Building resilient healthcare organisations in Australia:

Innovation, data and security

Celebrating
100 Years in Australia
Est.1922

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HEALTH SERVICES
by **RSM**

1922–2022:
RSM and a century of Australian healthcare

"Money spent in improving the health of the community is the very best and wisest investment we can make. Everyone knows from personal experience how the quality and quantity of the work we do is affected by the state of our health."[1]

Billy Hughes, on the campaign trail in 1922 and Australia's PM from 1915–1923

In 1922, an emaciated five-year-old named Phyllis Adams became the first Australian to receive an insulin injection. As dietary restrictions were the only known way to treat Type 1 diabetes, she had survived for eight months on just a teaspoon of peanut butter, a lettuce leaf and a glass of junket a day while Canadian researchers tested their discovery of insulin on dogs.

Finally ready for human use, the precious vials of insulin crossed the ocean and Phyllis, who weighed just 10 kg by then, received her first injection on a pier by Sydney Harbour. She was then given half a Sao biscuit which she remembered as one of her greatest ever meals, according to her son.[2]

We can speculate that the ship bearing Phyllis's life-saving insulin may have docked in Perth as it made its way from Toronto to Sydney. Though there was no fanfare, something new was happening there too. On 27 March 1922, Edgar Robert Woolcott began the company that would become RSM Australia.

Instead of asking his clients to come into the city, he took the unusual step of visiting the customer. Doing the work at the client's shop, farm or practice gave him a deeper understanding of their needs and enabled Woolcott's business to grow consistently over the coming years. That relational ethos has stayed with RSM, helping us to provide tailored advice that reflects each client's values and goals.

A century of Australian healthcare

Phyllis's harbourside injection was a fitting start to a century of innovations that saw Australians receive eight Nobel Prizes for physiology and medicine and invent the cochlear implant, the HPV vaccine, sunscreen, embryo freezing, flu antivirals and the medical application of penicillin.[3]

Despite initial predictions that insulin would only give her a few more years, Phyllis herself lived to see many of those developments. She died in 1998 at the age of 81, having spent a record 76 years of her life using insulin.

In the 20+ years since Phyllis died, diabetes care has advanced at a rapid pace. Gone are the rigid diets, daily urine tests and insulin derived from slaughtered cattle and pigs. Today, we have biosynthetic insulins and the high-tech precision of closed-loop insulin pumps and continuous glucose monitors.

Today's healthcare spending involves many other things that could not have been imagined in 1922 such as genetic screening, COVID-19 vaccines and treatment, digital health and biotechnology.

Australia's health system is now vast and complex, funded by the federal and state governments, taxpayers and insurance companies. Health spending has grown faster than the rest of the economy since 2000–01.[4] The 2022–23 Budget committed $132 billion to healthcare in 2022–23 and this is expected to rise to $140 billion in 2023–24.[5] Hospitals are the largest health portfolio expense for the federal and state governments, accounting for more than one-third of all health expenditure.
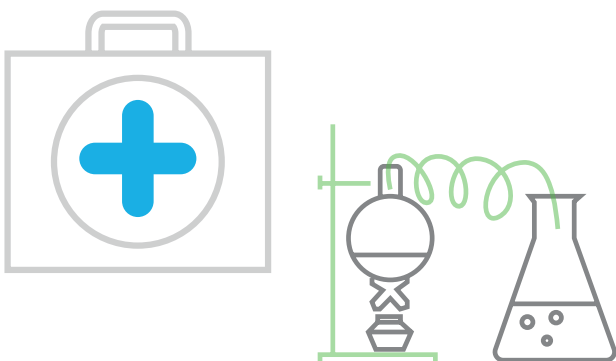
[1] www.diabetesaustralia.com.au/100years/the-first-australian-to-receive-insulin-the-high-seas-mission-to-deliver-lifesaving-medication-to-australia
[2] electionspeeches.moadoph.gov.au/speeches/1922-billy-hughes
[3] www.ipaustralia.gov.au/about-us/news-and-community/blog/how-innovation-improves-lives-10-australian-health-and-wellbeing
[4] www.aihw.gov.au/reports/health-welfare-expenditure/health-expenditure
[5] www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/record-investment-in-the-future-of-australias-health-system

RSM, too, has come a long way in our 100 years of business — from a husband-and-wife partnership operating without staff and selling a bookkeeping and recording system, to a national accounting and advisory firm with 1600+ personnel embracing all areas of business advice and services. RSM, like the health sector, has had to innovate or get left behind. Services such as Cyber Security testing, Data Analytics, Sustainability audits and technology consulting were probably not envisaged by Edgar Woolcott. But then again, in choosing a name like The National Service Company (RSM's original founding name), perhaps Mr Woolcott was not too far off the mark.

2022 onwards

Healthcare is constantly evolving. That's exciting and inspiring. It means new opportunities, new models of care, new victories over disease, improved quality of life and a longer lifespan.

The health sector is a varied and dynamic field, with opportunities to innovate to improve patient care, offer a better work-life balance to staff or increase profits. It can be challenging to maintain an agile, growth mindset when dealing with burnout and staff shortages yet those who cling to old ways in a changed world will, inevitably, be left behind. Innovation is now synonymous with the health sector and, like many aspects of life today, digital transformation is a key part of that innovation. Yet despite all of the innovation, the world could not have anticipated the last three years and the impact of COVID-19 on the world. And it continues to turn on their side many areas of life as we knew it in 2019.

This report explores some key challenges and opportunities reshaping the healthcare landscape in 2022 and beyond, including cyber security, data analytics, digital transformation and business technology — issues relevant to all businesses of any size in the health sector.

We also examine the immediate ramifications of payroll tax changes and provide timely advice for all health practices dealing with contractors and locums.

Each chapter ends with specific action steps to enable you to protect and grow your healthcare business. As you read, we encourage you to consider what these issues mean for your group, company or practice, your staff, your colleagues — and what you need to do as a result, whether that's changing your strategy, innovating with something new or accessing specialist advice.

Health Services by RSM brings together the experience across the firm's service lines in the health sector, backed by our 100-year history. We trust that the highlights in this report provide you with ideas as well as possible options for those issues that are common to your business, organisation or practice.

Peter Saccasan
National Leader, Health Services

HEALTH SERVICES
by **RSM**

THE JOURNEY TO
EXTRAORDINARY

The story of Control Bionics, Peter Ford

''Our mission is to produce the best technology in the world to help people with the toughest disabilities communicate with dignity, self-esteem and independence because all of us humans are social creatures.''

Peter Ford, founder of Control Bionics

Peter Ford is a Queensland-born medical school drop-out (as he puts it) and former journalist who began 'tinkering about with a bit of code' in the small amount of spare time he had as the first Australian anchor on American news channel CNN.

Twenty years later, the company he founded, Control Bionics, is listed on the ASX and provides innovative augmentative communication and control devices for people with severe speech and movement disabilities. Control Bionics products have been available on Australia's National Disability Insurance Scheme (NDIS) since 2015.

Like most disability advocates, Ford began by focusing on what a person with severe disabilities could still do.

> I thought if a person couldn't move or speak at all, what was still moving in their body? And that's the electrical signals sent by the brain to muscle. Even if the muscle doesn't respond, we can pick those signals up using electromyography or EMG.

That led to the development of a suite of speech-generating devices using EMG/spatial control, touch or eye control to give people with complex communication needs their voice using a neural sensor that talks to their smartphone or computer.

The late Professor Stephen Hawking even beta-tested Control Bionics' new products over several years — Ford describes him as 'a massive intellect in a body that didn't work anymore.'

Peter Ford

Control Bionics' products have been life-changing for people with conditions like motor neurone disease, cerebral palsy and acquired brain injury — and for their families too. Ford describes one client who can't move or speak but helps his wife and three kids run the house, makes money betting on the horses online and talks to his mates about football — he's mentally switched on and is living a full rich life despite his disability.

So, given the high percentage of start-ups that fail, what helped Ford succeed?

Some key elements in Control Bionics' success story are:

- Careful and timely collaborations with others involved in similar work including developers, academics, engineers and leading consumers such as Professor Hawking.
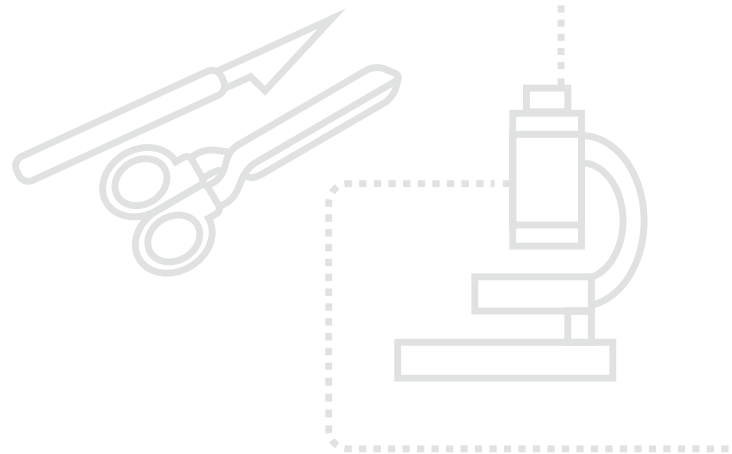
- Hiring the right people who can serve clients well — the Control Bionics team is made up of healthcare professionals and biomedical engineers rather than salespeople because, as Ford states, 'We're not selling whitegoods here.'

- Believing in the value of the work they were doing and working hard, hard, hard to create the best product and share their story.

Financially, there were two significant moments in the company's early history. The first was finding their first investor, Nightingale Investment Fund and building a long-term, mutually beneficial relationship. The second was winning a grant from the Australian government.

> So we got our first million, which was a huge start for us. Actually, in reality, a million doesn't go very far, but it was an enormous boost to get us going and it was a healthy investment on their part. We've always been impressed by that.
>
> And then almost a year after, we had a $485,000 grant from DFAT for a commercialisation grant. We believe that we returned that to the government several times over. But that was a very good investment by the Australian government back then. And programs like that for tech like ours are really vital.

Turning to cyber security , Ford encourages all Australian healthcare businesses to become partners with the Australian Cyber Security Centre to learn about how to protect data on all their devices because,

Right now, as you know, the nation is one of the many targets of aggressive crypto attacks and cyber attacks. So we do whatever we can to keep the fences strong. You just have to be as prudent and as vigilant as you can be, because the threats are real, and they're constant.

Control Bionics is going from strength to strength, continuing to innovate in order to support a wider range of clients in a growing number of countries. Ford leaves some final words of encouragement for Australian health innovators.

> If it was easy, everybody would be doing it. So you're almost certainly going to be doing something that's hard. So you've got to have a product, whatever it is. It could be an idea. It could be a thing. It could be a process. It doesn't matter. Whatever it is, you've got to believe, which means it's got to be worth believing in.
>
> And then you've just got to have endurance. And when you do talk to your investors, tell the truth. Don't do blue sky and smoke. Good investors see through that straight away. So you go in, you tell them exactly what it is, exactly what you want to do, and exactly what you need. Then we just had to work like hell and get the story out.

Bionic devices to aid speech could probably not even have been imagined in 1922 but, in 2022, are helping to improve quality of life for many people with disabilities and their families. There will be more exciting innovations to come as this century unfolds. Perhaps one of them will be yours.

PLEASE SHUT THE GATE:
ARE YOUR PATIENT RECORDS SECURE?

CYBER SECURITY: PROTECTING PATIENT DATA HELPS PROTECT LIVES

Digital Health Australia reports that the health sector has become a prime target for cyber attack. They have seen increased threat activity and reports of compromised systems.[6]

Due to its highly sensitive and personal nature, health data must be vigilantly guarded because it is highly prized by malicious actors. In the wrong hands, such data is a powerful weapon and a lucrative source of wealth.

> "Patient records are the most valuable data on the dark web. It's like stealing the Ferrari of data and each one goes for about US$250. Hacking credit card details is more like stealing a beaten-up old Ford. It's only worth about US$5 per card because the banks spot the transactions and block the cards quickly. But there's enough information in one patient record to let a hacker apply for 3 mortgages and 5 credit cards then sit sunning themselves on the beach in Mexico knowing it'll be nearly a year before anyone notices what's happened."

Ashwin Pal, Director — Cyber Security and Privacy Services at RSM Australia

> **Healthcare professionals are in the business of saving lives, not protecting data. And yet compromised data compromises patient care.**

CYBER SECURITY RISKS IN HEALTHCARE

Healthcare professionals are in the business of saving lives, not protecting data. And yet compromised data compromises patient care. Real and prolonged risks exist for patients whose medical records have been tampered with. The sector has staff who are already used to managing a range of healthcare risks through infection control measures and medication management and now that same mindset needs to extend to data protection.

Cyber security is so much more than an information technology (IT) issue. It's a vital component of:

- Patient care
- Enterprise risk management
- Staff wellbeing
- Digital transformation in the health sector

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[6] www.digitalhealth.gov.au/healthcare-providers/cyber-security/cyber-security-fundamentals

> "Mitigating cyber security risks should be a key element of corporate governance, not just the responsibility of the IT department."
>
> *Ashwin Pal, Director — Cyber Security and Privacy Services at RSM Australia*

Data breaches have crippled healthcare organisations

A healthcare data breach refers to the unauthorised disclosure of patients' personally identifiable information (PII). Such data includes:

- Patient names
- Medicare cards
- Private health insurance details
- Medical records
- Financial information

This is valuable information that malicious instigators use to earn a small fortune on the dark web.

The Guardian reports that a data breach back in 2018 means that the Medicare details of any living Australian may have been available online for several years now.[7]

In 2018, cyber security firm, Trustwave, estimated that medical records are worth US$250 on the black market, compared to just US$5.40 for a payment card or US$4.12 for a banking record.[8]

The reason that medical records are worth 50 times more than credit cards is because there's only a small window of opportunity to use the card before it is cancelled. Theft of medical records goes unnoticed for nearly a year, according to IBM.[9]

As *Forbes* reports, the damage to affected patients may never be undone.[10] One patient, Brandon Reagin, whose identity was stolen in 2004 as the result of medical record theft, spent a decade scrubbing charges from his credit report, and the integrity of his medical files remains in question because the thief claimed over US$20,000 in medical procedures using Reagin's identity. As Reagin commented on CBS News, 'That hospital may still have his [the hacker's] information, his blood type under my name… It's a little weird to think.'[11]

According to IBM's *2021 Cost of a Data Breach Report*:[12]

- Healthcare data breaches were the costliest form of data breaches for the 11th year in a row.

- The cost of a healthcare data breach increased 29.5% in the last year, rising to US$9.23m in 2021 compared to US$7.13m in 2020.

- Lost business accounts for 38% of the cost of a data breach. That includes increased customer turnover, lost revenue due to system downtime and the increasing cost of acquiring new business due to diminished reputation.

- It took an average of 287 days to identify and contain a data breach, seven days longer than in 2020. That means a breach occurring on 1 January would not be detected until 14 October. (The previous 2020 report further noted healthcare data breaches have the longest life cycle, taking 329 days to identify and contain.)[13]

- Across all sectors, the use of smart technology (AI and automation) to detect and contain attacks reduced the cost of a data breach by 80%. The 2020 report noted that only 23% of healthcare organisations use such technology.

Data breaches can go undetected

How do such data breaches happen? According to IBM[14]

- 50% of breaches were the result of a malicious attack
- 27% of breach incidents were caused by human error
- 23% were caused by a system glitch

Verizon's *2022 Data Breach Investigations Report* found that 39% of healthcare data breaches were made possible by internal actors — healthcare staff themselves.[15] Most of this is due to mistakes rather than malicious misuse of access. Breaches happen in common, everyday scenarios such as the locum GP who checks their personal email from the practice computer and clicks on a phishing link. And those mistakes are being made at a far higher level than in other industries such as education or mining.

The Tasmanian Ambulance Service was the victim of a data breach that affected every patient who called an ambulance from November 2020 to January 2021. Cyber attackers hacked into the outdated legacy radio technology being used for communications, intercepted that data, converted it to text and published the data online, which included information such as HIV status, gender, age and the address of each incident.[16]

As Tasmania's then opposition health spokesperson noted, 'To be in a situation where you're calling an ambulance in the first place is distressing enough, but then to have your personal details posted and kept up online for all this time is too much.'[17]

[7] www.theguardian.com/australia-news/2019/may/16/australians-medicare-details-illegally-sold-on-darknet-two-years-after-breach-exposed

[8] trustwave.azureedge.net/media/15350/2018-trustwave-global-security-report-prt.pdf?rnd=131992184400000000

[9,12] www.hipaajournal.com/average-cost-of-a-healthcare-data-breach-9-42-million-2021

[10] www.forbes.com/sites/forbestechcouncil/2021/06/07/increased-cyberattacks-on-healthcare-institutions-shows-the-need-for-greater-cybersecurity/?sh=2d956e0d5650

[11] www.cbsnews.com/news/hackers-steal-medical-records-sell-them-on-dark-web

[13,14] www.fiercehealthcare.com/tech/average-cost-healthcare-data-breach-rises-to-7-1m-according-to-ibm-report

[15] www.verizon.com/business/resources/reports/dbir/2022/summary-of-findings

[16] www.abc.net.au/news/2021-01-09/tasmanian-ambulance-data-breach-technology-overhaul-needed/13044780

[17] www.examiner.com.au/story/7079310/shocking-patient-privacy-breach-referred-to-tasmania-police

CASE STUDY
PREVENT, DETECT, RESPOND AND RECOVER

Being called up in the weekend is always an alarming thing in the cyber world. A large medical practice had just lost all their workstations to ransomware. The malware spread through the workstations within minutes, locking all the computers up rendering them unusable. The RSM cyber team was called to respond.

Notification — The decision was made to not pay the ransom. The first item of discussion was whether the client had cyber insurance (no in this case) and to notify the Australian Cyber Security Centre (ACSC).

Quarantine — While this was happening, the RSM team got onsite to quarantine the infection. Fortunately, the workstations were in an isolated network which protected the critical servers in the cloud and the operational network that was running key medical equipment. This meant that critical functions could still be performed, be it at a slower speed.

Recovery — All workstation data was backed up to the cloud and unaffected. The RSM team worked with the medical practice's IT staff to help rebuild and restore the workstations. Any workstation that was still functional was wiped clean and restored as a proactive measure from further infection.

Remediate — Once all the workstations were rebuilt and restored, the attention turned to remediation to stop a repeat of the incident. All workstations had an advanced anti–malware End Point Detection and Response (EDR) solution installed to pick up any further infections and stop it in its tracks. Backups were further protected with passwords and further network segmentation was put in place to reduce the 'blast radius' in the case of future infection. A user education program was also put in place.

Once the immediate remediation was taken care of, the RSM team turned their attention to a cyber uplift program. This started with a gap analysis to the Essential 8 and NIST–CSF frameworks. The client is currently working with RSM and our partners to implement controls to further strengthen measures to prevent, detect, respond and recover from similar incidents in the future.

RANSOMWARE ATTACKS

> Increased awareness and proper staff training would help mitigate risk yet the Australian government reports that only a third of Australian healthcare organisations embed cyber security awareness and training into their organisational policies and procedures.[18]

Ransomware is an ever-evolving form of malware designed to encrypt files on a device, rendering any files and the systems that rely on them unusable. Criminals then demand ransom in exchange for decryption.[19]

Worldwide, notable ransomware attacks include:

- A 2017 attack that shut down 16 NHS hospitals across the UK.[20]
- The NotPetya ransomware attack of 2017, carried out by the Russian military, which affected more than 80 companies in several countries. That attack shut down pharmaceutical giant, Merck, for two weeks causing $1.3bn in losses.[21]
- A spate of attacks (a 71% increase) against American hospitals from September to October 2020.[22]

Within Australia, ransomware attacks are known to have targeted:

- Melbourne Heart Group, Cabrini Hospital
- Eastern Health (4 Melbourne hospitals)
- ProctorU (9 universities, 444,000 records)[23]
- Several hospitals and aged care centres run by Uniting Care Queensland[24]

A ransomware attack shuts providers out of their own systems, forcing them to cancel elective surgeries and pivot to old-fashioned pen-and-paper methods of data recording and sharing. It's a stressful and alarming situation that makes it all too easy for essential information to go astray and compromise care, including lack of access to vital health data at a critical time for a particular patient.

Cyber security is a key consideration for MedTech companies too. The rise of connected wearable medical devices makes patients directly vulnerable to potential attack. At the 2017 Black Hat conference, researchers reported that they were able to upload malicious firmware to a pacemaker, opening the possibility of making life-threatening changes in therapy, such as changing the number of shocks delivered to patients.[25]

The TGA requires manufacturers and sponsors are required to continually assess and take action on medical device cyber security risks.[26] Are there minds out there that harbour such criminal intent? Former US Vice President Dick Cheney thought so and reportedly had the wireless capabilities in his pacemaker deactivated to prevent hackers using it as a method of assassination.[27]

18 www.digitalhealth.gov.au/sites/default/files/2020-11/Information_security_guide_for_small_healthcare_businesses.pdf
19 www.cisa.gov/stopransomware
20 www.theverge.com/2017/5/12/15630354/nhs-hospitals-ransomware-hack-wannacry-bitcoin
21 industrialcyber.co/features/pharmaceutical-manufacturing-cybersecurity
22 www.technologyreview.com/2020/10/29/1011436/a-wave-of-ransomware-hits-us-hospitals-as-coronavirus-spikes
23 www.upguard.com/blog/biggest-data-breaches-australia
24 www.healthcareitnews.com/news/cybersecurity-roundup-us-agencies-warn-russian-hacks-australian-hospitals-struggle-get-back
24 arstechnica.com/information-technology/2018/08/lack-of-encryption-makes-hacks-on-life-saving-pacemakers-shockingly-easy
26 www.tga.gov.au/publication/medical-device-cyber-security-guidance-industry
27 www.forbes.com/sites/forbestechcouncil/2021/05/21/dissecting-the-reasons-behind-medical-device-hacking/?sh=7527f0c22739

STRENGTHENING CORPORATE GOVERNANCE TO MITIGATE CYBER SECURITY RISKS

Eternal vigilance is the answer to improving cyber security in healthcare. Those with malicious intent will always find a way but there is evidence that health leaders are making it too easy for them through a lax approach to cyber security.

Nearly 60% of healthcare breach victims report being breached due to a vulnerability for which a patch was available (a patch is a software update that corrects vulnerabilities discovered in a product).[28] That's like leaving the door open for burglars. Organisations had been warned of a weakness in Citrix before this German hospital attack, in which a patient died while being transferred from the compromised hospital to another facility.[29]
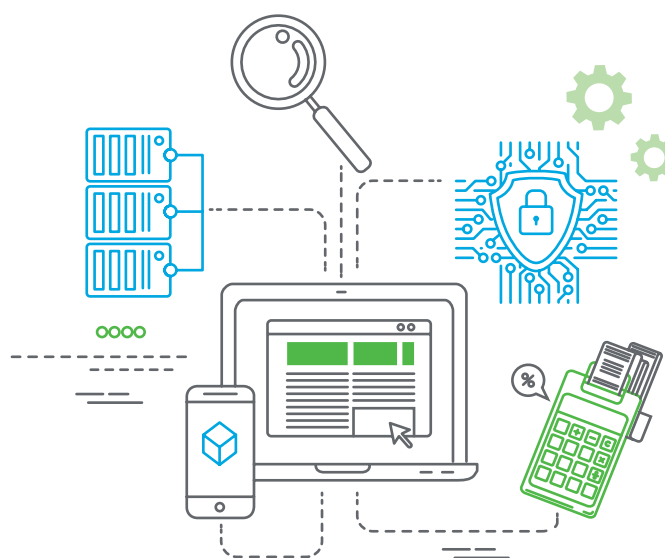
Australian healthcare organisations need a mindset shift so that mitigating cyber security risks is seen as a key element of corporate governance, rather than a low-level responsibility devolved to the IT department.

> "Cyber security is evidently much more than an IT issue. It's a vital component of patient care, enterprise risk management, staff wellbeing and digital transformation in the health sector. Oversight of any risk that could force shutdown, compromise patient safety, cause reputational damage and cost millions of dollars should rightly rest with the Board. The Board or organisation should ensure they are employing the latest protection and practices available. Health is not a space where barely 'just more than adequate' cyber security is acceptable. It needs to be top shelf."
>
> *Darren Booth, Director — Cyber Security and Privacy Services at RSM Australia*

As RSM has previously noted,

There is a gap in senior management's engagement and prioritisation of cyber security that needs to be addressed. Not only is there a lack of discussion around the risks at board level but there is also ambiguity over who is responsible for cyber security in the organisation. Ideally, the senior executives themselves should be accountable.[30]

Action steps to improve cyber defence

1. See cyber defence as a core part of corporate governance and restructure roles and responsibilities accordingly.
2. Appoint a chief information security officer (CISO) and give them responsibility for security policy and technology decision making — this is associated with US$145,000 cost savings versus the average cost of a breach.[31]
3. Start securing data using a baseline known as Essential Eight, recommended by the Australian Cyber Security Sector.[32] This makes it much harder for adversaries to compromise systems.
4. Build cyber-resilience. It is likely that an attack will come at some point. It is vital to put in place systems to enable detection, response to and recovery from an attack. Given the rapidly evolving nature of cyber defence, it is often worth outsourcing a detect and respond system to specialists.
5. Regularly train staff at every level in the organisation in the importance of cyber security so this is seen as an essential part of high-quality patient care.
6. Ensure your cyber security defences are externally audited for best practice on a regular basis.

[28] www.digitalhealth.gov.au/sites/default/files/2020-11/Information_security_guide_for_small_healthcare_businesses.pdf
[29] www.bbc.com/news/technology-54204356
[30] www.rsm.com.au/special-reports/catch-22-digital-transformation-and-its-impact-cybersecurity
[31] www.fiercehealthcare.com/tech/average-cost-healthcare-data-breach-rises-to-7-1m-according-to-ibm-report
[32] www.cyber.gov.au/acsc/view-all-content/essential-eight

HEALTH DATA IS GOLD:
ARE YOU RICH OR POOR?

> Managing a healthcare organisation is a complex and demanding job. Data analytics lightens the load by providing the information needed to make the right decision. Those insights can inform patient care, staffing levels and future planning, ensuring that scarce resources are properly allocated.

If cyber security highlights the risks of data, analytics demonstrates its potency, both for patient care and system-wide performance. Healthcare professionals *and* the organisational management team gain far more knowledge and more quickly than ever, and the patient can be a big winner in the detail, speed and extent of care that can be provided because of this.

THE POWER OF DATA

It is established clinical practice to consider a range of patient data, including age, sex, vital observations, blood test results or imaging scans to inform diagnosis and treatment choices.

In 21st-century healthcare, though, data can do far more than this. Data analytics can show trends, predict problems and guide the way towards the best outcome from a plethora of competing options.

''At a systems level, data analytics is a tool that may improve practice performance and could even ease Australia's hospital crisis[33] by aiding prediction, planning and system redesign.''

Srdjan Dragutinovic, Director – Data Analytics at RSM Australia

Insight into the mass of data

There's no shortage of data in healthcare — in fact, there's often an overwhelming amount of it. Two-thirds of NHS Trusts in the UK have over 100 different systems holding data.

The situation is similar Down Under. As the Australian Health Research Alliance notes,

Australia has fragmented health data holdings across all clinical domains. This fragmentation is multifactorial including legal, ethical and policy barriers and also data barriers such as inconsistencies in terminologies, data models, quality assurance mechanisms and mappings.[34]

Using data analytics, these diverse sources of information are brought together and turned into meaningful and actionable insights to inform planning. It amplifies the real story told by the data and brings it to life.

[33] www.ama.com.au/public-hospitals-cycle-of-crisis
[34] ahra.org.au/our-work/data-driven-healthcare-improvement

RSM partners with Qlik in the analytics space. Qlik's data analytics platform provides healthcare organisations such as the UK NHS and NSW Health with vital insights into:

- Clinical variation
- Predictive length of stay and readmissions
- Revenue cycle management
- Operating room and emergency department flow
- Population health
- Labour productivity / workforce analysis
- Clinical documentation improvement
- Pharmacy supply chain and medication use
- Clinical quality
- Care transitions and coordination
- Population health
- Patient experience and engagement[35]

NSW Health (NSW) used Qlik to transform the processing of five billion health records a year. They combined costing, clinical and other data into a single analytics application and can now easily identify high-risk patient groups and variations in care. Their efforts have paid off in improved patient outcomes and more than AUD$500 million in savings.[36]

Key types of data analytics

Data analytics helps answer key questions:

Why did this happen?
Turn to diagnostic analytics:

- Data discovery
- Data mining
- Correlations
- Monitor performance

What is likely to happen next?
Turn to predictive analytics:

- Use machine learning and AI to leverage historical data to make reliable predictions about the future
- Plan and act with confidence

What's the best course of action?
Turn to prescriptive analytics:

- Use optimisation and simulation algorithms to prescribe a solution
- Know where best to deploy resources to move forward

OPTIMISE PATIENT FLOW AND DEMAND MANAGEMENT

Given the permanent struggle for funding in Australia's (or any country's) healthcare system, it is essential to maximise performance wherever possible.

Ambulance ramping, lengthy waits in emergency departments across the country, lack of space on the wards to allow admittance, delayed discharges and an acute staff shortage all contribute to create pressures in the health system.

Predictive analytics will not solve such a complex problem, but it can certainly help oil the wheels by showing:

- How busy a hospital might be on a particular weekend
- Likely staffing needs at different times (avoiding the need for expensive last-minute agency staff)
- Probable hospital overstays or readmissions
- Which patients may not show up for their appointment

Predictive analytics is about being proactive rather than reactive. In the long run, that saves money and reduces stress.

35,36 www.qlik.com/us/resource-library/top-12-transformative-insights-in-healthcare?ga-link=sol-hc

AIR TRAFFIC CONTROL FOR HEALTHCARE

Air traffic controllers manage the safe and orderly flow of aircraft in and out of airports. That model is now being extended into the hospital setting with impressive results.

Royal Lancaster Infirmary in England now hosts an Analytical Command Centre. This is a series of large analytics dashboards displaying live and predictive information about patients throughout their hospital stay.

It gives frontline staff information on:

- Ambulance status
- Demand surges
- Patients due for discharge
- Available beds

The hospital now consistently triages 95% of patients within 15 minutes of their arrival in the emergency department, a stark contrast to the ambulance ramping plaguing Australian hospitals. There's also been a significant fall in medical outliers, which is known to improve patient outcomes.[37]

DATA ANALYTICS IN THE NOT-FOR-PROFIT SECTOR

For health-related NFPs, data analytics enables:

- A greater understanding of donors and clients
- More targeted and lucrative fundraising efforts
- Improved efficiency
- Better service to the targeted community

UK cancer charity, Macmillan, used data analytics to deepen its understanding of donors and their giving patterns to help project their income.[38] They also sought to increase their ROI on their World's Biggest Coffee Morning Campaign by understanding why people took part and reworking their messaging to create a more targeted appeal. The result? They exceeded their fundraising target by millions.

USING INSIGHTS TO INFORM DECISIONS

Managing a healthcare organisation is a complex and demanding job. Data analytics lightens the load by providing the information needed to make the right decision. Those insights can inform patient care, staffing levels and future planning, ensuring scarce resources are properly allocated.

It is now possible to drill deeper into a practice database for a particular health condition with bespoke analytics for say stroke, Type 2 diabetes, or frail and elderly populations.

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[37] pages.qlik.com/20Q3_GAT_CP_UKI_NHSFOIReport_Reg-LP.html
[38] charitydigital.org.uk/topics/topics/how-charities-can-use-data-analytics-8443

DIGITAL LITERACY

"One of the most important aspects of any data journey, and one that is often overlooked, is to help people understand the language of data. Data Literacy is essential if you want your staff to be able to read, work with, analyse, and argue with their data."

Matthew Cunneen – Director, Data & Analytics at RSM Australia

Interpreting data takes skill. Analytics platforms work hard to provide meaningful, digestible data but healthcare leaders need to know how to interrogate the data, understand the story it is telling and determine the next steps.

Action steps for data analytics

1. Create and embed a culture that values and seeks out data–driven insights to:

   - Identify and prioritise strategic initiatives
   - Improve risk management
   - Enhance the value proposition to customers

2. Implement reliable, secure dashboards that deliver real–time key performance indicators and visual analytics on a single, consumable canvas.

3. Embed data–informed decision making into existing processes

   - Frontline workers are too busy for any additional layers of work. Data insights must be easily available on the devices and in the software they already use so that it naturally informs clinical and managerial decisions.

4. Improve data literacy by investing in staff training so that staff feel confident to read, understand, analyse, use and debate data that is relevant to their role.

5. Use robotic process automation (RPA) services to automate repeatable business processes, reduce staff costs and minimise human error.

6. Engage a specialist in business intelligence for health.

CASE STUDY
RAPID DATA ANALYTICS ASSESSMENT

Starting the journey to create a data driven, insights led organisation

Background

To succeed, Data Analytics need to be at the heart of decision making and this means having an integrated set of data and metrics, processes and systems as well as the right behaviours in the way people work – across the entire organisation.

RSM provided a rapid diagnostic evaluation of how Data Analytics is currently used by the client to drive improved business performance. We helped identify the foundational elements required to build a data analytics function, with a view to becoming a more data driven, and insight led organisation.

Approach

In order to capture the information required to conduct the assessment, RSM conducted workshops and interviews, reviewed documents, and leveraged industry standard models to benchmark the clients data analytics maturity:

- Conducted an Analytics maturity survey completed online
- Documentation reviews
- Interviews with key staff
- Compiled findings from Discovery and evaluate across five key dimensions: Organisation, Infrastructure, Data Management, Analytics and Governance.
- Assessed against stated vision/requirements and identified gaps
- Identified initiatives and performance improvement recommendations
- Identified valuable business initiatives
- Evaluated identified initiatives against prioritisation criteria — benefits, complexity, risk
- Validated initiatives with key stakeholders

Challenges, Issues, Risks

Any type of maturity assessment is likely to come up against varied opinions amongst those interviewed or surveyed. There is also typically differing levels of maturity across the organisation, often by business area. Bringing that together in a nuanced way and getting buy in from management on the recommendations was a challenging task.

Outcomes

- The current state assessment focused on Organisation, Data Management, Infrastructure, Analytics and Governance and identified pain points and the capability initiatives that would allow the client to bridge the gaps between where it is and where it wants to be.

- We identified 15 capability uplift initiatives and created a prioritised roadmap that would help the client as an organisation move up the analytics maturity curve in various data analytics dimensions.

- We identified 4 business led data driven opportunities, based on an assessment of value generation, cost and risk. They could be undertaken immediately, but each required an investment in some aspect of people, process, data or technology.
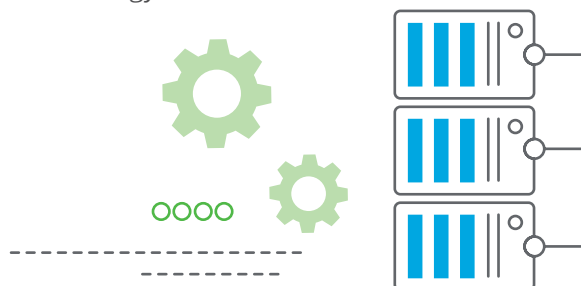
DIGITAL HEALTH AND INNOVATION: CHANGE THAT UNLOCKS NEW VALUE

> As author, Jamie Notter, says, 'Innovation is change that unlocks new value.'[39] It creates opportunities and threats, winners and losers, payoffs and penalties.

Digital health and innovation encourage healthcare businesses to embrace change in a way that benefits patients and professionals.

Stage of the business life cycle

1 Start up   **2** Growth   **3** Maturity   **4** Renewal or decline

39 jamienotter.com/what-is-innovation
40 experience360.com.au/getting-ready-for-the-health-care-revolution
41 www.macquarie.com.au/assets/bfs/documents/business-banking/bb-health-industry/Perspective-on-Health-report.pdf, p11

INNOVATION TO ENHANCE PATIENT CARE

Today's patients live and work in a digital world. They're used to banking and shopping online and using apps to book ride shares, food deliveries and holidays.

> "Most healthcare services fail to provide patients with the degree of interactivity and engagement they have come to expect from all other aspects of life."[40]
>
> *Experience 360*

Healthcare has often lagged behind, relying on the patient to do a degree of legwork that more customer-focused businesses no longer require. Patients with complex health needs often find that they're managing their condition within a fragmented health system that relies on them to plug the gaps.

> "Patients must find, comprehend, remember, repeat, share, wait, carry and afford their care, when they are most vulnerable. Healthcare businesses that focus on lightening the patient's burden will enhance goodwill, as they become preferred centres of care."[41]
>
> *Macquarie Bank, 2020*

The COVID-19 pandemic has transformed many aspects of healthcare, catapulting sometimes reluctant practitioners into a digital era and rapidly advancing the uptake of telehealth. Yet there is still a way to go.

Table 1: The Digital Patient and The Digital Practice*

The digital patient	The digital practice	
	Tool	Benefits
Searches for health information online	Has regularly updated, mobile-friendly website and social media presence	Seen as well-informed, capable and friendly
Books an appointment online	Offers online bookings	Saves admin time, improves patient experience
Registers online	Sends a digital patient registration form and consent form by SMS	Saves admin time, reduces transcription errors
Attends the appointment	Offers a choice of telehealth or face-to-face appointments Has a self-serve check-in kiosk & ability for the patient to see where they are in the queue	Attracts more patients, offers a more convenient service
Next steps	Offers: ▪ eScripts ▪ Digital pathology ▪ Online referrals to specialists	Patient convenience
Pays for services	Submits the Medicare or insurance claim on the patient's behalf	Patient convenience

From Laurel Grey, National Manager, Digital Advisory, RSM Australia

Connected care

Remote monitoring devices are transforming the model of care for many chronic conditions.

- **Diabetes:** Forget the paper diary of glucose results. Now, data from a continuous glucose monitor and an insulin pump that uses artificial intelligence is uploaded to the cloud where their diabetes educator or endocrinologist can review it.

- **Sleep apnoea:** Nightly data from a patient's CPAP machine is uploaded for the respiratory specialist's review.

- **Asthma:** Smart inhalers and a linked app help patients with asthma and pulmonary disease to predict allergens and improve management in conjunction with their doctors.

- **Heart failure:** Wearable sensors with machine learning alert patients and providers of any worsening in their condition that may prompt the need for rehospitalisation.

- **Mental health care:** An ingestible pill records that a patient has taken their medication and sends that data to a wearable patch that connects to an app.

- **General care:** Smart band-aids record and transmit key physiological information to a patient's doctor, enabling timely intervention.

- **Pharmacy:** eScripts mean a doctor's prescription can be sent directly to the patient's smartphone or to their nominated pharmacy and that reminders for prescription renewal can be automated, increasing medication adherence. Medications can be automatically packed into sachets and those sachets can be scanned, using the bar code applied by the packing machine, to match the tablets in the sachet to the patient, to ensure the right tablets are in the sachet for each patient.

Such devices and apps help to reduce the burden of living with a chronic condition. The device relieves a patient's mental load by recording crucial healthcare data and sending it to the treatment team who can then provide their advice by telehealth. That is vastly more convenient for patients who can maintain regular appointments without needing so much time off work.

Other innovations enable the:

- Extension of Hospital in the Home through new drug delivery systems that allow patients on long-term IV antibiotics or chemotherapy to be treated in the community

- Delivery of essential medical supplies to remote areas by drones

- Detection of asymptomatic COVID-19 cases through an artificial intelligence model that distinguishes asymptomatic people from healthy individuals through forced-cough recordings uploaded to a web browser.
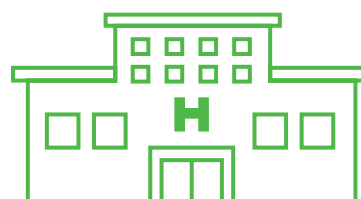
HIVE Program, Royal Perth Hospital

Royal Perth's HIVE Program (Health in a Virtual Environment) uses 24/7 monitoring of hospital patients. Artificial intelligence detects early signs of worsening vital signs and alerts the HIVE clinicians who then collaborate with the ward team to provide immediate care.
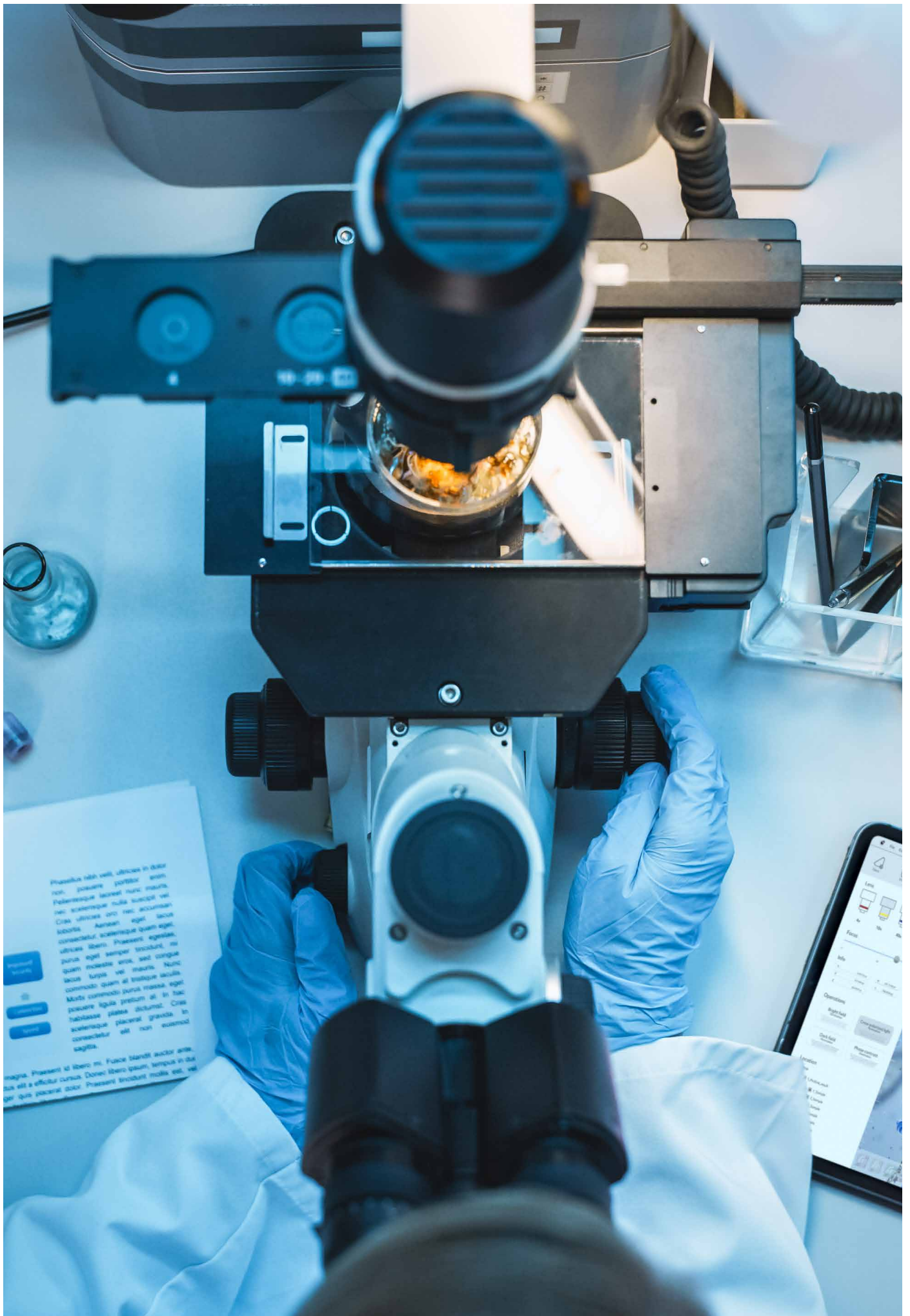
Telehealth: Time for video

Telehealth is the soulmate of remote monitoring, removing the need for an in-person visit to review data from a wearable device. This is a match made in heaven for patients with chronic disease or those living in rural and remote areas who can now choose from a greater number of practitioners and avoid the need for long journeys to see city-based specialists.

Telehealth is now a permanent and vitally important feature of Medicare. Since the pandemic began, nearly 100 million telehealth consultations have been provided in Australia. Now, though, it's time to focus on quality rather than quantity — and that means video, not telephone consults.

In the first quarter of 2022:

- There were **12.3 million** telehealth consultations, representing **27%** of all MBS services

- GPs, mental health professionals and nurse practitioners used telehealth for approx **30%** of their consultations

- Specialists used telehealth for **17%** of their consultations while only 2% of allied health consultations were provided through telehealth[42]

Depressingly though, statistics for Q1, 2022 show that 88% of telehealth consultations rely on a phone call with just 12% using video.[43]

Perhaps it's not surprising. Many practices were forced to switch to telehealth in the midst of a global health crisis so opted for the most familiar technology that was already easily available to both them and their patients — the phone. Transitioning out of the pandemic, some practices have implemented a more carefully planned telehealth service that integrates with their practice management systems and includes video. And, not to labour the points of our earlier chapter, better security of patient privacy and data can be implemented through these more formal application-specific solutions.

Video telehealth has many benefits. Doctors can observe a patient's appearance, body language and environment, picking up many useful clues that aid diagnosis and treatment decisions.

According to the Royal Australian College of General Practitioners, among GPs who use video telehealth:

- 19% say they find it more personal
- 26% say it helps them assess the patient
- 18% say it aids them in undertaking a physical exam[44]

With telehealth now a permanent feature of the Australian healthcare system, it is time to realise greater benefits through video telehealth. There are a number of available platforms that can be integrated into existing practice systems and which provide end-to-end encryption to protect patient data.

Video telehealth yields benefits for practitioners too. Practices that set up their telehealth service properly can feel confident that they're meeting their legal and security requirements while also managing their service well so that it contributes to practice profits.

For doctors, pharmacists and allied health providers, telehealth has endless applications, especially in a country as vast as Australia. It's not hard to see how the availability of a national telehealth network would save lives by bringing the health professionals to the patient.

A good telehealth service not only attracts patients. It may also help attract staff in an era of widespread shortages. Most healthcare professionals would welcome the flexibility of working from home some of the time.

CREATING INNOVATION IN HEALTHCARE

Healthcare professionals are uniquely placed to lead innovation in their field — and many have done so. Years of working in the system enables healthcare professionals to see gaps or identify needs and to create meaningful solutions.

Examples of Australian innovations include:

- Practice management systems such AutoMed or CorePlus
- Practice intelligence systems such as Clinimetrix and Cubiko
- Accessible, streamlined healthcare models such as SMS Healthcare and Docto
- Digital advanced healthcare directives through Touchstone Life Care

For an innovation to succeed, it must:

- Solve an existing pain point
- Improve the patient, clinician or user experience
- Be easily integrated into current clinical workflows
- Fit with the probably future landscape of healthcare
- Ensure data protection and patient privacy

42,43 coh.centre.uq.edu.au/telehealth-and-coronavirus-medicare-benefits-schedule-mbs-activity-australia
44 www1.racgp.org.au/newsgp/professional/gps-have-embraced-telehealth-survey-finds

CASE STUDY
RANDWICK HEALTH & INNOVATION PRECINCT

A flourishing ecosystem for innovation

The stereotypical inventor is usually an eccentric loner, like the wild-haired Doc Brown in Back to the Future. The reality of modern healthcare innovation is far different. As Matt Ridley explains,

> Innovation is crucially different from invention, because it is the turning of inventions into things of practical and affordable use to people. It speeds up in some sectors and slows down in others. It is always a collective, collaborative phenomenon, involving trial and error, not a matter of lonely genius.[45]

Innovation thrives in an environment where people can work with each other, challenge each other's assumptions, build on each other's ideas and support one another to leverage funding.

That's the thinking behind the Randwick Health & Innovation Precinct (RHIP). It's part of a NSW government strategy to bring universities, medical research institutes and hospitals together to create new approaches to healthcare, improve clinical practice and foster innovation.

RHIP's four founding partners are the South Eastern Sydney Local Health District, Sydney Children's Hospitals Network, the University of New South Wales and Health Infrastructure NSW. It includes three nationally recognised teaching hospitals and 15 collaborative partners including nine medical research institutes. Collectively, the Precinct has a 22,000-member workforce, constituting 40% of the jobs in the Randwick LGA, conducts 1.8 million patient interactions per year and is undergoing significant redevelopment through a $1.5 billion investment by state and federal government, UNSW and philanthropic donors.

The Randwick Health & Innovation Precinct is also an ideal location for health start-ups, which benefit immensely from access to the Precinct's facilities and expertise and, in some cases, even co-location.

42,43 coh.centre.uq.edu.au/telehealth-and-coronavirus-medicare-benefits-schedule-mbs-activity-australia
44 www1.racgp.org.au/newsgp/professional/gps-have-embraced-telehealth-survey-finds
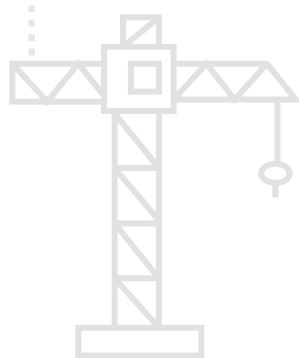
As Stephen Palmer, RHIP's Industry and Innovation Lead explains,

> "There's a real advantage in working alongside and rubbing shoulders with those experts every day.
>
> Drop Bio's a great example of that. They moved in with us just over a year ago. The entire company's now in the School of Biological Sciences at UNSW and that allows them to use the laboratory facilities there as if they were a member of staff of the university. So they get an ID, they get access to the library, they get lab coat facilities, they can use gloves, they can do their experimentation.
>
> Having access to those facilities means they don't need to recreate it themselves. They don't need to buy equipment but they can do quite sophisticated laboratory studies. And as a consequence, they've managed to attract quite a bit of investment and are now growing quite well as a company."

Other ways for health innovators to engage with the Randwick Health & Innovation Precinct include:

- Commissioning consultancy work
- Engaging the Precinct to undertake some contract research such as genomics analysis to support the development of a product or service
- Assembling a collaborative research project to develop an innovation. This may involve creating a team of engineers, commercialisation experts, clinicians, or others and applying for funding from various sources.
- Conducting clinical trials for new devices and treatments

Such partnerships enable healthcare innovators to access federal and state funding grants and also strengthen the case for private investment. As Palmer notes,

> "I think it adds to their story in terms of trying to attract investment, saying we have this extended family and are able to use UNSW resources, we've got their support, we've got cheap rental. We are leveraging all of these elements of being able to co-locate or indeed collaborate.
>
> If it's just a two-man band, investors might say, "Hang on a minute. Have you really got all the expertise and resources you need to succeed?"
>
> Partnering with us gives companies broader and deeper expertise and it makes them more investible, I think."

That's certainly something to think about for healthcare innovators. And those opportunities are not just available through the Randwick Health & Innovation Precinct. Similar precincts have been created in Liverpool, Westmead and Camperdown in Sydney and in regional NSW and nationally, creating easier opportunities for industry to partner with clinicians, academics and innovators.

For more information, please follow RHIP on LinkedIn and Twitter.

LEVERAGING YOUR INNOVATION SPEND THROUGH R&D TAX BENEFITS

Research and development (R&D) is a major line item for health sector companies. A plethora of grants and tax incentives support R&D meaning that innovation can actually support cash flow for some health businesses. And leveraging that health innovation and technology spend is just what your average CFO and CTO would like to do.

Early Innovation Company Scheme

This scheme is designed to support start-ups. If a company has been incorporated for less than six years, a new investor buying new equity shares issued by the company can receive a non-refundable tax offset and a GST-free period.

The R&D Tax Incentive

This helps companies innovate and grow by offsetting some of the costs of eligible research and development. It's accompanied by a rigorous regulatory regime and reviewed closely by the Australian Taxation Office and AusIndustry.

An important recent change is that AusIndustry now automatically recognises clinical trials as a core R&D activity eligible for annual registration. This is a much clearer, more user-friendly stance than the previous one where some stages of clinical trials were considered R&D and other stages were considered simply to be part of the standard process of new drug design, for example.

In biotech alone, the R&D tax incentive has helped to fund the development of:

- AI to speed up microbiology lab samples
- Cardiac catheters that are 50% cheaper and 70% greener than previous catheters and can be re-used up to 20 times
- Needle-free vaccines

R&D in healthcare is a complex area. Consulting firms like RSM enable healthcare businesses to successfully access government funding for innovations through:

- Thorough eligibility assessment
- Substantiation of claims
- Compliance and preparation
- Reviews and audits associated with R&D Tax Incentive claims.
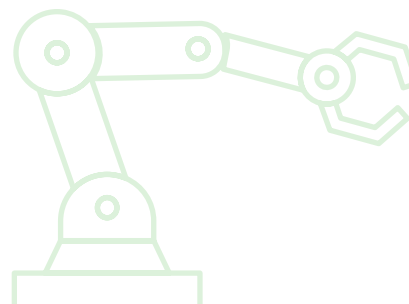
MAKING INNOVATION WORK

Some days, it feels hard enough to do the essentials of your job without feeling under pressure to be innovative as well.

Yet, innovation can often help to ease those burdens by automating some tasks and enabling easier, more efficient ways of operating. It can also stimulate creativity, renewing your enthusiasm for work. And it can renew a business that is failing to thrive in the current environment.

It's sobering to realise that only 12.2% of Fortune 500 companies in 1955 were still on the list in 2014, 59 years later.[46] The world is always changing — and that pace of change has quickened with the pandemic. No healthcare business can afford to ignore digital health and innovation, especially when it is backed by such a strong consumer culture that sees digital engagement as the norm.

Action steps

1. Review your practice or healthcare business from a user's perspective (or ask an expert to do so). Where are there opportunities to innovate, to offer an online service alongside a face-to-face one, to improve patient care/safety through automation?

2. Review your telehealth practice. What's stopping you from using video telehealth or extending your service to cover more patients? Once you identify a need, look for relevant training programs that cover both the business and clinical aspects of telehealth (and ideally earn you a few CPD points in the process).

3. Where do you see a gap in patient care? How could you innovate to address it?

4. If you'd like further support, use an external adviser to:

   a. Create or review a transformation strategy for your business
   b. Help you work on your business mindset
   c. Support your wellbeing as you transform your business
   d. Implement your strategy
   e. Procure the necessary tools to support your transformation.

5. Ensure you are taking advantage of all Government assistance that is available to leverage your cashflow and investment in innovation.

6. Ensure your R&D record keeping is best practice from the start, not done at the end where you need to work backwards

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46 www.aei.org/carpe-diem/fortune-500-firms-in-1955-vs-2014-89-are-gone-and-were-all-better-off-because-of-that-dynamic-creative-destruction

TAKE A CHANCE:

DOES THE COMPANY BUDGET GET ALLOCATED TO THE BUSINESS OR TO THE PATIENTS?

Healthcare spending brings difficult choices. Investing in new equipment that has a direct impact on patient care has immediate appeal. Investing in better operational and finance technology to streamline and automate the back office is less exciting yet it has the potential to greatly improve a business's health. This opens up more opportunities to serve patients in the long run. In fact, legacy systems may demand immediate attention, which can detract from the holistic, strategic view that healthcare businesses must take to be successful

So, what are some steps that a healthcare business or organisation can take that will add value, both in financial terms and patient experience? How do you go from fighting fires across your administration and management of internal staff and focus on the big picture?

- By having a long-term technology strategy that cuts across the whole business and which can be staged and managed.

- By identifying and subsequently letting go of legacy systems and procuring the right operational and finance technology, creating efficiencies, producing better data and providing stronger systems security.

- By developing a procurement strategy for your business that allows you to regularly re-evaluate your technology ecosystem and source new and relevant solutions.

- By partnering with reputable and industry-specific implementation partners to configure your systems correctly and according to best practice as well as produce great documentation and continually train your staff.

Your people
- Who has the biggest pain points?
- Who can oversee the change process?
- Who can educate your staff and customers?

Your processes
- What's critical for compliance reasons and what can be changed?
  - What can be adapted to suit the flow of the software you select?

Your offering
- What is the easiest existing product or service you can fully digitise?
- What is one new offering you can easily sell to customers?

Your customers
- How will they find out about your offering?
- How will they buy from you?
- How will they stay connected to you?

Signs you're using a legacy system:

1. It's deprecated — the company no longer provides software updates and support for it.

2. Your IT support costs are untenable.

3. It's server based and there is no option to upgrade to a cloud hosted version.

4. It lacks integration with the other systems in your business.

5. You end up running several separate databases or disparate systems for different parts of your business.

6. You have implemented time-consuming workarounds to do things that a newer system could automate — such as having your receptionist type and send SMS appointment reminders

THE RISKS OF RELYING ON A LEGACY SYSTEM

Technology, computer systems or programs are forever evolving. Holding on to a legacy system that once worked for healthcare business operations could now be holding you back — costing you time, money, security and opportunity as well as affecting patient outcomes.

It's like relying on an old Nokia instead of a smartphone. There are many things that could make your business more efficient that a legacy system just cannot do. A wheezing, unfit legacy system often proves unreliable, inaccessible and unsuited to a health system forever changed by the pandemic.

> "The ongoing effects of COVID-19 have arguably heightened the need for healthcare workers to have continuous, reliable access to IT systems. Therefore, refreshing technological foundations will continue to be of crucial importance to healthcare organisations."[47]
>
> *Hospital and Healthcare*

The risks of relying on legacy systems include:

- Lack of real-time financial insights
- Staff completing manual processes that can easily be automated
- Duplication of data entry
- Data breaches
- System failure
- Inability to work remotely
- Lack of cohesive and complete patient data
- Difficulty recruiting staff as the practice or hospital seems outdated

Let's talk about the finance department!

When you're working with a legacy system, it can be easy to be lulled into complacency around other forms of manual processing in order to fit the requirements of the system versus taking advantage of the opportunities presented by fully cloud-based finance solutions. Specific risks in using outdated systems to manage your general ledger, accounts payable, receivable and more include:

- **Mis-entry of data** — the vast majority of health businesses rely completely on cash coding to create their ledgers, pay suppliers and reconcile patient payments. Simple errors in data entry, coupled with a lack of supporting documentation (most legacy systems don't allow you to store documents against transactions), can wreak havoc on large practices

where finding discrepancies can be like finding a needle in a haystack. The onflow impact is massive — supplier overpayments run rampant when purchase orders are not correctly reconciled against stock received and supplier bills.

- **Valuable, experienced staff spend time doing data entry** — some of your staff may have decades of experience in healthcare and are capable of assisting you to identify some of the trends outlined in Chapter 2 in order to assist you in making better strategic decisions for your business. When legacy systems are involved, these staff tend to spend the bulk of their workdays entering data and investigating anomalies like the ones mentioned in the point above. This can lead to a lethargic, disengaged workforce that could be better employed in analysis and decision making rather than administrivia.

- **Fraud and processing errors** — too often, legacy systems leave gaping holes in accounts payable processes that are rife for exploitation or, worse, allow for processing of large amounts to an incorrect account.

- **Manual end of month processes resorting to Excel** — stock control, asset management and regular accounts management can be cumbersome in legacy systems, meaning the modules wind up being used incorrectly or with manual workarounds over time. This means that finance teams wind up spending precious hours reconciling data outside of the accounting package and creating manual journals to get the books up to date days if not weeks after the ideal end of month closure.

Real life:

One large government agency that RSM provided System Selection services to:

- Employed an experienced, highly technical finance manager in their team to create a number of complex spreadsheets and disparate SQL databases to manage assets and accruals on invoices that their legacy ERP simply couldn't handle easily.

- Data management became a full-time role for a person who was qualified for a high level, strategic analysis role and offered so much additional value to the organisation.

- The lack of integration and manual data import involved so much manual workaround and specialist knowledge that the role couldn't be easily passed on to a more junior staff member, meaning role redundancy for several critical month and year-end tasks wasn't an option.

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47 www.hospitalhealth.com.au/content/technology/article/why-the-healthcare-sector-must-reduce-its-reliance-on-legacy-it-systems-1240305791

Let's talk Practice Management

Managing your business operations can be just as much an administrative burden as the finance solution driving your metrics. Key considerations to think about when evaluating the future state of your practice management from a back office and staff management perspective:

- **Integrations to databases** — how much integration will you require to either validate patient or medical practitioner information in your system? What value would these integrations add to streamline the day–to–day operations of your business and eliminate confusion and data entry?

- **Integrations to your accounting/finance solution** — if you are running a separate finance system, what data will need to be pulled from the operations solution in order to streamline and automate the flow of data? Do doctor's pays need to be automatically calculated? Are there simple reconciliations that could be removed if systems spoke directly to each other?

- **Customisation of records and patient data** — each business will be different around the best practice used to keep track of patient data. Think about how your staff want to view data and whether or not the future system will allow for views to be altered to suit your workflows and practices. Can form capture eliminate time spent in consultation?

- **Customisation of reporting** — systems vary vastly and widely around reporting, and many large businesses are left using the basic reporting and creating consolidated reporting using pivot tables and vlookups in Excel more often than not. How well the practice solution will allow you to view and extract data can save hundreds of hours a year of manual data manipulation.

At some point, a legacy system has to be replaced. It's better to proactively choose that time yourself than to be faced with replacing it urgently because its final failure has plunged your business into a crisis. Or worse yet, that a system change is driven by a merger, practice acquisition or other driver that involves additional human capital and systems management that can be all–consuming.

What are your options?

Procuring software solutions that are localised and robust in functionality can be limiting. Luckily, the number of Software as a Service (SaaS) solutions available in the marketplace is consistently increasing in Australia across the healthcare sector.

Key terms to know

Software as a Service (SaaS)	A software solution that is wholly hosted, managed and updated by a software vendor in the cloud and accessible in a browser.	
Software Tiers	Software tiers represent the level of specific functionality a software solution has. It can be used to denote the level of complexity and cost involved in system setup and data migration.	Tier 1 – means the solution does only one or a few functions, i.e. Xero and Clinic to Cloud Tier 2 – means the solution encompasses multiple functions across finance and operations in one; often these solutions can handle multi–entity consolidation and complex reporting, i.e. NetSuite and Microsoft Dynamics Tier 3 – means the solution is suited for large enterprises and multinationals, i.e. Oracle and SAP
Enterprise Resource Planning (ERP)	A term used to describe a large software solution that encompasses multiple facets and allows for organisational–level budgeting and planning based on financial and non–financial data.	
Application Programming Interface (API)	A term used to describe an integration endpoint that is set up between one system and another.	

Regardless of whether or not you are involved deeply in the procurement of new systems in your business or not — familiarity with the terminology and process behind procurement and implementation will be critical in your strategic decision–making and cutting down on the time required to get to an end result.

CASE STUDY
COVID-19 SYSTEM WHICH DIDN'T EXCEL

Public Health England missed 16,000 positive COVID-19 tests that should have been reported in daily figures between 25 September and 2 October 2020. How? Because they were transferring lab test results into old Excel templates.

The old XLS Excel file format can only store around 65,000 rows of data, equating to about 1,400 COVID cases (each case generates multiple rows of data). When that limit was reached, further cases were left off the template. Public Health England 'fixed' the problem by creating numerous smaller spreadsheets.

> ''The Public Health England developers no doubt had some reason to transform the text files into Excel templates, presumably to fit with legacy IT systems. But avoiding Excel together and shipping the data from source (with appropriate cleaning and checks) into the system would have been better and reduced the number of steps in the pipeline.''[48]
>
> *Professor Paul Clough, University of Sheffield*

There are two lessons from this case.

Firstly, choose the right tool for the job. Many tools would handle this better than Excel, including on-site and cloud-based solutions capable of scaling and managing data storage for reporting and analysis.

Secondly, if budgetary constraints or other pressures prevent you using the best tool for the job, at least avoid using a blunt one. In this case, Public Health England was using an old version of Excel. Had they simply upgraded to today's XLSX Excel file format, their systems would have been able to handle over a million rows of data, meaning those missing 16,000 COVID cases would have been accurately and promptly reported.

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[48] theconversation.com/why-you-should-never-use-microsoft-excel-to-count-coronavirus-cases-147681

PROCURING THE RIGHT TECHNOLOGY SYSTEMS TO ENABLE BETTER PATIENT CARE AND BUSINESS OPERATIONS

The right operational and finance technology is an investment that enables business growth and better patient care through streamlined processes, greater efficiency, and data that leads to insight. And it's better to have your cyber security and data analytics teams working on fewer and more modern systems than cobbling together solutions and information across a wide and prolific number of networks.

It's critical that healthcare leaders invest in updating their technology systems sooner rather than later. But, with numerous software platforms on the market, how do business owners or Boards choose wisely?

> ''You need clarity on the goals <u>and</u> drivers, not just for the person at the top or the Board but for your practice manager, your nurses, your administration team, your doctors and other health professionals, who can tell you how everything needs to work for each of their focus areas.''
>
> *Laurel Grey — National Manager, Digital Advisory, RSM Australia*

A strong technology procurement strategy involves:

- Ensuring you know who will make the decision and how, including setting crystal clear evaluation criteria up front
- Getting clarity on the goals and drivers across your organisation
- Taking stock of your existing technology ecosystem and architecture
- Identifying pain points with your existing system
- Benchmarking your current practices against competitors
- Balancing competing interests and perspectives from within your organisation in order to prioritise effectively
- Seeking input from internal stakeholders such as your medical and administrative teams on future state functionality
- Seeking input from external stakeholders, such as your patients or government bodies
- Understanding the high, mid and low-level reporting required by all parties
- Considering likely future directions in healthcare, such as a greater reliance on telehealth or greater patient involvement in their care
- Considering any external constraints or regulations you must adhere to
- Prioritising your needs and wants to ensure the new system is robust, integrated, intuitive and adaptable.

CASE STUDY
MAJOR NSW INFRASTRUCTURE AGENCY

This agency is responsible for health capital works over $10 million in NSW. Much of their work involves procuring the right services to plan, design and construct health facilities.

They had a legacy Oracle solution and a custom in-house procurement platform to manage over 110 active projects. The prospect of changing systems was daunting but they recognised the risks of continuing to use outdated software.

RSM worked closely with leaders in the finance, procurement and IT teams to conduct a detailed tier 1 ERP software selection for the agency. Our Digital Advisory and Risk Advisory teams actively guided the solution scoping and documented the requirements of any new system.

RSM also conducted an extensive solution screening involving three vendors over several months in order to gain insights into the requirements fit, pricing and an indication of what the implementation plan and timeline would look like.

Armed with this full analysis, the team at Health Infrastructure ultimately decided to work with their existing ERP solution on an upgrade path. The work done gave the agency complete comfort in their decision and clear next action steps to take to senior leaders.
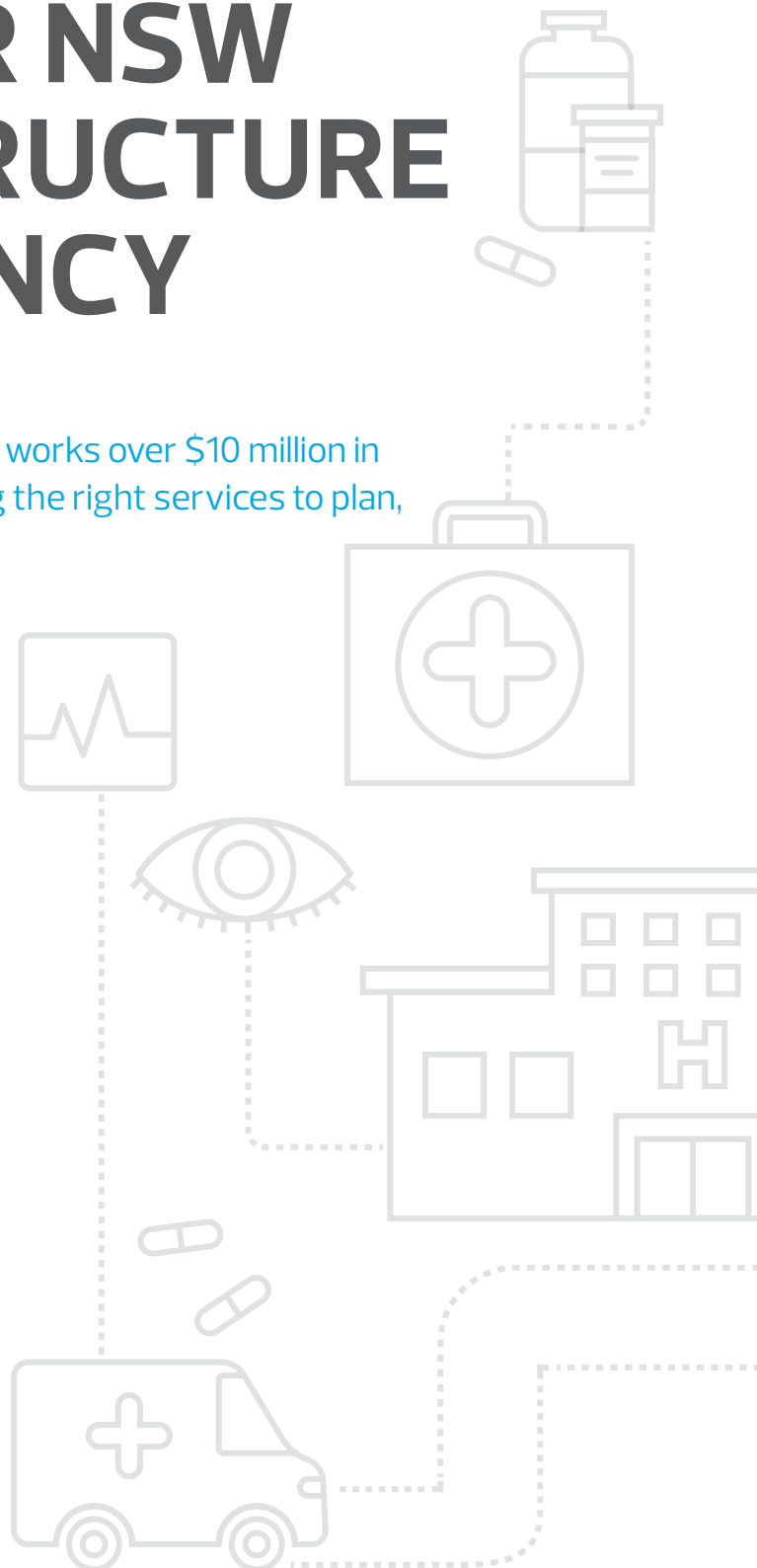
A matrix to guide the choice of a new system

This is not meant to be prescriptive — some organisations prefer to seek demos earlier, for example, to understand what's available — but it is important to cover all these bases.

Action	Purpose	Notes
Identify your technology lead	To drive the project forward.	They need the skills and authority to lead the procurement and change management processes. If you don't have the skills on board, or perhaps you want a fresh view from outside, look to appoint an external project manager and adviser. You will still need the internal project leader who can make decisions and liaise with the Board or management team.
Create a baseline	To gain a birds–eye–view of what you're using to run your business or organisation now and to understand which integrations would help you most.	List every system you use, including those for: - Finance - Payroll - Human Resources - Time & Attendance / Rostering - Medical records - Registering new patients - Appointment bookings and reminders - Practice and business management - Prescriptions - Referrals - Pathology - Transcriptions
Stakeholder consultation	To gain insights about current pain points and what a new system needs to deliver. To ensure buy–in to the change process.	Include each area of your business (e.g. admin team, management team, clinical team — including professionals and their assistants). Document concrete examples of where the current system is failing or where additional manual processes are being used to work around its limitations. Ensure the right people are in your workshops or answering questionnaires, not simply the 'important' people.
Establish a clear scope	To ensure you know what you're looking for in a new system.	What areas can you live with for now and what will the elements of the future state look like? What are the non–negotiables for a new system? What are the regulatory requirements for your systems? What are the nice–to–have elements? What do you want to avoid?
Survey the market	To understand the range of different systems on offer.	What are the main systems to consider? What do your counterparts in other businesses use? What's their feedback on those systems?
Set evaluation criteria	To ensure sound decision making based on what's important to you, rather than 'gut feel' or the best sales patter or the slickest website demo.	List the questions you want to ask suppliers to help you decide, e.g. - Data migration — content and timing - Integrations - Cost - Ongoing support - Time frame to implement - Who and what cost to implement
Seek vendors or providers, make time for demos & choose	To explore a few systems thoroughly and evaluate them against your criteria and against each other	Ensure key stakeholders are involved. Have a list of must–be–answered questions. Know your budget
Have an implementation plan	To know how to set expectations within the business across all impacted users	Don't be hero and go for the 'turning the switch on for everything on day one'. Inform the business of the timeframe and how and when users will be impacted. Be aware of patient needs and minimise impacts.
Understand your overall total cost of ownership	Get a clear picture of the costs involved across: - System setup - System integration - Ongoing subscriptions - Ongoing support	There can be hidden costs around integration or support fees that you need to consider. If you don't ask the right questions of vendors, you often don't get the right answers.

This matrix can apply to both financial and operational technology requirements. Whatever the organisation needs, any major technology spend should fit the budget, the business plan and the business strategy.

The pitfalls of procuring your own software

- Managing the volume of vendors — Software ecosystems for large practices, even those leveraging ERPs, can contain 10–20 solutions, all with their own sales and contracting methods. Keeping track of the multiples of vendors during a selection process can be extremely time consuming and onerous.

- Getting "real advice" from vendors — Let's face it — you will be working directly with salespeople throughout the procurement process; none of whom will have your specific practice considerations or best interest at heart. Maintaining an impartial view and obtaining advice directly from vendors can be problematic.

- Implementation and service delivery disparities — Each vendor tends to offer a different software configuration and support plans; depending on the size and complexity of the solution, your internal team can be on the hook for the majority of setup and documentation of the configuration for future troubleshooting.

"Most people go into the procurement process flying blind, calling their friends or other practices for ideas, then they abandon the whole idea because it seems too hard. That's why you need a procurement process in place and an internal champion to lead it.

Once you start contacting suppliers, expect the phone calls and emails. These companies are really heavily weighted with sales people. That's why you need your evaluation criteria to make a decision — is it going to be based on cost, integration between solutions, how well it fits?

In larger organisations, the solutions will be more complex, the language more 'tech' and the sales people you will meet will be slicker! Ensure you have the right team on this project so that you can focus on the outcomes of the internal and external discovery work you have done to determine your organisational needs.

A complete change of legacy systems has not been everyone's experience. After all, in large health organisations this might happen once in 10 years — if that — for a complete overhaul. And you only want to spend your budget ONCE. So get the rights skills in to get this job done."

Laurel Grey — National Manager, Digital Advisory, RSM Australia

Actions for getting a better technology strategy in play

1. If you haven't yet, take a solid high–level overview of your healthcare business and identify:

    a. How many different core systems you have
    b. How connected or disconnected they are
    c. Get some feedback from real users in all areas of the business on what works and what doesn't and how they spend their day
    d. Or better still get an expert in to map it out for you

2. Follow the matrix provided in this chapter to get the proper detail on just what is happening, what can be done better and then go about the selection process with probity checks and management oversight. This is not a job for your admin team or even your current IT force which MAY have vested experience in a legacy system and who may not be current on what should replace it.

3. Take the opportunity to align the future state of your healthcare services with your technology strategy. Look to develop a sense of timing of budgetary needs and set priorities.

4. Technology spend in health is generally big and complex. Ensure you have the right people bringing it together and seeing it through to execution and go–live.

5. Create a plan that builds around your patient care and professional practice, or your medical or biotech process, and provides efficiencies for your administration. Talk with someone who has the experience of implementing a staged solution that doesn't distract your team from keeping the business running.
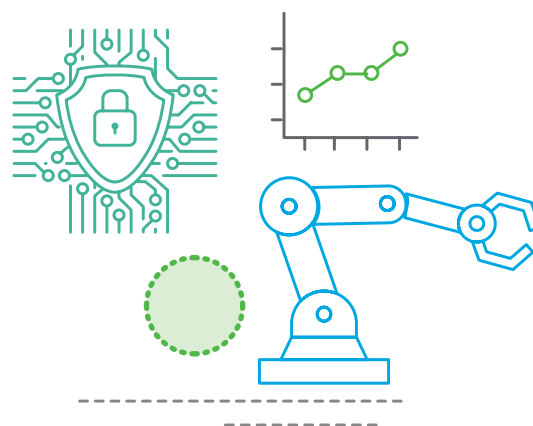
BLOOD IN THE WATER:

PAYROLL TAX, SUPERANNUATION AND CONTRACTORS IN THE HEALTH SECTOR

The State revenue offices have upended the medical profession with their recent challenges to the medical centre model and the application of payroll tax. At the same time, courts have given a wake-up call to all employers on the requirement to pay superannuation for contractors under the Superannuation Guarantee Act.

> "All health practices should review their contractor arrangements in light of recent court rulings on payroll tax and superannuation and how these apply to payments made to contractors."
>
> *Sam Mohammad, National Lead, Indirect Tax Services at RSM Australia*

Whether you are a GP, medical specialist, allied health practitioner, pharmacist, dentist or optometrist, or indeed any company that engages contractors, you should take note of these recent decisions and the potential impact on your liability in these areas.

PAYROLL TAX — A CLEAR AND PRESENT DANGER FOR HEALTH PRACTICES

The usual model of engaging health practitioners worked on the basis that they were independent professionals earning their billings directly from the patient while the medical centre retained an agreed percentage of the billings for providing infrastructure, administration and other support.

The medical centre would receive the gross billings, take out their own fees and then remit the balance to the practitioners.

The courts have now held that the usual flow of funds in this model means that the money received by the practitioners is 'payment' in respect of a 'relevant contract' for payroll tax purposes — and therefore subject to that tax.

Payroll tax and thresholds

The states and territories collect payroll tax on wages paid or payable by an employer to employees when the employers total wage bill exceeds a specified annual threshold.

NSW	ACT	VIC	SA	TAS	WA	NT	QLD
$1.2m	$2m	$650k	$1.5m	$1.25m	$1m	$1.5m	$1.3m

It is important to note that where a contractor is engaged there is an additional requirement that they work 90 days or more before payroll tax is applicable. Part of a day consists of one day.

Furthermore, 'wages' is a defined term. It covers payments to employees but extends to include amounts paid under various contracts that are principally for the supply of labour (with state-based differences). Each state will have its qualifications, extensions and exemptions in and around this general definition. You need to know where you stand in the state where you pay people who you contract with.

The case which gave rise to the payroll tax decision – Thomas and Naaz v Chief Commissioner of State Revenue in NSW – has cost the owner/operator of three practices in Sydney over $795,000. An appeal to the decision was rejected on 6 July 2022.

> "We understand revenue offices in NSW, Victoria and Queensland are ready to run with the decision and start a process of reviewing similar arrangements. In NSW, the Commissioner is likely to go back 4 years in prosecuting this interpretation on any centre operator that fits the facts of this case."
>
> *Peter Nicol – National Director, Medical at RSM Australia*

Practices urgently need to review their practice arrangements in light of the outcome in Thomas and Naaz. Let's look at the details of the case.

A summary of NSW: Thomas and Naaz v Chief Commissioner of State Revenue

Thomas and Naaz Pty Ltd owned three medical centres in western Sydney.

Thomas and Naaz did not consider themselves liable for payroll tax. In their view, they had contractual arrangements with doctors who were working in their own separate practices providing services to patients only.

Revenue NSW saw those arrangements very differently. In their view, payroll tax was due because the contracted doctors were not only providing a service to patients but also to Thomas and Naaz as it could not operate its medical centre without them.

The case was heard in September 2021. The New South Wales Civil and Administrative Tribunal (NCAT) agreed with Revenue NSW and ordered Thomas and Naaz to pay payroll tax of $795,292.00.[49]

If it walks like a duck and talks like a duck...it's liable for payroll tax

Thomas and Naaz had detailed written agreements with contracting doctors that gave the practice a high degree of control over a doctor's working arrangements.

The Tribunal reviewed those service agreements and determined that most of the control was held by the medical centre. This was not two independent businesses entering into a contract; it bore all the hallmarks of an employer–employee relationship and, as such, was subject to payroll tax.

The practice	The doctors
Provided rooms for doctors to see patients	Usually worked exclusively for one of the medical centres owned by Thomas and Naaz
Set the fees charged to patients	Bulk billed each patient and used their own Medicare details for invoicing
Employed all the admin staff who collected fees and made bookings	Received 70% of the claims paid by Medicare for the patients they saw, paid on a fortnightly basis by the practice to the doctors
Made claims to and received funds from Medicare	Could not substitute themselves with another provider if they were sick or on leave
Placed those funds into one account before distributing them to doctors each fortnight minus a 30% service fee	Were required to sign a detailed agreement with Thomas and Naaz that included 'employee-like provisions' such as:
Owned the patient records	▪ Required hours of work ▪ Annual leave provisions ▪ Following practice policies and procedures ▪ Signing on and off each day ▪ Being physically present when rostered on ▪ Promoting the practice's best interests ▪ Restraints on practising at another clinic within 5km of Thomas and Naaz

Importantly, the courts also rejected the 'trust funds' concept – that the medical centre was merely receiving and holding funds belonging to the practitioners and was passing, onto those professionals, funds that belonged to them – and found that the 'flow of funds' told a different story. The court took the view that the so-called passing of trust money was simply a 'payment' as required by the legislation and, secondly, that the payment was paid in relation to a 'relevant contract', being a contract principally for the supply of labour and one which was not exempt.

49 classic.austlii.edu.au/au/cases/nsw/NSWCATAD/2021/259.html

> Clearly there is concern in the industry about impact on organisation owners as well as the ability to survive and uphold services to patients.

Response from the medical community

Alarmed by the ruling and its broader implications, Australian Medical Association NSW swung into campaign mode.

> "A payroll tax on medical practices will force some doctors to close their doors while others will have to stop bulk billing. Patients will lose access to healthcare and be forced to pay more."[50]
>
> *Australian Medical Association*

In February 2022, the AMA hosted a webinar on the topic with the Commissioner of State Revenue. Clearly, doctors and practice owners were concerns — 740 of them tuned in. Clearly, the Commissioner was not to be deterred — he admitted that Omicron was the only reason that there had not been further audits of practices.[51]

The AMA NSW noted that practice owners were reluctant to speak openly about their payroll tax concerns for fear of triggering an audit. Many doctors provided their anonymous comments on the 'mercenary tax' which they feared would 'decimate general practice businesses.'

One GP stated:

Depending on interpretation of payroll tax I could lose $120,000 straight away if five years retrospective money was taken. Going forward $25,000 to $30,000 per year.

I already forfeit more than 40% of my income being a director and running a practice. Revenue NSW is trying to take more than 15 to 25% of my operating profit per annum by misconstruing a well understood concept in general practice about contractors.

These taxes are doing grievous harm by further placing immense strain on our practice to spend tens of thousands of dollars changing our structure for no reason other than to avoid the Office of State Revenue creating loopholes for themselves to price gouge us.

We are afraid of bankruptcy, endless ongoing price cuts to our profession, with increases year on year in GP stress, suicide and mental health. We are tired of the underfunding, the public slamming of our profession.[52]

Regional GP

[50] www.amansw.com.au/payroll_tax/#:~:text=This%20change%20in%20the%20State,managed%20by%20the%20general%20practice
[51] medicalrepublic.com.au/payroll-tax-blitz-to-hit-patients-not-just-practices/63839
[52] www.amansw.com.au/payroll-tax-anonymous

Superannuation extends to labour supply contracts

Contractors come in all shapes and sizes when it comes to operating methods. Many operate as individuals, some as companies and some as trusts. Many people assume that engaging a contractor means the contractor is liable for all the on-costs and usually a contract spells this out. However, this is not necessarily in accordance with the statutory requirements.

Under the Superannuation Guarantee Act, the definition of 'employee' is extended to include someone who works under a contract that is principally or wholly for the supply of labour. This has ramifications for those who are paying contractors.

Engaging contractors does not necessarily mean there are 'no strings attached'. The application of superannuation to contractors affects all industries in the health sector, including allied health, pharmacy and dental as well as medical centres.

Whether or not superannuation applies depends on whether you're contracting with an individual or a company.

> "Essentially where your contractor is an individual, you have no choice. Any payment for services should consist of a payment to the contractor and one to their super fund. You cannot pay the full gross amount to the individual. If they're a company, then you don't have to apply superannuation to the payment since the contract is with a company, not an individual."
>
> *Peter Nicol — National Director, Medical at RSM Australia*

What does this mean for the way you engage contractors?

These cases have potentially far-reaching implications for many health practices and businesses that engage doctors, allied health professionals, pharmacists and other providers of health and related services on a contract basis.

In the worst-case scenario, it means you may have both current and historic liabilities for payroll tax and superannuation, which could become crippling.

That money has to come from somewhere. Either patients must pay higher fees or the practice must accept a lower return or its 'staff' — the doctors and health professionals who provide services to the centre — must accept reduced income. All options are unpalatable.

Your risk of payroll tax does not, ultimately, depend on the Thomas and Naaz decision but on the terms of your contracting arrangements and on the flow of funds that take place in your day-to-day operations.

You may be able to reduce the risk of payroll tax by changing your conditions and accepting less control over your contractors. For example, giving discretion over working days/hours, enabling them to work at unrelated businesses, issuing invoices in the doctor's name and ABN (not the practice name), not collecting or distributing fees on their behalf and removing restraints on practising in the same area. This is general advice only, not complete or specific advice to similar situations and each medical centre operator should seek advice specific to its facts.

Actions steps

1. Be aware that state revenue offices have scented blood and are likely to start auditing healthcare practices.

2. Recognise that you're now at significant risk of being made subject to payroll tax if your clinic collects consultation fees (including Medicare rebates) into its operating account then remits healthcare professionals minus a service or administrative fee.

3. Review contracts held with all health professionals and eliminate any agreements or clauses that take on a 'look and feel' of an employment contract. This will include removal of clauses such as leave entitlements, hours of work etc. Be aware of contracts with individuals which will be subject to superannuation.

4. Consider how the flow of funds and patient billing can be amended to ensure the payment from the business to the contractor is replaced by a payment by the health professional to the business for services. There would appear to be sufficient leverage available over the practitioner by the practice owner to ensure that the services fee does make its way to the business owner from the billings collected by a practitioner.

5. Consider the processes in and around the patient services and the practitioner and how you can give substance to from in ensuring that the role of the practitioner is distinct from that of the business and that funds flow accordingly.

6. Seek capable, professional advice on the best arrangements for your unique needs. Remember, your arrangements need to reflect a mutually beneficial relationship between two parties, not a power dynamic between an employer and an employee.
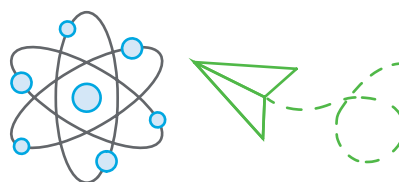
RSM:
YOUR PARTNER IN HEALTH

Australian healthcare has changed immensely in the last 100 years. If anything, the pace of change is getting faster as digital transformation and the ongoing impact of COVID–19 reshapes the landscape.

We encourage you to review the action steps at the end of each chapter of this report and contact the relevant RSM adviser if you would welcome our advice.

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	Srdjan Dragutinovic	srdjan.dragutinovic@rsm.com.au	03 9286 8238
Digital health and innovation	Jaime Lam, Risk Advisory	jaime.lam@rsm.com.au	03 9286 8273
	Jessica Olivier, R&D Tax Advisory	jessica.olivier@rsm.com.au	02 8226 4500
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Payroll tax in healthcare	Sam Mohammad, Indirect Tax Advisory	sam.mohammad@rsm.com.au	07 3225 7867
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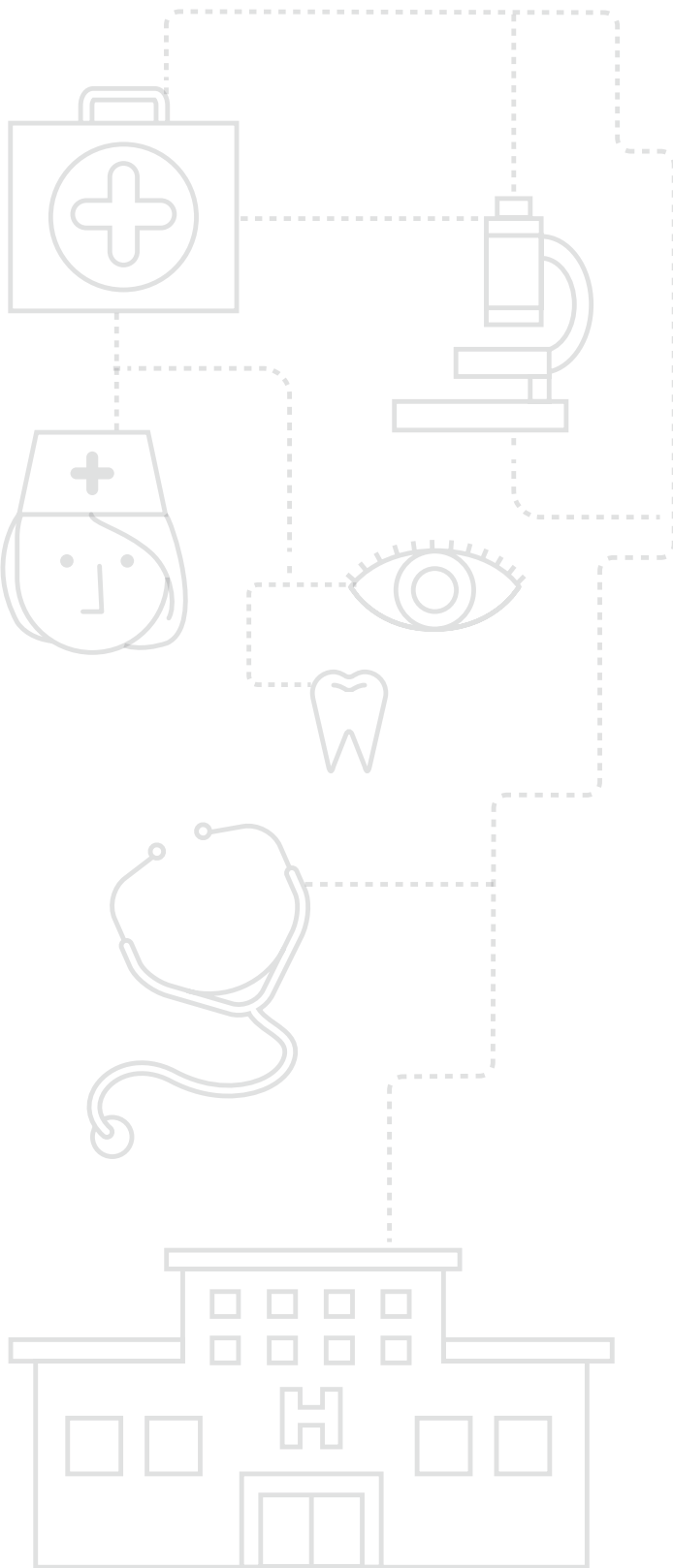
WE'RE HERE FOR YOU

The complex nature of working in the health sector means you face unique challenges every day.

At RSM, we want our clients to be 100% confident about their business and financial affairs, to be ready to take the next step, whatever that might be. We seek to demonstrate the Power of Being Understood, listening and working with you to solve challenges as they arise and have been the trusted adviser to the health sector and Australian health professionals for a century now.

Our national team of health industry advisors have extensive experience working with clients from hospitals and international pharmaceutical and biotechnology companies right through to general or allied health practices.

Health Services by RSM comprises an extensive range of health-specific solutions developed from experience across the health sector. From a standing start 100 years ago, RSM now has offices around the country, dealing with large and not-so-large health companies, businesses, organisations and practices.

And the RSM global network spans over 120 countries, so dealing with cross-border health companies is not new to RSM.

In addition to this industry experience, the team has technical expertise across all major service lines including audit, tax, risk advisory, business advisory, corporate finance, restructuring and financial services. Wherever your focus lies, we'll listen to your challenges and provide tailored strategies for your organisation or for the health professional that reflect your values and priorities.

OUR NATIONAL DIRECTORS IN HEALTH SERVICES

Our experts head up specific health sectors and bring deep knowledge supported by a team focused on industry issues:

Peter Nicol
Medical (practice, suppliers, manufacturing)

Jaime Lam
Healthcare and Community (health organisations, NDIS services across all health, community health services)

Ray Scott
Aged Care (facility owners)

Trevor Lake
Allied Health (practice, companies, suppliers)

Jayesh Kapitan
Hospitals

Peter Saccasan
Pharmacy – retail pharmacy, biotech and pharmaceutical and National Leader, Health Services

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