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Health Education Australia Ltd (HEAL) Thought Leaders Forum

'The Future of our Medical Workforce'

Report

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Executive Summary

Health expenditure in Australia is 10.3% of GDP (2015/16) and increasing[1] and is a complex system of funding, policy and operational responsibilities. With it, changes in demography and disease patterns as the population ages, and the burden of chronic illness grows, there is an increased demand for healthcare services. A maldistribution of the health workforce (supply and distribution), concerns re quality and safety of health services[2] and the challenge of the role of urban planning in creating healthy and sustainable communities weighs heavily on society. Additionally, there is a developing understanding that achieving equity in health, especially for Indigenous Australians, and for others who are on the less fortunate end of the scale of social determinants of health, requires more than just providing health care services.

In this context, Health Education Australia Ltd (HEAL) Thought Leaders program invited expert participants to attend a forum to address the topic of 'The future of our medical workforce' by exploring the idea of 'building medical training (undergraduate and postgraduate) from the ground up'.

In the current training environment, education, training and professional development competes with productivity and health professionals are largely taught on the job by clinicians who 'know what they know' and that's what they teach their students. Whilst not ideal, this model is difficult to change and today, healthcare education is not that dissimilar to what was taught 20-30 years ago. Alternatively, software engineers, for example, work in real time and share innovation, information and workloads across the world in virtual communities. The healthcare training environment has largely remained static and it is therefore prudent that we look at what we can do to set up the system for the next 20-30 years. To do this we need to challenge some of the existing assumptions:

- *Training should be hospital centric*: This type of medicine is largely the public's perception around healthcare and as such it is a political driver for decision makers.
- *Hospitals and special societies will determine the correct specialist/generalist mix and workforce numbers:* Hospitals have 'special societies' such as; Cardiology, Orthopaedics etc. Are these societies accountable to the population that they serve to a sufficient degree?
- *Training must be intense and of long duration*: these societies require trainees to have intense and lengthy training (approx. 12 years overall) which is atypical of any other industry.
- *Remuneration should automatically increase with years of training.*
- *The public won't cope with transparency regarding clinical performance and patient outcomes:* this remains an interesting and debated conversation.
- *Mind and body medical training should be run through separate training systems:* Mental health and biological healthcare are taught to health professionals as completely different streams but in reality are inextricably linked.

Additionally, specialist training colleges face additional challenges that include:

- *Detachment between the hospital as the employer of a doctor providing a service and the training college* that dictates the training required of a junior doctor in the workplace.

[1] Australian Institute of Health and Welfare (AIHW), (2016) Australian Government
[2] Victorian State Government (2016) Better, Safer Care

- *The tension of the college playing a collegiate and an adversarial role in the running of training and assessment* and also having power over the doctor's career.
- *The need to be a professional body* to bring together clinicians for their common benefit and for scientific discussions.
- *The business:*
    - need to increase trainee numbers without necessarily paying appropriate regard to workforce requirements or the future career prospects of their trainees.
    - requirement to keep existing fellows happy by reducing further competition.

As we struggle with a largely archaic medical training system the CSIRO Future of Health report[3] posed a fairly optimistic view for healthcare that needs to shape any restructure of the healthcare industry. The vision is to a system that:

- moves from reactive treatment of illness to proactively managing health.
- focuses on wellbeing in a holistic, consumer-centric way.
- recognises that the one-size-fits approaches need to move to providing precision health solutions.
- moves from extending life to improving quality of life over a lifetime.

The main objective of the Thought Leader forum was to capture recommendations and key focus areas that need to be considered in the future. Thematic analysis was applied to recommendations that included:

- *Healthcare professionals of the future.* For most clinicians it will be the need to manage the complexities that an individual cannot manage well on their own. They will need to ensure that they are maximising their skills and working 'at the top of their game' and that jobs are redesigned so that tasks and activities that can be completed by alternative members of the workforce are reassigned. Community-based care has to be seamless with hospital care with clinician validation being derived from real-time feedback on their contribution to meaningful patient outcomes.
- *Educational impact – undergraduate and prevocational.* Medical training needs to be seamless and there is an opportunity for Universities to take a broader role in medical training that includes identified pathways and support that commences in high school through to taking responsibility for prevocational education in the early hospital years. Universities don't want to meddle in healthcare and healthcare providers have an opportunity to transfer a bulk of the education to education providers and to work in a much more complimentary way.
- *Vocational training*. One of the biggest current challenges in the hospital is the integration of care between community services and hospitals. Current hospital training programs pay little attention to this essential requirement for future clinicians.
- *Generalists/Career Medical Officers (CMOs)*. CMOs are extremely valuable to the hospital system but support of this cohort by the health services is very limited. A cultural shift needs to occur to promote the CMO as an attractive and valued career option that is a fundamental part of the workforce and better suits how we should be doing business in the

[3] Future of Health (2018) Shifting Australia's focus from illness treatment to health and wellbeing management, CSIRO, Australia

future. The CMO/generalist workforce could deliver the care in parallel with traditional trainees and could be further exposed to a higher density and a broader variety of cases including community rotations to support better integrated care without the frequent staff changes that are associated with traditional training pathways.

Furthermore, the specialist medical colleges should open up their siloed approach and be more collaborative in sharing and partnering in opportunities to cross fertilise and innovate in the provision of micro-credentialing opportunities for other disciplines, particularly generalists wishing to upskill in areas of high demand.

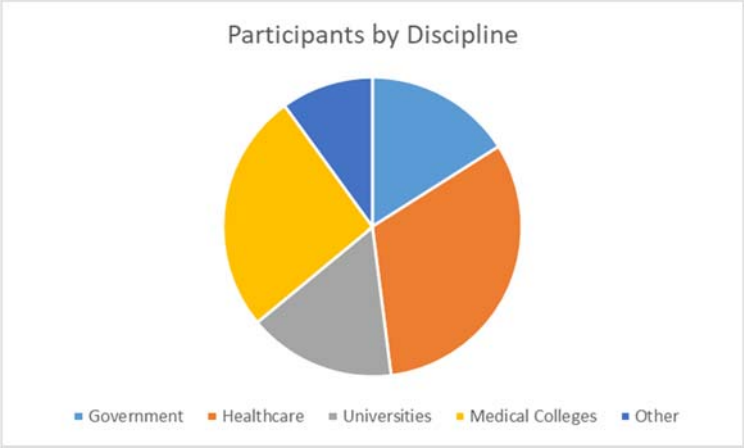
- *Digital Technology and Artificial Intelligence.* The healthcare industry collects abundant data but often lacks the analytical and improvement skills to extract and apply learnings from that data. Healthcare professionals need to increase digital literacy and improve their trust in digital assets. Digital technology allows health professionals to perform less memorising (of text books) and perform more critical assessment of data. Similarly, less diagnosis (as it's replaced with artificial intelligence) provides the ability to shift human skills toward more collaboration and coordination with team members and better communication with their patients to improve patient outcomes.
- *Consumer Input.* Health professionals tend to see patients and families as wanting things (increased expectations) rather than contributing things. For a health system of the future we have to determine/rely on, how patients and families can contribute more. There is a need to teach healthcare workers to adopt this viewpoint rather than seeing patients as a burden on the system.
- *Indigenous health and equity.* Promoting Aboriginal, Torres Strait Islander and Māori health is important to understand and we need to give these topics sufficient emphasis (in the curricula). We need to ensure that co-design by those with lived experience informs the content, training and assessment.
- *Alternate Models.* A number of alternative and new models of care were considered including; the value of consumer committees and board engagement, increased responsibilities and training of nurses, use of Physician Assistants (health navigators, or similar) and the globalisation of health in ensuring (our home grown) research and products are exportable.
- *Accreditation of education and training.* It is important to recognise that the future of medicine is the doctors coming into the system now and that they may have differing values, or differing perspectives on life to the doctors before them. And as they are our future, we need to adapt to them, rather than adapting them to our traditional values and ways of thinking.
- *Research.* The acquisition of a research degree (PhD) involves taking a clinician away from a service role for at least three years and is often not followed by a significant further research contribution. This is probably because the highly competitive nature of traditional research does not facilitate substantial ongoing clinical roles. The value that accrues to the individual and the broader society from this three years away from service provision will be vigorously argued depending on perspective. Regardless of perspective, we need to find better ways to encourage an ongoing research contribution while continuing to provide service delivery work by the best and brightest amongst our colleagues. One solution would be to bias the incentives for these talented staff to contribute to research on service delivery improvement rather than the more common highly disease-specific, interventional or basic research. Research also needs to be stimulated in areas that the community as a whole requires, where we start to understand and improve the system in which we work,

for example; aiming for better levels of health literacy, improving and interacting with teams to truly understand the behavioural side and mental health side of healthcare.

Finally, we need to recognise that medical practice changes, the boundaries of medicine aren't new but the boundaries between medicine and other health professions will continue to merge, change and vary. This shouldn't be thought of as controversial, but that we need to focus on what outcomes we need, and what quality we are trying to achieve. The medical profession itself needs to adapt but this should be viewed as a positive opportunity. Change takes time and the change that is detailed in this report should be considered in a 10 year timeframe which means we should be thinking about the leadership of the future and developing our interns of today.

Background

Health Education Australia Ltd (HEAL) Thought Leaders program invited 50 participants from government, universities, medical colleges and health services (see Attachment 1) to attend a forum of expert presentations, discussions and a hypothetical (see Attachment 2). The program aimed to address the topic of 'The future of our medical workforce' by exploring the idea of 'building medical training (undergraduate and postgraduate) from the ground up'.



Prior to the forum participants were given a program of the day (Attachment 3) and a briefing document (Attachment 4) to assist with framing the day. During the forum, participants had an opportunity to ask questions during the program and to provide questions via Slido, a Q&A and polling platform which allowed anonymity.

The following is an account of key points from individual presentations, the hypothetical, participant discussion and comments and questions captured on Slido.

Introduction

Australia's Healthcare system is a complex mix of Commonwealth and State Government funded services and services funded by private health insurance. The system is a multifaceted web of settings, participants and supporting mechanisms. The Australian Government and state and territory governments also fund and deliver a range of other health services, including population health programs, community health services, health and medical research, Aboriginal and Torres Strait Islander health services, mental health services, and health infrastructure.

Health expenditure is 10.3% of GDP (2015/16) and increasing[4] and is a complex system of funding, policy and operational responsibilities. With it, changes in demography and disease patterns as the

[4] Australian Institute of Health and Welfare (AIHW), (2016) Australian Government

population ages, and the burden of chronic illness grows, there is an increased demand for healthcare services.

Other challenges include relentlessly increasing expectations within the community for the quality, accessibility and cost of care they desire. Patients have increased access to information, Google and related healthcare apps that are now in competition as alternatives to visiting the health professional. A maldistribution of the health workforce (supply and distribution), concerns re quality and safety of health services[5] and the challenge of the role of urban planning in creating healthy and sustainable communities weighs heavily on society. Additionally, there is a developing understanding that achieving equity in health, especially for Indigenous Australians, and for others who are on the less fortunate end of the scale of social determinants of health, requires more than just providing health care services.

The competence of Medical Practitioners in the Australian healthcare workforce has helped to place the Australian health care system amongst the highest ranking in the world for both quality and affordability. Forthcoming challenges of rising community expectations, an ageing population and increasing prevalence and complexity of chronic disease including mental health, together with relentless pressure on healthcare costs are now putting pressure on undergraduate, prevocational and vocational training to rapidly adapt to changing priorities, particularly for care outside of the hospital.

Thomas Friedman in his book 'Thank you for being late, an optimist's guide to thriving in the age of acceleration', references 'Moores Law' in which the human adaptation curve has been overtaken by IT at a pace where hardware and software advancements are more than doubling every two years. Whilst we have learnt to manage the disruptive change this acceleration inevitably brings in many aspects of our lives, training of our health care professionals has continued along largely traditional lines. In Friedman's view, the next step after "disruption" is "dislocation" where large segments of the community are not able to adapt and are left behind. In our view, the education of health care professionals, particularly at the postgraduate level, has resisted disruption to date and is on the threshold of this feared dislocation. We need to act now to ensure the vocational training of our present and future doctors will equip them to meet the rapidly changing needs of the community we serve with both confidence, agility and competence.

This Thought Leaders forum aimed to challenge the assumption that medical training is 'fit for purpose' to sustainably deliver the care our community needs both now and in the future. By facilitating communication and networking between key stakeholders and consumers of healthcare we hoped to both identify key opportunities for improvement and to sow the seeds for action to re-set the training of our dedicated health care professionals.

The Healthcare Environment

During the Thought Leaders forum there was significant dialogue from presenters and participants that captured the setting in which we work. A summary of the dialogue can be found in Attachment 5 and has been divided in to three areas; current healthcare environment, current training and workforce environment and the future environment. It highlights some of the current issues we experience.

Recommendations and Focus Areas

The main objective of the Thought Leaders forum was to capture recommendations and key focus areas that need to be considered in the future. The following section is a thematic analysis of recommendations that were presented during the forum.

[5] Victorian State Government (2016) Better, Safer Care

The following key categories were identified:

Healthcare Professionals of the Future

For most clinicians it will be the need to manage the complexities that an individual cannot manage well (on their own). Focus will need to be on; patient and family preference, evidence base, investigation results, interacting comorbidities, psychosocial concerns, economic costs, managing barriers of health literacy and treatment plans that are tailored to the patient.

Health practitioners need to ensure that they are maximising their skills and working 'at the top of their game' and that jobs are redesigned so that tasks and activities that can be completed by alternative members of the workforce are reassigned. Essential skills will be required in; explaining risks, complex problem solving, communication, teamwork, negotiation, empathy and the ability to garner trust and patient engagement. The importance of digital literacy and critical evaluation are also emerging as essential skills allowing the appraisal of new information, particularly as new evidence and 'best in class' approaches are emerging at a faster rate, and as patients/consumers obtain information from newly emerging sources.

Community-based care has to be seamless with hospital care and validation that needs to be derived from real-time feedback on their contribution to meaningful patient outcomes. The driver of validation is in the university system but not in the healthcare system which sees really good healthcare professionals disappear after five years to management roles or private practice because we don't have a really good validation system that supports good performance in the clinical practice that they provide.

So what can we do to get this acceleration?

- Provide 'thought leader' opportunities.
- Incorporate the voice of the patient consumer.
- Make it easy for clinicians to retain and develop general and holistic skills that are required and easy to pick up new skills.
- Train for and promote teamwork for improvement.
- Provide clinicians with information so that they understand how to develop rapid improvement care systems.
- Provide a seamless interface between training bodies.
- Better utilise the private sector as fertile training grounds.
- Allow consumer input to inform what the community wants (proactively) instead of waiting for things to go wrong (and have a royal commission to solve them).
- Stop doing things that don't add value.
- Examine the data to see where the maldistributed workforce gaps are i.e. are all Cardiologists in specific regions or do we have a realistic distribution?
- Have a single source of truth of workforce projections of each medical discipline/craft group to enable workforce planning.

There are things that are harder to change, like the split of responsibility for the healthcare system between the Commonwealth and state governments, however at a local level, we need to improve the disconnectedness between the university, the medical colleges (and other training bodies) and the healthcare services. No one has jurisdiction over all training and somehow this needs to be managed.

To counteract some of the challenges outlined above, the Victorian Government is working on the following initiatives:

Pathways to grow the medical workforce:

- Encouraging clinical flexibility – being innovative about partnerships and pathways. Clinicians need to be more flexible by living or visiting rural areas on a regular basis.
- Support of end to end training programs – collaboration with the training colleges to chaperone trainees through training programs who will stay in rural locations as current dislocation from the training provider is an issue for vocational trainees
- Developing multi-year contracts for PGY1-2s.
- Rural streams for paediatric training.

Partnerships to provide a collaborative approach:

- Developing networks of training – implemented meetings between government and colleges.
- Providing different models for rural training and providing curriculum and KPIs to train clinicians specifically for rural areas.

Programs and Policies:

- An emphasis on multidisciplinary care. Support of a strong nursing model of more than 420 Nurse Practitioners with prescribing rights working in diverse roles in Victoria.

Promotion:

- There needs to be a lot more work in the area of the following:
    - Emphasis on disease prevention rather than diagnostic and curative services.
    - Changes in lifestyle and chronic disease impacting the health care system.
    - Health promotion strategies that can develop and change lifestyles, and impact social, economic and environmental conditions that determine health.
    - All levels of government increasing focus on prevention.

Educational Impact

Medical training needs to be seamless and there is an opportunity for universities to take a broader role in medical training that includes identified pathways and support that commences in high school through to taking responsibility for prevocational education in the early hospital years. Universities don't want to meddle in healthcare and healthcare providers have an opportunity to transfer a bulk of the education to education providers and to work in a much more complimentary way.

Undergraduate Training

The University of Melbourne is in the process of testing a new flexible model of training for medical students which could be transferable to other universities. It is designed to provide flexible learning with the following key highlights:

- A more diverse entry to medicine needs (fit for purpose student) that can be upskilled as required – pre requisites to include a multistage interview that has an increased focus on soft skills.

- Flexibility of delivery – available on phone or laptop.
- Flexible module learning that a student can accelerate, decelerate or repeat as required across years (i.e. if they like a second year subject in first year it can brought forward).
- Learning with no geographical boundaries.
- Increased number of faculty who are practicing clinicians.
- Provision of a more embedded research curriculum. Research used to be 6 months in the final year but now a longitudinal exposure across years will enable students to follow cases or a cohort of patients over the years.
- Opportunities for discovery – personalise the course if the student knows they want to be a GP from the beginning – they can do half a day in a GP practice from the commencement of the course.
- Clinical exposure from year 1, week 1 rather than only in the final year.
- A flexible curriculum that allows diversions and the ability to take time away to have a family, to travel etc.

Work in progress includes the following initiatives:

- Better undergraduate management of expectations (of medical students) of career pathways that could possibly include moving into their preferred specialised field straight from, and included in, the undergraduate degree.
- Provision of better pathways for students that are struggling to move out of the traditional medical degree or to graduate with specific clauses/restrictions (i.e. without the parallel licence to practice) so that they can work in policy or similar.
- Improved governance process (in general) between the university and the healthcare services and particularly in the development of competency based assessments that are designed in conjunction with health services, that are relevant to their intern year, wherever it is (metro or rural).
- Developing pathway relationships with medical colleges to get credits (components of undergraduate training accredited for advanced training) – e.g. if a student did anatomy and physiology in their undergraduate degree, there may be a possibility to get a credit in surgical training and save 3 months of vocational training.
- Provide a duel MD to expand opportunities for students e.g. Master of Health program is currently available to medical students but this could be opened up to include other options e.g. engineering so that MDs can be flexible in career options (e.g. work for CSIRO or similar).

Prevocational Training

There are many tensions for prevocational trainees who provide their graduate years with limited contact of patients and largely providing clerical roles. There is a pressure on productivity with sicker patients (shorter length of stay – greater turnover of patients) and their families demanding increasing time. Key recommendations for improvement includes:

- A streamlined education and support program from undergraduate to postgraduate years and better management of expectations between the two domains.
- Curated coursework with assessment (possibly a national curriculum) that allows clinical reasoning in a safe and protected environment.

- An education program that is managed and monitored by the universities, the medical colleges or some other educational body.
- Quarantined funding of Teaching, Training and Research (TTR) grants away from the health services capital base.
- Implementation of a more transparent, audited form of funding of Teaching, Training and Research (TTR) grants.
- Provision of improved resources in the health services, particularly around training and wellness.
- Improved support for junior doctors on rural rotations – use of technology.
- Allow prevocational doctors to 'work at the top of their game' – use of alternative workforce models to provide clerking activities.

Vocational Training

In General

Medical student exit surveys (by the Medical Deans of Australia and New Zealand) show future career expectations (as being almost consistent year on year):

- Internal medicine (20%)
- Surgical specialists (15%)
- General practice (9-10%)

Almost no one shows an interest in becoming a Career Medical officer (CMO, which is viewed as a gap filler and an underappreciated role) and even GPs have an initial stigma of not being as elitist as internal medicine or surgery. In reality, these statistics are quite different to what actually happens, with about a third of all trainees becoming GPs and CMO positions remaining at a minimum. Rotations in prevocational years in to primary care, community practice and mental health may help to destigmatise these disciplines and broaden the pathway of vocational expectations.

Additionally, hospitals choose to have all care delivery provided by trainees (supervised by consultants) which sets the hospital system up as the determinant of training. An elevation of generalist medical practitioners would better suit how we should be doing business. One solution would be to have a permanent hospital workforce of generalists/CMOs that actually deliver the care in parallel to trainees who can then be trained by appropriate supervisors and exposed to a high density and a variety of cases and can rotate to the community to enable a much broader understanding of the patient episode and pathways. One of the biggest current challenges in the hospital is the integration with community services and current training programs are fundamentally different paradigms. This model ensures that patients get care from a stable permanent workforce that understand the system and who have relationships throughout the whole organisation (with no conflict of training).

Generalists/CMOs are extremely valuable to the hospital system and support of this cohort by the health services, needs to be evident. A cultural shift needs to also occur to promote the CMO as being an attractive and valued career option that is a fundamental part of the workforce. The role requires a redesign as an appealing pathway for those doctors who do not want to set up a private practice, who like variety, who would receive stable employment and benefits and have flexibility of service. The position requires:

- A recognised career structure
- Pathway options (with credits) to other vocational programs
- Appropriate remuneration

- A home base (college) with accreditation, professional support and management of professional development
- Flexible work hours and conditions
- A name and profile change

Medical Colleges

To determine recommendations for the medical colleges to improve training programs we have to ask, what makes a good specialist?

Specialist doctors will ultimately have varying degrees of involvement in different areas of practice, depending on their specialty and interests – from public, private clinical work, to education, health leadership and research. So how can the colleges support the production of a 'good specialist' who is not only medically competent, but able to adapt and be flexible to all of the environments and situations both throughout their training and as a specialist and to adapt over time to the varying demands of their life and career circumstances.

Being a good doctor in whatever specialty requires more than just clinical skills and knowledge, so how do we teach a medical specialist the ART and SKILLS of medicine? How do we create doctors who will be active and independent lifetime learners in addition to being practitioners of evidence-based medicine?

A survey of a small group of vocational trainees offered the following perceived challenges as recommended focus areas to medical training in 2020:

- Increased number of medical graduates means there are huge bottlenecks to get in to specialist training. This provides an increased pressure for trainees with the feeling that they have to start on the specialist path very early in their career.
- Inadequate increases in specialist training program places.
- Increased number of adult learners (due to MD programs) – that require increased independence/autonomy that is not always reflected in the program and adds further pressure for trainees.
- Perceived lack of mentorship, support and career planning during training and beyond.
- Programs have supervisors assigned with formative and summative assessments but many trainees just view these tasks, log books and learning plans as bureaucratic exercises, things to tick off, rather than being an active process of foundation.
- Supervisors/mentors do not have the expertise, training, support or time that they need to effectively help trainees to engage with their learning.
- Rural gaps in the workforce require trainees to attend rural and regional areas which often means that they don't get adequate practical and surgical exposure to achieve fellowship requirements.
- Rural rotations struggle to provide effective feedback on examinations and feedback that is constructive to the trainee.
- Communication (particularly communication that crosses cultural barriers), teaching and leadership skills are not taught well in training (and in general).
- Lack of global health and indigenous health exposure.
- Lack of support of research activities.
- Lack of training in critical thinking.

- Lack of flexibility in training for a trainee to train in a part time capacity.
- Trainees' rotations to health services not close to home (some interstate or overseas) are challenging for family life – particularly as the postgraduate cohort is often older and more established that the previous undergraduate cohort of trainees (and often in the peak reproductive years of their life). There is no evidence that this actually benefits the trainee or training, and it can significantly impact mental health, burnout, family situations and drop-out rates.

Some key questions to consider for the future are:

- How might we optimise vocational medical training for adult learners?
- How might we increase learner-engagement, support and flexibility in training?
- How do we balance this with patient demands, safety and satisfaction?
- How do we optimise vocational training within the limitations of our health system and resources?
- How do we create medical practitioners and an educational model which can adapt to an ever-changing health landscape?

Finally, it would be beneficial if the medical colleges opened up their siloed approach and were more collaborative and open to sharing and partnering in opportunities to cross fertilise and to develop innovation (rather than being so isolated in their thinking).

Impact of the Royal Commission

Specialist medical colleges consistently embark on improvement of their training programs and professional offerings, and as identified above, the Royal Australian and New Zealand College of Psychiatrists (RANZCP) will examine reform in the context of the findings of the Royal Commission in to Mental Health. The interim (Royal Commission) report made nine recommendations, with two recommendations that deal with workforce; Recommendation 6 – lived experience workforce, and Recommendation 7 – workforce readiness, and included the following:

- The provision of workforce data and analysis:
    - Investment in system resources to collect and collate data across mental health services in Victoria
- Use of technological and digital opportunities:
    - To transform workplaces, education and training, treatment
- Expanding the workforce:
    - Mandatory rotations in to mental health services for junior doctors by 2023
- Investment in collaborative leadership as a step toward genuine participation and multidisciplinary care

More recommendations will come in the final report.

Work has commenced on some of the immediate solutions such as addressing:

- The issue of non-clinical time (research, teaching, education and training) with respect to pay, workload, scope of practice.

- Training:
    - Creating a pipeline
        - redesign of undergraduate teaching & clinical support
        - mandatory rotations of junior doctors through mental health services and redesign of postgraduate rotations & support
    - Need to increase targets for entry in to FRANZCP training
    - Consider alternatives to current mandatory rotations to remove bottlenecks
    - Develop subspecialty vocational & training pathways in addiction, adult, psychotherapies
- Creating a learning system:
    - Learning from experts (education, CPD)
    - Learning from others including lived experience (mentoring, observing, rehearsal, supervision, peer learning, reflection)
    - Learning by doing (breadth vs depth, extending scope of practice, working to specialised skills)
- Balance between assessment and treatment
    - Build psychopharmacological & psychotherapeutic skills
    - Build leadership & communication skills
- Maldistribution of workforce
    - Leverage off rural & regional medical schools
    - Attract high quality leadership
    - Create metro, regional & sub-regional networks
- Address supervisory capacity
    - Most pressing need in rural & regional areas
    - Blended & remote models of supervision
    - Digital technologies to allow remote supervision
    - Online training modules
- Expand training in to private sectors
- Build primary care and other workforce capacity
    - Consultation-liaison models for primary care (access to specialists)
    - CMBS reform to better reflect non-clinical time requirements of team care
    - Training and liaison support for justice, education, social services, corrections, policing
    - Responding to workplace stress & mental health issues
- Open up public mental health system to non-specialist medical doctors (to get a sub specialisation) in rural and regional settings:
    - GP Psychiatrists (in common with GP Obstetricians, GP Anaesthetists)

Digital Technology and Artificial Intelligence

Healthcare professionals are very good at collecting data but not as good at doing something with it. Healthcare professionals need to increase digital literacy and improve their trust in digital assets. Digital technology allows health professionals to perform less memorising (of text books) and perform more critical assessment of data and similarly, less diagnosis (as it's replaced with artificial intelligence) and shift human skills toward more collaboration and coordination with team members to develop better treatment plans.

Artificial Intelligence (AI) is an important part of our future – 20 years hence will look very different and promoting professional and humanistic practice in a world of increasing technological change will be a key ethical challenge. There will be impacts on the patient and impacts on the practitioner, particularly in terms of beneficence (maximise beneficial outcomes), justice (distribute healthcare in an equitable manner), non-maleficence ('first do no harm') and autonomy (respect for individual

will). In terms of the patient there are benefits around greater autonomy, there are a whole range of better diagnostic examples but from the doctors perspective, in terms of beneficence, if there is a potential for improved diagnosis, there will be a following legal duty on doctors. Juris prudence (the theory of practice of law), talks about different rights in different ways, so if a court decides that a patient has a right to have their images assessed by AI, because it is deemed an accurate model, and a doctor doesn't do that, the doctor opens themselves up to legal liability, both in the civil courts and the regulatory world.

Having said this, it is important for clinicians to realise the benefits for AI as well to access information, create networks of practice and access to the community.

So how far can we go in pursuit of developing generalist training models that include digital technology and AI? Are the Colleges capable of developing new training programs based on a more differentiated generalist model? In terms of accreditation and regulation, what's the AMCs role in leading some of this work?

Consumer Input

Health professionals tend to see patients and families as wanting things (increased expectations) rather than contributing things. For a health system of the future we have to determine/rely on, how patients and families can contribute more. How do we value what they have to offer, do, and bring to manage their own healthcare? There is a need to teach healthcare workers to adopt this viewpoint rather than seeing patients as a burden on the system. It's often hard for healthcare workers, when they are immersed in the system, to see the patient and family perspective and to realise we are all the same and have similar expectations.

To understand the consumer, we need to ask the question 'what is great care and what does it look like?' and the right assumption is, that all care (that is accessed) is safe and provides quality care. More specifically, great care is about respect, being involved, and that care is available when needed. There are many studies that support the lack of listening and understanding skills of doctors in patient interactions. Great care is listening and understanding the patient; priorities, culture, challenges and what the patient would like (from the doctor).

Access to information is fundamentally important to patients and families. The NHS Inpatient Survey (2016) clearly highlights that patients want to be involved in their care. Conversely, clinicians largely see it as a challenge that patients have access to information e.g. access to 'Dr Google' etc. This is normal human nature and should be viewed as a strength whereby the clinician should help the patient to navigate through the information. Healthcare shouldn't be protective of a patient's information and it should be offered and shared with the patient to assist in managing their condition. Interacting with the health system is one of the largest frustrations of patients. Navigating care in the community needs to be easy, particularly as many chronic illnesses are managed in the home rather than in health services. Patients need to be involved in developing care pathways and models and educators need to teach health professionals patient centred care (explicitly) and include it as fundamental to the curriculum.

There needs to be more emphasis on consumer rating tools – that already exist and are receiving growing importance with the need to develop an improved bedside manner and consultation skills by healthcare professionals. Care models need to show evidence of consumer involvement (as a valuable health resource) to increase rapport in the management of a treatment plan.

Health professionals need to understand the inequities that exist and the root causes behind them so that they can improve skills and empathy addressing inequity, and to close some of the inequity gaps by decreasing hospital admissions. Fewer chronic diseases, greater workforce participation, fewer welfare payments etc. is extremely advantageous to Australia and its economy.

Indigenous Health and Equity

For the workforce of the future and for training organisations to ensure that they are fit for purpose and that healthcare professionals provide appropriate equity and social justice, there are a number of key challenges to address:

- Inequity – Inequitable outcomes are a safety and quality issue and as such we need to examine our cultural safety. Each health professional needs to examine their own world view, their own biases and their practice and how it may affect the relationship with their patients.
- Identifying our privilege – Transparency and equity of selecting trainees (in to undergraduate and vocational training) needs to be ensured. Bringing different views to the table, ensuring inclusion, ensuring that everyone has a voice, ensuring the environment is safe (for everyone to feel they belong) is required.
- Environmental action – There is a need as individuals to identify with the land, of belonging, of understanding the environment and where to take action to ensure environmental health and sustainability. We need to learn from our indigenous population as to how we connect to our environment.
- People power – The New Zealand report on stage one of the Health Outcomes Inquiry provided recommendations that are transferrable to other countries and cultures. In particular, the 'treaty principles for the primary health care system' seek to:
    - Provide for Māori self-determination and mana motuhake in the design, delivery, and monitoring of primary health care.
    - The principle of equity, which requires the Crown to commit to achieving equitable health outcomes for Māori.
    - The principle of active protection, which requires the Crown to act, to the fullest extent practicable, to achieve equitable health outcomes for Māori. This includes ensuring that it, its agents, and its Treaty partner are well informed on the extent, and nature, of both Māori health outcomes and efforts to achieve Māori health equity.
    - The principle of options, which requires the Crown to provide for and properly resource kaupapa Māori primary health services. Furthermore, the Crown is obliged to ensure that all primary health care services are provided in a culturally appropriate way that recognises and supports the expression of hauora Māori models of care.
    - The principle of partnership, which requires the Crown and Māori to work in partnership in the governance, design, delivery, and monitoring of primary health services. Māori must be co-designers, with the Crown, of the primary health system for Māori.

Promoting Aboriginal, Torres Strait Islander and Māori health is important to understand and we need to give these topics sufficient emphasis (in the curricula). We also need to ensure that the content and skills are appropriately assessed. One of the challenges of the AMC is to determine who actually develops and signs off on specialised educational skills/standards. There are various committees in place but in the case of indigenous content, should experts in this area sign off on the content rather than the broader faculty of the medical schools and medical colleges?

Alternative Models

There are many alternative and new models that warrant consideration. A few were identified as follows:

- Consumer Committee/Board Engagement. Stories and narrative can be powerful and we are realising the value of including consumers and/or specific groups of people e.g. a consumer or a Torres Strait Islander on a committee or board. In many cases however, this sort of representation has minimal impact as individuals often only have a single voice. Adoption of an advisory committee/board (of consumers, indigenous peoples etc.) may be a better solution so that there is support in providing a point of view. We also need to remember than there is a big difference between lay people on boards and consumer representatives on boards. Most lay people on boards tend to be lawyers or accountants etc. Consumers bring a voice in a specific way, and both are needed.
- Increase the responsibilities and training of nurses – and allow GPs to focus on more complex cases (US example of the 'Minute Clinics').
- Use of Physician Assistants (health navigators, or similar) to alleviate workload and the high clerical requirement of medical staff.
- Globalisation of health – connecting health professionals with the rest of the world to ensure that Australians have access to health solutions. Also, ensuring our home grown research and products are exportable.

Accreditation of Education and Training

Accreditation should reflect the values and expectations of our communities. Values are hard to understand but should inform the accreditation process. There is need of a system that will improve public health and safety with a strong focus on ethics and accountability and the need for trustworthiness. Trustworthiness that includes competence, honesty and reliability, the actions that people take in their lives. In the educational construct this can be translated to the proposed use of EPAs for interns as they link with competence and reliability.

For the public 'you can't speak for me if I haven't had a say' (Sister Elizabeth Davis)[6], this also translates to medical students and young doctors in the development of improvement. Educators need to listen to medical students, interns and vocational trainees. Conversely, there is also a need to acknowledge the importance of mentorship but to apply it with the importance of not judging (by your experiences) by the standards you lived 20-30 years ago.

It is important to recognise that the future of medicine is the doctors coming into the system now and that they may have differing values, or differing perspectives on life to the doctors before them. And as they are our future, we need to adapt to them, rather than adapting them to our values and ways of thinking.

Research

Competent young clinicians often feel pressure to pursue clinical research positions in order to advance their career prospects. For those with a genuine interest this may lead to a productive research career which may or may not be combined with ongoing significant clinical work. When this occurs the results can be of great benefit to the individual and the broader community. Commonly, however, acquisition of a research degree (PhD) involves taking a clinician away from a service role for at least three years and is often not followed by a significant further research contribution. This is probably because the highly competitive nature of traditional research does not facilitate substantial ongoing clinical roles. The value that accrues to the individual and the broader society from this

[6] https://www.mercyworld.org/newsroom/the-ministry-of-leadership-and-religious-life-elizabeth-davis-rsm-1-901/

three years away from service provision will be vigorously argued depending on perspective. Regardless of perspective, we need to find better ways to encourage an ongoing research contribution while continuing to provide service delivery work by the best and brightest amongst our colleagues. One solution would be to bias the incentives for these talented staff to contribute to research on service delivery improvement rather than the more common highly disease-specific, interventional or basic research. In this way high class service delivery could be melded with a research and improvement career for outstanding front line staff that avoids drawing them away from the clinical environment for substantial periods of time.

Research also needs to be stimulated in areas that the community as a whole requires, where we start to understand and improve the system in which we work, for example; aiming for better levels of health literacy, improving and interacting with teams to truly understand the behavioural side and mental health side of healthcare. Gaps needing to be filled include achieving 'better safer care' through:

- Patient centred care
- Systems & processes for delivering care
- Clinical governance
- Improvement science
- Leadership skills
- Professional development
- Effective teamwork

Academic Health Science Centre (AHSC)

Academic Health Science Centres (AHSC) are a partnership between two or more universities and healthcare providers focusing on research, clinical services, education and training. They recognise that the combination of scientific method and clinical care is the fastest means of ensuring that scientific advances are translated into improved patient care.

The organisational structures that comprise an AHSC can take a variety of forms, ranging from simple partnerships to, more increasingly, a fully integrated organisation with a single management board. As federally funded organisations, the AHSC, of which there are approximately seven in Australia, were implemented to bring together health services, universities and research centres around an agenda to ensure that medical research breakthroughs lead to direct clinical benefits for patients and to collaborate across undergraduate and postgraduate education and training.

It appears that they are highly active in research but not so on the training front (and their existence is largely unknown by healthcare services and the medical colleges). To ensure that they loop back to the original intent it may be good to have an accreditation structure (e.g. to a peak body like the Australian Medical Council).

Attachment 1 – Forum Participants

Name	Surname	Position	Company
Navin	Amarasinghe	Staff Specialist	Peninsula Health
Sumitha	Bhaskaran	Head of Unit General Medicine	Monash Health
Susan	Biggar	National Engagement Advisor	Australian Health Practitioner Regulation Agency (AHPRA)
Lee	Boyd	Executive Director Learning and Teaching, Chief Nursing and Midwifery Officer HEAL Non-Executive Director	Eastern Health
Jenny	Brookes	Director Postgraduate Medical Education	Eastern Health
Robyn	Burley	Director, Education Learning and Assessment	Royal Australian College of Physicians (RACP)
Laura	Cotrone	Education Manager	Postgraduate Medical Council of Victoria
Neil	Cunningham	Director Medical Education	St Vincent's Hospital Melbourne
Rangi	De Silva	Obstetrician and Gynaecologist, Research Fellow	Mercy Hospital for Women, The University of Melbourne
Paul	*Eleftheriou*	*CMO*	*Western Health*
Julie	Faoro	CEO	Postgraduate Medical Council of Victoria (PMCV)
Nigel	Fidgeon	CEO	Australian and New Zealand College of Anaesthetists (ANZCA)
Steven	Fok	Senior Policy Officer	Department of Health and Human Services
Karen	Gordon-Clark	Executive Officer	Royal Australasian College of Surgeons (RACS)
Christina	Guo	Intern & Chair	Medical Students Council Victoria (MSCV)
Mukesh	Haikerwal	Council General Practitioner	Australian Medical Association (AMAVic) Circle Health
Julia	Harrison	Director of Undergraduate Medical Education	Monash University
Annette	Holian	Orthopaedic Surgeon	Royal Australasian College of Surgeons (RACS)
Lyn	Johnson	Executive Director of Education & Training	Australasian College of Emergency Medicine (ACEM)
Callie	Kalimniou	Legal Counsel	Royal Australasian College of Surgeons (RACS)

Name	Surname	Position	Company
Annette	Katelaris	Director Professional Medical Education	University of Sydney
Brittany	Kiegaldie	Program Coordinator	HEAL
David	Knowles	Partner HEAL Non-Executive Director	Pitcher Partners
Lynette	Lee	Dean of Education	Royal Australasian College of Medical Administrators (RACMA)
Jennifer	Lindley	Co-Director, Medicine Course Curriculum	Monash University
Anna	Lyubomirsky	Executive Manager, Education and Training	Royal Australian and New Zealand College of Psychiatrists (RANZCP)
Louise	McCall	Director of Education	HEAL
Rodney	*Mitchell*	*President*	*Australian and New Zealand College of Anaesthetists (ANZCA)*
Laura	Mogie	Medical Services and Leadership Registrar	
Rob	Moulds	Medical Advisor	Therapeutic Guidelines and HEAL
Liana	Moule	Marketing Manager	HEAL
Debra	Nestel	Professor of Surgical Education	Monash University
Harvey	Newnham	Program Director of Emergency and Acute Medicine HEAL Chair Board of Directors	Alfred Health
Hung	Nguyen	General Practitioner Medical and Cultural Educator HEAL Non-Executive Director	Bunurong Health Service
Elisabeth	Nye	Director of General Medicine	Peninsula Health
Robert	O'Brien	Director, Education	Australian and New Zealand College of Anaesthetists (ANZCA)
Phillip	Pigou	CEO	Australian Medical Council (AMC)
John	Prins	Head, Melbourne Medical School	The University of Melbourne
Kiri	Rikihana	New Zealand General Manager	Australian and New Zealand College of Anaesthetists (ANZCA)
Vijay	*Roach*	*President*	*Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)*
Praveen	Sharma	Senior Manager	Medical Workforce, Department of Health & Human Services, Victoria

Name	Surname	Position	Company
Julian	Smith	Professor of Surgery	Monash University
Simon	Stafrace	Chief Adviser, Mental Health Reform Victoria	Victorian Government
Beverley	Sutton	CEO	HEAL
Veronica	Vele	Head of Training Services	Royal Australasian College of Surgeons (RACS)
Michael	Walsh	CEO (outgoing)/Consultant	Epworth Health
Bruce	Waxman	CMO	Bass Coast Health
Greg	Williams	Associate Director, CSIRO Futures	Commonwealth Scientific and Industrial Research Organisation (CSIRO)
Andrew	Wilson	CMO	Safer Care Victoria, Victorian Government
Guin	Wilson	Surgeon	Northern Health
Michael	Wozniak	Academic Lead for Clinical Skills, MD Program	Flinders University

Note: Those listed in *italics* did not attend

Attachment 2 – Hypothetical

The Australian Prime Minister, following recent political trends, has just announced a Royal Commission into Australia's Health Care Workforce of the 21st Century. The surprise announcement is a response to chronic community concern about the lack of progress on "closing the gap" between health status and outcomes of indigenous and non-indigenous Australians, and also the disparity in access to services and health outcomes between Australians living in remote and rural communities and those living in cities. There is also concern at the high cost of training health care professionals, particularly doctors, and a sense that we haven't got the balance right.

The Terms of Reference for the Commission are wide-ranging, covering the following:

1. Education of the Health Workforce – review the efficiency and effectiveness of current undergraduate and post-graduate education curricula and methods of teaching/training fit for purpose in terms of preparing participants to address the health care needs of individuals, Australian and Global communities in the 21st Century. Recommend Improvements.
2. Utilisation and Deployment of the Health Workforce – review the efficiency and effectiveness of the current health workforce in meeting the health needs and demands of Australian communities, in particular the distribution of the workforce and the interaction between different health professions and non-professional health workers across institutions and other health care settings. Recommend Improvements.
3. Planning, Resourcing and Regulation – review the efficiency and effectiveness of current health workforce education and utilisation planning, resourcing and regulation. Recommend improvements.

The PM has established an expert panel to advise the newly established Royal Commission on how the necessary work might be undertaken and what the priority areas for consideration should be.

Attachment 3 – HEAL Thought Leaders Program

'The Future of our Medical Workforce'

Date: Thursday 20 February 2020 **Venue:** HEAL, Level 16, 120 Spencer Street, Melbourne 3000

Time	Speaker	Topic
REGISTRATION (0830-0900)		
09:00 - 0920	**Professor Harvey Newnham** Chair, Health Education Australia Ltd (HEAL)	Introduction, Welcome to Country & Setting the Scene
0920 – 0940	**The Hon Jenny Mikakos (on video)** Victorian Minister for Health	Official Opening and the Future of the Healthcare workforce from a government perspective
0940 - 1000	**Mr Greg Williams** Associate Director, CSIRO Futures	Future of Healthcare
1000 - 1020	**Associate Professor Andrew Wilson** Chief Medical Officer, Victorian Government, Department of Health	Medical Workforce Strategy
MORNING TEA (1020-1040)		
1040 - 1100	**Professor John Prins** Head of the Melbourne Medical School and Professor of Medicine at The University of Melbourne	Undergraduate Medical Curriculum Redesign
1100 - 1120	**Mr Philip Pigou** CEO, Australian Medical Council	Accreditation of Prevocational and Vocational training, what does it look like going forward?
1120 - 1140	**Dr Mukesh Haikerwal** Council Vic Australian Medical Association (AMAVic)	Workforce challenges from an AMA and Primary Healthcare perspective
1140 - 1215	Facilitated by **Dr Michael Walsh**	Audience questions to the panel and general discussion by all
LUNCH (1215-1300)		
1300 - 1320	**Ms Susan Biggar** Consumer Representative and National Engagement Adviser at Australian Health Practitioner Regulation Agency (AHPRA)	What do consumers/patients want from our medical workforce?
1320 - 1340	**Ms Kiri Rikihana** General Manager (New Zealand) at Australia and New Zealand College of Anaesthetists	The future of vocational training from a College perspective & the interaction of Colleges with healthcare providers
1340 - 1400	**Associate Professor Simon Stafrace** Program Director, Alfred Psychiatry, Adjunct Clinical Associate Professor, Monash University	Mental Health Workforce- Challenges, Opportunities & their Impact on Psychiatric Training
1400 - 1420	**Dr Rangi de Silva** Vocational Trainee (Obstetrics and Gynaecology Registrar)	Vocational Training – A gap summary gathered from colleagues
1420 - 1520	Facilitated by **Dr Michael Walsh** Panel Members will consist of the speakers above plus: ▪ **Dr Christina Guo** – Intern and 2019 Chair, Medical Student Council of Victoria (MSCV)	Hypothetical - 'Building medical training (undergraduate and postgraduate) from the ground up' Audience will enter questions in 'Slido' (or similar) to be addressed in the session after afternoon tea
AFTERNOON TEA (1520-1545) – Audience Q's will be themed		
1545 - 1645	Facilitated by **Dr Michael Walsh**	Audience questions to the panel and general discussion by all
1645 - 1700	**Professor Harvey Newnham** Chair, Health Education Australia Ltd (HEAL)	Summary and Close

Attachment 4 - HEAL Thought Leaders Forum – Briefing Paper

'The Future of our Medical Workforce'

Date: Thursday 20 February 2020
Venue: HEAL, Level 16, 120 Spencer Street, Melbourne 3000

Background

HEAL (formerly VMPF) is an independent education body not closely aligned with any single profession, nor with government or other education providers. HEAL's goal is to improve health outcomes for patients through education of healthcare professionals.

The HEAL 'Thought Leaders Program' aims to start and foster conversations that improve health care. It does this by addressing gaps and assumptions in our current approach to healthcare by facilitating discussions between relevant experts and stakeholders to explore alternative approaches that may be of greater benefit.

This paper has been prepared to brief participants (speakers and delegates) of the upcoming HEAL Thought Leaders Forum (the forum) that will address **'The Future of our Medical Workforce'** by exploring the idea of **'building medical training (undergraduate and postgraduate) from the ground up'.**

Introduction

Vocational training of the Australian healthcare workforce has helped to place the Australian health care system amongst the highest ranking in the world for both quality and affordability. Forthcoming challenges of rising community expectations, an ageing population and increasing prevalence and complexity of chronic disease including mental health, together with relentless pressure on healthcare costs are now putting pressure on vocational training to rapidly adapt to changing priorities, particularly for care outside of the hospital. This Thought Leadership event aims to illuminate these challenges further with the goal of assuring prevocational and vocational training is "fit for purpose" in order to deliver the care our community needs at a sustainable cost. The following is a brief list of relevant contextual questions:

1. What will our community's expectations regarding health care quality, access and delivery look like in 20-30 years' time?
2. How do we make healthcare a great place to work with the necessary workplace flexibility, diversity and professional satisfaction for staff and prevent the "burnout" already so prevalent in so many of our healthcare clinicians?
3. Are the disciplines that provide care fit for purpose, how can their training be improved and what are the gaps/opportunities to repurpose where appropriate?
4. Is the expectation that all or most of the medical care in our hospitals will be provided by supervised trainee specialists sustainable?
5. How do we better address the skill mix and training required to provide greater preventive health care and community-based care in the future?

6. How do we broaden our training so that graduates not only have good clinical skills but also understand how to utilise and continuously improve the functioning of the complex system in which they work, throughout their careers, in partnership with those for whom they care?

In this regard, and as mentioned in the Background, we have chosen to focus on the medical practitioner as this group has some very specific workplace and training challenges that have an impact on healthcare delivery, their interaction with other healthcare professionals and ultimately patient care outcomes. We also recognise that not all matters are peculiar to medical practitioners and that other disciplines will relate and acknowledge parallels with some of the challenges described below.

Forum Process and Outcome

A small group of 50 executive/senior participants from government, universities and medical colleges will be invited. The first wave of invites will register through the Eventbrite ticketing platform. To ensure a mix of craft groups, the second wave of invites will target deficient numbers in a craft group.

Consent will be sought from all participants to be listed as a participant in the report, to allow photographs from the event to be shared and that the event will be recorded. They will also be informed regarding the likelihood of media presence. Participants will get an opportunity to ask questions during the program and to provide questions via a Q&A and polling platform such as 'Slido' (or similar).

The forum discussion will be recorded and transcribed in to a White Paper that will capture the content of the day; themes, ideas, key findings, issues, recommendations etc. The report will be shared with speakers for comments and feedback. Once accepted it will be shared with participants and made available in the public domain.

Forum Content Brief – For Individual Presentations

For the purposes of setting the scene for the forum we offer the following thoughts to try to capture the essence of the discussion topics. Presenters are obviously not limited to this dialogue.

Today in Healthcare – the context within which we work

A health system is 'all the activities whose primary purpose is to promote, restore and/or maintain health'[7]. Further, a good health system 'delivers quality services to all people, when and where they need them'[8]. Australia's healthcare system is a multifaceted web of public and private providers, settings, participants and supporting mechanisms. The Australian Government and state and territory governments also fund and deliver a range of other health services, including population health programs, community health services, health and medical research, Aboriginal and Torres Strait Islander health services, mental health services, and health infrastructure.

Health expenditure is 10.3% of GDP (2015/16) and increasing[9] and is a complex system of funding, policy and operational responsibilities. With it, changes in demography and disease patterns as the population ages, and the burden of chronic illness grows, there is an increased demand for healthcare services.

[7] World Health Organization; Glossary (2019) https://www.who.int/healthsystems/hss_glossary/en/index5.html

[8] Australian Institute of Health and Welfare (2018). Australia's health 2018. Australia's health series no. 16. AUS 221. Canberra: AIHW.

[9] Australian Institute of Health and Welfare (AIHW), (2016) Australian Government

Other challenges include relentlessly increasing expectations within the community for the quality, accessibility and cost of care they desire. Patients have increased access to information, Google and related healthcare apps that are now in competition as alternatives to visiting the health professional. A maldistribution of the health workforce (supply and distribution), concerns re quality and safety of health services[10] and the challenge of the role of urban planning in creating healthy and sustainable communities weighs heavily on society. Additionally, there is a developing understanding that achieving equity in health, especially for Indigenous Australians, and for others who are on the less fortunate end of the scale of social determinants of health, requires more than just providing health care services.

The Future of Healthcare

To inform our topic, we also need to consider what's to come and how healthcare and the role of the health professional might change within the practicing lifetime of today's doctors in training.

When we ask the everyday healthcare worker 'what will the future of healthcare look like?' they inevitably talk about the increasing focus on community based medicine and the predictable move away from the major/acute hospital structure as we know it. Future healthcare models of care are being centred on the management of chronic and complex health conditions, the aging population and the increased need for mental health support services. 'Health Care Home' planning and patient and family service support are priorities[11]. Health Care Homes are premised on the need for high quality, patient centred clinical care, patients as partners in their care, patient enrolment, flexible service delivery and enhanced access to care.

Most futurists in healthcare are of course touting the role of Artificial intelligence (AI) and its associated technologies like machine learning (ML), advanced data analytics, robotic process automation (RPA), Internet of Things (IoT) and even blockchain technology and it is hard to predict the pace of when and how they will be included in the healthcare industry. It is widely acknowledged however, that as AI is the ability of a computer program or a machine to think and learn, it is about to transform industries and the work that humans currently do. Industries such as accounting, law and medicine are prime opportunities for this to occur by virtue of the fact that they are largely based on big data, algorithms, historical and evidence based logic. Disruption is already becoming increasingly evident in these sectors. Medicine has already seen the release of apps such as Babylon (a subscription health service provider that provides remote consultations with doctors and health care professionals via text and video messaging through its mobile application) and IBM's 'Watson' that has impacted over 15,000 clients and partners, 80,000 professionals and 185,000 patients and consumers with its AI solutions[12].

Patient/Consumer Expectations

Most highly developed industrialised nations, including Australia and New Zealand, generally enjoy good health outcomes. People want to trust health service organisations and clinicians to provide safe and high quality health care. Sentinel events however, are still far too prevalent. 1 in 9 patients in Australian hospitals suffers a complication and if a patient stays overnight the complication rate increases to 1 in 4.[13]

[10] Victorian State Government (2016) Better, Safer Care
[11] Better Outcomes for People with Chronic and Complex Health Conditions, (2016) Report of the Primary Health Care Advisory Group, Commonwealth of Australia
[12] IBM - https://www.ibm.com/watson/health/
[13] Duckett, S., Jorm, C., Moran, G., and Parsonage, H. (2018). Safer care saves money: How to improve patient care and save public money at the same time. Grattan Institute.

All patients want an excellent outcome from their interaction with the healthcare system. Improving patient experience has an inherent value to patients and families and is therefore an important outcome in its own right.

Most surveys emphasise that patients place good communication skills, including being treated with dignity and respect, as the most important attribute of healthcare professionals that from their perspective leads to an excellent outcome.

This is almost certainly in the context that patients take it for granted that in most situations every healthcare professional with whom they come in contact will be in the right frame of mind, focused solely on the patient's needs and possess the basic clinical skills appropriate to their responsibilities. However, patients don't necessarily think to emphasise the importance of good clinical skills, rather they focus on the behavioural skills as their top priority.

So, even if we accept that the relevant competencies have been taught to health professionals, the system also relies on the health professionals being of an appropriate state of wellness to carry out their duties. Medical practitioners in particular have struggled with this over the years; long shifts, the stress of responsibility, coping with death and dying, managing acute patients, family demands, training expectations and an increasing litigious society places untold stresses on the individual practitioner. And, despite best intentions, national standards and accreditation processes, patient safety and quality care lapses continue to plague our health system. In fact, almost every significant safety failure in recent decades happened in a hospital that passed their accreditation with flying colours.[14]

Organisations (Employers) vs Medical Training

The primary role of a healthcare organisation is to ensure the care undertaken within the organisation achieves excellent patient outcomes. In doing this, the organisation has a statutory obligation to provide a safe working environment for employees and contractors, and a safe visiting environment for loved ones and the public more broadly. Various regulatory agencies, state and federal, have a strong interest in ensuring that systems, policies and processes are in place to provide such a workplace environment, and to disclose, investigate and improve where adverse incidents involving employees and contractors occur.

There are a number of studies that identify inhibiting factors to good patient outcomes, such as cost-effectiveness policy and transparency goals for external accountability. Employers are obliged to deliver high quality safe care to patients as well as providing a work environment where staff (and contractors) feel safe and secure from a physical, mental and spiritual health perspective. Health professionals are under pressure to provide increasing productivity, but this can be associated with a high administrative workload rather than providing that time to patient care and improved patient experiences.[15] [16] The Work Health Safety (WHS) environment has a direct impact on staff wellbeing. There are strong sanctions directed towards employers by relevant regulators (Worksafe, professional regulatory boards, college accreditation bodies etc.) in an effort to ensure a safe working environment, and from an employer perspective these are usually more explicit and direct than regulations regarding creating and maintaining an environment conducive to excellent patient care outcomes.

[14] Duckett, S., Jorm, C., Moran, G., and Parsonage, H. (2018). Safer care saves money: How to improve patient care and save public money at the same time. Grattan Institute.
[15] Renate A. K et al. (2014): How nurses and their work environment affect patient experiences of the quality of care: a qualitative study, BMC Health Services Research
[16] MacPhee M., Dahinten V. S., Havaei F. (2017) The Impact of Heavy Perceived Nurse Workloads on Patient and Nurse Outcomes; Administrative Sciences

In this context, it should be noted that healthcare organisations are unusual in that most of the employees providing the face-to-face service to the 'clients' of the organisation are registered professionals who have a much higher degree of autonomy – and accountability – than employees in most other types of organisations. These complexities challenge the culture of healthcare organisations and it is important that healthcare workers understand the impact that culture and collaboration has on the delivery of quality healthcare. Braithwaite et al (2017) through a systematic review and meta-analysis found a consistently positive association held between organisational culture and patient outcomes across multiple studies, settings and countries.[17]

Because of the organisations' inevitable focus on funding they can easily lose sight of the fact that the environment they are providing, whilst perhaps ensuring the indicators set by the funding sources are met, might actually be hindering excellent patient outcomes – and in particular by failing to enable their professional employees to communicate with their patients.

This model inevitably causes tensions between organisations and doctors in training. Pre vocational trainees (particularly PGY 1-2) argue that service requirement inhibits their opportunities to engage in formal education programs provided by the organisation. It is also acknowledged that prevocational training also varies greatly from organisation to organisation. The Australian Medical Council (AMC) is currently reviewing the National Framework for medical internship on behalf of the Medical Board of Australia. The AMC is now consulting on the proposed scope of the review and initial evaluation activities in forming the scope of the review indicate it will be a comprehensive review of all components.[18]

Likewise, vocational doctors in training have argued that, with activity based funding (ABF), the drive for efficiency becomes an increasingly important focus to the detriment of teaching and training.[19] They also feel a competing and overwhelming requirement to comply with the demands placed on them by their training college.

To alleviate some of the tension the Australian Medical Association (AMA), nearly a decade ago, convened a meeting of relevant parties including the Medical Colleges, the Medical School Deans and Health Workforce Australia to discuss how Teaching, Training and Research (TTR) could be included in ABF structures for hospitals. That meeting identified TTR as core business for the Australian health system and argued it should be viewed as an investment in sustainable, quality health care. Recommendations were delivered to the governing body for activity based funding, the Independent Hospital Pricing Authority (IHPA). [20] TTR has been quantified in the current IHPA plans but jurisdictions remain unenthusiastic and despite the AMA highlighting the need to incorporate TTR into the core business of hospitals there has been little action since.

A further tension, with the same result of detracting from better patient outcomes, is the disconnect between the hospital as the employer of a doctor providing a service and the training college that dictates the training required of a junior doctor in the workplace. Some would go as far as saying that training colleges have transformed an important organisation with a strong democratic tradition into an enterprise that is largely disconnected from its original purpose to 'bring together clinicians for their common benefit and for scientific discussions'. This has led to a fundamental redirection of its values and purposes. In fact, there is a view that there is a conflict of interest with colleges

[17] Braithwaite. J et al (2017) Association between organisational and workplace cultures, and patient outcomes: systematic review, BMJ Open 2017; 7(11): e017708

[18] AMC, Review of the National Framework for Medical Internship (2019), https://www.amc.org.au/accreditation-and-recognition/assessment-accreditation-prevocational-phase-medical-education/process-for-the-review-of-the-national-framework

[19] Wilson C. (2017) It's time to recognise the value of medical training; Council for Doctors in Training, Australian Medical Association

[20] https://ama.com.au/article/activity-based-funding-teaching-training-and-research

having opposing views; of the college playing a collegiate and an adversarial role in the running of training and assessment and also having power over the doctor's career. It could be argued that the widespread adoption of commercial principles and practices has led not to greater efficiency and effectiveness but to a loss of cultural depth and communal values. In addition, as training has become the principal business of most learned colleges there is an inherent conflict of interest pushing colleges to increase trainee numbers without necessarily paying appropriate regard to workforce requirements or indeed the future career prospects of their trainees. There is also the requirement to keep existing fellows happy by reducing further competition.

Training doctors, caught in the middle, are left to negotiate hospital rotations through disciplines that comply with their training program requirements. For the hospital, this is an extremely complex exercise to formulate appropriate rosters whilst dealing with numerous college and individual doctor requests. Most college training programs also require a variety of experiences which leads to doctors rotating through disciplines for 10-12 week rotations. This has an impact on continuity of patient care and outcomes.

Healthcare organisations also have to work within the confines of the undergraduate and postgraduate medical training system that sees mandatory practices (not seen in other industries) imposed on them. Not only does the medical system in Australia guarantee medical graduates a postgraduate year of employment (unique to any other industry) but the timing is such that organisations have to manage staff changeovers that occur in significant waves; with all graduating doctors commencing at the same time in every hospital each year (in January) and all subsequent junior doctors (PGY2 and above) rotating to different jobs in February. This places enormous competency, training, productivity and support challenges on the system, notwithstanding the risk to patient care outcomes.

Additionally, there is an increasing trend of doctors in training leaving their contracted employment early, commonly in November each year, after they have fulfilled their college training requirement. The trainee may seek a break but this puts undue pressure on the remaining health professionals in the organisation to pick up the additional workload.

Losing any number of the medical workforce is a burden on the system and it is compounded by the sessional nature of the senior medical workforce in the public training system. Most healthcare organisations also have a substantial percentage of their senior medical staff as visiting medical officers (VMOs) rather than full time senior doctors as staff specialists. Additionally, more than 50% of elective work is provided by private hospitals with a disproportionately small share of the training 'burden' that gets little funding for training and training is provided by accredited specialists who are, in the main, not employed by the sponsoring health service and are paid on a Fee-For-Service basis (and not paid for teaching and training). This compounds the challenges of providing training opportunities for junior doctors and competes with productivity and ultimately patient care.

Alternative Workforce Models

To alleviate some of these challenges, some states in Australia are increasingly utilising Career Medical Officers, a group of medical practitioners that have consciously chosen to stay as a generalist employee of the healthcare organisation or did not achieve entry into the training program of their choice. This group of doctors is small in number but are very valuable resources providing permanency and stability to the workforce. With an increased demand and limited supply of traditional vocational training positions there is an opportunity to professionalise this craft group.

Other countries have developed alternative models, such as Physician Assistants, to take away the lower level tasks to free up the junior doctor to provide the more complex tasks. Additionally in the US, Nurse Practitioners play an increasingly major role in relieving General Practitioners (GP) of patients in strategically placed nurse run 'Minute Clinics' that manage thousands of lower level

category illnesses and only refer the more complex cases to the GP. A similar model has been adopted in the UK where Pharmacists play a major role in relieving the load on GPs by managing basic low level category illnesses.

In Australia we have experimented in this area with limited success largely due to a lack of infrastructure and/or an unsupportive political climate. For example, a few universities offered a Physician Assistant qualification, including The University of Queensland (that closed in 2011). Similarly, various grant programs have explored opportunities for nurses to be trained in skills typically provided by medical staff. One such example was at Austin Health where nurses were trained to do endoscopies.[21]

One of the most recent advancements of healthcare is the Electronic Medical Record (EMR) and while the EMR is reported to provide benefits of better health care by improving all aspects of patient care, including safety, effectiveness, patient-centeredness, communication, education, timeliness, efficiency and equity, for the healthcare worker it can increase the burden on information entry. At Cabrini Health they recognised that as electronic medical records have developed, the physician has been pulled away from patient care into data entry and as a result they are trialling medical scribes to enable the physician to focus on the patient while the scribe simultaneously completes the medical record.[22]

Forum Content Brief – For the Hypothetical

The speakers of the forum have been carefully chosen to set the scene and to explore their area of expertise. The 20 minute presentations, whilst important in their own right, are also designed to be a precursor to the facilitated Hypothetical that will further explore the topic of:

'Building medical training (undergraduate and postgraduate) from the ground up'.

The following are prompters that may be useful to explore during the Hypothetical:

Is the current training model fit-for-purpose?

- All healthcare professionals (including medical practitioners) are currently trained predominately in the acute care environment on acute medicine. The future is a move toward community based services. Will our healthcare professionals be fit-for-purpose?
- Do universities and medical colleges change their training curriculum to accommodate the future of healthcare or do they need solid evidence of what the future will be before they change?
- What should be included in a new medical training program/curricula
- In what organisations/environment should training occur?

Is the current employment model fit-for-purpose?

- Are we paying sufficient attention to the workplace health and safety of trainee doctors?
- Who is accountable for trainee health & wellbeing?
- Are there more innovative employment models that might facilitate training that meets expectations and also promote health and well-being?

[21] Nurses take on doctors' tasks, (February 10, 2013) The Age Newspaper, Julia Medew
[22] https://www.cabrini.com.au/research-and-education/research-programs/emergency-department-research-and-medical-scribe-program/ed-medical-scribe/

Should historical practices be revisited?

As stated above, there are a number of practices that have occurred for many years that have not been reviewed and that have the potential to alleviate pressure on medical practitioners in the workplace:

- Should healthcare organisations stagger junior medical staff appointments to:
    - align market demand to service and training requirements.
    - alleviate the November exodus of junior medical staff from employment contracts.
    - align continuity of care year round rather than all junior medical staff commencing annual contracts in January and February each year.
- Should we professionalise the Career Medical Officer?
- Should there be a mandatory ratio of permanent medical staff to VMOs?

Who should be responsible for prevocational and vocational training?

Should we consider providing postgraduate training and education through tertiary education organisations such as the universities in an effort to:

- streamline postgraduate education across all specialities.
- remove any current anachronistic practices.
- allow greater flexibility in commencement, duration and completion of training.
- allow greater breadth of training with broader skills acquisition according to a trainee's wishes and requirements for their chosen career direction.
- align training programs with other industries; behavioural sciences, education, management and IT.
- alleviate the burden of training from the colleges and allow the colleges to be professional bodies responsive to member needs.
- remove the tension of doctors in training competing with employment needs and being answerable to a professional body that manages their career.

Post-Forum Event

On the date of the forum HEAL (formerly VMPF) will celebrate its 100 year anniversary. All speakers and delegates are welcome to join additional invited guests (between 5-7pm) to celebrate the anniversary with a drink and canapés.

Attachment 5 – The Healthcare Environment

During the Thought Leader forum there was significant dialogue from presenters and participants that captured the healthcare setting in which we work. The following is a summary of that dialogue. The section has been divided in to three areas; current healthcare environment, current training and workforce environment and the future environment. It highlights some of the issues we experience.

Current Healthcare Environment

Australians rank amongst the healthiest in the world but our healthcare industry still faces many challenges. Key challenges facing Australia's healthcare sector (and most global health sectors), are:

- the ageing population, the rise in chronic disease and mental health and wellbeing. Australians on average spend 11 years in ill health which is one of the highest OECD countries, probably because we are good at keeping people alive.
- sustainable financing – an increasing population, rises in healthcare costs and the dependency ratio places significant financial strain on the system.
- maldistribution of the medical workforce with rural areas largely serviced by International Medical Graduates (IMGs) who tend to be temporary due to the lack of a multicultural infrastructure. Similarly, programs to attract graduates in to bonded rural positions have also failed as young people gravitate toward metropolitan areas.

In addition there are several important emerging challenges:

- Environmental change and the effects on health and biosecurity concerns.
- Antimicrobial resistance.
- Powerful social determinants of poor health outcomes – 8-9 year life gap between Aboriginal and Torres Strait Islanders compared to non-indigenous Australians.
- Increasing consumer expectations – expectation of faster, more convenient and effective health services.
- Digital challenges – privacy and confidentiality, data management (particularly around 'My Health Record'), data literacy.
- Keeping pace with innovation and the need to be more agile.
- The need to continue to expand general practices from single entities to hubs that include allied health services, mental health services, practice managers and practice nurses (to join up the care). Additionally, point of care pathology testing is now available but to date only six practices are registered as a pathology provider. The wide acceptance of Telehealth consultations supported by Medicare item numbers during the pandemic is one recent example of the readiness of the community to accept new approaches to care. One could reasonably ask why a pandemic, such as COVID-19, was required to facilitate this change.

Current Training and Workforce Environment

In Australia (and New Zealand), medical education begins in medical school; upon graduation it is followed by a period of prevocational training including internship and 1-3 postgraduate years. Thereafter, enrolment into a specialist-vocational training program as a registrar is required that eventually leads to a fellowship qualification and recognition as a specialist medical practitioner. This process typically requires seven years of postgraduate training but can take up to 12. The Australian Medical Council (AMC) provides accreditation of training for undergraduate programs (through the

universities) and postgraduate programs (through the medical colleges). The postgraduate medical councils (in each state) accredit the health services for prevocational training. The AMC has no input in to curricula of these programs but can seek to influence the content through application of standards. As a national body and a conduit of information, the AMC would like a better role in sharing key principles and values (of training programs) and as such, they are currently developing a policy around how they might have an opportunity to further influence organisations.

Undergraduate Training Environment

The majority of universities in Australia are providing a curriculum for medical students that has seen minimal change in 20-30 years. Many challenges are inherent in the system and include:

- entry to medicine of high school graduates that are a fairly homogenous cohort that may lack diversity and cultural breadth.
- rigid curricula with very prescribed contact hours.
- faculty that have not practiced medicine in 10 years.
- medical students that often don't feel equipped or workplace ready for employment. Day 1 of the internship is often very different to a medical student's expectations.
- limited pathways to practice outside of medicine.

Postgraduate Training Environment

Medical Training Survey

In 2019 the Medical Board of Australia, along with Australian Health Practitioner Regulation Agency (AHPRA) and other stakeholders, developed and distributed a Medical Training Survey[23]. The survey, a national, profession-wide survey, of all doctors in training in Australia was developed with the aim to improve the quality of medical training, by understanding more about trainees' experiences. The survey had an excellent response rate with approximately 1 in 4 doctors responding and 9,378 doctors in training were included in the analysis. There were five versions of the survey, for each of the following areas:

1. Interns
2. Prevocational trainees and unaccredited trainees
3. GP trainees
4. Specialist trainees
5. International Medical Graduates (IMGs)

The results provided a snapshot of the quality of medical training in Australia including the training curriculum, orientation, clinical supervision, access to and quality of teaching sessions, workplace environment and culture and the future career intentions of doctors in training.

Overall, doctors in training reported relatively positive experiences of their medical training with 78% indicating they would recommend their current training position to other doctors (vs 8% who wouldn't) and 76% that would recommend their current workplace as a place to train (vs 9% who wouldn't).

[23] https://www.medicaltrainingsurvey.gov.au/

Only a small number of specialist trainees (1%) indicated they did not intend to continue in their specialty training program and 5% of IMGs reported they did not intend to continue on a pathway to general or specialist registration. 49% of interns, prevocational and unaccredited trainees and IMGs reported having a training plan.

Specialist trainees, including non-GP and GP trainees, were asked to rate the training program provided by their college/s and where applicable, their Regional Training Organisation (RTO). Ratings for training programs were mostly high, except for trainee involvement in the design of their programs and, the quality of psychological and/or mental health support services, if provided at all.

The role and implementation of exams for specialist trainees may need further focus and the provision of timely and useful feedback was an issue for many trainees. Among the 42% of specialist trainees who had sat exams for their College, there was quite a high level of dissatisfaction with both the feedback received about exam performance (non-GP: 46%, GP: 44%) and its timeliness (non-GP: 38%, GP: 38%). While not as stark, some trainees questioned whether the exams they had taken entirely reflected the training curriculum.

Specialists (including specialist GPs) largely shoulder responsibility for the day-to-day supervision of doctors in training (76%), with registrars (18%) picking up responsibility for supervising most of the other doctors in training. Eight in 10 (84%) doctors in training rated their clinical supervision as 'excellent' or 'good' and just 4% rated it as 'poor' or 'terrible'. Clinical supervision was highly rated for accessibility, helpfulness and providing an appropriate level of responsibility. However, the level of feedback, discussions about goals and objectives and regular, formal feedback were less highly rated.

Teaching sessions were rated as 'excellent' or 'very good' by 80% of doctors in training, with only 3% rating them as 'poor' or 'terrible'. The majority of survey participants were complimentary about the range of opportunities they had to advance their clinical skills (89%) and to develop their procedural skills (77%). However, fewer trainees agreed that they were able to participate in research activities (57%) or had access to protected study time/leave (63%).

While six in 10 doctors in training (59%) considered they had a good work/life balance, one in five (21%) disagreed. Overall, 50% considered their workload 'heavy' or 'very heavy' and half (47%) received payment for unrostered overtime 'always' or 'most of the time'.

Some trainees perceived that an undesirable culture had a negative impact on their wellbeing. These impacts included the amount of work expected of them (27% report negative impact on their wellbeing 'always' or 'most of the time'), having to work unpaid overtime (25%), having to relocate for work (24%), dealing with patient expectations (22%), and lack of appreciation (21%).

Although in general, the training survey posted some very good results, the following is a summary of low ratings, and thus opportunities for areas of improvement:

- Trainees having limited input and design of their training.
- Timely and appropriate feedback from assessments and examinations are not provided.
- Discussing goals and objectives and regular, formal feedback does not always occur.
- Development of procedural skills is limited.
- Over a quarter of trainees perceived that they experience an undesirable culture had a negative impact on their wellbeing via:
    - having to work unpaid overtime.
    - having to relocate for work.

- dealing with patient expectations.
- lack of appreciation.
- limited good work/life balance.
- limited access to psychological/mental health support services.

In General

After training for an average of seven years, interns often do not expect to enter the workforce spending 80-90% of their time in front of a computer (particularly, in those hospitals with electronic medical records) and only speaking to patients for 15-20 minutes/day. By and large education, training and professional development competes with productivity and health professionals are largely taught on the job by clinicians who 'know what they know' and that's what they teach their students. Scheduled training is limited for interns to one hour of protected training/week (if you can access it and if the registrar can hold the pager). Whilst not ideal, this model is difficult to change and today, healthcare education is not that dissimilar to what was taught 20-30 years ago. Alternatively, software engineers, for example, work in real time and share innovation, information and workloads across the world in virtual communities. The healthcare training environment has largely remained static and it is therefore prudent that we look at what we can do to set up the system for the next 20-30 years. To do this we need to challenge some of the existing assumptions:

- *Training should be hospital centric*: We are very good at 'rescue medicine', where something has already gone wrong and needs to be fixed e.g. trauma, transplants etc. This type of medicine is largely the public's perception around healthcare and as such it is a political driver for decision makers. The reality is that this does not represent a large proportion of medicine today. Much of what we do today is largely around complex situations, chronic disease, socially disadvantaged, social determinants of healthcare, public health policy and public health behaviours; drugs, alcohol etc. Also, most healthcare professionals are trained in hospitals and as such they provide most of the care. The role of the clinician is largely to supervise trainees. This means that the workforce graduates become health professionals that know how to work in the acute environment. This is largely not what society needs to provide the majority of care that occurs. It therefore must be asked, are our healthcare professionals trained in a way that has them fit-for-purpose?
- *Hospitals and special societies will determine the correct specialist/generalist mix and workforce numbers:* Hospitals have 'special societies' such as; Cardiology, Orthopaedics etc. Are these societies accountable to the population that they serve to a sufficient degree?
- *Training must be intense and of long duration*: Additionally, these societies require trainees to have intense and lengthy training (approx. 12 years overall) which is atypical of any other industry.
- *Remuneration should automatically increase with years of training:* The enterprise agreement for medical practitioners provides an increase in salary for each year of experience. This is a disincentive for the hospital and training programs to allow doctors to get a number of years of generalist experience as they are priced out of the market.
- *The public won't cope with transparency regarding clinical performance and patient outcomes:* This remains an interesting and debated conversation.
- *Mind and body medical training should be run through separate training systems:* Mental health and biological healthcare are taught to health professionals as completely different streams but in reality are inextricably linked.

Specialist Training Colleges

In general, specialist training colleges face many challenges that include:

- detachment between the hospital as the employer of a doctor providing a service and the training college that dictates the training required of a junior doctor in the workplace.
- the tension of the college playing a collegiate and an adversarial role in the running of training and assessment and also having power over the doctor's career.
- the need to be a professional body to bring together clinicians for their common benefit and for scientific discussions.
- the business:
    - need to increase trainee numbers without necessarily paying appropriate regard to workforce requirements or the future career prospects of their trainees.
    - requirement to keep existing fellows happy by reducing further competition.

Additionally, each specialist college experiences unique issues, peculiar to their college, as well as issues that exist due to challenges in the external environment. Currently, Victoria has commissioned a Royal Commission in to Mental Health and the interim report released in November 2019 (final report due in October 2020) highlighted many issues (and recommendations outlined below in 'Impact of the Royal Commission').

One of the key concerns (of the Royal Commission) is that "there is no consolidated source of data held by the state or Commonwealth, in private or public repositories… & at a sufficient detailed level." Therefore no data with sufficient granularity to plan for the future. This is typical of other specialist disciplines.

Other interim findings also epitomise the issues that specialist colleges face to varying degrees, they are:

1. Education, Training & Practice Supports
    - Lack of exposure to mental health in undergraduate courses
    - Lack of training for General Practitioners
    - Negative training experiences for junior doctors
    - Limited access to training supports, including supervision
2. Deskilling & low morale
    - Staff feel they are being deskilled & constrained by working environments that do not support their practice
    - Multidisciplinary models challenged
    - Shift away from specialist to generic interventions
3. Occupational violence – becoming far more pronounced over the last decade
4. Perceptions of the workplace
    - Cultural change and consequent challenges
    - Stigma issues

5. Pay & conditions
    - Psychiatrists lowest paid in Australia, in public health system, in Victoria

Government Focus

The Commonwealth Department of Health, Australia is currently developing a National Medical Workforce Strategy in collaboration with the Medical Workforce Reform Advisory Committee (MWRAC). MWRAC members include the states and territories, specialist medical colleges, and medical professional associations.

The Victorian Government specifically has identified areas of focus that are categorised as the 5 Ps:

- Pathways:
    - Maldistribution of healthcare professional trainees. Approximately 75% of Victorians live in the metro area but more than 90% of training positions are in metropolitan Melbourne and 98.9% of sub specialists are based in Melbourne.
    - Medical college training view that all trainees need to be trained in the same way when there is an argument to the contrary e.g. metro vs regional requirement.
- Partnerships:
    - Dislocation between Commonwealth & state governments, specialist medical colleges, universities and health services and peak bodies (e.g. CSIRO) to inform.
    - The phenotype of an intern in Australia is female, 26yrs with a partner who is also a professional. Movement of this cohort has now provided a shortage of basic physician training 2nd years. The corollary means that trainees leave jobs before their contract is complete as they can easily get other jobs elsewhere as required.
- Programs and Policies:
    - Department stepping up to support education & training of GPs Victorian Rural Generalist Program to provide cohesive pathway to a rural career as a general practitioner with advanced skills.
- Promotion:
    - Emphasis on disease prevention rather than diagnostic & curative services.
    - Changes in lifestyle and chronic disease impacting health care system.
    - Health promotion strategies can develop and change lifestyles, and impact social, economic and environmental conditions that determine health.
    - All levels of government increasing focus on prevention.

Future Environment

The CSIRO Future of Health report[24] has a fairly optimistic view for healthcare in the future. The vision is to a system that:

- moves from reactive treatment of illness to proactively managing health.
- focuses on wellbeing in a holistic, consumer-centric way.
- recognises that the one-size-fits approaches need to move to providing precision health solutions.
- moves from extending life to improving quality of life over a lifetime.

[24] Future of Health (2018) Shifting Australia's focus from illness treatment to health and wellbeing management, CSIRO, Australia

To achieve the vision, technology provides many answers in the form of self-care tools (like apps) that allow data management and transfer, consumer wearables that collect biological and environmental information, pairing monitoring with treatment actions, virtual bots to assist people between visits with video calls etc. Such technology can form the basis of consumer-centric health management plans, managed by providing increased responsibility to nurses, whilst relieving medical practitioners to focus on more complex health needs.

Technology exists to provide consumer empowerment and 'smart homes' with human led services that are augmented by artificial intelligence (AI) solutions. The reason it's not ubiquitous today is because the sector is holding us back through lack of funding, policy etc.

Similarly, the report by Deloitte, Forces of Change in health[25] highlighted the need for more collaboration, disruption and the need to be holistic in care. The report states that the future of health will be organised around the consumer and likely driven by digital transformation enabled by radically interoperable data and open, secure platforms. Health is likely to revolve around sustaining wellbeing rather than responding to illness.

Progress is being made slowly by organisations such as the MACH (Melbourne Academic Centre for Health) which distinguishes itself by approaching the goal of enhanced patient outcomes from a system perspective. Rather than commence with an explicit focus on specific diseases, the projects within the MACH are relevant to all partners, who work collectively to identify systemic problems, from primary health care through to tertiary care. Once these issues have been identified, suitable solutions are proposed utilising the full research strength of the MACH members[26].

Nevertheless, the general feeling regarding the future of healthcare is an increasing focus on community based medicine and the predictable move away from the major/acute hospital structure as we know it. Future healthcare models of care are being centred on the management of chronic and complex health conditions, the ageing population and the increased need for mental health support services. Healthcare professionals will need to partner with patients to provide high quality home and community care, flexible service delivery and enhanced access to care.

Additional Issues

Other than the issues identified in the sections above, there are some additional areas that we don't do well in healthcare and remain behind other industries in a number of key areas:

- We need to better focus on **innovation** and to collaborate with more people in the sector to achieve this. A key objective of Commonwealth and state governments is to provide care as close to home as possible, and as safely as possible, particularly in rural areas but utilising technology is often inequitable and expensive.
- Healthcare has passionate people working in a complex, scientific, clinical environment, that work well in local teams but they work in relatively archaic systems in a very restrictive craft based apprenticeship model. The environment has a relentless operational pressure to provide more productivity that restricts inventiveness and the opportunity for validation. How can we validate compassion, empathy, intuition, negotiating skills, clinical judgement and their impact on good patient outcomes?
- Whilst the government recognises the broader health challenges it is their job to explore specific conditions at a more granular level to inform policy, for example, although diabetes is increasing, coronary artery disease is relatively flat, but heart disease is growing

[25] Forces of Change (2019) The Future of Health, Deloitte
[26] https://www.machaustralia.org

exponentially so this will have an impact on decision making. This level of detail relies on good data management and digital literacy remains a challenge.