



# Workforce Dynamics Indicators

Ian Crettenden  
Executive Director  
Information Analysis & Planning  
Health Workforce Australia

May 2013

# Health Workforce Australia

- HWA tasked by Health Ministers to produce estimates of the anticipated health workforce requirements out to 2025.
- To quantify
  - current health workforce
  - anticipated health workforce requirements
  - number of training positions that will be needed
- To provide an impetus for reform through showing the future impacts of current decisions and possible future changes
- To present the best available planning information on our future health workforce

# Workforce Dynamics Indicators Objectives

- To establish a set of key indicators that can be used to highlight aspects of the current workforce that may be of concern in the future
- These indicators represent the key dynamics of workforce
  - Recruitment
  - Retention
  - Return to practice
  - Retirement

# Workforce Dynamics Indicators Background

- Based on HWNZ vulnerability ranking method
- Intended to be complementary to the workforce projections we undertake
- Provides insight into the drivers behind the projections

# Workforce Dynamics Indicators

## Methods

- Chosen to reflect the main drivers of workforce supply and link to the parameter inputs of the workforce projections
- Based on nationally comparable data
- Provide an easy to read summary of the key supply issues and allows an easy comparative assessment

# Medical Specialties Score Ranges

	Minimal concern		Significant concern		
	1	2	3	4	5
Average age (years)	<45	45-49	50-54	55-59	60+
Replacement rate	130+%	110-<130%	90% - <110%	70% < 90%	<70%
Dependence on SIMGs (migrant inflows as a percentage of all specialty inflows)	<12%	12-24%	25-37%	37-49%	50+%
Duration of training program (years)	<4	4	5	6	7+

# Medical Specialty Indicators

Medical specialty	Average age	Replacement rate	Dependence on SIMGs	Duration of training
Anaesthesia				
Dermatology				
Emergency medicine				
General practice				
Intensive care				
Obstetrics and gynaecology				
Ophthalmology				
Anatomical pathology			n.a.	
Other (clinical) pathology <sup>(a)</sup>			n.a.	
Cardiology			n.a.	
Endocrinology			n.a.	
Gastroenterology and hepatology			n.a.	
General medicine			n.a.	
Geriatric medicine			n.a.	
Medical oncology			n.a.	
Nephrology			n.a.	
Neurology			n.a.	
Other physicians <sup>(b)</sup>			n.a.	
Paediatrics and child health				
Psychiatry				
Radiology				
Radiation oncology				
General surgery				
Orthopaedic surgery				
Otolaryngology				
Plastic surgery				
Other surgery <sup>(c)</sup>				

# Medical Specialties – Link to Projections

Selected medical specialties		Average age	Replacement rate	Dependence on SIMGs	Duration of training
Anaesthesia -	2012	Yellow	Green	Orange	Orange
Anaesthesia -	2025	Orange	Yellow	Orange	Orange
Emergency medicine -	2012	Green	Green	Orange	Orange
Emergency medicine -	2025	Orange	Orange	Orange	Orange
General practice -	2012	Yellow	Orange	Red	Green
General practice -	2025	Orange	Orange	Red	Green
Obstetrics & gynaecology -	2012	Orange	Green	Orange	Orange
Obstetrics & gynaecology -	2025	Orange	Orange	Red	Orange
Psychiatry -	2012	Orange	Green	Red	Orange
Psychiatry -	2025	Orange	Yellow	Red	Orange
Diagnostic Radiology -	2012	Yellow	Yellow	Red	Orange
Diagnostic Radiology -	2025	Orange	Red	Red	Orange
Radiology oncology -	2012	Yellow	Green	Green	Orange
Radiology oncology -	2025	Orange	Green	Green	Orange



# Additional Score Ranges

	Minimal concern				Significant concern
	1	2	3	4	5
Average age (years) [revised]	<40	40-44	45-49	50-54	55+
Percentage age 55+ years	<20%	20% -<30%	30% - <40%	40% < 50%	50+
Annual change in average hours (separately for males and females)	< +/- 0.3hrs	+/- 0.3hrs - < +/- 0.6hrs	+/- 0.6hrs - < +/- 0.9hrs	+/- 0.9hrs - < +/- 1.2hrs	+/- 1.2hrs+

# Other Health Professions

Selected Health Professions	Average age	Percent aged 55+	Change in hours worked Males	Change in hours worked Feales	Replacement rate	Dependence on SIMGs	Duration of training
Ambulance officers	Yellow	Green	Green	Green	n.a.	Green	Green
Intensive care ambulance paramedics	Yellow	Green	Green	Green	n.a.	Yellow	Green
Dietitians	Green	Green	Orange	Green	n.a.	Green	Yellow
Medical physicists - ROMPs	Green	Green	n.a.	n.a.	Green	Orange	Orange
Medical physicists - DIMPs	Yellow	Yellow	n.a.	n.a.	Red	n.a.	Orange
Nursing support & personal care workers	Yellow	Yellow	Green	Green	n.a.	Red	Green
Optometrists	Green	Green	Yellow	Green	n.a.	n.a.	Orange
Physiotherapists	Green	Green	Green	Green	n.a.	Yellow	Yellow
Podiatrists	Green	Green	Green	Green	n.a.	Yellow	Green
Psychologists	Green	Yellow	Yellow	Green		Green	Orange

# Workforce Dynamics Indicators

## Next Steps

- Plan to integrate this work with scenario analysis as an easy way to understand the effects of different policy alternatives
- Start to examine candidate measures for demand indicators

