ROLE OF TELEHEALTH IN SUSTAINABLE HEALTH
“Driving adoption and scale through policy and talent”
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  Policy levers to embed change
  Digital health and new patient experiences

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  Driving change through culture, people and talent
  The competition for STEM talent
  Preparing for change

EXCITING NEW DIGITAL HEALTH ANNOUNCEMENTS IN WA

QUESTIONS
• SHR Panel announced in June 2017; Interim Report published March 2018; significant engagement over the course of 18 months.

• SHR not about cutting costs, it is about understanding how costs can be avoided, waste reduced, and where re-investment will have the most impact on people’s lives and minimise rising cost.

• Inconvenient Truths around ED, Chronic Disease, ICT spend

• Without intervention, health spending projected to approach 38 per cent of State budget by 2026, at expense of other essential services.

• SHR Panel engaged with hundreds of individuals and organisations:
  • 330+ Public Submissions
  • 19 Public Forums and Regional Sessions
  • 5 Ministerial Roundtables; numerous events
  • Clinical Reference Group; Consumer and Carer Reference Group

• Released April 10, 2019.
Demand has risen substantially as population has grown and aged and chronic disease, obesity and mental health conditions have risen.

Health had a decade average of 9% expenditure growth to 2% per cent in 2017–18 and 2.5% forecast in 2018–19.

Costs of hospital services and labour >benchmarks. MBS/PBS.

Obesity, Tobacco, Alcohol, Meth, Child health, EOL, Mental Health, Hospital Induced Infections, avoidable tests have been major drivers.

Patient Assisted Travel scheme was costing between $250m+.

Past ICT spend has not delivered the patient, clinical nor operational ROI outcomes. Telehealth has been an exemplar but how to support expansion in both country and metro as a First Consult default.

Role of telehealth in aged care / impact of Royal Commission
POLICY HIGHLIGHTS

- Increase proportion of investment in public health and prevention
- Halt the rise in obesity and reduce harmful alcohol use
- Reduce environmental footprint – energy, emissions, consumables
- Reduce clinical variation and ensure only treatments with a strong evidence base and value are funded
- Mental health services: prioritise and invest in capacity to balance early intervention, through acute and recovery services
- Improve access to outpatient services through telehealth
- Command Centre to improve safety, access, transport in the country
- Reduce delays to/from home for older people
- Phased digitisation to empower citizens and improve services
EMBEDDING TELEHEALTH IN WA CARE DELIVERY

Allied health services
Burns
Cancer services
Cardiology
Chronic conditions, including diabetes, Asthma and chronic obstructive pulmonary disease (COPD)
Emergency telehealth service (ETS)
Ear nose and throat (ENT) and audiology
Gastroenterology
General medicine
General surgery
Haematology
Hospital in the home (HITH)
Mental health
Neurological services
Orthopaedics
Paediatric services
Palliative care
Pain management
Plastic surgery
Preparation for childbirth and parenting (external site)
Renal and urology services
Respiratory and sleep medicine
Stroke
Women’s health services
TELEHEALTH MUST FEATURE IN THE HEALTH LANDSCAPE IN WA IN 2029

Personalised Health
- Smart phone
- Apps
- Wearable health and fitness trackers
- Interconnected appliances

Healthcare
- Patient navigation apps
- Telehealth
- Robotics
- Artificial intelligence
- Virtual reality
- Drones

Treatment & Innovation
- Advanced diagnoses and treatment of conditions through genomics
- Use of spatial technology
- Precision medicine may be used to deliver personalised treatments

Smart Cities
- Internet of Things
- Reduction in carbon emissions
- Efficient, connected planning and infrastructure

Courage to change and innovate

People and communities at the heart of connected, transparent support systems

Focussing on the value of what is being spent

Strengthen wellbeing as well as treatment

Purposeful partnerships to improve Social and cultural HD
Needs to drive a cultural shift:

- From a predominantly reactive, acute, hospital-based system;
- Strong focus on prevention, equity, early child health, end of life, and access to services through Telehealth, AI, AR /VR /MR, smartphone apps, robotics, technology and innovation.
- Focus on repurposing or updating existing facilities, collaborating with providers with greater use of contemporary models of care
- Hospital in the Home, Care in the Community, Caring Communities and digital technology.
- Enabled by Digital Health, Data Linkages (with right open data, privacy, security in place);
- New scopes of practice; Digitally trained contemporary Workforce.
AR/VR/MR WILL ALSO PLAY A KEY ROLE IN FUTURE HEALTH

LOOKING TOWARDS THE FUTURE - INDUSTRY 4.0

- Industry 4.0
- Impact on People & Culture,
- Scale of Change,
- The Competition for STEM Talent,
- Future of Work – WA,
- Success Factors,
- Challenges.
Industry Profile

INDUSTRY 4.0 - WORLD ECONOMIC FORUM REPORT

Trends driving industry growth

1. Increasingly ageing societies
2. Advances in artificial intelligence
3. Expansion of influence in developing economies
4. Expansion of the middle classes
5. Increasing adoption of new technology
6. Increasing availability of big data
7. Shifts in global macroeconomic growth
8. Shifts in national economic growth
9. Advances in mobile internet
10. Expansion of education

Technological advances in health care, Disruption, Empowered consumer, Aging and growing population worldwide, Human Factors of transformation

Technology adoption in industry (share of companies surveyed)

- Big Data
- AI
- Wearables
- IOT
- AR/VR
- 3D
- Lack of Understanding
- Leadership
- Skills/Labor
- Investment/VC

Expected impact on workforce (share of companies surveyed)
- Modify locations of operation: 73%
- Modify value chain: 67%
- Reduce workforce due to automation: 41%
- Expand task specialized contractors: 32%
- Expand the workforce: 27%
- Expand workforce due to automation: 20%
- Bring financing on-board for transition: 20%

Barriers to adoption of new technologies (share of companies surveyed)

- Lack of Understanding: 80%
- Leadership: 73%
- Skills/Labor: 60%
- Investment/VC: 40%
THE IMPACT ON PEOPLE AND CULTURE

- Skill sets required will change in most industries,
- The effects of digitisation in the workplace is profound, all sectors of our economy are going to be impacted by Industry 4.0,
- 14% of Australians in the health sector are in precarious roles that could be automated or disappear,
- Roles requiring technical expertise are less likely to be impacted.
**SCALE OF CHANGE**

By 2030

- **85% of jobs**
  - Don’t yet exist today
  - Jobs experiencing significant impact

- Automated activities
  - **1/3**
  - Across jobs/industries
  - 32% over the next 10 years

- Org investment
  - **23%-37%**
  - In robots across industries

- By 2030
  - **12m**
  - Shortage of healthcare workers
THE COMPETITION FOR STEM TALENT

- Easily available, wide choice of talent with required skills: 9.09%
- Talent available, some shortage of skills: 20.45%
- Neither difficult nor readily available, normal recruitment used: 13.64%
- Slightly difficult and creative sourcing required: 22.73%
- Extremely difficult, extensive sourcing or solicitation from competitors, interstate: 36.36%
FUTURE OF WORK - WA

Percentage of WA Respondents

AI and Machine Learning Specialists
Big Data Specialist
Data Analysts and Scientists
Digital Transformation Specialist
New Technology Specialist
Software & Apps Developers
SUCCESS FACTORS

- Digital health technologies are the new norm,
- Transforming the workforce of the future,
- Investment in learning and development of people – shifting investments from capital intensive investments to a digitally driven ecosystem,
- Diverse workforce,
- An intelligent system that is patient centric,
Impact of Technology on Jobs

• Strategically assessing the workforce and the impacts of significant emerging technologies,

Strategic workforce planning

• Strategically plan and align the workforce of the future – rapid advancements will require new roles,

Aligning People with technology

• Developing integrated plans that manage employees with a focus on optimising the increasing integration of people and technology
SUMMARY

- Technologies present new approaches to health care,
- Consumers are demanding a more participatory digital ecosystem and are more comfortable with digital interaction and sharing of health data,
- Digital health provides prompt, interconnected, convenient and personalised experiences,
- Digital health and tele health are reshaping the health care sector.
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QUESTIONS
Establishment of an Indo-Asia Digital Health Centre for Innovation & Commercialisation

Connecting Research and Business to Catapult Commercial Ideas into Jobs

Strictly Confidential

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QUESTIONS

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