Government of **Western Australia**
Department of **Health**

Department of Health - WA

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Transforming Teaching, Training and Research

Professor Gary Geelhoed

Chief Medical Officer

Assistant Director General – Clinical Services and Research

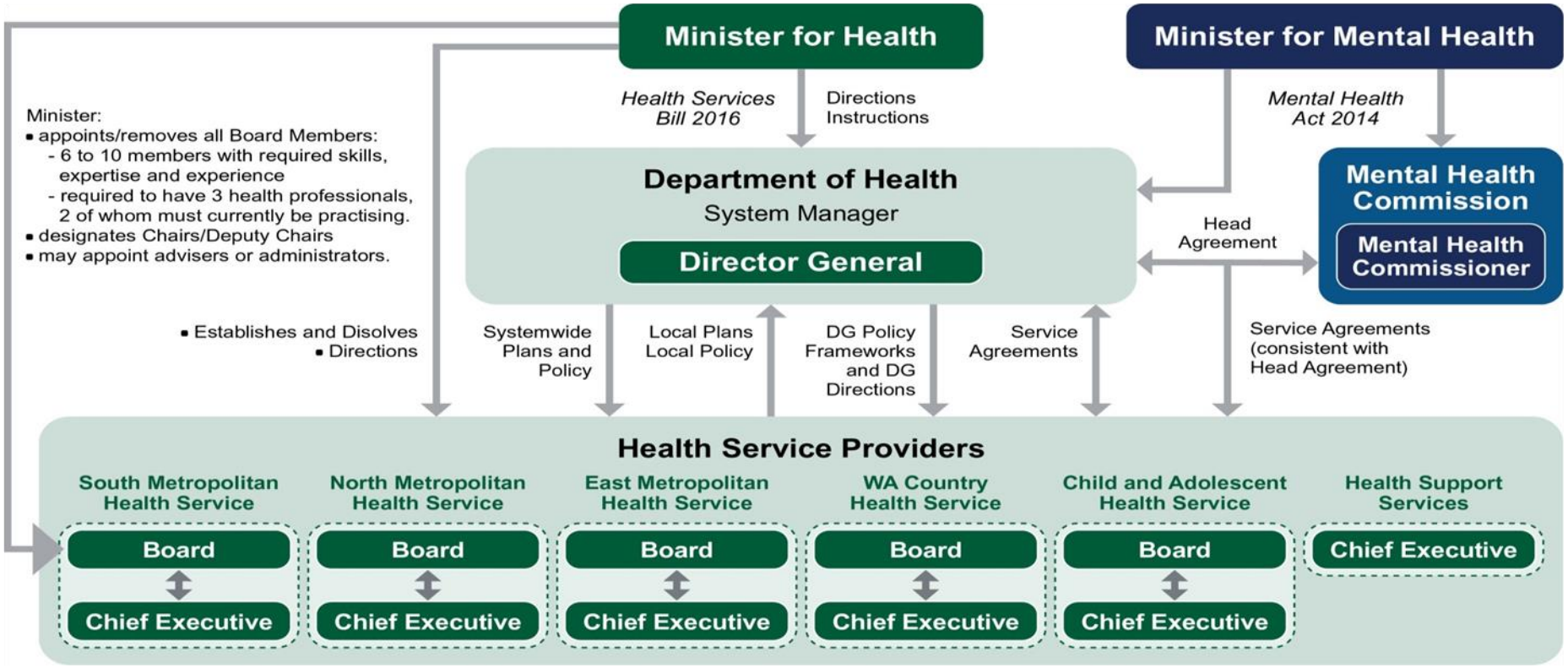
What do we mean by TTR?

- Independent Hospital Pricing Authority's (IHPA) definition
  - *attain the necessary qualifications or recognised professional body registration to practice;*
  - *undertake specialist training/advanced practice in medicine, dentistry, nursing, midwifery or allied health.*
- Research
  - *Resources provided to undertake research*

Why TTR?

- “Perfect Storm”
  - Iron ore price
  - ABF funding
  - New hospitals
  - New AHS …..EMHS
  - AHS Boards

WA Health Reform - New Governance Model



Question

- How do we balance short term service needs with the elements that make for excellence in health in the long term?

WA Health Service Delivery

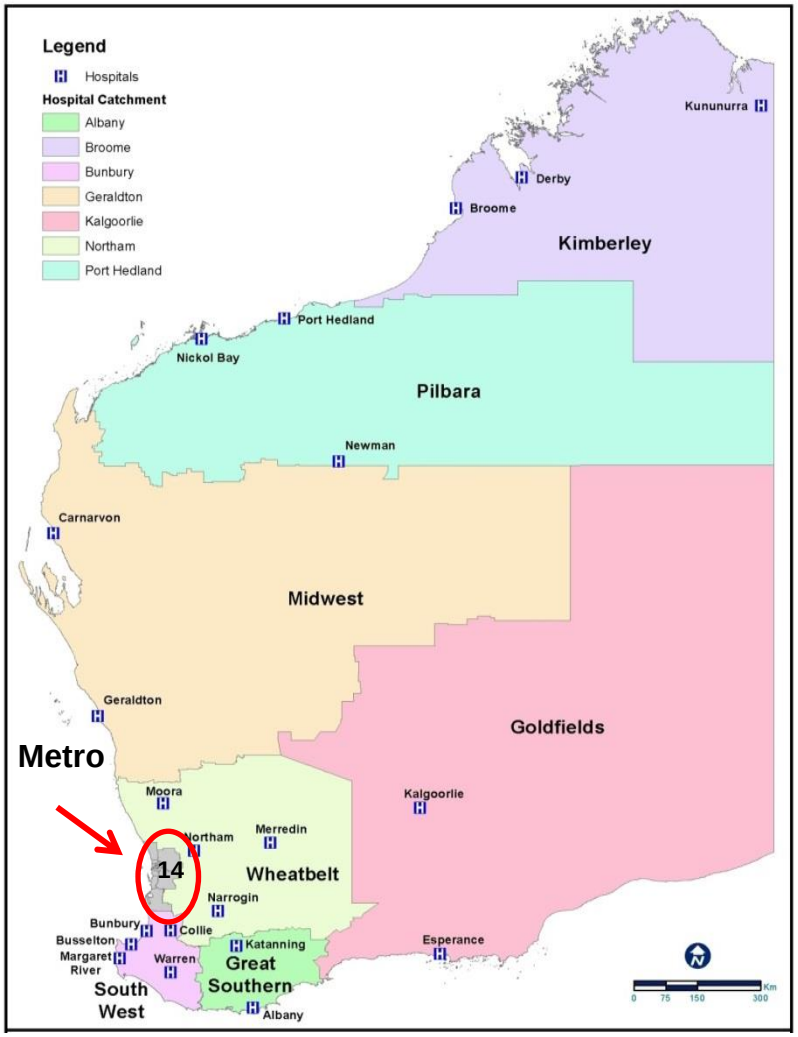
WA is geographically the largest state in Australia and the fourth largest by population.

METROPOLITAN HOSPITALS (Perth):

- 5 tertiary hospitals
- 5 general hospitals (three with PPP)
- 4 specialist hospitals

COUNTRY HOSPITALS (operated by WACHS):

- 6 regional resource centres (Albany, Broome, Bunbury, Geraldton, Kalgoorlie and Port Hedland)
- 15 integrated district health services
- 50 small hospitals/primary health centres
- 2 SJOG facilities with co-located services with public Regional centres.

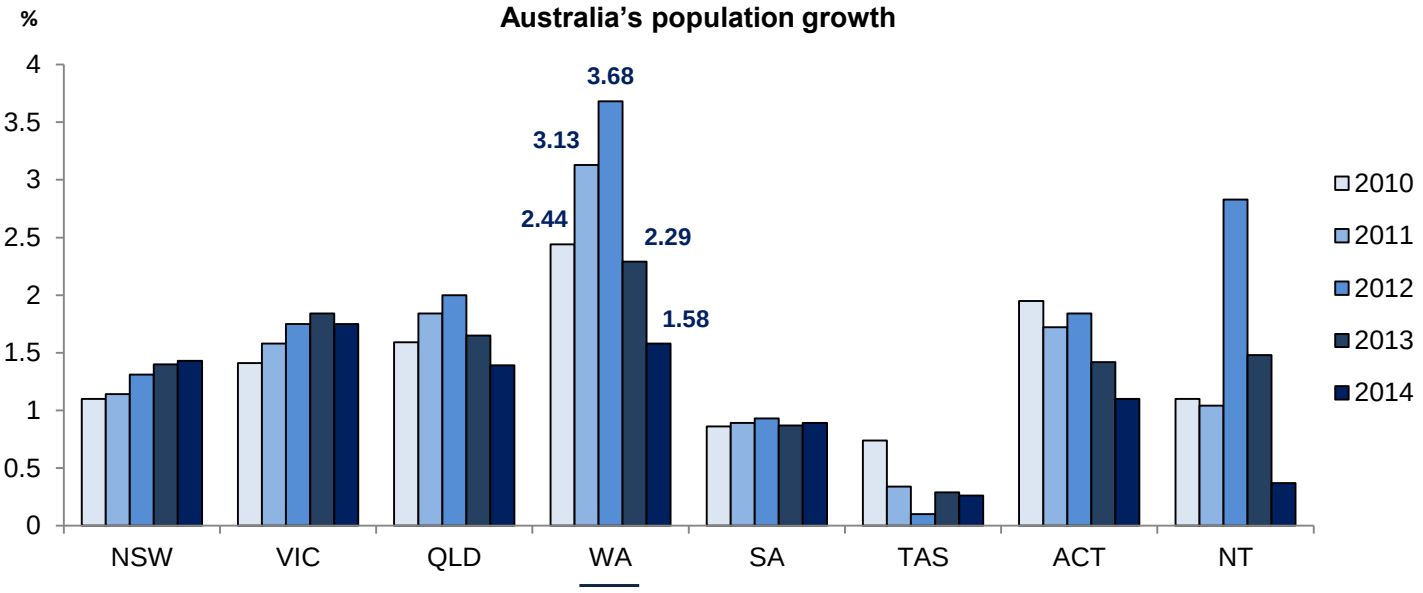


NON-GOVERNMENT PROVIDERS:

WA Health collaborates with non-government health service providers such as: home nursing with Silver Chain, aged and continuing care with Brightwater, patient transport with the RFDS and St John Ambulance, and primary health care with the Aboriginal Medical Service and Primary Health Networks.

High Population Growth Rates

- Demand for health services in WA continues to be impacted by high population growth rates which peaked at 3.68% in 2012
- Whilst the growth rate in 2014 has declined to 1.58%, it continues to remain high relative to other jurisdictions as illustrated below



Source: Australia Bureau of Statistics, *Total Population Growth Rate, State and Territories 2009 to 2014* (cat. no. 3302.0).

System Snapshot – 2005 vs 2015

	2005	2015	% growth
WA Population	2,011,207	2,591,585	28.9%
Separations	461,201	642,074	39.2%
ED attendances	676,947	1,009,633	49.1%
Outpatients		2,533,890	~50%
Separations from specialist mental health inpatient services	8,760	13,553	54.7%
Mental health community service contacts	495,538	888,449	79.3%
Births in WA Health funded services	18,094	24,694	36.5%
Health Budget	$3.43 bn (2005-06)	$8.05 bn (2014-15)	134%

Research Policy Framework

1. Policy framework statement

The Research Policy Framework specifies the research requirements that all Health Service Providers (HSPs) must comply with in order to ensure effective and consistent research activity across the WA health system.

This policy framework recognises research as a core function. It promotes a culture of continuous improvement and excellence through research and innovation to help deliver a high quality and sustainable health system.

The purpose of this policy framework is to ensure:

- compliance with relevant legislation, policies, standards, codes of conduct and national best practice guidelines
- **clarity about the expectation for HSPs to support research and encourage its integration into service provision**
- research effort across WA health system will be conducted in accordance with the highest ethical and scientific standards
- support for the consistent management of Research Governance and Intellectual Property across the WA health system.

1. Principles

The key principles that underpin this policy framework are:

Excellence
Research is of highest ethical and scientific standard, contributing to the advancement of knowledge and its progressive translation to relevant policy and practice through innovative technologies and programs that improve health outcomes.

Consumer engagement and protection
Research involving participants will have a people-centred approach with relevant engagement and protection of participant rights.

Relevance
Research should offer the prospect, either directly or through the generation of preliminary results, of improved patient outcomes and/or improved healthcare productivity.

Embedding
Wherever feasible, research activities should be integrated as a core function within routine healthcare delivery, to increase opportunities to conduct research.

Workforce
Champions of academia and research will attract and retain high calibre health professionals who, while producing and translating their own research, will ensure the early introduction to Western Australia of knowledge and advances within their areas of expertise.

Consistency and Efficiency
Research is managed in a way that promotes consistent and efficient practices across the WA health system.

Collaboration
Those undertaking research activities work to ensure strong collaboration among internal and external stakeholders including national and international partners.

Sustainability
Research activities are managed in a sustainable manner to support and promote research, maintain and develop a skilled research workforce, provide the best possible research infrastructure and foster future investment in research.

Clinical Teaching and Training Policy Framework

The purpose of this policy framework is to ensure:

clinical teaching and training activity is at a level that ensures future workforce capability and is not limited to current workforce requirements

Principles

The key principles that underpin this policy framework are:

Sustainability
Clinical teaching and training activities will be efficiently and sustainably managed to ensure future workforce capacity, development of a skilled and competent workforce, provision of the best possible teaching infrastructure and to foster future investment in clinical teaching and training across the WA health system.

Quality
Clinical teaching and training will meet the standards of appropriate governing bodies.

Workforce planning
Ensure that clinical teaching and training activity is relevant and supports short and long term workforce capability, supply and distribution.

Adaptability
Clinical teaching and training activity will reflect changing environmental factors such as demographics, emerging health needs, models of care and new technologies to ensure an adaptable and responsive health workforce.

Transparency and accountability
Maintain systems and processes that demonstrate sound governance, management and reporting of clinical teaching and training activities and outcomes.

Role of Research in WA Public Health System

Patient benefits
Improved health outcomes; access to new treatments through clinical trials; discard ineffective treatments

Innovation
Stimulate a culture of innovation in the public health system: generate new knowledge; system improvement; new processes, procedures and products; problem solving

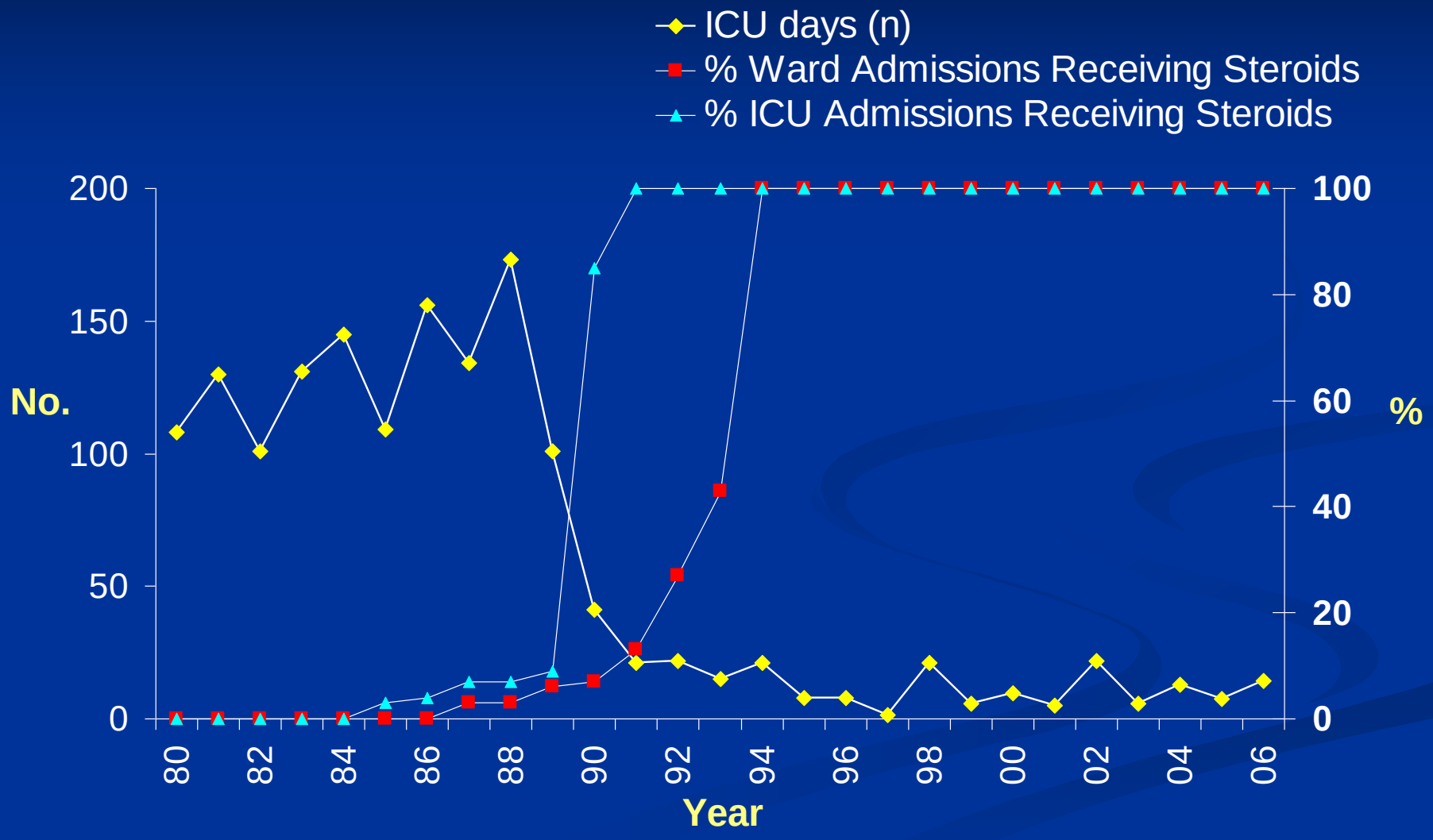
Health Workforce
Attract/retain high quality staff; empowerment; motivation

Economic benefits
Potential for increased efficiencies: contribution to a more sustainable health system

- RoI of 1.38 for the RTP program between 2007/08 and 2009/10 (Round 1-3)
- Two reports by Access Economics (*Exceptional Returns: the Value of Investing in Health R&D*; *2003* and *2008*) demonstrated that research delivers to the Australian economy about $3 billion annually, with a return on investment of $2.17 for every dollar spent.
- The National Health and Medical Research Council (NHMRC) also reports that $1 invested into cancer and cardiovascular disease research yields $1.70 and $5.02 respectively in community benefit.
- The medical research sector now brings more than $100 million per year into WA through research grants and contracts, and employs a high proportion of the skilled workforce at universities, research institutes, health services, and industry. The major WA medical research institutes alone directly provide about 1000 jobs.

Geelhoed GC, Macdonald WGB. Oral and inhaled steroids in croup: a randomized, placebo-controlled trial. Pediatr Pulm 1995; 20:355-360.

Geelhoed GC, Macdonald WGB. Oral dexamethasone in the treatmentof croup: 0.15 mg/kg is as effective as 0.3 mg/kg or 0.6 mg/kg.Pediatr Pulm 1995; 20: 362-367



Savings to PMH per yr $952,000

Cost of Dexamethasone
syrup for a year $819.

Teaching, Training and Research

Funding

TTR functions undertaken in public hospitals are block funded as per agreement between the Commonwealth and each state and territory (*National Health Reform Agreement 2011 (NHRA)*).

Health Service Provider - service agreements

TTR funding is outlined in each Health Service Provider's Service Agreement, which must state that teaching, training and research in support of the provision of the services is to be provided by the HSP.

Teaching, Training and Research

Funding

2015-16: ~$240m TTR block funding for WA (C'wealth + State)

(NSW: $405m; Vic: $295m; Qld: $282m; SA: $96m)

Table. TTR block funding by Health Service

(C'wealth and State combined)

	2015-16 ($)
CAHS	20,191,701
NMHS	89,580,163
SMHS	107,371,533
WACHS	23,250,884
TTR total	240,394,281
Total WA HS expenditure	6,640,836,367
TTR % of total WA HS $	3.62%

TTR in context of health budgets

- “Quarantine” Research Funding?
- WA Health budget 2005-2015 – 134% increase ($3.43b to $8.05b)
- WA hospitals cost > National Efficient Price
- Challenge: How to articulate value of Government investment in TTR in high-cost AND resource constrained environment?
- What are clear TTR links to health / economic / social outcomes?

Note of optimism

- Reform - recognition of TTR in the Health Services Bill 2016 (soon Act)
- Mechanisms to ensure TTR focus in Health Service Providers and track performance – through Policy Framework and Service Agreements
- DoH ongoing funding for research (~$14m)
- FutureHealth WA – *extra* $30million over 4 years (finishes 2016-17)

Research Development Unit (RDU)
Office of the Chief Medical Officer

Research policy

- Research policy and development
- Research governance and human research ethics
- Intellectual Property (IP) management

Research funding

- **Infrastructure and institutes support (2015/16: $9.1m)**
  - *Medical and Health Research Infrastructure Fund* (MHRIF)
  - *Research Institute Support (RIS)*
- **People support (2015/16: $1m)**
  - *Clinician Research Fellowships (CRF)*
  - *New Independent Researcher Infrastructure Support (NIRIS)*
- **Projects support (2015/16: ~$4m, excluding TPCHRF)**
  - *Telethon-Perth Children's Hospital Research Fund (TPCHRF)* – funded from FutureHealth WA
  - *Research Translation Projects (RTPs)*
  - *Misc research initiatives – telehealth, asbestos, etc*

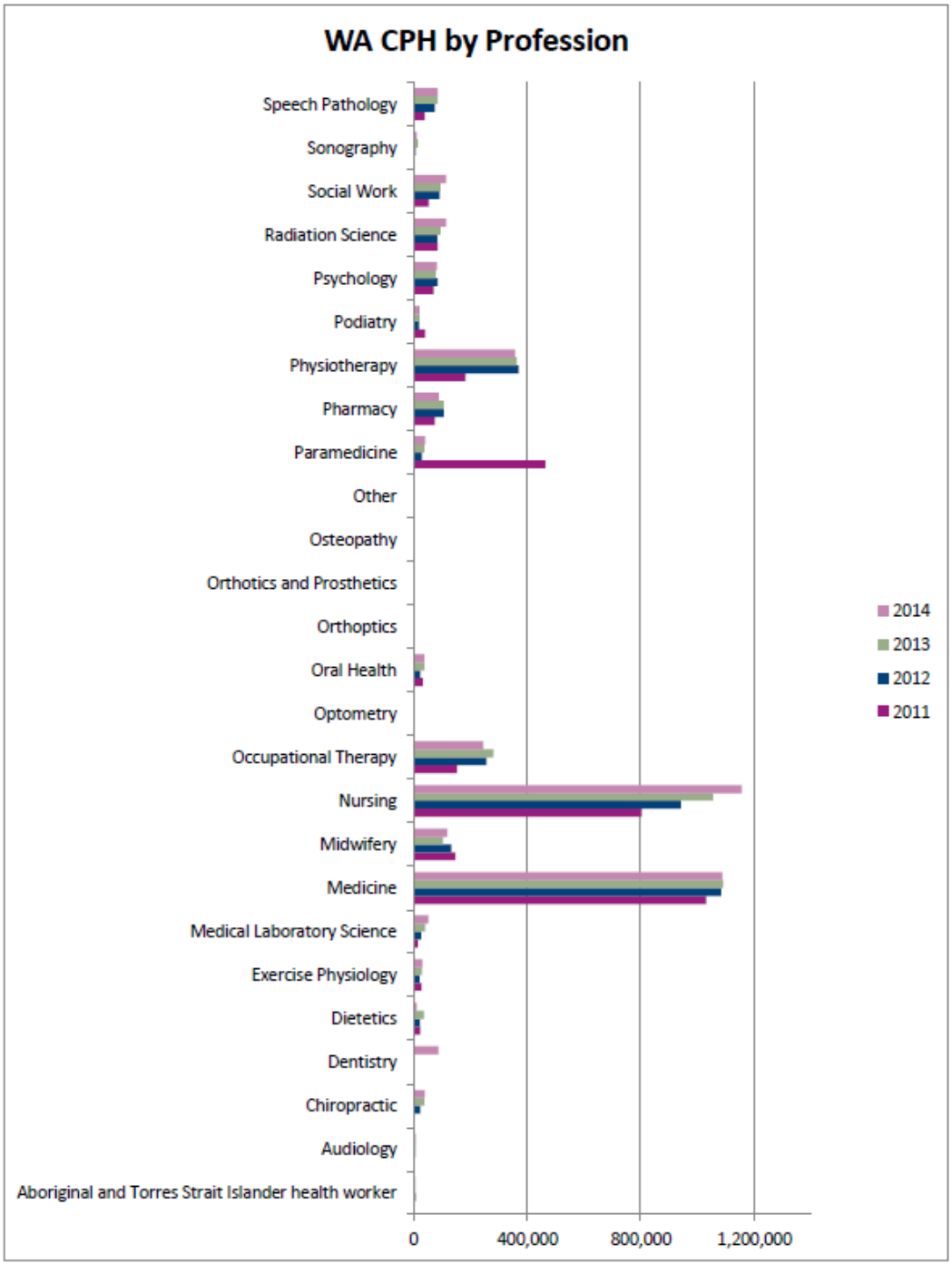
FutureHealth WA

- State Government initiative: $30m for health and medical research over 4 years (2013/14 to 2016/17)
- Has supported more than 10 initiatives so far, including:
  - Merit Awards for emerging WA researchers
  - Research Governance Service IT System
  - Establishment and operation of WA Health Translation Network (WAHTN)
  - Research Education and Training (through WAHTN)
- WAHTN is a consortium of the Department of Health, WA Health teaching hospitals, major research institutes and all WA universities, with a vision to:

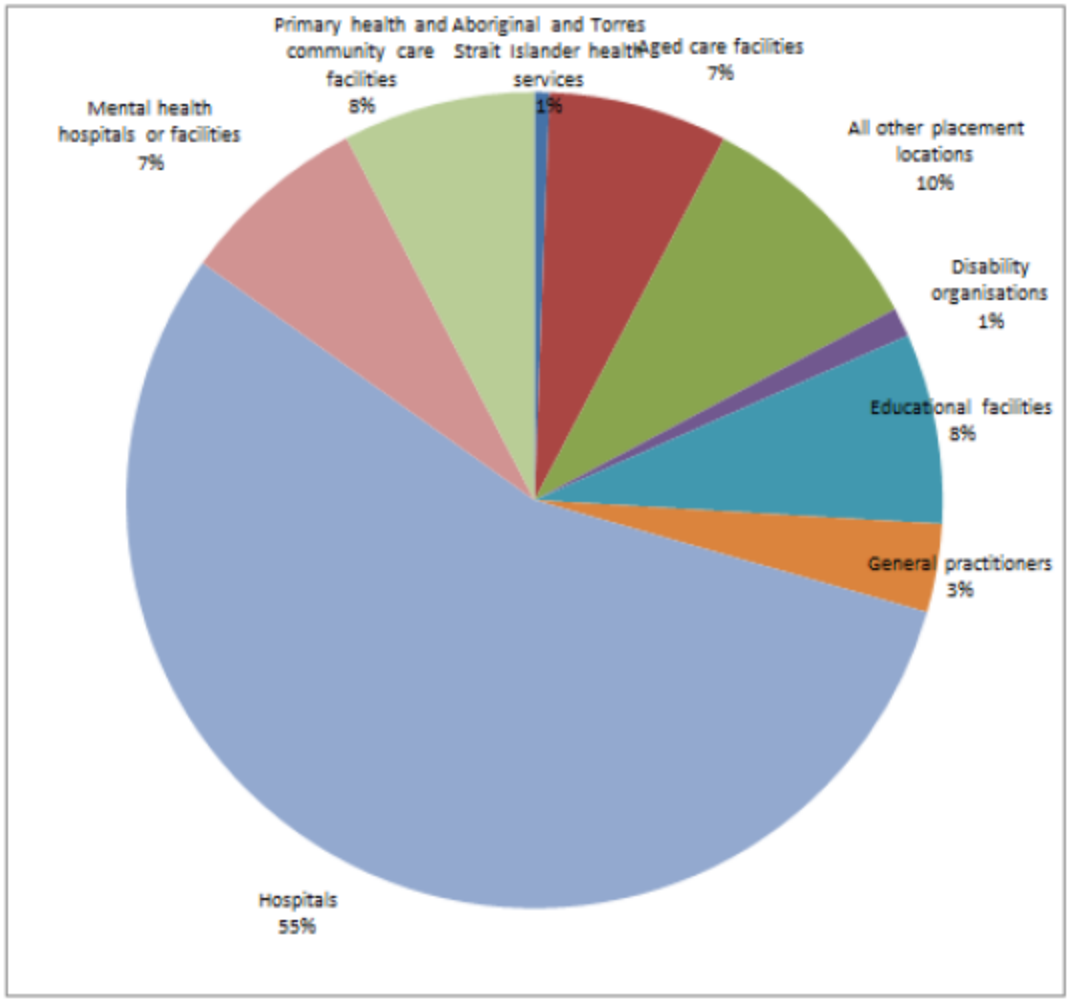
  “strengthen the health impacts of our outstanding research discoveries, to build a future legacy of research excellence and translation.”

Between 2011-14 in Western Australia:

- student numbers in higher education health-related courses increased by 15%
- 55% of activity occurred within a hospital setting
- Nearly 90% of all activity occurred in the metropolitan area
- Nursing and Medicine accounted for 59% of activity
- Over 2000 sites provided placements across the state
- Consistently, 98% of all placement demand came from the 5 local universities


WA CPH by Profession
Speech Pathology
Sonography
Social Work
Radiation Science
Psychology
Podiatry
Physiotherapy
Pharmacy
Paramedicine
Other
Osteopathy
Orthotics and Prosthetics
Orthoptics
Oral Health
Optometry
Occupational Therapy
Nursing
Midwifery
Medicine
Medical Laboratory Science
Exercise Physiology
Dietetics
Dentistry
Chiropractic
Audiology
Aboriginal and Torres Strait Islander health worker
0
400,000
800,000
1,200,000
2014
2013
2012
2011

2014 Clinical Placement Hours across Settings



- In Western Australia (WA), the number of domestic medical graduates requiring internships has almost tripled from 2006 to 2017 (Table 1).

Table 1: Historical and projected numbers of domestic medical graduates in WA (estimated beyond 2017 as there are annual failures/deferrals which alter the numbers to a small extent).

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
UND	0	0	0	49	50	84	99	106	97	95	82	112	113	110	109	109	109	109	109	109
UWA	122	124	132	142	184	186	177	162	156	192	200	219	194	207	207	207	207	207	207	207
CMS																	60	80	100	110
Total	**122**	**124**	**132**	**191**	**234**	**270**	**276**	**268**	**253**	**287**	**282**	**331**	**307**	**317**	**316**	**316**	**376**	**396**	**416**	**426**

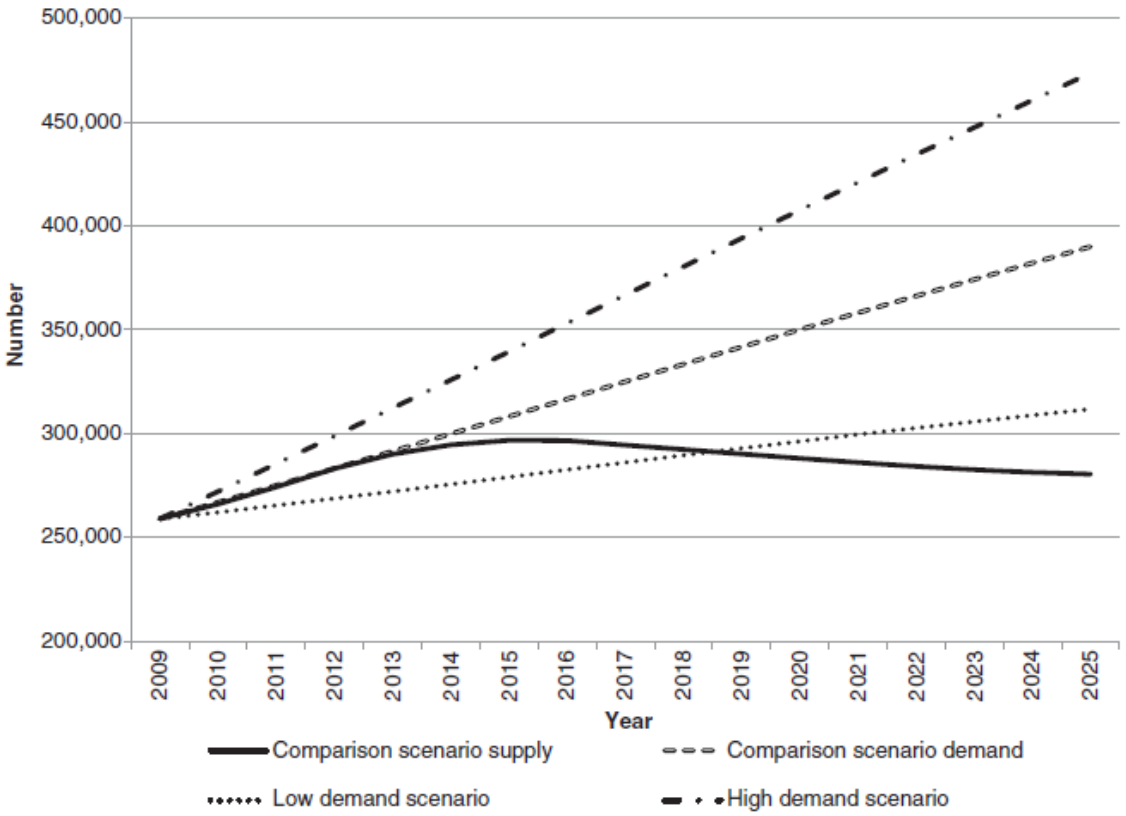


Figure 7 Nursing workforce supply and demand projections: high and low demand scenarios. This illustrates the potential impact of changes in demand on future nursing workforce requirements relative to the comparison scenario. In the low demand scenario, the demand for the workforce was reduced by a notional value of two percentage points. In the high demand scenario, the demand for the workforce was increased by a notional value of two percentage points.

Question

- How do we balance short term service needs with the elements that make for excellence in health in the long term?