

Workforce Planning: Stepping Stones on the Pathway Forward

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Sustainability of our profession

- Is the present professional structure of pathology and laboratory medicine sustainable in its present form?
- What pathways must be explored or undertaken by professional groups and Government in their responses?
- What needs to happen?



Drivers of Change

- Demographic and regulatory pressures on the pathology profession
- Disruptive technological advances that will further impact on the profession
- Political processes that shape the directions of the profession's responses
- Potential professional responses to these factors, and their implications



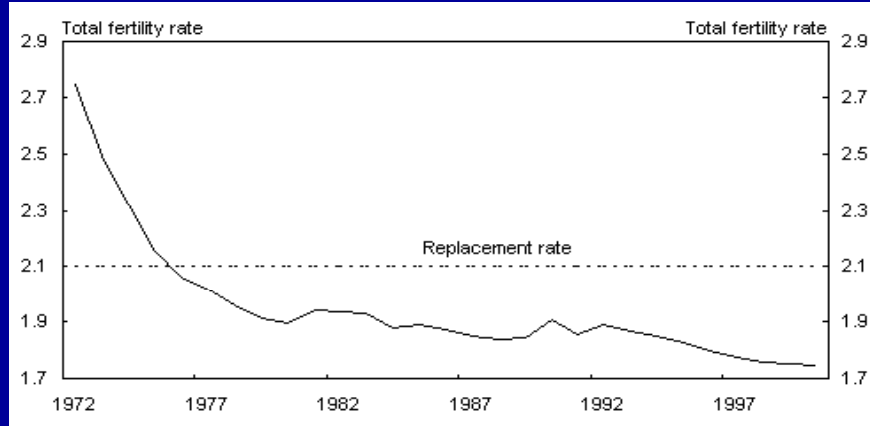
Life expectancy



Source: KPMG Property Advisory. US Census Bureau (2006)

Workforce entry

Australia's historical total fertility rate

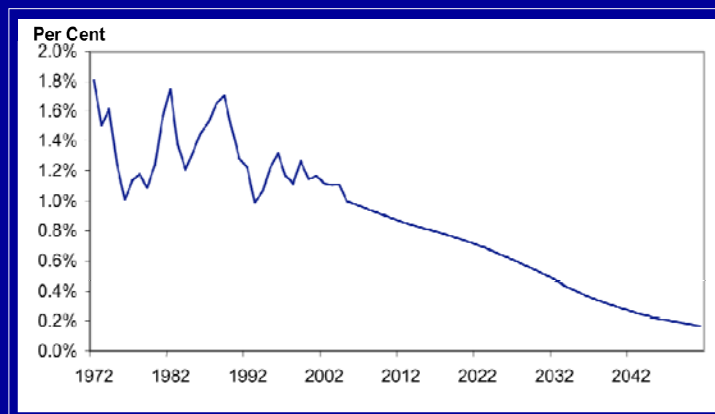


Source: ABS Cat. No. 3301.0 (various).



Workforce entry

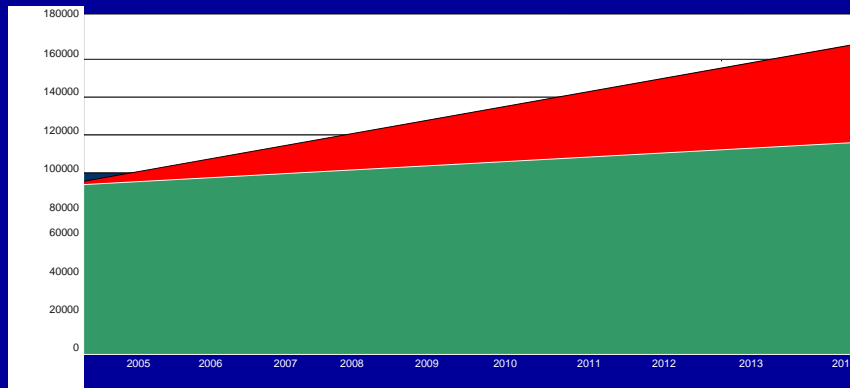
Historic and Projected Population Growth Rate - Australia



Source: RIM Unit, Commonwealth Treasury



Gap between Demand and "Supply" (Number of Persons)



Total Demand

Total: "Supply"

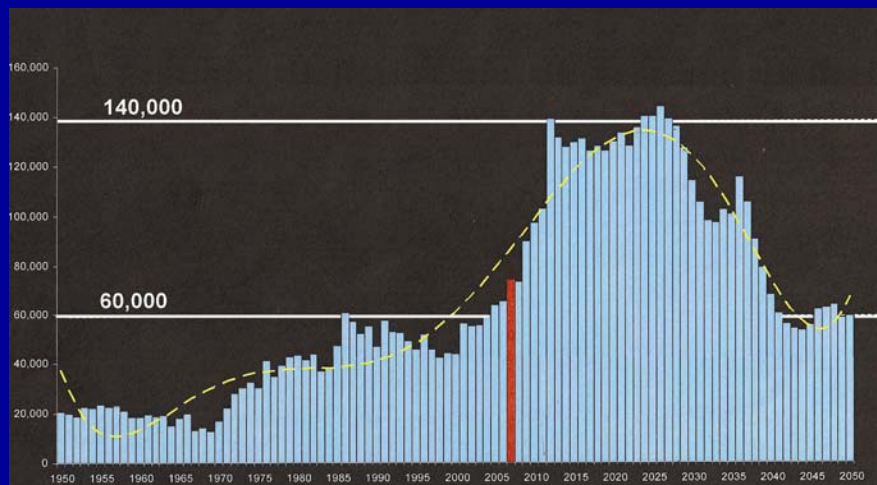


Workforce Exit (~65 yo)

1950

2007

2040



Source: KPMG Property Advisory, US Census Bureau (2006)

Demographic Conclusion

- Demand for Pathologists/Scientists will exceed supply for the next 20-30 years
- We have only *just* entered this phase
 - It will get *much* worse
 - We have only just begun to experience the problem

Regulatory Framework

- Accreditation required for C'wealth MBS funding
 - and soon possibly also for State funding
- NPAAC sets standards
 - NPAAC Requirements
 - Note Supervision Requirements (under review)
 - Incorporates AS ISO15189
 - NATA accredits against NPAAC Requirements
- Medicare Australia
 - APA, APP, APL, ACC

Supervision of Pathology

- NPAAC Categories of Laboratories
 - GX, GY, B, S, M
- GX and GY require a pathologist
- S can be a pathologist or a “Senior Scientist”
 - Senior Scientist = F(AACB) or PhD, plus 10 years experience
- Billing for pathology requires a Medical Practitioner

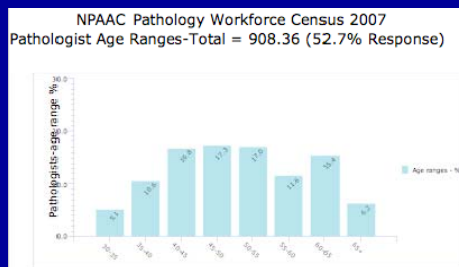
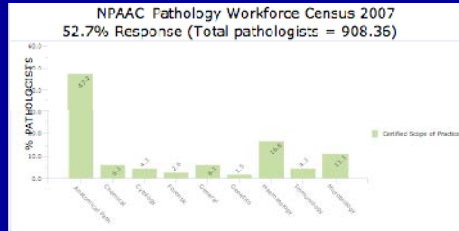


The Workforce “Crisis”

- Do we have enough Pathologists?
 - And, by the way, also enough Clinical (“Senior”) Scientists?
- Data already available suggests there is a mismatch and shortage
 - Reasons: automation, mergers, lack of career, etc
- Government aware of Pathologist shortages
 - Now becoming aware of a possibly even more acute Scientist shortage

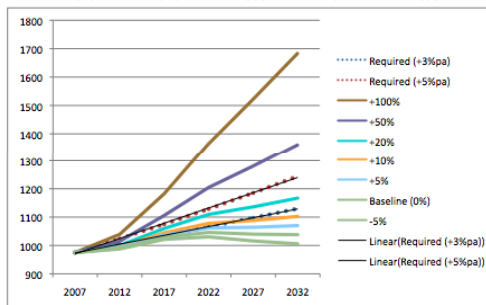


Pathologists



Workforce: Pathologists

	2007	2012	2017	2022	2027	2032
Required (+3%pa)	975	1004	1034	1065	1097	1130
Required (+5%pa)	975	1024	1075	1129	1185	1244
+100%	975	1039	1182	1363	1521	1683
+50%	975	1015	1106	1205	1280	1360
+20%	975	1000	1060	1110	1136	1167
+10%	975	995	1044	1078	1088	1102
+5%	975	992	1037	1062	1064	1070
Baseline (0%)	975	990	1029	1046	1040	1038
-5%	975	988	1022	1030	1016	1006

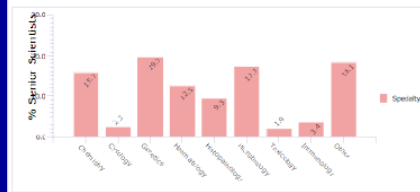


NB - "Required" assumes:
- Existing workforce numbers are "sufficient"
- x% compound growth in requirement



Clinical "Senior" Scientists (NPAAC)

NPAAC Pathology Workforce Census - 2007
52.7% Response (Total Senior Scientists = 412.35)

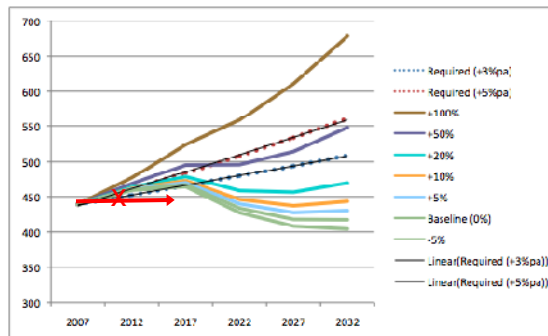


NPAAC Pathology Workforce Census 2007
Age Ranges Senior Scientists -Total =412.35
(52.7% Response)



Workforce: Clinical Scientists

	2007	2012	2017	2022	2027	2032
Required (+3%pa)	439	452	466	480	494	509
Required (+5%pa)	439	461	484	508	534	560
+100%	439	477	524	559	611	678
+50%	439	469	495	496	514	548
+20%	439	463	478	459	456	469
+10%	439	462	473	446	437	443
+5%	439	461	470	440	428	430
Baseline (0%)	439	460	467	434	418	417
-5%	139	159	161	127	108	101



NB - "Required" assumes:
- Existing workforce numbers are "sufficient"
- x% compound growth in requirement



Workforce Remediation

- Medical
 - College successful in securing funding for increased Registrar training
- Scientific
 - Pathology Associations Council (PAC)
 - CBS, SoP, Career Pathways
 - DoHA
 - Urbis survey, Human Capital Alliance (HCA)
 - College
 - Faculty of Science, [but only] for Clinical/"Senior" Scientists
 - NPAAC
 - Supervision Consultation Draft
 - Streamlining the Regulatory Framework



Workforce Conclusions

- Demand already exceeds supply
 - Problem will be with us for 20-25 years
- Affects profession differently
 - Pathologists – shortages recognised early
 - AP, Haem, Genetics, General
 - Increased number of Registrar trainees, immigrants
 - Clinical Scientists – shortages only now being acknowledged
- To address this, may require a (soon non-existent) trainer layer
 - So if we let the problem crystallise, it may never be fixable



Drivers of Change

- Demographic and regulatory pressures on the pathology profession
- **Disruptive technological advances that will further impact on the profession**
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Emerging Trends

- PoCT
 - GP Trial of PoCT
 - Increasing use of PoCT in RARA to address workforce issues
- Genomics and Molecular Diagnostics
 - Entering mainstream pathology
- Convergence
 - Pathology, Imaging and Medicine

Squeezing the balloon

- Government and Profession collaborating since 1989
- “Capped” reimbursement for pathology
 - Utilisation continues to rise
 - New funding via MSAC (EBM) or by negotiation with Government under 5-year Pathology Agreement (MOU)
 - Foreshadowed new funding framework via Review of Genetics
 - Future plans not yet known
- If “capped” reimbursement remains, then:
 - If Genomics/POCT grows, then either:
 - Funding for traditional pathology must shrink
 - Or else more money must be allocated
 - Or else new models of pathology delivery



Consequences of capped funding and limited supervision

- Combined pressures of funding and limited supply of Supervision:
 - Centralisation and Consolidation
 - Cheaper (balance between cost and TAT)
 - Efficiency (fewer sites requiring subspecialty supervisory expertise)
- Note that this solution is only interim
 - The number of Clinical Scientists still declines sharply from 2017+



Technology and Workload Conclusions

Technology and Workload

- Volume of “traditional” testing will continue to grow
 - But shrinking workforce
- PoCT
 - Consumer empowerment
 - Political expectations
- Technology
 - Molecular diagnostics
 - Genomics
 - Imaging convergence



Policy implications

- Efficiencies must continue
 - Centralise
 - Automate
- PoCT inevitable
 - Decentralise
 - Convenience
 - At higher cost
- New areas of pathology
 - At higher cost



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What do Pathology Stakeholders want?

- Patients
 - Safety, Quality, Convenience
- Government
 - Safety, Quality, Value
- Profession
 - Actualisation
 - Career satisfaction
 - Respect and influence
- Proprietors
 - Satisfactory financial return (profit or NCOS)



Funding a sustainable workforce

- Training costs money
 - If it didn't, then everyone would train
- Short-term focus over one generation
 - C'wealth: MOU and funding cap
 - States: Corporatisation (in response to #1?)
 - Private sector: market consolidation
- Noone has focussed on sustainability
 - "Grazing the Commons"



Responses to date

- C'wealth
 - NPAAC workforce census
 - QUPP workforce report (“Legg”)
 - Pathology workforce survey and review
- States
 - Enterprise reform
 - Consolidation into Statewide services
 - All except NSW (under consideration) and Vic
- College
 - Working with C'wealth, States, Industry and Private sector to create training opportunities

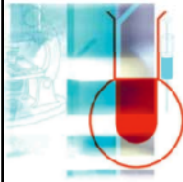


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Boot-strapping the Profession



Pathology Associations Council

www.pathology.med.pro

AACB | AAPP | AIMS | ANZSBT | ASC | ASCIA | ASM | ESA | HGSA | HISA | HSANZ | IAP | NCOPP | RCPA

- 14 Peak Colleges, Associations and Societies
- With a number being small niche Specialties
- Includes Employers
- But not Healthcare Diagnostics
- Includes both AU/only and AU/NZ



Activities of the PAC

- Competency Based Standards (CBS)
 - Revised
- Scope of Practice (SoP)
 - Mapped to CBS
- Career framework for Scientists
 - Uniquely Australian, but based on UK
- “Registration” and self-Certification
- Continuing Professional Development (CPD)
 - CPCP, APACE, MOPS and others

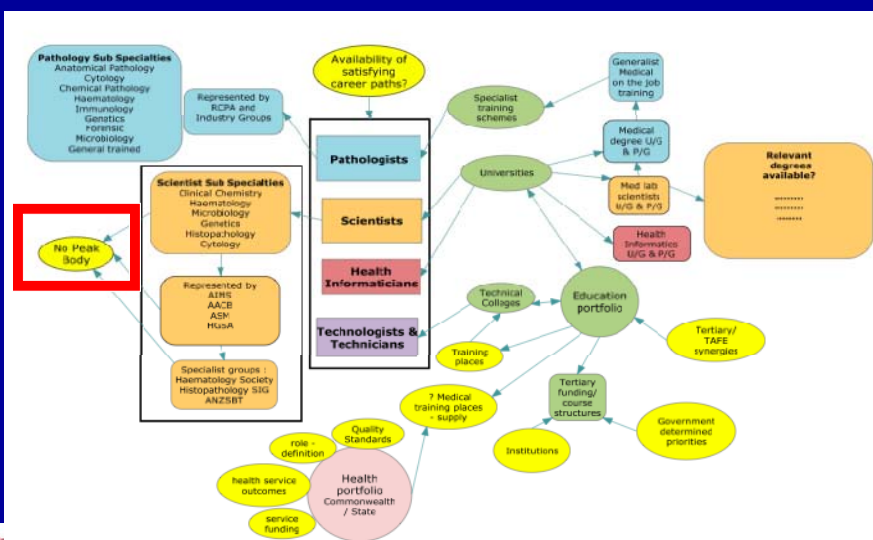


Limitations of the PAC

- Broad membership
 - Without regard to Pareto principles
 - Almost anyone can join
 - Asymmetry of representation
- Communications and Liaison
 - Voluntary consensus
 - S...l...o...w
 - Not intended as a decision-making body
- Vested vs Global interests
 - Employers: different agenda and timescale
 - College and AIMS are multidisciplinary
 - Many others (including AACB) are single-discipline
 - Government: does not yet recognise PAC



Limitations of the PAC



Registration of Scientists? No

- Registration of Scientists is not on the National Agenda
 - For at least next 5-10 years
 - By then, too late to make a difference
- Self-regulation (“Accreditation”) by the profession is eminently feasible
 - *If* we wish to pursue this
 - Requires CBS, Certification, CPD, Training Pathways



Professional Responses Conclusions

- Clinical Scientists are an endangered species
 - The Cavalry (QUPP, some States) are coming
 - Will they arrive in time?
- There is no single peak professional body to represent Scientists
 - RCPA has succeeded for Pathologists, and possibly now also for Clinical Scientists
 - Note that its Constitution currently precludes it representing other than Pathologists
- A professional framework is being developed
 - Close to completion



Where are we now? Quo vadis?

- Pathology workforce shortage is real
 - Multiple data sources
- Current professional framework unsustainable
 - Demand > Supply
- Technology will change traditional laboratories
- Current efforts
 - States and C'wealth
 - Pathology Registrars
 - Clinical Scientist career
 - NPAAC
 - Modernise supervisory framework
 - Best o/seas experience
 - Anticipate technology
 - Genetics, IT, PoCT
 - Commercial response



(My) Conclusions

- Rome is burning...
 - But at least Nero has stopped playing his fiddle
- Supervisory requirements
 - NPAAC streamlining regulatory framework
- Career structure for Pathology Scientists
 - Must be sustainable, sufficiently attractive
- Training the next generation of Scientists
 - Now insufficient time to start from scratch
 - Competency framework and Scope of Practice enables transitional and conversion courses

