

Professional Career Development

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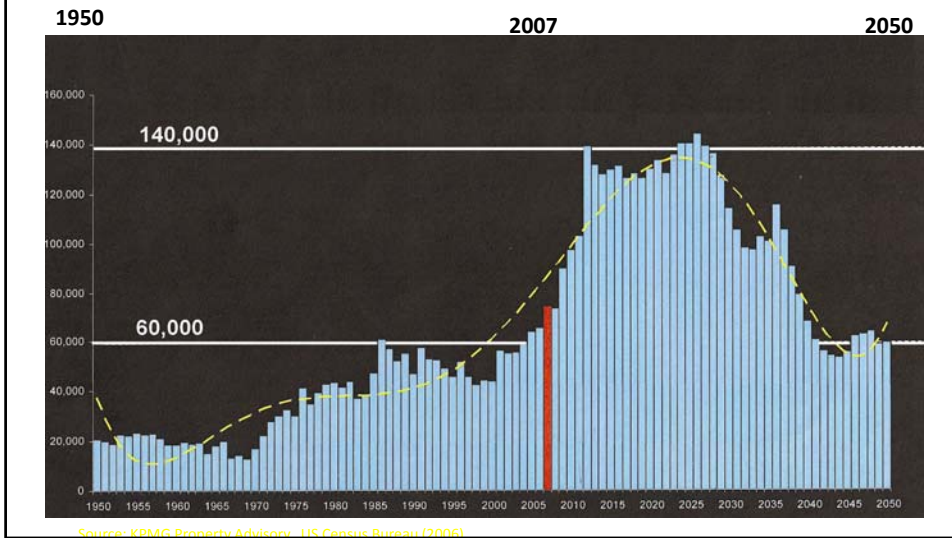


This Afternoon

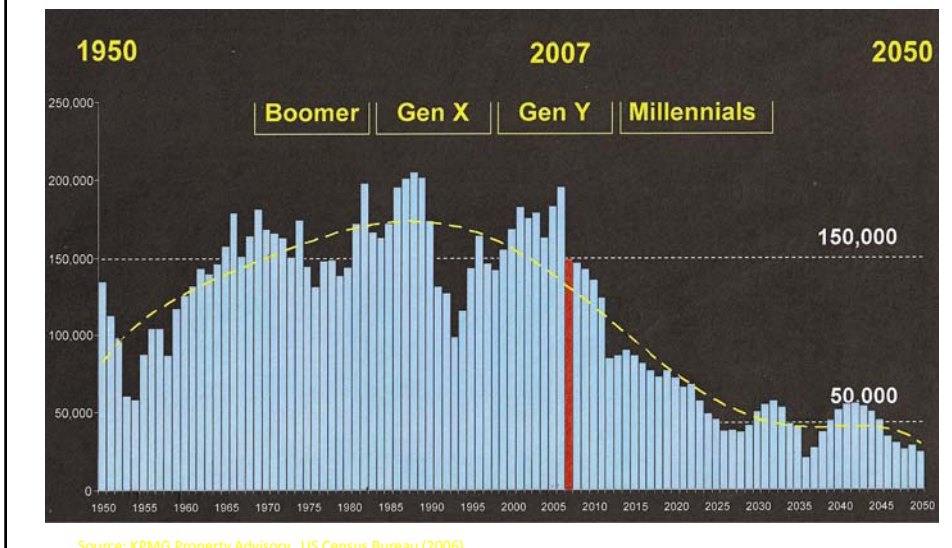
- Laboratory of the Future
- Competencies for the Future
- Career Framework
- Summary



Retirement age 65+ over 100 years



Difference between those entering and leaving the Work force over 100 years



Future

- Ageing Population
 - Baby Boomers
 - Money, intolerant, demanding
 - Politically influential
 - Multiple co-morbidities
 - Education, defence, healthcare ... Conservative views
 - Health care costs rising and demand increasing exponentially



How to deal with a mix of generations

- Gen X
 - Gen Y
 - Baby Boomers
 - Millennials
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- Different views and expectations
 - As supportive of the older generation?

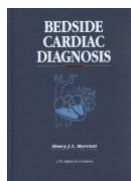


Future

- Increasing patient demands
 - Population expansion
 - Chronic disease increase
 - Ca 40% increase by 2020
 - Complexity of medicine
 - Shortened Length of Hospital Stay



- But chronic disease still requires regular monitoring of cholesterol, HbA1C, WCC...
- Demand will outstrip our capacity to meet it!
- PoCT – where pharmacy, GP, beside the bed



Laboratory of the Future??

- Focus
 - Cost containment
 - Networks - aggregation
 - Lean processes
 - Demand management
 - Cost effectiveness of tests
 - Dealing with 'rare' genetic disorders
 - Staff and skill shortage
 - Retain staff
 - Training



Laboratory of the Future??

- Technology change
 - Greater reliance on external support from Suppliers
 - Integration of analysers – Immunology + Clin Chem – solid phase assay
- Structural change to traditional disciplines
 - Blood sciences – chemistry, haematology, immunology, transfusion
 - Tissue sciences – histopathology, cytology
 - Infectious diseases – microbiology, mol pathology

Laboratory of the Future??

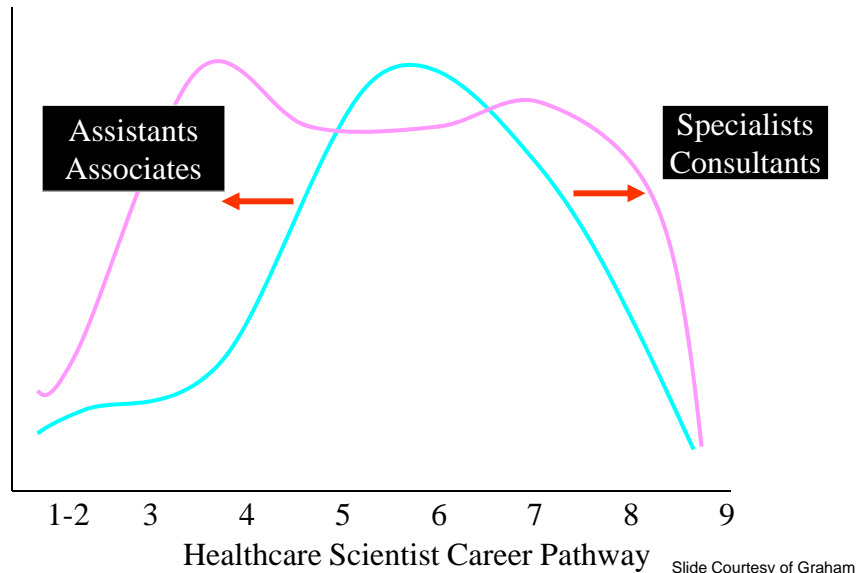
- Role of Suppliers
 - Training – University link
 - Subcontractors to maintain equipment day/day
 - Routine maintenance
 - Operations
- Staff profile change
 - Vocationally trained staff
 - Associate degree to fill in gaps
 - The 'new' base qualification

Laboratory of the Future??

- Fewer scientists
- Relatively more senior scientists
 - Broader roles
 - Substitution
 - Cut up



Healthcare Scientist Profile



Australian Pathology Workforce Statistics

- Age
 - Pathologists - 52% > 50 years
 - Senior Scientists – 54% > 50 years
 - Scientists – 32% > 50 years
- Intention to leave in 5 years
 - Pathologists – 22%
 - Senior Scientists - 43%
 - Scientists – 28%



- Scientists

- Declining interest
- Low pay
- Limited career path
- Unsociable hours
- Alternative careers



What IS a scientist and what do they BRING to a pathology service?

Career Structures and Pathways for the Scientific Workforce – DoHA Report

- The conclusion was that there is an adequate supply of graduate medical laboratory scientists – some local shortages
- There is a patchy shortage of medical technicians
- Imminent shortage appears to be with ‘senior scientists’

Planning a Sustainable Workforce

- What do they do?
 - Competency Based Standards – the skills needed
 - Scope of Practice – different levels of skills needed by different staff levels
 - What is the work volume?
- = How many we need! – The next step

CBS

- Unit 1: Collection, preparation and analysis of clinical material
- Unit 2: Correlation and validation of results of investigations using knowledge of method(s) including analytical principles and clinical information
- Unit 3: Interpretation, reporting and issue of laboratory results
- Unit 4: Maintenance of documentation, equipment, resources and stock
- Unit 5: Maintenance and promotion of safe working practices

CBS

- Unit 6: Professional accountability and participation in continuing professional development
- Unit 7: Responsibility for Medical Science practice including test selection, development and use of laboratory investigations
- Unit 8: Liaison with health workers and others to continuously improve the service
- Unit 9: Participation in education and training of health workers and others
- Unit 10: Contribution to advancement of knowledge and improvement of laboratory practice

Assessing Competency

- Emphasis on competency and not formal qualification
- ISO 15189 and NATA
- External Assessment needed - QAP

Scope of Practice – Role Definition

What should a Scientist do?
- linked to CBS



What should a Technician do?

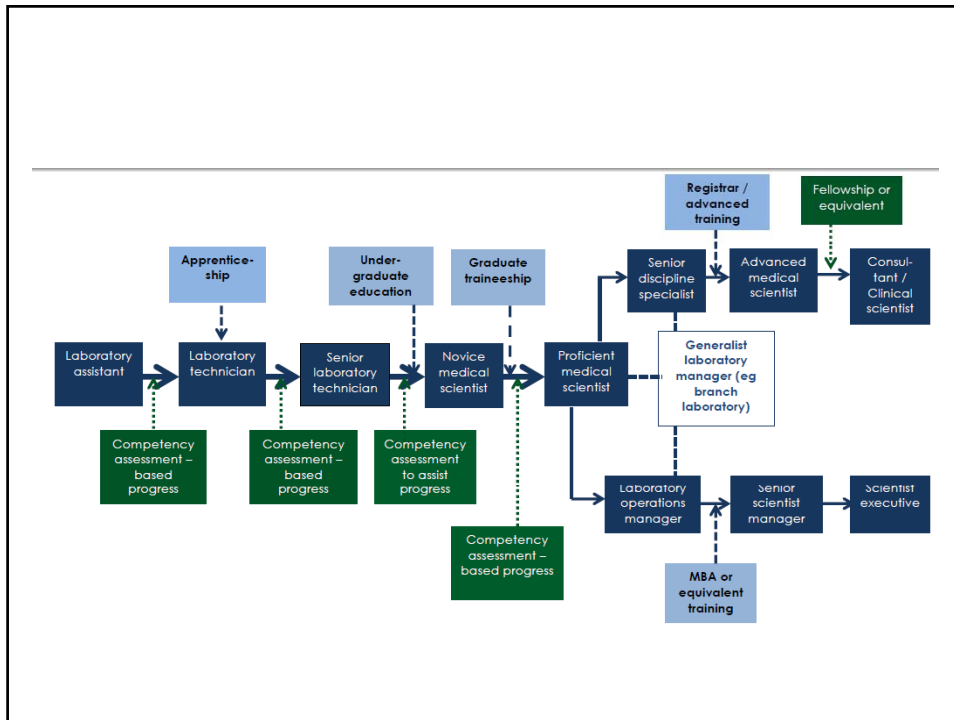
What are the tasks various staff should be doing!

Basis for employment and deployment of staff

Scope of Practice					
	Laboratory Assistant and above	Technician and above	Scientist and above	Senior Scientist	
Technical Skills * Collection, preparation and analysis of clinical material					
1.1 Ensure the appropriateness of sample collection procedures	Understands correct identification and labelling requirements for patient specimens	Aware of collection instructions for test procedure/s and correct specimen/s required for testing	Understands transport requirements for test and notifies appropriate staff if this is exceeded and/or results are compromised		
1.2 Ensure the appropriateness of specimen reception procedures	Determines acceptability of samples within guidelines	Aware of requirements to match specimen and documentation upon receipt in laboratory	Notifies appropriate staff if patient identification error is observed or specimen is sub-optimal		

Training

- How should we train staff for the future laboratory
 - Vocational – return to apprenticeship?
- If competencies are important shouldn't we focus on them?
- Is in-house training the best?
 - Expensive to train, resources, time, skill base



Clinical Scientist?

- NPAAC definition
 - PhD?
 - FAIMS, FAACB, FHGSA, FASM
 - FFSc RCPA
 - Competency
- Expert analyst – how to train?
 - Come in as expert – PhD, MSc and then into internship position for clinical training
- Manager?
 - Relevant experience and ML?
 - Regional laboratory - B
 - Section head – G
 - Laboratory Manager - G

Pathways

- Academic, professional and competencies
- Need to cover the supervision gap – regional labs
- PhD - academic “expert” – translational science role, innovation, development
- Manager - MBA – type qualification – part professional, part university based

Summary

- Laboratories will change
- Need to determine the makeup and structure of a future workforce
- What IS a scientist
- How do WE change

- Education is not training is not competence!

