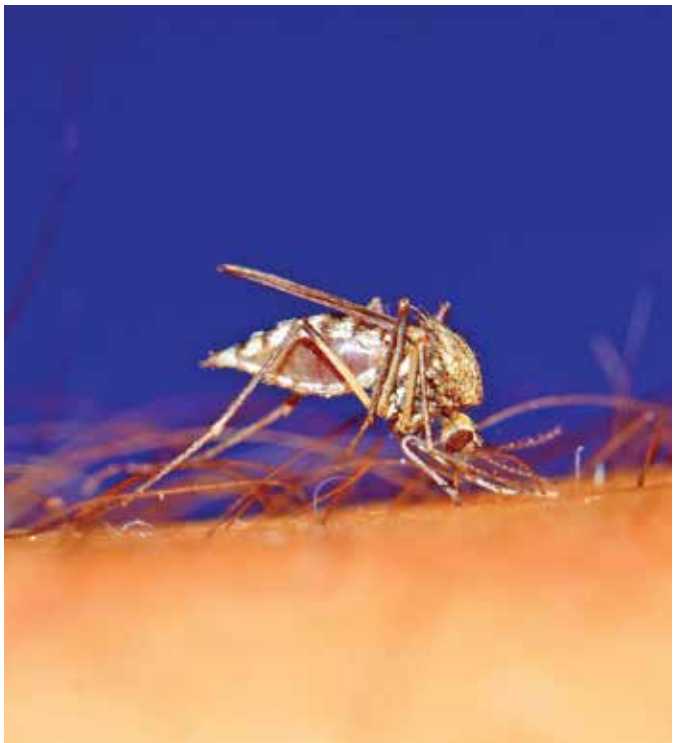
They started by throwing stones and then set fire the centre and some cars.

Just days later, another attack took place at another nearby treatment center in the city of Butembo. In that attacks, a car was used to ram the centre's gate and the attackers started shooting guns.

When police arrived, the attackers fired at them in a half-hour gun battle in which one police officer was killed.

Patients being treated fled the centre, with some remaining at large and infected by the deadly disease.

Zika down in Brazil, but caution still advised



The Brazilian Government has declared an end to the state of emergency over the Zika virus, but other nations are still urging travellers to the massive South American country to be cautious.

UK health authorities still warn of a "high risk of Zika virus transmission" and the World Health Organisation still classifies Brazil as an "Area with new introduction or re-introduction with ongoing transmission" of the virus.

There is no vaccination or medication to prevent the mosquito-borne disease, which has symptoms similar to dengue fever and causes aching joints and headaches. It is rarely life-threatening and only one in four people infected actually develop symptoms.

latest studies also suggest that people who have previously contracted dengue fever might be less likely to be infected by Zika.

It is most threatening to pregnant women, whose foetuses can be severely affect by the virus.

The Brazilian outbreak began in 2015, causing the Government to implement a mosquito eradication program. It claims huge success from the campaign and says the number of Zika virus cases is now down by 95 per cent from the number in 2016.

Deadly measles and plague outbreaks in Madagascar

Almost one thousand children and young adults in Madagascar have died from measles since October last year, according to the World Health Organisation.

By the end of February, the official death toll was 922 and rising.

This is despite emergency vaccination programs having been implemented in the face of an outbreak.

WHO's Dr Katrina Kretsinger said the current total cases of infection stood at 66,000.

She said an emergency response vaccinated 2.2 million of the 26 million population. Some of those young people had previously been vaccinated but had only received one shot, and so were given the more standard second booster jab.

Madagascar, an island nation in the Indian Ocean, is one of Africa's poorest countries. In 2017, only 58 per cent of the population had been vaccinated against measles.

Adding to the current spread of the disease, however, is that there had not been a big measles outbreak in the country since 2003 and so few immunities had been developed in the population.

Madagascar health authorities now plan to make a two-dose vaccination against measles standard practice. A program will be introduced this year.

But the small nation is also infected with an outbreak of pneumonic plague, recording 124 deaths since August and a total of 1,231 infections.

Plague – both pneumonic and bubonic – is endemic to some parts of Madagascar, but the current outbreak has reached heavier populated areas and cities where normally it doesn't.

This has sparked growing concern for the disease's spread. The WHO has sent teams to Madagascar to help with disinfecting and cleaning populated areas in an effort to halt the spread any further.

Another chapter in global health security

A health worker puts on protective equipment at an Ebola treatment center in Bunia, Democratic Republic of the Congo. (© John Wessels/AFP/Getty Images)

The United States has pledged $150 million to help high-risk countries build their capacity to guard against global disease threats such as the Ebola virus.

The United States' $150 million contribution is on top of more than $1 billion committed by the US Government since 2014 to help 17 high-risk countries prevent, detect and respond to infectious disease outbreaks.

These efforts are part of the Global Health Security Agenda (GHSA), which aims to ensure all countries can prevent, detect and respond quickly to outbreaks of infectious diseases.

"The United States supports GHSA 2024 at the highest levels of our Government," US Health and Human Services Deputy Secretary Eric Hargan said in 2018 when he announced the contribution at the Global Health Security Agenda Ministerial Meeting in Bali, Indonesia. World leaders had gathered there to launch the Global Health Security Agenda 2024.

The meeting reaffirmed members' support for continued collaboration on global health security, Mr Hargan said. He also emphasised "significant interest and participation" from the US private sector.

GHSA 2024 continues a global partnership that launched in 2014. The partnership addresses the need for close collaboration across borders and sectors to make the world safe from infectious diseases. Thanks to these efforts, international organizations, nongovernmental partners and more than 60 countries are working together to prevent, detect and respond to disease threats across the globe.

Recognising there is more work to be done, the original Global Health Security Agenda was extended by five years, to 2024. GHSA 2024 aims to build on past accomplishments and create measurable improvements in health security in more than 100 countries by 2024.

According to the recent progress report, these investments have paid off. Supported countries were largely able to take the lead in responding to more than 25 reported public health emergencies last year.

Yet, as Mr Hargan is quick to point out, challenges remain. Meeting these challenges and safeguarding against global disease threats will be the continued focus of GHSA 2024 and beyond.

This article was written by freelance writer Toby Merkt for *ShareAmerica*, the US State Department's content sharer.

dp Learning

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Beethoven meets the bush at Easter

BY CHRIS JOHNSON

With Easter fast approaching, some turn their minds to holiday destinations where live music can be enjoyed. And the Easter long weekend provides a number of music festival opportunities around the country.

There is Bluesfest at Byron Bay and the National Folk Festival in Canberra – both promising the best of times offering world class entertainment in their respective genres. Either would be a great way to spend Easter.

But let's talk about another, very special music festival spanning the Easter long weekend – the Four Winds Festival.

This one is also world class and it's set in the most tranquil and scenic locations one can imagine.

It is a classical music festival in and around Bermagui on the picturesque NSW south coast.

And when they say classical ... it offers the perfect blend of truly classical classics and contemporary interpretations of the music.

The festival's Artistic Director is world renowned classical accordionist James Crabb. He explains his vision for this year's Four Winds.

"Top of my mind is the audience experience," he says.

"There is no doubt that the Four Winds Festival is a wonderful escape from our everyday lives. We come together with likeminded people and enjoy many hours of quality music with friends, in the most exceptional location amongst nature.

"But, believe me, that beautiful experience can be lessened if the program presented doesn't consider what the audience is going to experience musically. Like a good meal, it's all about balance, combinations of flavor and getting just enough of the unexpected to surprise us and leaving us wondering where we can get more.

"I'm also very conscious that the audience is musically interested, but may not know about some of the music being presented at the festival. So, part of the art of being the Artistic Director is explaining the music to the audience, giving them a sense of what to expect and how to receive the music, particularly if its less well known. For me the opportunity to share a sense of discovery with the audience is incredibly rewarding and I strive to make sure they go away having experienced something new, that they had no idea they were going to love.

"The other key aspect is working with the artists to encourage them to try new collaborations or to perform new repertoire in the context of the festival – which always generates inspired creativity and excitement, while also giving them a platform to share the repertoire they are truly passionate about or particularly known for."

Over four days, the festival centres around two full days of music on Saturday and Sunday on the main Sound Shell amphitheatre nestled within 30 acres of bushland at Barragga Bay just south of Bermagui.

But there is plenty more at numerous other locations, from the free Friday Night concert on the oval in Bermagui, to a string of more intimate house and pavilion concerts around town and beyond.

For anyone wanting to go from the nation's capital, there is a bus service for the first time this year, running from Canberra to Bermagui.

The line-up at this year's Four Winds is outstanding. Check it out at http://fourwinds.com.au/ and enjoy some great music over Easter, at whichever festival you end up at.

Discovering the *real* Bali on bike

BY CHRIS JOHNSON

Traipsing through someone's house as an itinerary stop on a day tour is a little disconcerting. It is especially so when you are enthusiastically encouraged to inspect how the occupants live. A little less so once you realise the payment they receive for opening their homes amounts to a significant boost to their income. More on that soon.

Bali is Bali and Australians usually either love it or leave it well alone. We do have a special relationship with the Indonesian island. It is close enough for a quick, cheap holiday and inviting enough for some fun on the beach and at its numerous nightspots.

Beyond the water sports, bargain hunting, resorts and bars, however, there is a vibrant arts and cultural scene that many visitors embrace.

Beyond that, there is what is often referred to as 'the real Bali'.

The real Bali might be more elusive than actually real but making any kind of effort to leave the bustling tourist traps behind and spend some time exploring rural neighbourhoods away from the beaches can be a rewarding experience.

Doing it on bicycle makes it a whole lot of fun.

There are a number of small companies offering Bali bicycle adventures. All of them do a decent job of providing a good glimpse into how locals live, work, worship and rest. Their itineraries are remarkably similar to each other, so you can't really go wrong with whichever touring company you choose.

And it is all done by passing through the heart of some of Bali's most spectacular scenery.

En route to the starting point, a driver will take you to a working coffee plantation not too far from Ubud where you get to drink a very tasty blend that can only be brewed after a particular coffee bean is eaten and excreted by a civet cat ... yum.

Then a late breakfast high up one side of Mt Kintamani that comes complete with a stunning view of the active volcano Mt Batur and its gorgeous namesake crater lake. That spot is hard to leave, but it is where the pedalling begins.

Because it is high up already, there's not much pedal pushing to be done. It's a downhill ride that is extremely enjoyable.

In a small group with a tour guide out front ("no one go ahead of me ok?") cyclers pass by jungles, bamboo forests and rice paddies, and through quaint villages and traditional compounds. All along the route, stops are made for the purposes educating the group in the ways of the locals.

Walking through the paddies and around temples is part of the experience, as too is meeting a real farming family and having a dig around their compound home.

I was struck by the dignity of the matriarch who greeted us. The polished tiles of her home's entrance (no doubt paid for by the tour companies who bring their travelling guests by for a visit), belied the starkness of the cramped and bare living quarters inside. Children sat on the porch helping their mothers craft traditional baskets and bags. Everyone seemed happy and were delightful to interact with.

We were invited to inspect their home, their farmyard animals, their place or worship – all of which was nestled together in a compound where at least three generations cohabitated.

It did feel a little weird – invasive even – gazing down on their rustic, basic beds and uncovered floors. But they seemed happy to have us there – if only for the fees they are paid by the touring companies and the money we tourists give them for their crafts and photos.

Once you accept that, the stop becomes an enriching encounter.

Then it's more cycling through villages and ever-changing landscapes before reaching the final destination a few hours down the mountain from where it all began. After loading the bikes onto trailers, your driver whisks you off to a local restaurant for a traditional 'late' lunch.

The bicycle tour itself lasts about four hours, but with the chauffer drive to and from whichever beachside hotel you're staying at, you need to allow a whole day.

And it is a day to remember. One which will give a whole new meaning to the words "I've been to Bali too".

Reefer Madness?

BY DR CLIVE FRASER

It's been two years since the prescribing of medicinal Cannabis became legal in my home state of Queensland.

Undoubtedly the legislation and its implementation have not been without controversy.

Patients in Queensland cannot lawfully 'smoke' their prescription Cannabis.

It is also illegal to drive with any detectable trace of THC.

There are no psychiatric indications for the use of medicinal Cannabis, but I know a lot about it from my clinical experience with recreational users.

They prefer to smoke it because it is poorly absorbed orally.

They also often add tobacco to prolong their enjoyment and unwittingly increase their dependency risk.

Roman Catholic missionaries introduced tobacco to India in the 16th Century AD and it wasn't long before enterprising Indians had invented a device called a Hookah.

Cigarette papers hadn't been invented and a multi-stemmed Hookah could let users share their enjoyment of a smoke.

The water filter added to the ceremony of the ritual, but did nothing to filter out toxins, carcinogens and the like.

Oh, and a Hookah was also just the device you needed to smoke your Cannabis or Opium, as you do.

And it was a modern day Hookah that I would need to fix my car which has stubbornly stayed in limp-home mode since last month's column.

Readers will recall that my car's On-Board Diagnostic reader had detected a leak on the intake side of my diesel motor.

Such a leak would prevent my turbo-charger from adding an extra 6 to 8 psi of boost which is about 0.5 Bar.

More importantly a tiny air leak would cripple my engine by not permitting it to rev or accelerate so that all that my car could do is 'limp home'.

I'd done my best to find the air leak by inspecting every hose and joint, all to no avail.

But filling my intake pipes with pressurized smoke might help me find the leak.

My home-made Hookah was made from a spray gun filled with baby oil heated by a Nichrome wire attached to my car battery.

The hot wire vaporized the baby oil which poured out of a pipe at the top.

I momentarily thought of taking a drag from the aforesaid smoking pipe as so many of my patients would, but the psycho-active effects of vaporized baby oil are not well-described.

Besides that the smoke was there for a reason, to find my leak, and I wasn't wasting any of it.

Low and behold smoke was pouring from my air filter box through a big drain hole in the bottom.

But the air cleaner wasn't usually pressurised and the hole was there to let water drain if I drove through a puddle.

After a lot gaffer tape and more smoke I found a tiny pinhole in the pipe between the intercooler and the intake manifold.

The pinhole was on the under-surface of the pipe and there was no way that I would have ever seen it otherwise from above.

The pipe was flexible and made out of some sort of modern version of rubber.

Oily air is scavenged from the top of the motor and transferred to the intake manifold via these pipes.

The oil tends to lie on the bottom surface of the pipes and rots the rubber, eventually forming a hole.

Very astute mechanics know to listen for the slightest hissing sound from these tiny leaks.

A new hose and a computer re-set meant that my car was out of limp-home mode!

Success, at last, until I switched my car off and saw the engine light back on the next day.

To be continued.

Safe motoring,

Doctor Clive Fraser

doctorclivefraser@hotmail.com

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