



energy

Future Solutions in Australian Healthcare ~ White Paper

Innovative Ideas and Strategies for Sustainable Healthcare

A thought-provoking resource for healthcare trends,
organisational strategy and future government policy.

Authors

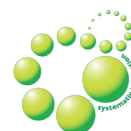
Dr Avnesh Ratnanesan
Paul Howarth

Contributors

Prof Ian Frazer, AC, CEO Translational Research Institute & Australian of the Year
Prof Stephen Leeder AO, Chair of the Western Sydney Local Health District Board, Director,
Research Network, Western Sydney Local Health District & Chief Editor, Med. Journal of Australia
George Savvides, Managing Director, Medibank
Dr Martin Cross, Chairman Medicines Australia
Gavin Fox-Smith, Managing Director ANZ, Johnson & Johnson Medical
Michael Ackland, President GE Healthcare ANZ
Dwayne Crombie, Managing Director, Private Health Insurance BUPA
Shaju Backer, Managing Director, Merck Serono and Board Member, Medicines Australia
Alison Verhoeven, CEO Australian Healthcare and Hospitals Association
Andrew Sudholz, CEO JAPARA Aged Care
John Bronger, Board Member, Pharmaceutical Society of Australia and former President of Pharmacy Guild
Dr Mal Washer, Doctor and former Federal Member of Parliament
Lesley Dwyer, CE West Moreton Hospital and Health Service
Len Richards, Chief Executive, Central Queensland Hospital and Health Service
Michael Armitage, CEO Private Health Australia
Mark Fitzgibbon, CEO & Managing Director NIB Health Funds
Eileen Hannagan, CEO Chris O'Brien Lifehouse
Gail O'Brien, Board Member, Chris O'Brien Lifehouse
Eric d'Indy, Co-founder of Invitation to Health and
CEO of Westmead Medical Research Foundation
Genevieve Gilmore, CEO Australian Integrative Medicine Association
Michelle Bridges, Co-founder & Director of 12WBT, Leading Author & Wellness Expert

Editors

Darrell Mann
Matthew Eton
Matthew Tice



Executive Summary

The 'Future Solutions in Australian Healthcare White Paper' has been developed in collaboration with 21 key healthcare thought leaders to help solve Australia's major health challenges and guide the future of the healthcare system leading up to 2020. This White Paper offers a 'big picture' perspective on future trends. It is a resource for organisational strategy or government policy with provocative ideas for change, which could be utilised by any healthcare leader, organisation or government body in Australia.

The scope of this paper is focused more on "what we could be doing", rather than "how we should be implementing it". This Paper captures a range of provocative ideas and strategies for the future of healthcare, as well as identifies common priorities that require more urgent attention. Collectively, these healthcare thought leaders manage over \$8 billion of Australian healthcare expenditure and hold roles that influence over \$30 billion of healthcare industry annual turnover.

Australia has a generally solid healthcare system that is regarded as one of the finest in the world. Approximately \$140 billion is spent on healthcare in Australia amounting to more than 9.1% of Gross Domestic Product which is around the mean compared to other OECD countries.¹ Studies show that the average life expectancy and overall wellbeing both rank as being the 6th highest in the world.²

[A good health system has] access and affordability, consistency, so it's fair and equal, and good healthcare outcomes in terms of quality of life... length of life and also the overall health profile"

~ George Savvides, Managing Director, Medibank

However, epidemics such as obesity, diabetes, cardiovascular disease and cancer are growing at alarming rates. Approximately 29% or 5.2 million adult Australians are obese, a major contributor to the rise in co-morbidities. Sedentary lifestyles, smoking, alcohol, prolonged sun exposure and the prevalence of fast food are behavioural patterns that

are placing unparalleled demands on the sickness end of the healthcare spectrum.

"One third of the costs of the health system are from smoking, alcohol, obesity and sun exposure"

~ Prof Ian Frazer AC, CEO Translational Research Institute and Australian of the Year

Combined with the rises in cost of medical treatment and technologies, Treasury projections estimate the growth rate of healthcare expenditure vs. GDP will rise from 4% to a staggering 7% by 2050.³ This phenomenon will be compounded by an ageing population and the burden of chronic disease. The system's failure to ensure equitable access to healthcare services, particularly in rural and regional communities, is reinforced by life expectancy estimations of young Aboriginal and Torres Strait Islander population to be 10 years lower than non-Indigenous males. The state of care in such communities is further challenged by funding requirements and the lack of skilled healthcare professionals able and willing to serve in these locations.

Detailed analyses of interviews with thought leaders reveal 6 major challenges that contribute to a self-propagating 'Vicious Cycle' in the healthcare system. 'Cracking the code' to the system's overall picture unveiled disparities in incentive models, uneven workforce utilisation, as well as inertia to innovate in an uncoordinated system, all of which contribute to this downward spiral. Many stakeholders are unaware of the exact interrelationships within the Vicious Cycle which result in inefficient care, inadequate health outcomes and unsustainable cost increases.

The Vicious Cycle is potentially costing the government and healthcare organisations tens of billions of dollars and preventing the system from better caring for millions of Australians, now and into the future.

In order to fix these issues, the solutions mentioned

in this White Paper break patterns of the Vicious Cycle and transform it into Virtuous Cycle of positive gain. Solutions include reforms to funding and incentive structures which ensure that future budgetary changes force more productive results. Changes also include managing workforce levels and introducing measures for better long-term planning to ensure that quality services are more aligned with national population needs.

The Australian healthcare system, like many others around the world, has been guilty of measuring what is easy rather than what is important. It is easy to measure the number of patients a clinician sees in a day; it is far more difficult to measure the 'quality of life' outcomes of the patient before and after a consultation. All serious system improvements start from measuring the right thing. If as a healthcare stakeholder you had to pick one solution from the range of practical and revolutionary strategies presented in this Paper, it would be to implement a suite of far more appropriate success measures.

"We need to reward the right health outcomes rather than the volume of work done"

- Dr Martin Cross, Chairman, Medicines Australia

Two practical tools and processes have been developed by Energesse to assist leaders, organisations and governments implement some of the recommendations from this Paper immediately. They are guidelines focused on 'Prevention Strategies and Wellness Programs' as well as a 'Partnership Development Guideline for Healthcare Projects' to help achieve exponentially positive results. Healthcare leaders can therefore achieve markedly improved health outcomes and return on investment by tailoring relevant ideas and strategies for their own situations and make a positive difference in the health and wellbeing of all Australians.

Table of Contents

Executive Summary	2
Table of Contents	4
Introduction	5
The Current State of Australian Healthcare	4
The Objectives and Methodology	6
Major Challenges in Australian Healthcare	6
1. Disparities in funding models, goals and outcomes	6
2. Uneven workforce utilisation and increasing specialisation	8
3. Complex, uncoordinated and fragmented system of care	8
4. Ingrained inertia toward improvement and innovation	10
5. Ageing population and complexity of medical advancements	11
6. Modern lifestyles and external influences to the system	12
Overall Analysis of the Challenges ~ ‘Cracking the Code’	13
Uncovering the Vicious Cycle in Healthcare	13
Opportunities for Solutions ~ Breaking the Vicious Cycle	15
1. Align funding with long term vision, goals and outcomes	15
2. Repurpose and rebalance workforce	17
3. Integrate and coordinate stakeholders and providers	18
4. Catalyse improvement and innovation	20
5. Manage demand with disruptive approaches	22
6. Focus on prevention, wellness and major external influences	24
Analysis of Solutions	27
Conclusions and Next steps	27
Contact	27
Acknowledgements and Declarations	27
Authors & Thought Leaders	29
Appendix A ~ Partnership Development Guidelines	30
Appendix B ~ Guidelines for Prevention and Wellness Programs	31
References	32

Introduction

The Future Solutions in Australian Healthcare White Paper has been developed in collaboration with 21 key thought leaders to help solve Australia's major health challenges and guide the future of the healthcare system. This innovative paper combines the intelligence of a diversity of leading experts across several sub-sectors of the Australian healthcare and wellness industry. Unlike other research initiatives that delve into specific policy issues, this White Paper offers a 'big picture' perspective on future trends. It is a resource for organisational strategy or government policy with provocative ideas for change. This Paper would therefore benefit any healthcare leader, organisation or government body in Australia.

The scope of this paper is focused more on the "what we could be doing", rather than "how we should be implementing it", although the latter is briefly discussed. In addition, two specific guidelines have been produced for 'Prevention Strategies' and 'Partnership Development' as these were common priority areas for many leaders moving forward.

Each leading expert contributed their insights based on vast career experience and knowledge of the latest scientific evidence. They shared visionary yet practical long-term views to solving healthcare challenges facing Australian society leading up to 2020. The thought leaders interviewed manage more than \$8 billion of Australian healthcare expenditure and hold roles that influence in excess of \$30 billion of healthcare industry annual turnover.

The Current State of Australian Healthcare

Australia's healthcare system is generally regarded as one of the finest in the world but it can be better - there are significant challenges to be faced now and into the future.

Approximately \$140 billion is spent on healthcare in Australia. This amounts to about 9.1% of Gross Domestic Product (GDP) - comparable to the mean

spent by other OECD countries.⁴ Nonetheless, the average life expectancy is the 6th highest in the world, approximating to 80 years for men and 84 years for women.⁵ In terms of overall wellbeing, Australia also scored the 6th highest in the world with 64% of the population considered to be 'thriving'.⁶ Based on this it would appear that Australia is a relatively happy and healthy nation and that there is no 'crisis' in the healthcare system.

However, based on closer review of the statistics and expert insights of thought leaders, there are valid causes of concern for Australia's ability to meet current and emerging challenges. Conditions such as obesity, diabetes, cardiovascular disease and cancer are growing at alarming rates. About 25% of Australian children and 63% of adults are overweight, making it almost on par with the United States.⁷ Approximately 29% or 5.2 million adult Australians are obese - a major contributor to the rise in co-morbidities. Sedentary lifestyles, the consumption of junk food and the rising prevalence of the fast food industry are becoming everyday cultural norms. At the 'sickness' end the spectrum, there are unparalleled demands placed on the healthcare system.

Due to advances in modern medicine and rises in the cost of medical treatment and technologies, Treasury projections estimate the current growth rate of 4% for healthcare expenditure vs GDP will rise to a staggering 7% by 2050.⁸ This phenomenon will be caused by an ageing population and population growth as well as the significant burden of chronic disease, particularly in terms of rates of hospitalisations.⁹ Across Australia, waiting times for elective surgery are the longest they have ever been and in states such as Tasmania, the proportion of those waiting longer than 1 year for elective surgery is 8.8%.^{10 11} The Australian public has high expectations of their healthcare system and Emergency Department waiting times are a source of growing public dissatisfaction.

Of great concern is a perceived failure to ensure equitable access to healthcare services, a fundamental

principle of egalitarian care and a feature demanded by the public. This problem is particularly acute in rural and regional communities, where the geographic vastness lends to isolation and unbalanced access to care. For the Aboriginal and Torres Strait Islander population born in 2010–2012, life expectancy was estimated to be 10 years lower than that of the non-Indigenous population for males; a statistic that is unacceptable in a modern economy, particularly one that is relatively wealthy.¹² The state of care in such communities is further challenged by funding requirements and the lack of skilled healthcare professionals able and willing to serve in these locations.

With these factors in mind, this White Paper explores these issues with some of the most notable thought leaders in Australian healthcare. Following a revealing analysis, this paper addresses the root causes of these challenges and provides innovative future directions for leaders and stakeholders in the system.

Objectives and Methodology

This White Paper has been developed for Australian administrators, policymakers, practitioners, organisations and businesses in the healthcare and wellness industry, as well as the increasing numbers of healthcare-literate members of the public. It guides transformation of the healthcare system to deliver truly optimal care, improved health outcomes and long-term economic sustainability that Australian society requires.

The intention of this paper is not to cast blame or simply identify ways to reduce the cost of healthcare. It is intended to stimulate thinking and present opportunities for solutions so that leaders, organisations and governments can explore them in their decision-making processes for the benefit of Australian society.

Interviews were conducted with 21 leading CEOs and Thought Leaders in the Australian healthcare and wellness industry. Each expert contributor described the challenges in healthcare from their perspective, as well as ideas on how to solve them. Major themes were consolidated where possible, although they do always represent a consensus of opinions. In fact, the importance of this White Paper arises from the divergent ideas and proposed solutions from a cross-functional range of healthcare sectors.

All interviews were conducted by Dr Avnesh

Ratnanesan, CEO of Energesse and lead author of this White Paper. Dr Ratnanesan has over 15 years experience across multiple sectors of healthcare in the UK and Australia. Energesse was founded with a mission to improve the health and well-being of one billion lives, working with leaders, organisations and governments. It currently works with organisations in the US, UK and Australia to solve challenges in the healthcare and wellness sector.

Energesse led the production of this White Paper following positive feedback from thought leaders on the need for greater collaboration to define future solutions for the healthcare ecosystem. In light of its scope and need for objectivity, the development and communication of this White Paper included the expertise of several international consulting firms including Akumen (UK), Systematic Innovation (UK), Palladium Consulting (US/Australia) and Eton Associates (Australia).

Major Challenges in Australian Healthcare

Upon analysis of the 21 interviews, 6 major themes emerged as major challenges in Australian healthcare. The first phase of analysis was therefore to break down the major challenges as defined by the thought leaders and identify root causes. They are not listed in any order of priority.

1. Disparities in funding models, goals and outcomes

Thought leaders have generally observed disparities in how funding is allocated and what constitutes good ‘value for money’ in terms of desired health outcomes. At a high-level perspective, this lack of clarity can result in ‘cost-shifting’ between Federal and State governments during budget negotiations. The flow-on effect is that changes in government can lead to changes to long-term budget commitments. While annual budget cycles are accepted as a mandatory discipline, long-term resource planning for local healthcare organisations remain a challenge. Area and disease-specific health services are unable to implement much-needed projects of high impact despite knowing the 10-year needs of its local populations.

There is also excessive ‘red tape’ in trying to obtain certainty of funding for large-scale capital projects when submissions need to be made to both State and Federal governments.

“In the United Kingdom you go to the State Health Authority and you either get the money or you don’t and the decision is clear. Here, it can be a combination of federal, state or own source funding. Depending on funding delivery this can complicate or prolong the process.”

~ Len Richards, Chief Executive, Central Queensland Hospital and Health Service

The root causes

Several underlying factors play a role in the mismatch between funding models and health outcomes required for the future.

1. Goals & value perceptions of the system are unclear, cost-focused and not linked to a greater vision
2. Measures and incentives are short-term and activity-based, rather than value-based
3. There is a separation of, and disconnect between, State and Federal Government health budgets
4. Three-year political cycles interrupt and stymie long-term planning

“[A good health system has] access and affordability, national consistency, so it’s fair and equal, and good healthcare outcomes in terms of quality of life... length of life and also the overall health profile”

~ George Savvides, Managing Director, Medibank

Unclear goals and vision

First, a major overarching reason for incongruence between healthcare industry leaders and government is that there is no consensus on how value is perceived in the healthcare system. The following questions remained unclear among healthcare leaders:

- What is the overall vision for our health system?
- If we know that current trends are ‘unsustainable’, what would be regarded as a sustainable health system?
- What is our target average life expectancy?
- Where do we want to be from a quality of life perspective?
- Where is the real value in the health system coming from?

“We don’t understand where the value comes from in the system; we need a value chart”

~Dr Martin Cross, Chairman Medicines Australia

The Federal Government’s main focus in recent times has largely been based on looking at our health system as a budgetary cost centre that has to be mitigated in order to meet Treasury’s priority of reducing the

national budget deficit. While widespread budget cuts may be necessary, they can also be counter-productive without a true understanding of the inter-relationships between the various components and how they affect population health outcomes. In fact, reactionary budget cuts can eventually raise long-term costs even further. This becomes more evident later in this Paper in the section on ‘Overall Analysis of the Challenges’.

A good, productive system inevitably delivers outcomes that cost money. However, the overall lack of clarity on our targeted national health outcomes sometimes leads to new policies being regarded as ‘controversial’, rather than ‘good policy’. It is not surprising, therefore, that they occasionally do not receive the necessary buy-in from peak bodies. A new approach is required.

Short-term, activity-based measures and incentives

Due to the fact that the Australian health system’s long-term vision and goals are unclear, we have resorted to measures that are more short-term and activity-based. Our public hospitals are remunerated on an ‘activity-based funding’ model while our primary care system is largely remunerated on a fee-for-service model.

A fee-for-service model is easy to measure and works well in remunerating doctors and hospitals for the number of patients that they treat. It is also simpler to manage as payment is often standardised per patient, based on if they are bulk-billed or if additional fees are charged. However, the challenge with a ‘fee-for-service’ model is that as consumption of services increases, the overall system incurs proportionately more fees, regardless of the degree of change in the health outcome in a population. Therefore, based on the current system, there is no incentive in the system to link fees to larger health outcomes of national focus, such as rates of diabetes, obesity and cardiovascular disease.

The result is a ‘high churn’, high turnover system that is incentivised by treating patients quickly and with an emphasis on presenting symptoms rather than root causes. This can be attributed to the need to ‘see’ a high volume of patients, rather than produce high quality outcomes for patients. ‘Note that this observation is not a reflection or criticism of the clinical competencies of individual healthcare practitioners. Rather, it is a flaw in the system’s incentive structure which needs to be corrected.

State and Federal Government separation of healthcare budgets

So why has the system not changed or adapted to meet with the longer term needs of populations and instead focus on results, that is, health outcomes? The underlying reason for this is that the structural separation between Federal and State governments in the management of healthcare makes it practically difficult to agree on such terms, particularly when a long-term vision has not been articulated. The system is further complicated by the fact that while secondary care budgets are managed by State government, Federal government funds primary care expenditure via Medicare and occasional large capital projects, therefore inadvertently causing misalignment of high level objectives.

Three-year political cycles

In Australia, governments and their ministerial leaders are often not in their policy and political leadership positions for very long. The Australian electoral system requires an election every three years and since the first Parliament opened in 1901, the average life of parliaments has been about two and a half years.¹³ Despite Australia's relative political stability, with any new state or federal government healthcare policies are subject to significant political review and change. This is especially the case when an incumbent party is replaced and the new leadership has divergent views on policy. The flow-on effect of relatively rapid policy changes compound the problems faced with short-term incentives, Federal and State separation and incongruence of goals and outcomes.

“There is no perfect funding system, but we have to support motivated people to do the right thing”

~ Michael Ackland, President GE Healthcare ANZ

2. Uneven workforce utilisation and increasing specialisation

The Australian healthcare workforce is highly in terms of its skill and intellectual capability. However, challenges exist in filling shortages in particular locations and ensuring staff are appropriately skilled to meet the needs. For example, recruitment of skilled staff in regional areas is a struggle, particularly in terms of recruiting specialists in areas such as Central Queensland where there is a need for more general orthopaedic surgeons. While there are sufficient funds in the system to finance the shortfall of skilled specialists in remote areas, it is difficult to attract them. Where alternatives exist, regulatory barriers and opposition from stakeholder peak bodies may prevent these needs from being fulfilled.

“It's around being able to remove any traditional barriers to bring an alternative supportive workforce. Within the aged care system there are opportunities for aged care workers, enrolled nurses and allied health to do more. We also have heard that in our rural communities we need to have skilled professionals to undertake full procedures; we're not likely to get medical staff wanting to work in many of those areas. We do need to be able to think of getting existing support staff to be able to work to the top of their license. We actually need to start to push those boundaries”

~ Lesley Dwyer, CEO West Moreton Hospital and Health Service

Increasing specialisation

The dynamics and demands of the medical workforce are also changing. With increasing specialisation in the medical field, there is a greater degree of complexity in the roles that need to be filled. Rural general practice roles are also a challenge as certain doctors are more attracted to more financially lucrative urban roles with private practice opportunities. Procedural specialties are occasionally disproportionately remunerated under the fee-for-service MBS which leads to workforce shortages in non-procedural specialties.

Another factor that affects retention rates in the workforce is research-backed indications of high degrees of general distress, depression and mental health issues among the medical profession.¹⁴ Clearly these trends challenge the system's ability to sustain a workforce that needs to deliver on future healthcare priorities. There is a need to invest in 'caring for carers' in order to maintain productivity, motivation and retain existing workforce.

3. Complex, uncoordinated and fragmented system of care

Few would argue that our current healthcare system is very complex to navigate and largely uncoordinated. Examples of this fragmented system of care include the separation of primary care with secondary care and a lack of cohesion between the public system and the private system. The separation between State and Federal Governments also means that work initially conceived at federal level is occasionally reinvented at state level. These silo structures cause 'fault lines' whenever patients, budgets and resources shift from one part to another. These 'fault lines' are replicated across the entire healthcare system resulting in system-wide inefficiencies, variable standards of care and information asymmetries.

The root causes

1. Historical origin as cottage industries
2. Lack of incentives to integrate
3. No accountability across pathways
4. Regulations and restrictions on choice
5. Geographical isolation
6. Culture of protectionism, vested interests and inadequate stakeholder trust

Historical origin as cottage industries

“The biggest challenge at the moment is that healthcare is a series of cottage industries in this country and there is no serious attempt to try and integrate care”

~ Prof Ian Frazer, AC, CEO Translational Research Institute & Australian of the Year

The Australian healthcare system historically began as a series of ‘cottage industries’ or independent silos of general practices, hospitals and pharmacies that were set up to meet local needs. As a result, patients largely receive disjointed care, especially when moving across different levels of service providers. This causes problems, particularly when transferring from their general practitioner to a hospital and returning to the community upon discharge. These inefficiencies are also particularly acute when patients move between public and private services. While general practitioners in Australia have the unenviable position as the patient’s gatekeeper to services, for individual stakeholders, there are no major commercial incentives for truly integrated care across aged care, primary care or hospitals.

No accountability across pathways

There is also no one responsible for managing the entire pathway of a patient’s care, which means errors, duplicated tests and inefficiencies can occur along these transition pathways without much accountability.

In addition, on a system level, many tasks can be done just as efficiently and more cost-effectively by other healthcare practitioners (e.g. nurses, allied health workers, pharmacists) on lower pay scales. Some people are being overpaid for certain health outcomes, even when somebody else can do the job. This issue will continue to occur as long as there is no single point of accountability in the care pathway.

“We are concerned about owning the patient, when really we need to link everyone to the systems”.

~ Michael Ackland, President GE Healthcare ANZ

Regulations and restrictions on choice

There are also certain regulations that limit choice to the end consumer and prevent integration. These include regulations that restrict the ability of private health funds to participate in primary care. This limits their ability to coordinate their members’ health needs, particularly in relation to optimising secondary care and other services. Restrictions on pharmacy locations ensure that existing pharmacies are able to serve areas of need, however they can discourage competition and natural market forces to create optimal choice for the consumer. These deliberations have to be balanced with governments own intentions to contain pharmacy numbers in order to manage costs as well as pharmacists ability to transport their skills where they are needed.

Geographical isolation

One of the greatest areas of inequity of care is the failure to deliver appropriate services to Torres Strait Islanders and Aboriginal populations, where there is a 10-year difference in mortality rates compared to other Australians. Indigenous populations and certain rural and regional populations with low socio-economic backgrounds are not getting sufficient access to services. A contributing factor to this is Australia’s geographical vastness and resulting isolation from basic infrastructure.

“A major challenge lies in our rural and regional areas of unmet needs. Bringing a level of service to patients that is geographically distant is very challenging and there is a great disparity. Only government can cover these areas, it is difficult to contract out services here as the private sector needs economies of scale and these are areas of market failure”.

~ Alison Verhoeven, CEO Australian Hospitals and Healthcare Association

Culture of protectionism and inadequate stakeholder trust

Due to the separation of Federal and State in funding healthcare, there are flow-on effects in terms of how organisations in healthcare culturally deal with each other. These territorial conflicts have been observed at a number of levels and interactions:

- a) Between clinicians and health administrators
- b) Between the clinical community and health funds
- c) Between the public and private sector
- d) Between government and industry bodies

The resulting effect of naturally diverse and vested interests is that collaborative agreements across patient pathways can be difficult to materialise in practice.

The bureaucratic cost of healthcare thus increases. With this lack of trust comes a perception that some individuals and organisations take advantage of the system. This further reinforces a resistance to change and territorialism within silos. It questions whether we have the right balance of consultation and collegiality among stakeholders in the system.

4. Ingrained inertia toward improvement and innovation

There is a general consensus that the Australian healthcare sector is a slower adopter of process innovation and technology systems compared to other sectors. This is evidenced by the slow uptake of e-health initiatives such as the personally controlled electronic health records (PCEHR). We are however better at obtaining access to new treatments and the latest technologies in clinical medicine. Interviews with experts reveal a variety of root causes for this dynamic.

Clinical outcomes for new treatments and technologies

The pharmaceutical industry is probably the most advanced area of the healthcare system to demonstrate cost-effectiveness. New treatments are stringently compared to existing ones on the market via the Pharmaceutical Benefits Scheme (PBS) reimbursement system. As such, there needs to be clear evidence that these drugs work and that they are good 'value for money'. The PBS is also one of the only major budgets in the healthcare system where the growth rate has stabilised and even starting to decline, now and in future years.

"In pharmaceuticals every single dollar the government spends is based on a cost-effectiveness test. Why can't we apply that to some of the other areas? Because PBS is one of the most rigorous schemes ... the best administered scheme across any government expenditure. There aren't many government expenditures tested for cost-effectiveness the way pharmaceuticals or PBS is tested for cost-effectiveness".

~ Shaju Backer, Managing Director, Merck Serono

Debate on long-term value proposition of new innovations

In the short term, other new diagnostics, treatments and medical technologies can increase costs, not reduce them. One of the challenges of understanding the true value of medical devices is that the data required for cost-effectiveness analyses can only be collected after they are in widespread use. Biological and targeted therapies are proving to be

a very high unit cost to government, although they are much more effective due to their personalised nature and narrower patient pool. However, access to these treatments is often dependent on Australia's attractiveness as a market for international pharmaceutical companies.

Increasingly, instability of the Australian pharmaceutical industry and reimbursement conditions of new drugs could threaten Australia's market status and patient's early access to medicines. Yet there are moral, ethical and societal benefits in preserving access to new medicines in therapeutic areas such as cancer, where there is greater urgency. Speed of access to medication is a critical factor here. "There's about, by my estimate, somewhere in the region of a quarter of a trillion dollars every year now available for direct foreign investment, which companies spend on R&D or companies spend on manufacturing. We, I don't think, are getting anything like the share we could get when we compare ourselves to places like Singapore and places like Ireland who have, what I would describe, as sensible proactive policy in order to attract direct foreign investment."

~ Dr Martin Cross, Chairman, Medicines Australia
Variable degrees of consumer empowerment

Variable degrees of consumer empowerment

In a universal healthcare system such as in Australia, patients in the public system have access to Medicare reimbursement and do not generally pay for publicly funded services apart from co-payments with their medications. The trade-off to this system is that they often do not get to choose their primary care practitioner, specialist or allied health worker in the system. This perception of 'lack of choice' can lead to a loss of empowerment, particularly when dealing with illness. It also means that there isn't a strong drive for services to improve in order to meet the needs of a passive consumer. For the sake of clarity, a converse example would be if a consumer were visiting a hairdresser or eating at a restaurant ~ any poor service could easily result in a complaint and a potentially immediate change to improve the service.

Compared to consumers of the public system, private patients who pay fees for their medical services are often more in control, and therefore more empowered. This is because they get to choose their own doctor, and increasingly are able to access information enabling them to do so. These higher income patients are also more empowered because they are able to afford more complementary therapies, health

foods, health coaches and expensive medications, thus expecting a higher quality of service delivery. The variations in consumer empowerment cause differential flow-on effects into the system creating a wide variation in how the system improves itself.

5. Ageing population and complexity of medical advancements

The challenges that come with an ageing demographic and increase in the burden of chronic disease are already acutely observed in the health system. There is increasing resource utilisation and demand for services, especially growing rates of hospitalisations and health insurance claims in the private sector. While Medicare covers payments for treatment of sickness and disease in the public sector, patients often purchase preventative products and services outside the healthcare system.

“The system is good at diagnosis, good at prescribing and bad at compliance”

~ John Bronger, Board Member, Pharmaceutical Society of Australia and former President of Pharmacy Guild

There is a shift in the system from the provision of acute care resources to a growing need for chronic disease resources. This is particularly the case in lower socio-economic regions and as younger populations present with multiple risk factors for chronic disease.

As western healthcare systems are traditionally focused on curing disease rather than enhancing wellness, these risk factors may often be missed. Due to pressures of tight timeframes and fee-for-service incentives in Australia, there can be a propensity to treat a patient's symptoms rather than risk factors and the root cause of conditions. Prevention requires a change in conditioning, on both the practitioner's side as well as the patient's side. Society is culturally conditioned to seek rapid attention when sick.

However, there needs to be public health measures that educate the population to deal more urgently with detrimental behaviour patterns as well, such as addictions to smoking and alcohol, which lead to a large proportion of chronic disease.

“One-third of the costs of the health system are from smoking, alcohol, obesity and sun exposure”

~ Prof Ian Frazer AC, CEO Translational Research Institute and Australian of the Year.

“The fiscal environment is looking for quick results, when prevention strategies can take a whole generation to show benefits. Interventions to reduce tobacco use began in the 1950s. We are now seeing

changes in rates of lung cancer...we are not going to get short term results”

~ Alison Verhoeven, CEO Australian Hospitals and Healthcare Association

Patients with chronic diseases will also need specialised physical facilities to manage their needs, particularly as they get older. The aged care sector is therefore challenged in dealing with this rising demand for skilled staff and adequate financial capital to prepare for these changes.

“The number of people aged 85 and over will double over the next 20 years with rising dementia. There are 185,000 beds in the market, and we need another 75,000 in the next 10-12 years to service this population. The capital required to build those facilities is around \$15 billion. We need the time and efficiencies to service those needs”

~ Andrew Sudholz, CEO JAPARA Aged Care

Western medicine becoming more niche and specialised

With growing areas of science catering to the growth in burden of disease, advances in modern medicine have also created fragmentation of disease states and niche categorisations. These categorisations can be based on stages of disease, nature of its cause or pathology of the condition. As the science of genetics and epigenetics advances, categorisation can also be based on certain biomarkers. The resulting effect is that specialties such as oncology, cardiology, radiology and surgery are becoming more super-specialised in order to keep up with the knowledge requirements of medical advancements.

Rising costs of treatments and technologies

Increasing niches of disease require increasing diagnostic tools, tests, treatments and access to specialist care. All these factors result in increasing costs to the healthcare system over time. These are extrapolations of the general trend of Western medicine and will continue to progress in that same direction and add to demands on the overall health system.

This added complexity to the system is a major challenge for general practitioners who not only have to manage the holistic needs of the patient, they also have to keep up their knowledge of the various specialties. This information asymmetry means that they are also unsure about which specialists to refer to, their quality of service and their degree of capability. They are in fact overwhelmed in their roles and there is a need to help them with their decision-

making in this aspect. Additionally, disruptive trends of care that potentially deliver similar outcomes could be explored to reduce the dependence on specialists.

“We need to be educated on the demands of a changing world”

~ Dr Mal Washer, Doctor and former Federal Member of Parliament

6. Modern lifestyles and external influences to the system

The reality is that a large portion of health outcomes in Australian society are determined outside of the healthcare sector. In fact, the vast majority of chronic conditions are due to lifestyle choices. Australia's national prevention agenda hangs in the balance with structural changes in government. However, this should not deter leaders in healthcare from influencing lifestyle-based activities and policies at the grassroots levels.

“The preventive challenge is a very complex one. When you think about the diseases that challenge us at present, their origins are in the lifestyle of an affluent society. The preventive levers are all outside the health system...things like town planning, agriculture policy, food policy. The agendas have followed fast food producers and retailers. The extent to which we develop public transport systems, and encourage people to walk in between using buses and trains like they do in Manhattan...All of those

things we know, from descriptive studies especially, have a bearing on health of people. It's a bit like global warming; we need a national approach that's structural. That's the thing that's missing.”

~ Prof Stephen Leeder, Chair of the Western Sydney Local Health District Board, Director, Research Network, Western Sydney Local Health District and Chief Editor, Medical Journal of Australia

Access to healthy foods is also a problem in the Australian environment. Conversely, exposure to fast food advertising is widespread, particularly to very young children. The danger is that the obesity epidemic begins at a very young age and the addictive behavioural patterns that lead to chronic disease become well entrenched and very resistant to change in adulthood.

“Industry has more money than government and can market to children. This is the number one challenge for people to navigate. Fast food is highly accessible and so are foods in supermarkets and cafes that are high in calories and low in nutrition. It took about 50 years to rein in smoking and the tobacco industry, so it is no longer easily accessible. We need to make fast food less accessible... Research is now showing that this may be the first generation where children may have a shorter lifespan than their parents due to lifestyle choices.”

~ Michelle Bridges, Co-founder & Director of 12WBT, Leading Author & Wellness Expert

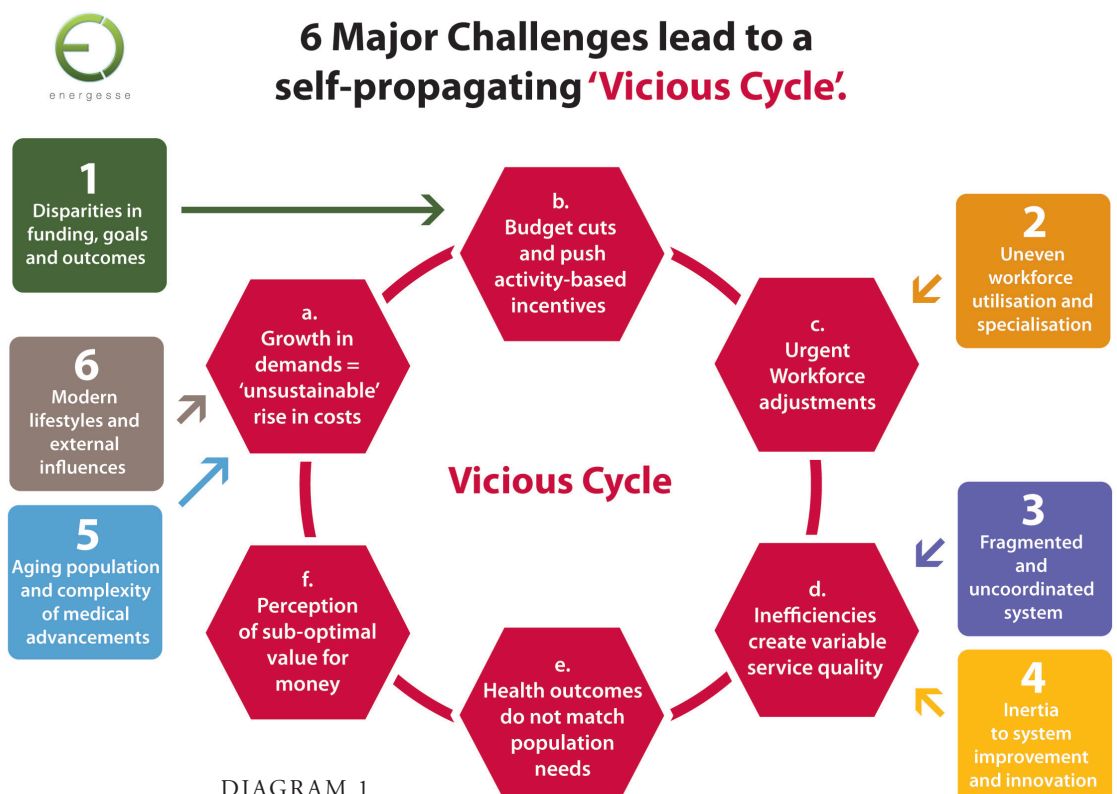


DIAGRAM 1

6 Major Challenges and their Root Causes

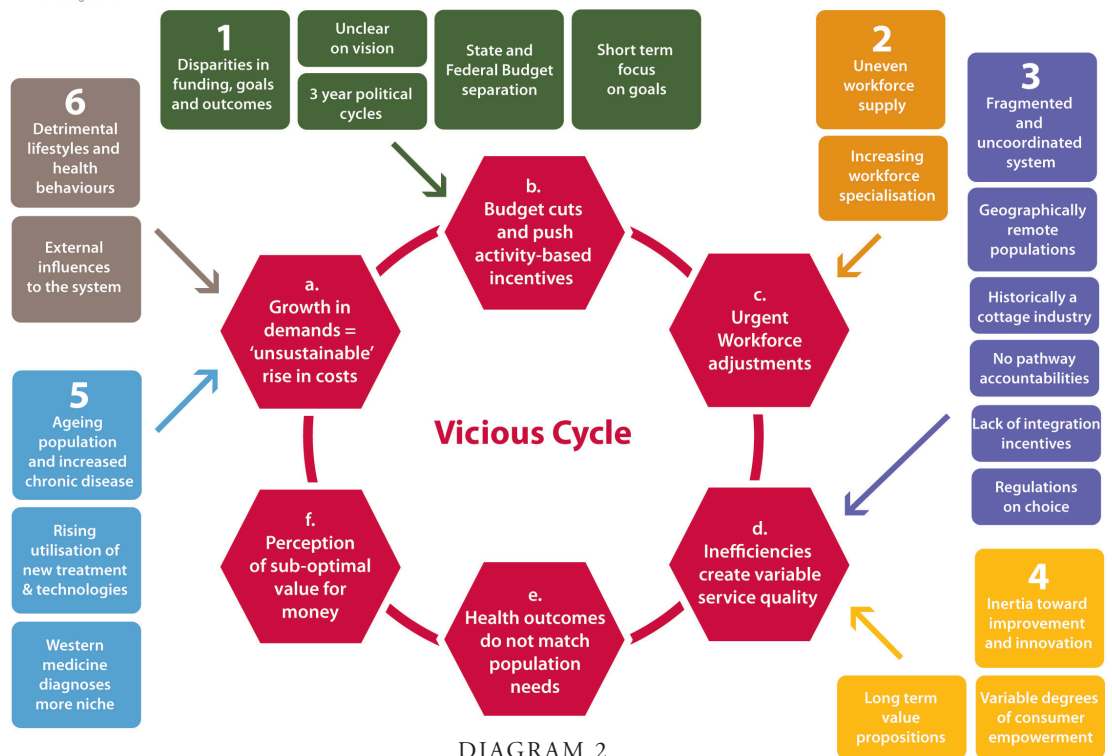


DIAGRAM 2

Overall Analysis of the Challenges ~ 'Cracking the Code'

Our in-depth analyses of challenges reveal 6 major challenges in the healthcare system. When mapped into a flowchart or 'perception map', these 6 major challenges contribute to an interrelating cycle of activity identified as the 'Vicious Cycle' that cause the unsustainable rise in healthcare costs. While most stakeholders in healthcare are aware of the challenges in isolation, most are not aware of the interrelationship between them and their effect on a self-perpetuating negative pattern. The Vicious Cycle in the healthcare system results in a downward spiral of inefficient care, inadequate health outcomes and an increasing rate of cost rises in the long term.

With healthcare expenditure estimated to be approximately \$140 billion, this downward spiral is potentially costing the government and healthcare organizations in Australia tens of billions of dollars in costs or lost revenue. More importantly, the system could be serving healthcare to millions of Australians in far better ways than it is now.

Uncovering the Vicious Cycle in Healthcare

The Vicious Cycle is a continuous loop of activity that is self-propagating. To better understand the cycle, it

is important to understand its root causes and the flow chart of how the cycle perpetuates itself.

- The first point to note is the growth in resource demands on the far left of the cycle. The 2 major challenges i.e. challenge no. 5 (ageing population and complexities of modern medicine) and challenge no. 6 (modern lifestyles and external influences) contribute to this high growth in demand for resources. The rapid growth in demands is observable as projections of cost rises from 4% of GDP to 7% of GDP in 2050. This is regarded as unsustainable.¹⁵
- The flow-on effect of those perceptions in the cycle is the implementation of cost cuts and budgetary restrictions within Federal government. These cuts have a cascade effect on State Government and healthcare organisations. Additionally, there is greater pressure placed on achieving pre-set objectives which are largely activity-based measures (note that objectives are rarely downgraded despite the budget cuts).
- The next flow-on effect is that both governments and healthcare organisations respond by readjusting their workforce and often making staff cuts whose wages are often the largest components of a healthcare organisation's budget. Alternatively, in some areas wages have to rise significantly in order to fill short-term gaps.

Workforce adjustments on this scale have short-term and long-term impacts. In the short term, these adjustments feed into an already inefficient system and deteriorate the situation even more. In the long term, they lead to excess of supply of certain workforce groups (pharmacists, new graduate doctors and certain specialists) and acute shortages in others (nurses, rural general practitioners, and rural general surgeons).

One mechanism to deal with this issue is to fund training for new health professionals, but as the incentive structures are not aligned, eventually these professionals drift away from areas and specialties of need into the oversupplied ones. This occurs in spite of unsustainable wages growth in this sector.

- d. The healthcare system has inefficiencies due to a multitude of factors such as its lack of integration and activity-based incentive models. Any additional pressure on the system drives it toward highly variable quality of services.
- e. When these variations in service quality is replicated millions of times across the population over a period of years, the financial cost to the system is in the billions and the population's health outcomes remain sub-optimal.
- f. Therefore, despite the growing pressure on the system, the health outcomes produced from services

do not match the overall needs of the population. There is therefore a perception that we get 'sub-optimal' value for money in healthcare because we do not 'appear' to receive better outcomes despite the additional pressure we place on the system. Our healthcare expenditure is therefore perceived by certain sectors of the economy as a cost, rather than an investment.

- a. The net effect is we therefore perceive the rising costs of healthcare and the growth in demand for resources as 'unsustainable', without truly understanding how the system got there. The Vicious Cycle therefore continues as the system moves into the next round of budgetary restrictions and inefficient outputs.

In order to solve these challenges and evolve the healthcare system, there is a need to break the cycle to stop the negative spiral of historically programmed actions. Through budget cuts and short-term changes, current interventions are only treating the 'symptoms' of a system that is dysfunctional. In order to break the Vicious Cycle, the root causes of the 6 major challenges also need to be addressed. A range of targeted solutions need to be implemented to reverse the downward trend and transform the system into a 'Virtuous Cycle' with positive outputs.



DIAGRAM 3

Opportunities for Solutions – Breaking the Vicious Cycle

“Problems cannot be solved by the same level of thinking that created them.”

~ Albert Einstein

Thought leaders contributed a wide range of solutions, some of which were common across several leaders, while others were disruptive and had potential for exponential benefits to Australian society. It should be noted that the proposed solutions are not a ‘finger pointing’ exercise at government or any other stakeholder. They highlight a range of opportunities and ideas that can benefit all healthcare stakeholders and Australian society in potentially ‘game-changing’ ways if appropriately implemented. Additionally, while some ideas may seem radical or provocative, they have been included to stimulate broader out-of-the-box thinking. Some solutions may not be feasible in the near term due to overt political, economic or legal barriers.

1. Align funding with long-term vision, goals and outcomes

One of the main challenges that the healthcare system faces is lack of clarity on the long-term vision and the goals of the system. There is a common understanding that Australia aspires to maintain universal access to high quality care, however the focus of public dialogue is often mainly cost targets. In that regard, the term ‘unsustainable cost rises’ lacks complete definition and stakeholders are unclear of what is actually sustainable.

“We have to fight to keep a universal healthcare system in Australia; we have to defend it...”

~ Michael Ackland, President GE Healthcare, ANZ

Due to this lack of clarity, all the stakeholders and ‘moving parts’ within the system are unable to move forward in a coordinated fashion due to lack of direction and buy-in. There are therefore several options proposed by thought leaders, many of which require **major national reforms**:

1. Set a clear and broader vision for the future
2. Involve industry leaders in development and execution of that vision
3. Deregulate/de-link major funding allocations from political cycles
4. Align goals and incentives with the vision
5. Fund outcomes based on population health management
6. Single funder model
7. Deregulation to introduce new funding sources
8. Sharemarket and superannuation investment

Set a clear vision

Without a clear vision and long term outcomes targets, organisations within the system are unsure as to where to head in the future. Cost reduction initiatives provide some insight toward a general trend that government is aiming for in the short term, but they do not provide clarity on targets that healthcare providers should be planning for in the long term.

Involve industry leaders

Closer coordination of leaders in both government and industry across all sub-sectors of the healthcare system could facilitate better development of long-term design and ongoing strategic implementation. Much like an ‘Advisory Board’ for any organisation, major government decisions can be informed by a collective of industry thought leaders from multiple perspectives. Through a regular consultation process with leaders that understand the problem and have distilled those views objectively, better decisions can be made on the future strategies in healthcare.

“Government needs to decide what GDP is acceptable and what you want to achieve in the long term...Our goals should be quality or life and quantity of life to stabilise or go up”

~ Prof Stephen Leeder AO, Chair of the Western Sydney Local Health District Board, Director, Research Network, Western Sydney Local Health District and Chief Editor, Medical Journal of Australia

Deregulate/de-link major funding allocations from government

Although Australia has three-year political cycles for Federal Government, they are on average in position for only two-and-a-half years. This fact detracts from any critical long-term vision, strategy and projects from being implemented. There is therefore a suggested need to conduct a national apolitical re-evaluation of healthcare goals. This would include short, medium and long-term goals, and subsequently adjust funding models accordingly. Separation of the healthcare system from the political system would offer a more objective approach toward implementing long-term objectives. Precedents have been set in the financial sector, such as the relationship between the independent Board of the Reserve Bank and Treasury.

The Reserve Bank Board manages monetary policy and decides on interest rates independently of the political process and the Governments of the day. This principle of central bank independence in pursuit of accepted goals is the international norm and prevents manipulation of interest rates for political ends,

and keeps policy focused on long-term goals. This independence includes a process of consultation and accountability which is potentially emulated in the healthcare sector.¹⁶

A similar model could be replicated in healthcare and involve exploratory discussions between the Health Ministry, State Governments, leaders of health services and Treasury. It would likely require approval at Prime Ministerial level.

Funding Population Health Management

Several experts recommended realigning the healthcare portfolio structure to align with population health management and outcomes-based incentives. This would create a move from purchaser–provider transactions to population health management funding. In this model, financial flows are dependent on factors such as the local population's size, average age, co-morbidities and demographics.

An example of such an implementation is the Health Boards structure similar to that applied in Scotland, Wales and New Zealand. Funding is allocated per person, and allocated funds are driven by health outcomes rather than treatment solutions. Primary care also falls into governance of the boards and is merged with acute care. Other examples of population health management include the Australian Defence Force where there is a high-needs population with services tailored to clearer outcomes.

“This way we will address unmet needs before it becomes expensive and emergency-driven”

- Len Richards, Chief Executive, Central Queensland Hospital and Health Service

Single funder model

A single source of funds is also deemed more sensible to reduce the level of bureaucracy involved in negotiating between Federal and State government for large projects. This single funding structure could be done at a government level and/or involve health insurance funds. Single funder economic models that would focus on prevention and keep people out of acute care include Health Maintenance Organisations (HMO) in the US or the previously proposed Medicare Select. Structures such as these would reduce shifting costs between State and Federal Governments and simplify funding application processes.

Funding allocations are also currently too short term, with annual planning cycles and budgets preventing long-term initiatives from being implemented. There

needs to be a 5-year horizon on funding, even if it is on a non-binding basis, to allow more cohesive long-term planning for stakeholders such as local area health services. One sub-sector of healthcare that already experiences this level of certainty is pharmacists via the Pharmacy Guild of Australia.

They have the Community Pharmacy Agreement with government which lasts 5 years and provides certainty to both parties on future strategies, funding and resource allocation, and therefore more certainty over target outcomes. ‘Trust-based’ structures such as these allow healthcare stakeholders the relative independence and accountability to perform their duties despite any major fluctuations to the ‘government of the day’. These types of arrangements can therefore encourage implementation of larger projects that meet the priorities of the community, many of which are known over a 10-20 year horizon.

“[A friend in Spain] took a contract from the government to run all the healthcare for a region with a capitated funding model for the population for a total of 15 years.... He said “When I was responsible for spending money on all of their healthcare, not only hospital care, but every single thing - integrated care, primary care, physios, hospitals and cardiac operations...with the whole deal integrated across the patient rather than across the system.... I focused on prevention like I had never done before. Now, if we want to keep people healthy, they are the sort of incentives that the system needs to develop.”

- Michael Armitage, CEO Private Health Australia

There is a general agreement that the fee-for-service model is not effective for chronic disease management, as we need evidence-based outcomes where healthcare practitioners are able to spend more time with patients and are incentivised for it.

“We need to reward the right health outcomes rather than the volume of work done”

- Dr Martin Cross, Chairman, Medicines Australia

Deregulation to introduce new funding sources

At a systems level, health insurers are poised to play a bigger role in Australian healthcare. Stakeholders in this space have indicated interest in covering the gap for expensive medicines, and becoming involved in major purchasing decisions while government continues to maintain oversight of social objectives and funding areas of need. While health insurers acknowledge the legal and regulatory barriers in entering the primary healthcare space, there is an

interest to integrate primary care and hospital care by converting all participants to private cover.

Participation by health funds could also ensure more health checks and prevention measures were implemented, such as funding obesity counselors who coach on behavioural changes, or diabetes educators who conduct urine tests and blood pressure checks.

“For seven years, they’ve [Holland] been in the top two or three of the OECD of customer satisfaction scores for their health system. Since they’ve reformed the system to be integrated across public and private, they’ve had lower indexation. They’ve had lower health cost inflation, year-on-year, than Australia. Most recently, it’s been half of ours. So, it’s more sustainable and meets all the accessibility and affordability criteria. 100% of the population is involved [in private health insurance], whereas here it’s only 50% in private cover.”

~ George Savvides, Managing Director, Medibank

“Big health funds will make a difference to how we practice medicine, as there is more of a drive toward more cost-effective treatments. Funds will dictate what is most effective and won’t fund other forms – I think that is a good thing”

~ Dr Mal Washer, Doctor and former Federal Member of Parliament

Sharemarket and Superannuation investment into healthcare

Apart from changing funding models, there also exists great opportunity to attract new sources of investment into various sectors of healthcare. Medibank’s privatisation, the success of JAPARA as the first public listed aged care operator in the country and Healthscope’s (Australia’s second largest private hospital operator) \$2.25 billion market offer indicate that healthcare is an attractive sector among institutional investors. The sharemarket therefore offers a real and significant opportunity for other private organisations across the health sector to bring in new funds and provide services into the marketplace to serve unmet needs or disrupt existing models.

Health insurance funds also have an opportunity to attract new investment into the market by creating products using superannuation, and providing whole-of-life cover. This would be a paradigm shift in transferring existing wealth management infrastructure into the healthcare space. While there are current restrictions around lump sum payouts with super, a significant portion of the nation’s wealth

could be unlocked for healthcare purposes. Visionary leadership is required in creating financial products to explore this option as it offers another opportunity for the economy to support the health and wellbeing of its citizens.

“We do need to move from an annual health insurance decision to an offering for those who want ‘whole-of-life’ cover. Healthcare decisions made at certain points in the person’s life, say somewhere around retirement, could be helped using superannuation. That is, if a part of it could be used to procure health cover for the rest of their lives. It’s a better choice than buying a boat, or overseas trip; people tend to get excited about the lump sum, and they find themselves in great need later on in their lives. Using the benefits of tax-effective medicine, benefits of superannuation can guide choices around ‘whole-of-life’ need, which in turn protect the economy, the funder and the Treasury from unnecessary costs in the public system. This is because people have covered themselves properly for their entire lives”

~ George Savvides, Managing Director, Medibank

2. Repurpose and rebalance Workforce

There are several trends that will help align the healthcare workforce for future needs of the Australian population. Reports from Health Workforce Australia provide much greater depth as to the maldistribution of doctors and specialists nationwide and the high dependence on overseas doctors and nurses.¹⁷

However, there are three key themes that experts have covered in this White Paper that have possibly been less covered elsewhere:

Reskill and repurpose for areas of need

One of the major costs to the system is staff salaries. Salary requirements are often higher in rural areas or areas of staff shortages where adequate care services cannot be provided to the local population. Organisations have to incur fees above market rates to fill those positions. A major opportunity is to maximise the role of allied health and nurse practitioners such as increasing the scope of practice for nurses to include vaccinations, endoscopies and other minor procedures, allowing them to work at the top of their license.

In certain rural areas such as Central Queensland, there is a need for more generalists, particularly rural generalists where surgeons would be involved in major surgery, emergency departments and obstetrics. As the mainstream colleges have more specialised training requirements, these area health services need to broaden

the training programs to attract and retain surgeons.

“There is an excitement to broaden their skill base, rather than narrow it... Practitioners that are trained in rural medical skills are more likely to stay in rural care”

~ Len Richards, Chief Executive, Central Queensland Hospital and Health Service

Other sectors of the healthcare workforce such as pharmacists can also be retrained and repurposed to fill gaps in care. With the right funding mechanisms and as highly used and accessible health professionals, pharmacists can be a lower cost workforce and more involved in:

- a) Coordinating discharge med's between hospital and GPs.
- b) Risk screening for chronic diseases such as cardiovascular disease, obesity, asthma and diabetes, smoking cessation and nutritional advice
- c) Managing mental health patients and addictions.
- d) Prescribing certain low-risk and commonly used medicines
- e) Diagnosing and treating minor conditions and ailments

“Pharmacists are at the coal face. They can change behaviours and conduct screenings for undiagnosed conditions ~ they can see 100 - 150 customers a day”

~ John Bronger, Board Member Pharmaceutical Society of Australia and former President Pharmacy Guild

Educating clinicians on resource management

As the healthcare system in Australia moves toward a more resource-conscious system, such as that in the UK, clinicians and administrators have to improve on their decision-making process such that both the interests of individual patients and that of the broader society are managed. One option is to continue to encourage dual skilling of clinicians in medical and management qualifications.

“A little bit of business management in the health system would not be a bad thing. Teach the people who are running the place how to run a business because they are running a business. You don't get to be head of a hospital because you're a business manager. That's the problem. The skill sets that get you to one job aren't actually the right one for the next job up the ladder. The de-medicalisation of health administration is equally bad. We'll just get the efficiency manager running the place. That doesn't work either. You need to train people for those jobs

that have both sets of skills”

~ Prof Ian Frazer AC, CEO Translational Research Institute and Australian of the Year

“I don't think there are any issues between managing cost and clinical care. I believe it goes hand in hand. I actually remember going for an interview years ago where I said something about focusing on effective resources and the medical director turned to me and said ‘You can't put a cost on care’ and I said ‘I have to put a cost on care...I have to make sure the limited resources we have goes far as it can’, and that's a true responsibility we all should have. I actually think it's going to come from training”

~ Eileen Hannagan, CEO Chris O'Brien Lifehouse

‘Caring for the carers’

For a sustainable healthcare system to work, the people that drive it - from healthcare workers to administrators – also need the emotional, mental and physical health to manage and sustain their roles. Their overall wellbeing and ability to manage stress is critical to dealing with people's problems on a daily basis and ensure the workforce can remain highly motivated and productive. A major research program by the UK government and adopted by the British National Health Service showed that investing in the health and wellbeing of employees is shown to be a valuable investment.¹⁸

There is also a clear relationship between a patients' increasing desire for empathy from their healthcare practitioners, rather than academic intelligence, and their responsiveness to treatment. Clinicians that demonstrate more empathy and have more emotional intelligence have higher job satisfaction than their counterparts that do not. Patients also show better outcomes when they have a good relationship with their practitioners who show more compassion.¹⁹

“Medicine doesn't always come in a pill”

~ Gail O'Brien, Board Member, Chris O'Brien Lifehouse

3. Integrate and coordinate stakeholders and providers

While we have relatively good health outcomes in Australia and most leaders do not feel we are in a state of crisis, all agree that our healthcare system is very fragmented and this causes great complexity.

“Healthcare is a series of cottage industries where GP's, pharmacies and hospitals are not talking to each other.”

~ Prof Ian Frazer AC, CEO Translational Research Institute and Australian of the Year

Benefits of greater integration across silos are considered 'no-brainers', and thus, in principle, there is little opposition to the concept of 'why we should do it'. Most questions in the community arise from 'how to practically do it' most effectively.

Instilling stakeholder trust

A first point is the need to instill trust between organisations or collaborators and, to this end, "The Speed of Trust" by Stephen Covey is a recommended reading to change culture within the system and reinforce trust among stakeholders. For some organisations, there is a need to further develop partnership capabilities. This includes being able to seek the right partners, enabling partnerships to work most effectively and also produce a greater return on investment for both parties. A 10-Step 'Partnership Development Guideline' has therefore been provided in Appendix A.

The second point is that in any system, solutions are most effective when presented and owned by the end-user. With that in mind, it does not have to be government alone to set up facilities for enhanced integration. Solutions can be very effective if developed closer to the patient interface. Linkages can be formed by any organisation in the healthcare space to solve problems closest to them. For example, electronic health record sign-ups could be linked with pharmacy visits or health insurance fund sign-ups – this solves the problem for consumers, government and encourages engagement with the provider.

There are 10 areas of focus for healthcare integration efforts. The 5 main priority areas are presented in this White Paper, while the remainder are included in a more detailed *Future Solutions in Australian Healthcare Research Report* available soon at www.energesse.com.

1. Between GP's and Allied Health

Advanced Care Plans (multidisciplinary care), Integrated Shared Care or GP Management plans advocate for a more multidisciplinary, person-centric approach to care which is very much needed in managing patients with chronic disease. The care needs to be holistic and catered to the addressing the challenges of the local community. These care plans need go beyond the physical parameters of illness and address the emotional and mental aspects as there is a need to tackle the root causes of behavior change.

"We need to have better structure for Drs and pharmacists to work together or have case conferences. This could be funded by the health funds or a

government scheme where the user pays. Pharmacists can deal with "frequent flyers" that are using a lot of health funds as they have got good systems to follow up patients with, such as phone and email. Relationships between pharmacists and doctors have now also improved; it used to be more territorial"

- John Bronger, Board Member, Pharmaceutical Society of Australia and former President of the Pharmacy Guild

Primary care can also work with networks of personal trainers who can help focus on exercise education, nutrition and motivation, as doctors usually only have time to provide brief advice and medication for the problem.

"Fundamentally, the main form of coaching is mindset... People need to understand the layers of psychology involved as so many emotions like boredom, happiness and sadness can all lead to addictive eating. Addiction to food is the hardest to overcome because food is available everywhere and you actually need it to survive!"

- Michelle Bridges, Co-founder & Director of 12WBT, Leading Author & Wellness Expert

2. Between primary care, acute care and aged or palliative care

There is also certainly agreement that people mostly do not want to die in an acute care setting; they want to die in the own homes. This would be possible if there were remote access to specialists, rather than having to confine terminally ill patients to an acute medical ward. As a system, there are opportunities to better manage the dying process at home where appropriate. This could be done with remote monitoring technologies and greater interaction between home care, or aged care and specialists, or primary care providers.

"You're going to have to have some infrastructure that can help primary care and general practice around helping people die with dignity in their own home. That means hands on workforce, access to specialist support. You only want a very small number that are complex to die in a hospice and preferably not in acute medical ward if you can avoid it... I think managing that kind of pathway around the dying process or, if you go to chronic disease, around the last three to six months, I think that would be one, because it's so powerful emotionally I think we could really make a difference"

- Dwayne Crombie, Managing Director, Private Health Insurance BUPA

3. Between primary care and health insurers - pathway managers

Pathway managers are a concept where the health system has a concierge, who has access to more defined pathways of care. Whilst in most cases the concierge or gatekeeper is the primary care provider, in a fragmented system, this role could be delegated to another entity. The pathway manager role could also fall to health insurers who introduce bundled care packages where there is a three-way conversation between clinician, consumer and insurer.

For example, the insurer allocates a certain amount of funding to manage asthma or diabetes, which allows regular service for high-risk patients to keep them out of hospital. These are also known as 'managed care' approaches for chronic disease and an opportunity for public-private partnerships. Pathway managers could provide training in health economics to facilitate efficiencies for all stakeholders along the pathway for mutual win-wins.

4. Between public and private hospitals

Public and private hospitals have numerous advantages and methods for collaboration. Not-for-profit entities also possess efficiencies that can be shared. For example, hospitals could share formularies, performance data and guidelines for common conditions. Activities such as this are facilitated by organisations such as the Australian Healthcare and Hospitals Association. Practitioners could be awarded Continuing Professional Development points for sharing intelligence across stakeholders in the system to further incentivise participation.

Private hospital networks are often under pressure to show more value for money, especially as their key clients include surgeons. Best practice sharing can allow surgeons to explore all the options with patients before recommending surgery. It also opens up further conversations for subcontracting public care to private and not-for-profit entities. For example, private health performs 60% of the surgery in Victoria demonstrating a clear demand for such partnerships.

"We need to use the capacity in private hospitals and facilitate buying private services where needed"

- Alison Verhoeven, CEO Australian Healthcare and Hospitals Association

5. Between Acute to Aged Care

There is certainly an opportunity for Transitional Care Programs that ensure improved patient transfers between the 'fault lines' of acute and residential care. The forming of alliances between State governments,

Department of Social Services as well as hospital networks to provide better transitional care could result in major wins for all concerned, especially residents. Specialist colleges should also be involved in terms of how this transition process is managed. In aged care, the user-pay environment is increasing; however a better transition process could ease this burden on users.

"In private hospitals, you must be close to your doctors, but in aged care you must be close to your residents. It can cost \$1000 per bed in a hospital and we can provide that for much less which results in savings to government and a solution to the bed-blocking scenario"

- Andrew Sudholz, CEO JAPARA Aged Care.

4. Catalyse Improvement and Innovation

There are several main areas for catalysing improvement and innovation in the system:

- a) Setting a clear strategy for research and innovation
- b) Facilitating non-commercial research
- c) Empowering consumers on their journey
- d) Personalised healthcare and customisation

Set clear strategies for research and innovation

The future calls for highlighting strategies for research as well as better communication and integration of research outcomes into clinical and management community. E-health records could certainly be used to encourage this level of research. There was a diversity of strategic areas of interest mentioned by thought leaders in the paper:

1. Bench-to-bedside translational research e.g. Westmead Health and Medical Research Precinct
2. Stem cell therapy and nanotherapy - these will become part of weapons of the future for the treatment of cancer
3. Genetics, epigenetics and genomics
4. The role of quantum physics in health and wellbeing
5. Complementary medicines
6. Environmental toxicities on health
7. Medical devices

"The Mckee committee review showed direct benefits to government and cost savings from research"

- Prof Ian Frazer AC, CEO Translational Research Institute and Australian of the Year

"We must get more incentives to develop biotech in Australia and attract more investment into Australian

healthcare. We have a high corporate tax rate compared to OECD countries which is at 24% tax. Resources boom is flattening and tourism is holding but biotech is a good sector for the future as we have the right intellectual capital in Australia”

~ Gavin Fox-Smith, Managing Director ANZ, Johnson & Johnson Medical

“We need to ensure ongoing access to new medicines and need alternate methods of funding outside the government system to support research. If clinical trials stop, productivity drops and it is bad for the health industry”

~ Dr Martin Cross, Chairman, Medicines Australia

There are also opportunities to change the law to support innovation, especially when people are willing to be participants. Lord Saatchi’s Medical Innovation bill in the UK proposes continuation of the scientific research process outside the lab. The bill proposes that with consent, doctors can treat patients dying of cancer and other diseases with new, experimental and innovative treatments, instead of having to stick to failed standard procedures, as the law currently requires.

“True innovation will have some risk and we need to manage that risk”

~ Gavin Fox-Smith, Managing Director, ANZ Johnson & Johnson Medical

Research and development mainly occurs in the US for large medical device manufacturers such as Johnson & Johnson Medical. The medical device sector therefore has an opportunity to broaden its research base in Australia and form partnerships with local government and private research entities. In that regard, the pharmaceutical industry has a greater presence in terms of Australian research collaborations.

“In Australia, smaller developers of technology often cannot get enough funding to commercialise. Only Cochlear and Resmed have done it on a global scale – why not more?”

~ Gavin Fox-Smith, Managing Director ANZ, Johnson & Johnson Medical

Facilitating non-commercial research

Currently a large section of research agenda is driven by commercial stakeholders who are focusing on achieving considerable financial returns for their shareholders. There is a major challenge to find resources for non-commercial based research.

“We have moved into experiencing chronic disease in epidemic proportions and these diseases are manifesting in progressively younger age groups. It has become critical that we understand why we have come to this situation. One of the solutions is to generate new models of funding for non-commercial and innovative research that addresses emerging sciences. These include field such as epigenetics, quantum physics and pre-emptive medicine i.e. understanding how to keep people in a state of wellness. Engaging with philanthropic donors and consumer-based research funding e.g. crowdfunding may help to achieve this”

~ Eric d’Indy, Co-founder of Invitation to Health and CEO of Westmead Medical Research Foundation

Suggestions to develop non-commercial research in Australia include philanthropic contributions from pharmaceutical companies or collaborative funding from the broader healthcare sector. Health insurers could also participate in such activity as there are potential long term health and economic savings to members. These are clearly areas for more exploration between leading scientists, research institutions, the National Health and Medical Research Council (NHMRC) as well as government stakeholders managing the Medical Research Future Fund.

Empower consumer participation in their health journey

In any system, end-users that are more empowered are more likely to push improvements in the system. In the case of healthcare, particularly in the public sector, end-users (i.e. patients) often do not have a choice as to which primary care doctor, nurse or specialist they see. It is a consequence of the demands on the healthcare system and choice is unlike a person seeing their hairstylist or accountant. This occasional lack of choice therefore disempowers individuals who are then not incentivised to drive innovation in the system.

There are rapid rises in online platforms that educate the end consumer with information to empower their health choices further. Some of these include White Coat online from NIB which acts as a Tripadvisor for dentists and allows for a community-rating of services. The AIA Vitality program is an innovative prevention program which offers members points for expressing healthy behaviours. These points can be redeemed for premium discounts and gifts.

There are also small devices on the market (iPhone apps, Fitbit) that can enable more individuals and the community to take responsibility for their health. Human beings are essentially driven by immediate

gratification and if that psychology can be harnessed, the available technology could possibly modify behaviours that result in reduced obesity, diabetes and other chronic conditions. These technologies monitor health behavior and feed back quickly to individuals so changes can be made rapidly.

These self-monitoring technologies can also be used in rural health which will allow for more sophisticated monitoring in the community, as people become more willing to share data. There is also significant opportunity for school groups and community groups to engage with these technologies for their health. Gamification of prevention technologies (i.e. using these apps or devices to encourage competitions with points) will be very attractive to both young and old and you can get communities to compete with each other for better health and wellbeing.

“Gen Z see privacy very differently to Gen X and that opens up opportunities”

~ Michael Ackland, President GE Healthcare ANZ

The general principle is that if you provide stakeholders in the healthcare with more information, you can drive further improvement up the value chain. One example would be to provide GPs more information on choice of specialists to drive improvements in how specialist care is delivered.

“So one thing that having a relationship with primary care physicians gives us is an early alert to impending major clients; there is a whole barrel of opportunities for us to work with GPs. Much of it is about empowering better choices by the consumer and attacking the information asymmetries”

~ Mark Fitzgibbon, CEO & Managing Director NIB Health Funds

Personalised health and customisation

Another solution opportunity is the trend toward customisation and personalisation of health and medicine. Customised programs enable differential degrees of empowerment because patients are better segmented by their needs and obtain better results based on how the treatment is being tailored to their needs. For example, there are several levels of specific care required for dementia patients and, therefore, aged care services need to be tailored to them accordingly. Such customisation includes research on how to specifically engage the whole family in the transition process, from hospital to home, home to hospital, hospital to community and so on.

Diagnostic technology is becoming more precise. For

example with cancers, while we are now diagnosing them based on their geography (e.g. breast cancer, prostate cancer, etc) future treatments are heading toward the genetics and epigenetics processes that cause them. Therefore future treatments target the individual's genes that cause the cancer in the first place, a phenomenon termed personalised medicine.

Nonetheless, personalisation of health (rather than personalised medicine) can empower patients with minimally invasive methodologies and produce better adherence and compliance. This is particularly the case when these technologies, such as Pansensic, use behavioural profiling to understand personality archetypes and motivating drivers to improve patient empowering and adherence. Like personalised medicine, they also reduce wasted effort and investment on people where such treatments or programs are likely to be less effective. Other innovative technologies, such as PH360, use scientifically proven epigenetic patterns to determine your own personal fitness and nutrition regime among other things, and are low cost. Personalised health tools are an undoubted future trend in healthcare and growing rapidly in community acceptance.

“This is a consumer-led transformation, rather than a system-led transformation”

~ Michael Ackland, President GE Healthcare ANZ

5. Manage demand with disruptive approaches

Managed entry

Australia is 1.5% of the global pharmaceutical market and still a Wave 1 country for most global pharmaceutical companies. This has been a differentiator to attract clinical trials into the country when competing against other countries. As the Australian market is increasingly becoming more unpredictable due to ongoing price reductions and higher costs in gaining PBS listings, some companies are already losing this status and de-prioritising Australia into a Wave 2 country. This means delayed access to medicines that are available overseas and therefore less attraction of investment into clinical trials.²⁰

Like the rest of the world, Australia is moving rapidly towards an era of personalised medicine. New drugs will target those patients who benefit most. However, even though these therapies focus on niche and narrower populations, their cost of researching and developing these drug therapies do not change. As a

result, the prices of these targeted therapies are very expensive and largely unaffordable to individual patients.

For certain high-cost drugs, government needs to look at managed access schemes which include providing early access to patients, managing costs for government and providing predictability to pharmaceutical companies. As you build more data on the population that is given early access to treatment, you build up the population.

With a Managed-Entry scheme, where critical patients get early access to treatments, this could apply not just for drugs but for other therapies, such as high cost medical devices. There is also more opportunity for risk-sharing agreements to create win-win solutions. For example, NICE in the UK has explored more out-of-the-box options such as allowing early entry with the first 12 weeks of treatment for free to patients while collecting data. This allows all parties to assess real world safety and efficacy in a managed population.

Disruptive technologies and techniques

Growing demand pressures on healthcare personnel, equipment and resources mean Australia has to introduce or accelerate disruptive models of care. 'Integrative medicine' is a disruptive method of clinical practice practice that could potentially solve this problem. However technology disruptors such as telehealth, are not only a solution to improve clinical practice, they also broaden access to healthcare services that are mainly '9am-5pm' services.

Using video conference technology, which is very low cost, it is possible to obtain 24-hour care, either by outsourcing advice to different regions or overseas. Video conferencing could be introduced into rural or remote settings as well as trauma settings, ambulatory and even outpatient care. However, along with setting up the technology infrastructure, the service also has to repurpose and incentivise medical practitioners to integrate it into their formal job description i.e. make it part of their 'day job'. For example, rostering certain specialists that are required to provide telehealth support at certain times of the day for a total 4 hours a week.

Private care providers, device companies and the public hospital system could put the technology and infrastructure in place to support practitioners and consumers to coordinate care. This is particularly useful for serious long term conditions such as heart failure, lung failure, cancer and chronic care where

intense monitoring is going to be the norm. The right healthcare practitioners will need to be involved at the right time. In conjunction, the e-health records initiative may facilitate how the healthcare system plugs into all that information at a primary care or secondary care level.

Deregulating medicines

It has been suggested that in some instances, the free market could take over some pharmaceutical products on the PBS and provide a win for all parties involved. Many low-cost chronic disease medications could be delisted from the PBS and widespread access still maintained, as the cost of the co-payment exceeds that of the retail price of the script. This could mean significant savings to the Federal Government as the average cost to the Department of Health is around \$15 in supply chain costs for each medication. It would also benefit patients as they would not need to pay the co-payment fee. However it should also be considered that overt access to certain medicines can lead to overuse, abuse and hospitalisations. For example, short term use of an over-the-counter drug such as ibuprofen can be beneficial, however longer term, inappropriate use can result in serious adverse events. These factors need to be taken into account when determining which drugs are suitable for cost savings from deregulation.

Ongoing price disclosure means it's a "race to the bottom for generics" as government tries to obtain the lowest price. Once COGS (cost of goods sold) become higher than profit, then generics medicines will exit the market. We need to be aware and ensure that there are enough suppliers to meet market demand in 'market sensitive' areas such as cancer therapies. For example with the supply of Taxotere, a cancer therapy, the generic supplier had to exit the market as it was no longer able to supply at the recommended price.

Solutions in this area are continuing to be managed by the PBS, the Therapeutic Goods Administration and peak bodies such as Medicines Australia, Generics Medicines Industry Association and the Australian Self Medication Industry among others.

Medical travel

As elective surgery waiting lists remain a topic of media debate, the healthcare industry is continuing to explore outsourcing models of care. It is already commonplace for radiology reporting to be outsourced overseas, particularly for after-hours reporting. Australia is also accustomed to obtaining medical and nursing staff from overseas. However, the concept of medical travel or medical tourism is

growing in popularity and organisations such as NIB are facilitating this disruptive model. They are managing demand by redirecting it to overseas providers. This solution could become more widespread and mainstream as an overall cost-effective option to offset elective procedure waiting lists as long as quality control is maintained.

“We are starting with cosmetic treatments because that is not funded by health insurance and, say, through NIB Options, you can have plastic surgery while you are overseas. We have a network now in Malaysia and Thailand. Our value proposition is launched around quality assurance and safety... that is a gap in the market. Less to do with cost... many travel because it's cheaper or they just want to hide for a couple of weeks. Eventually we see that market evolving into offering medical treatments overseas”
- Mark Fitzgibbon, CEO & Managing Director NIB Health Funds

Apply cost effectiveness principles across other areas of healthcare

The most advanced area of the healthcare system when it comes to applying cost-effectiveness principles is the PBS and it is the one area where the costs have flatlined and facing a downward trend.

“Expenditure outside the pharmaceutical sector is growing at the double digits, whereas the PBS is in decline and is one of the most rigorous schemes in healthcare which is tested for cost effectiveness. Why don't we use these principles elsewhere [in the healthcare system]?”
- Shaju Backer, CEO Merck Serono.

Due to information asymmetries among healthcare practitioners, surgeons and healthcare management, there are a wide variety of clinical procedures and protocols in place across the nation. As a result there are certain regions where costly procedures are being conducted at an unusually high volume. Arthroscopies and joint replacements can place a significant burden on the system when such procedures are conducted several thousand times in a year and there is vastly differing opinions on when such procedures should be conducted.

Options to control these costs include implementing caps or enforce guidelines. Caps would restrict clinical freedom and it would therefore be more sensible to help educate doctors to follow guidelines.

As a system, research into guidelines for treating specific conditions could increase. However, a more cost-

effective option would be to invest significantly more into communicating and translating existing guidelines into practice. This would require the system to incentivise such a move but it offers some quick wins.

For example, expert departments of authority such as the NHMRC regularly release research information. At a grassroots levels, the National Breast and Ovarian Cancer Centre have dedicated staff to read and publish scientific guidelines. These avenues are already available and it would be a matter of integrating that information into technology channels commonly used by Australian practitioners.

With an ageing population, governments will need to look more at the science before deciding whether certain operations are the most appropriate choice. A good example is SIGN (Scottish Intercollegiate Guidelines Network), where all colleges in Scotland develop guidelines for hundreds of common conditions. These then form the basis of practice and solve the problem of great variations of care quality and expenditure across different regions.

“We have to be completely focused on delivering the most appropriate care possible at the most efficient price so that healthcare can be shared around. We all want access to it”
- Michael Armitage, CEO Private Healthcare Australia

6. Focus on prevention, wellness and major external influences

“Prevention is not only about screening for diseases but must also include understanding the factors that facilitate wellness in each individual. To achieve this, we must ask ourselves, why we are experiencing these chronic diseases and be prepared to make some paradigm shifts in our thinking. For example, understanding the influence of modern environmental factors such as toxins and chemicals on our genes, a field known as epigenetics”
- Eric d'Indy, Co-founder of Invitation to Health and CEO of Westmead Medical Research Foundation

There is a growing awareness that chronic disease is placing a greater burden on our healthcare system and that we should be allocating appropriate resources to public health measures. A national focus on prevention is critical; we need to move our sole focus away from disease management. When organisations take on these initiatives, there is a need to clarify whether the prevention strategy is preventing primary incidence of disease or secondary hospitalisations. The latter often provides more immediate cost-benefits. Early intervention at primary care level can prevent

hospitalisations and reduce the need for high-cost interventions.

“For example, Gardasil is a major investment for this country and reduces the number of pap smears and risk of cancers, but the relationship is not immediate...Prevention and persistence go together”
~ Alison Verhoeven, CEO Australian Hospital and Healthcare Association

There are several main ways proposed to introduce preventative measures in healthcare. The top 3 are listed in this White Paper, while others have been included in a more detailed Future Solutions in Australian Healthcare Research Report.

Repurpose existing resources and facilities on prevention

Hospitals, general practices and even offices can be repurposed to include more space for simple nutritional counseling or recreational exercise. A change in culture starts in transforming existing ‘sick care’ facilities to more wellness-oriented spaces. These spaces might be particularly utilised during lunch breaks and after hours to initiate prevention-based regimes that are simple to administer.

“Government needs to use existing infrastructure to manage costs. Pharmacies can become community health centres. You can screen for hearing problems or even have exercise physiologists in there. It’s a network as good as Australia Post”

~ John Bronger, Board Member, Pharmaceutical Society of Australia and former President Pharmacy Guild

Integrative Medicine and Person-Centric Health

There is a growing demand from patients for an integrative medicine approach to healthcare. Under these care approaches, modern medicine remains the primary method of utilised care, however this is combined with approaches such as naturopathy, traditional Chinese Medicine (including acupuncture), complementary medicines or other modalities that have an evidence base. It can also include safe, non-invasive methods like meditation, yoga, tai chi and spirituality, which is becoming more commonplace in wellness centres.

These methods are now adopted in mainstream hospitals such as the Chris O’Brien Lifehouse which treats oncology patients as part of its integration of services with the Royal Prince Alfred Hospital. In the UK, the Royal London Hospital for Integrated Medicine (RLHIM) is the largest public-sector

provider of integrated medicine in Europe and is a part of the National Health Service. It offers an innovative, patient-centered service integrating the best of conventional and complementary treatments for a variety of conditions. Clinics are led by doctors and other registered healthcare professionals who are additionally trained in complementary medicine.²¹

“I speak from my own personal experience as well with my husband [Dr Chris O’Brien, Head and Neck Surgeon] and his long illness [with cancer], and his death... so I’m very, very conscious of the mind-body-spirit approach to healthcare. The holistic approach is what we need to do in terms of government and health getting together....It’s just going to take more people in a room and those who can make change... the thought leaders”

~ Gail O’Brien, Board Member, Chris O’Brien Lifehouse

An integrative medicine approach allows for patient preference and choice of evidence-based alternative therapies while still under the management of a GP. It is contended that the practice provides more ‘person-centric’ outcomes as it is treating the whole person rather than a specific disease in a traditional time-limiting GP consultation.

“Private health insurance has stepped in to pay for complementary and alternative therapies in the preventative health space e.g. naturopath consultation, but generally you have to be wealthy to afford preventative health”

~ Genevieve Gilmore, CEO Australian Integrative Medicine Association

An open-minded approach is required to embrace practices in the complementary and alternative health space. Experts agree that scientific evidence and approval needed, particularly as there is widespread use in the community. Organisations such as the National Institute of Health in the US are investing in research in this field for that very reason.

“Almost everyone is on some form of complementary medicine or supplement”

~ John Bronger, Board Member, Pharmaceutical Society of Australia and former President Pharmacy Guild

This alludes to the need for government-funded research and the NHMRC to step in as they could offer cost-effective pathways to chronic disease management. It is also potentially another avenue for the Medical Research Future Fund .

“There are different models for primary health care.

There are models where doctors have predominantly short consultations with their patients and where the management of chronic disease necessitates recurrent consultations. This model is costly for the government as there is simply inadequate time to understand the multi-faceted aetiologies of these conditions. Other models of care include when doctors choose to spend more time with their patients to understand individual pathways that have led to the disease process. Often these doctors embrace an integrative service delivery model, recognising the benefits of working with allied health and evidence-based complementary medicine practitioners. It would be beneficial for the government to select a representative sample of integrative and conventional practices to compare patient outcomes, particularly in relation to Medicare and PBS costs per patient. A research pilot may show interesting trends and potential savings for government”

~ Eric d’Indy, Co-founder of Invitation to Health and CEO of Westmead Medical Research Foundation

Extend influence outside the system

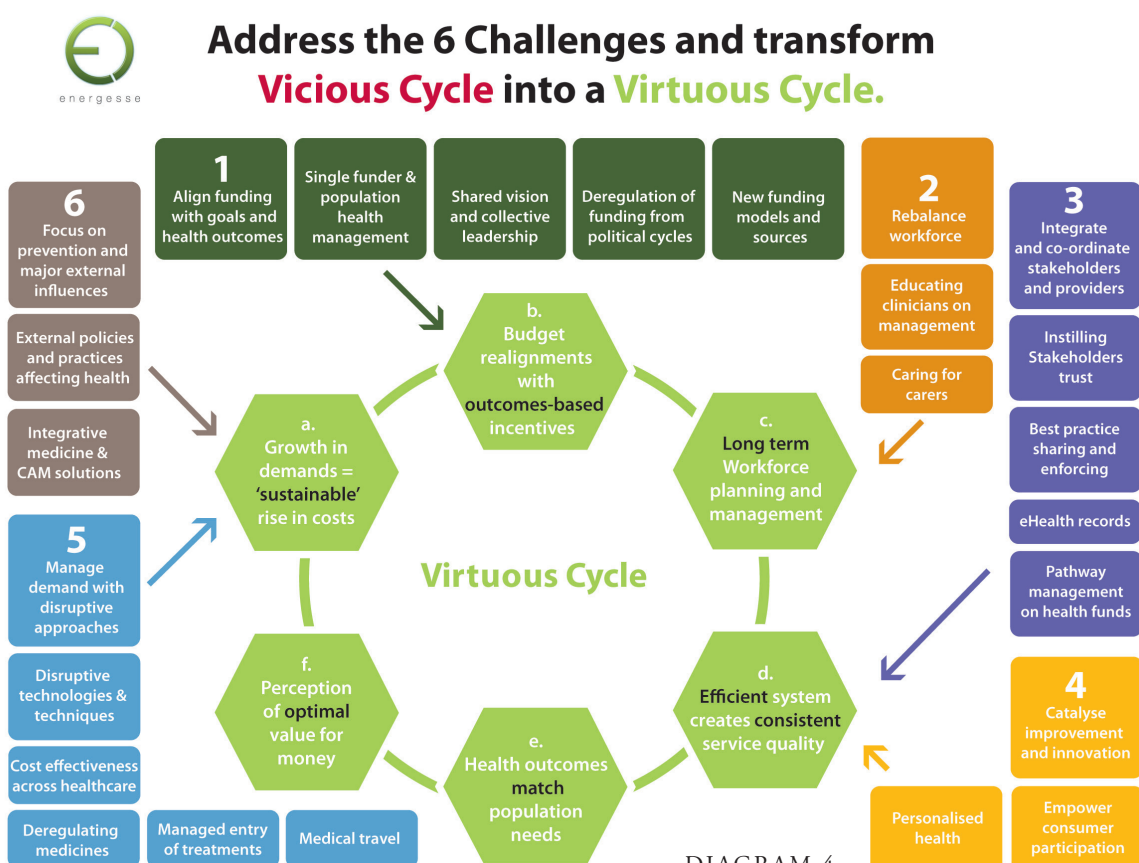
The source of the obesity epidemic can largely be attributed to modern sedentary lifestyles that involve a lack of exercise and consumption of unhealthy foods, reinforced and encouraged by junk food advertising and marketing. The healthcare system has influence over the direction within it, yet there is a need for the

healthcare industry to extend its expertise in other areas of societal policy in order to produce better overall health outcomes. A major challenge for the system is that it currently addresses conditions at the tail end of the health spectrum when we could be far more effective changing unhealthy behaviours during the formative years of childhood and adolescence. Potential areas where healthcare practitioners should extend greater influence include city planning to help encourage exercise and advise on psychological factors affected by living environments.

“More village-type communities where people can live work and play help with mental health outcomes”
- Dr Mal Washer, Doctor and former Federal Member of Parliament

Healthcare practitioners can be more involved in influencing the fast food industry and moderating junk food advertising targeted towards children. There could also be regulations around how supermarkets are set up, more effective labeling of food and the number of fast food outlets in a region. Doctors could be involved as health influencers outside the practice.

“Emerald is the fast food capital of Australia where obesity is growing rapidly. UK has much stricter licensing where healthcare liaises with town planning”
– Len Richards, Chief Executive, Central Queensland Hospital and Health Service



“The psyche of our nation has changed... There are schools that don't have sport in the curriculum. We need to teach kids how to develop an understanding of how the body works and how to keep it healthy... We are on the right track with junk food, it should not be allowed to market to children and we need to review advertising laws.”

*~ Michelle Bridges, Co-founder & Director of 12WBT,
Leading Author & Wellness Expert*

Online communities are another significant opportunity for credible members of the health and wellness industry to provide support networks that people can reach out to. Often the anonymity of such networks allows individuals to interact and express their real concerns and personal challenges with their health issues, which they might otherwise refrain from discussing with their families or even their doctor.

Human beings with health conditions crave social support. For example, the success of consumer online programs such as the ‘12 Week Body Transformation’ program demonstrate the effectiveness of social and technological innovation on behaviour change. The program has engaged several hundred thousand people from Australia and around the world.

Analysis of Solutions

Analysis from the divergent ideas and views from a diverse set of thought leaders demonstrates that healthcare is a complex eco-system that has significant interdependencies. Although Australia generally has a high quality health system, the Vicious Cycle depicted in Diagram 1 leads to a self-propagating cascade of cost escalation that will continue to be unsustainable. Any tweaks to the system may create short-term savings, but will not transform the cycle completely.

As a summary of Diagram 3, reform to funding and incentivisation structures (b.) ensure that future budgetary changes force more productive results in terms of health outcomes. The pressure on the system is more manageable as workforce levels are more contained from long-term planning measures (c.). In general, these changes ensure greater system efficiencies and output that drives more consistent quality outcomes (d.). Outcomes are also more aligned with national population needs (e.). There is therefore a better perception of ‘value for money’ in healthcare (f.), which results in more gradual and manageable budgetary increases (a.).

From a government perspective, it may appear that significant reforms are required to transform the cycle into a Virtuous Cycle of self-propagating, positive economic benefits and health outcomes. However, there are quick wins and large potential savings in the near term. For organisations these can be achieved in a faster timeframe using some of the ideas and strategies captured in this paper. In order to achieve a system that continues to offer equitable access, the best care, and at an affordable level and with excellent outcomes, the solutions mentioned in this White Paper could be applied to break the Vicious Cycle and transform it into Virtuous Cycle.

The Australian healthcare system, like many others around the world, has been guilty of measuring what is easy rather than what is important. It is easy to measure the number of patients a clinician sees in a day; it is far more difficult to measure the ‘quality of life’ outcomes of the patient before and after a consultation. All serious system improvements start from measuring the right thing. If as a healthcare stakeholder you had to pick one solution to start transforming the Vicious Cycle, it would be implementing a suite of far more appropriate success measures.

Two practical tools and processes have been developed by Energesse to assist leaders, organisations and governments to implement some of the recommendations from this paper immediately. They are guidelines focused on ‘Prevention Strategies and Wellness Programs’ as well as a ‘Partnership Development Guideline for Healthcare Projects’ to help achieve exponential positive outcomes in the healthcare sector. They are useful references for implementing projects in the Australian healthcare system.

Conclusions and Next steps

There are highly valuable ideas and strategies in this paper for organisations to refine their own strategic thinking or policy-making decisions immediately. To summarise the findings of this White Paper:

1. The Australian healthcare system has a good track record of outcomes, but is facing unprecedented challenges leading to unsustainable cost increases and resource constraints.
2. This Paper has identified 6 major challenges in the Australian healthcare system, all of which have 'root causes' particular to the Australian environment.
3. These challenges to the system create a Vicious Cycle of activity which reinforce the unsustainable increases in healthcare costs.
4. The Vicious Cycle is self-propagating and will continue unless their root causes are systematically addressed.
5. To reverse the trend, multiple options for solutions and reforms can be implemented by organisations or government to break the cycle.
6. Once implemented, they transform the system into a 'Virtuous Cycle' of better health outcomes and manageable costs.

Using econometric modeling and further specific inputs from government and stakeholders, further research can be certainly done to define the parameters of implementation. Additionally, due to the significant quantity of high value data obtained from the interviews with 21 thought leaders, a detailed 'Future Solutions in Australian Healthcare' Research Report will also be released in due course covering these issues with more depth. Interested parties should e-mail info@energesse.com for a copy.

In the interim, if there are any questions regarding the content of this White Paper or if advice is required to navigate a specific challenge in this sector, please contact Energesse using the details below.

Energesse is a specialist consulting firm for the Healthcare and Wellness industry. We consult to hospitals, biopharmaceuticals, health insurance, not-for-profit, wellness businesses and governments to solve their big challenges through innovative strategies, cutting-edge technologies as well as delivering improved health and economic outcomes. We consult to clients globally and help them make the biggest difference in people's lives.

Contact

For all inquiries, please visit www.energesse.com or contact:

Dr. Avnesh Ratnanesan (Avi)
(P) +61 2 8091 0918 [Australia]
(P) +1 310 307 4866 [USA]
(E) info@energesse.com

Acknowledgements and Declarations

We would like to thank all the contributors and their wonderful teams in their organisations for affording their time, expertise and honest opinions. The development of this White Paper was conducted in the spirit of improving healthcare for all Australians. We would also like to thank Darrell Mann from Systematic Innovation, Matthew Eton from Eton Associates and Matthew Tice from Palladium Consulting for embracing the vision of this paper and allocating time and resources to develop it as a practical catalyst for change. We also wish to acknowledge Geoff Quayle from Health Communications Australia for assisting with communication efforts on this paper.

The production of this paper was an independent exercise led by Energesse and was not funded by any of the contributors or their organisations.

We also wish to thank all Australians, especially those within the healthcare system who are doing amazing work every day treating the sick and unwell. We also wish to express our gratitude to those in the public sphere and government championing better health and wellbeing for broader society. We salute the doctors, nurses, allied health workers, pharmacists, healthcare administrators as well as the personal trainers, health coaches and wellness organisations that strive to provide their patients and customers with relief from pain, suffering, illness and delivering enhanced wellbeing.

It is a challenging industry, but would you rather be doing anything else?

We sincerely hope that this paper helps guide your journey toward better health and wellbeing.

Dr Avnesh Ratnanesan and Paul Howarth

Authors



Dr. Avnesh Ratnanesan
Founder and CEO
Energesse



Paul Howarth
Founder
Akumen, UK

Thought Leaders



Prof. Ian Frazer
CEO and Director of Research
Translational Research Institute



Mr. Andrew Sudholz
CEO and Executive Director
Japara Healthcare Ltd



Mr. George Saavides
Managing Director
Medibank Private Ltd



Mr. Mark Fitzgibbon
CEO and Managing Director
NIB Health funds



Dr. Martin Cross
Chairman
Medicines Australia



Ms. Alison Verhoeven
CEO, Australian Healthcare and
Hospitals Association



Dr. Michael Armitage
CEO
Private Healthcare Australia



Mr. Michael Ackland
CEO
GE Healthcare Australia & New Zealand



Mr. Len Richards
CEO
Central Queensland Hospital and
Health Service



Mr. Gavin Fox-Smith
Managing Director, ANZ
Johnson & Johnson Medical



Mr. Shaju Backer
Managing Director
Merck Serono and Board Member,
Medicines Australia



Ms. Michelle Bridges
Author, Celebrity Health & Fitness Expert
Australia's The Biggest Loser and 12 Week Body
Transformation



Prof. Stephen Leeder
Emeritus Professor, University of Sydney
Chair, Western Sydney Local Health District Board
Chief Editor, Medical Journal of Australia



Ms. Lesley Dwyer
CE
West Moreton Hospital and
Health Service



Mr. Dwayne Crombie
Managing Director
Private Health Insurance, BUPA



Mr. Eric d'Indy
Executive Director
Co-founder of Invitation to Health and
CEO of Westmead Medical Research Foundation



Mr. John Bronger
National Board Member
Pharmaceutical Society of Australia



Dr. Mal Washer
Former Member, Australian Parliament Former
Chairman, Alcohol and Drugs Society of Australia



Ms. Genevieve Gilmore
CEO
Australasian Integrative Medicine
Association



Ms. Eileen Hannagan
CEO
Chris O'Brien Lifehouse



Ms. Gail O'Brien
Board Member
Chris O'Brien Lifehouse

Appendix A

Partnership Development Guideline – 10 Steps for Collaborative Healthcare Projects

1. **Identify suitable partners** by researching individuals, organisations higher up the healthcare value chain and lower down the value chain. Set your own internal criteria of what you are looking for.
2. **Determine the level of partnership** intended to be developed. (Partnerships include joint ventures, strategic alliances, coordination, cooperation or collaboration). Every level has advantages and disadvantages and the partnership may be flexible to change levels at any time.
3. **Conduct research** ~ Understand the value you can bring to your partner by researching all the available value offerings that your organisation can provide. Research what the needs are for the potential partner organisation.
4. **Approach potential partner** - for initial exploratory discussions. Establish the appropriate contact person, contact details, location and role of the person. (A 'high touch' approach is recommended to build an initial relationship e.g. face-to-face meeting. Phone interaction or video conferencing is a recommended alternative if personal meeting is not possible).
5. **Establish clear objectives** ~ State your individual expectations and identify common objectives, shared values and outcomes. Find out if the partner's mission, goals and target market align with your organisation. Evaluate the level of trust between all organisations involved. If your assessment is positive then proceed to next step. If not, assess if mutual trust can be developed. If this is unlikely, go back to step four and research other potential partners.
6. **Determine mutual benefit** ~ What is the type of benefit ~ economic, productivity, safety, effectiveness or health outcome? Discuss complementary skills, capabilities and resources that are mutually beneficial for the partnership. Evaluate if any training needs are required for both parties during the partnership. Identify what trust behaviours need to be implemented to cement the relationship.
7. **Negotiate terms** ~ Determine with the partner the roles and responsibilities for partnership coordination and evaluation, product or service development, financial, legal and personnel considerations. Agree on clear measures of success and responsibilities for ongoing communication, implementation, management and evaluation. Consider outcome-based or risk-share agreements, as well as transactional terms.
8. **Close the deal** ~ Finalise contractual terms, timelines for initiation and sign off. Involve appropriate internal stakeholders for approval and buy-in e.g. legal support, senior executive, etc. Obtain and ensure appropriate leadership support and management resources available to execute the partnership.
9. **Communicate and celebrate** ~ Disseminate information on the partnership to relevant internal and external stakeholders e.g. local healthcare professionals, community, media, other stakeholders and information or authority gatekeepers.
10. **Initiate the partnership** with a kick off meeting and/or launch. Set up regular review and evaluation meetings for the partnership. Identify and aim for "quick wins" in the near term.

Appendix B

Guidelines for planning Prevention Strategies and Wellness Programs

1. Understand your organisation's strategic objectives:
 - a) Is it a screening strategy to pick up incidence of disease?
 - b) Is it to reduce utilisation in hospitals?
 - c) Is it to provide better health outcomes?
 - d) Is it a 'feel good' exercise for members or employees?
 - e) Is it a differentiator in the marketplace?

2. Clearly identify the target population:
 - a) Who are they specifically ~ age, sex, occupational types, health profiles etc?
 - b) What needs require the most attention?
 - c) What health support structures do they currently have in place?
 - d) Who is in their health eco-system?

3. What are your measures of success?
 - a) Is it based on outcomes e.g. BP reduction, no. of people with controlled blood glucose?
 - b) Is it based on activity e.g. no. of people screened?
 - c) Which measures are of highest priority?

4. What type of intervention will you apply?
 - a) Is it physical e.g. exercise and nutrition?
 - b) Is it mental, emotional or spiritual?
 - c) Have you explored technology solutions?

5. What level of engagement do you wish to have with your target audience?

6. Have you considered personalising or customising to improve uptake and adherence?
 - a) Have you introduced any profiling techniques?
 - b) Do you have options in place for various individual profiles?

7. What internal and external resources e.g. budget, staff or facilities can you allocate?

8. Determine your timelines for initiation and regular review as well as method of performance measurement/ data collection.

9. Adapt your strategy based on ongoing performance reviews and feedback:
 - a) Determine if results meet initial objectives
 - b) Identify areas of strengths and weakness
 - c) Decide on further continuation

References

- ¹ OECD Health data 2013, released June 2013
- ² Multiple Gallup Surveys 2011 www.gallup.com
- ³ Treasury projections
- ⁴ OECD Health data 2013, released June 2013
- ⁵ United Nations, World Population Prospects, 2012 revision
- ⁶ Multiple Gallup Surveys 2011 www.gallup.com
- ⁷ Ng et al, The Lancet, Early Online Publication, 29 May 2014. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980 - 2013: a systematic analysis for the Global Burden of Disease Study 2013
- ⁸ Treasury projections
- ⁹ Grattan Institute Report 2013
- ¹⁰ Australian Patients Association website www.patients.org.au
- ¹¹ Australian hospital statistics 2012–13. Elective surgery waiting times. Australian Institute of Health and Welfare <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129544691>
- ¹² Life Expectancy, Australian Institute of Health and Welfare. <http://www.aihw.gov.au/deaths/life-expectancy/>
- ¹³ Australian Department of Foreign Affairs and Trade http://www.dfat.gov.au/facts/electoral_system.html
- ¹⁴ Beyond Blue. National mental health survey for doctors and medical students October 2013. http://www.beyondblue.org.au/docs/default-source/research-project-files/bl1132-report---nmhdmss-full-report_web.pdf?sfvrsn=2
- ¹⁵ Hon. Wayne Swan MP, Intergenerational Report 2010, Australia to 2050: Future Challenges
- ¹⁶ Reserve Bank of Australia website <http://www.rba.gov.au/monetary-policy/about.html>
- ¹⁷ Health Workforce 2025 – Doctors, Nurses and Midwives <https://www.hwa.gov.au/our-work/health-workforce-planning/health-workforce-2025-doctors-nurses-and-midwives>
- ¹⁸ PriceWaterHouseCoopers, Building the Case for Wellness 2008, Health Work Wellbeing Executive
- ¹⁹ Dr Robin Youngson, Time To Care, How to Love your Patients and Your Job, 2012 Rebelheart Publishers
- ²⁰ Cancer Drugs Alliance Report 2014 <http://www.cancerdrugsalliance.org.au/>
- ²¹ University College London Hospitals website <http://www.uclh.nhs.uk/ourservices/ourhospitals/rhim/Pages/Home.aspx>