Advanced Practice for Radiation Therapy & Medical Imaging
- the results of NZ surveys

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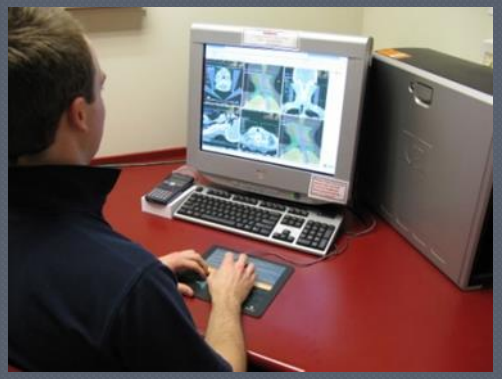
Setting the Scene

- Role development & career progression research – 2008

- Advanced Practice
  - Looked at overseas developments
  - Determined the needs of the New Zealand profession
  - Resourcing…
  - Acceptance…



Previous Research

- Majority of RTs and MRTs support role extension and the establishment of Advanced Practitioner (AP) roles

  Yielder, Murphy & Sinclair, 2008; Coleman, Herst & Sycamore, 2009

- MRTs are capable of taking on extended roles with appropriate education, training and supervision

  Yielder, Murphy & Sinclair, 2008

- Support for the development of formalised postgraduate qualifications

  Yielder, Murphy & Sinclair, 2008; Jasperse, Herst & Coleman, 2010

Generic Elements of the AP Role

- Clinical leadership
- Clinical decision making
- Professional/current issues
- Teaching and supervision
- Research and evidence based practice
- Legal and ethical issues
- Quality assurance
- On-going supervision and moderation
- Clinical skills and theory to support

Yielder, Sinclair & Murphy, 2008

- Masters Qualification

Aim

- To develop profiles for Advanced Practitioner roles in radiation therapy & medical imaging in New Zealand

  - Advanced Practice Working Group

    New Zealand Institute of Medical Radiation Technologists Board (NZIMRT)

    Therapy – Karen Coleman

    Diagnostic – Dr Jill Yielder

Objectives

- To investigate how RT and MI practitioners envisage advanced practitioner roles in NZ
- To establish profiles in different specialty areas for RT and MI Advanced Practice
- To establish criteria for each developed profile

In addition we sought to:

- Investigate the advantages and limitations affecting the implementation of these profiles

Methodology

- Nationwide electronic questionnaire to:
  - all qualified RTs
  - a specialist area sampling of senior MRTs

- Ethics approval from the:

- Multi-Region Ethics Committee
- University of Auckland Human Participants Ethics Committee

RT Profiles

Research RT	84%
Brachytherapy	77%
Head & Neck Specialist	71%
Prostate Specialist	70%
Breast Specialist	67%
Patient Education	67%
Palliative	67%
Imaging & Volumising	66%
Paediatric	59%

Example Profile - Research RT

Confirmation of all criteria	84%
Lead RT in radiation therapy research projects	98.6%
Liaison with multidisciplinary team, to include; clinical trial groups, radiation oncologists and university staff	98.6%
Mentor RT research within clinical department	
Assist with grant applications/funding for research projects	97.3%
Assist with the development of protocols	
Knowledge of multicultural perspectives	94.5%
Knowledge of evidence-based practice, research and on-going education	

Comments

- Consider to be standard RT practice

"A great deal of these are not advanced practice but are included in a current RTs role"

"Is this advanced practice?"

- Positive comments about this profile

"I think this position is of great benefit to the department. If we had this role the person could push for changes faster to benefit the department and patients"

"Definitely, otherwise a department will stagnate"

MI Profiles - Response

General Radiography	**62**
MRI	**26**
General Radiography - Trauma	**26**
Ultrasound	**21**
Fluoro/Screening/Specials	**23**
CT	**15**
Nuclear Medicine	**13**
Paediatrics	**15**
Breast Imaging	**13**
DSA	**9**
Research/ Clinical Education	**9**

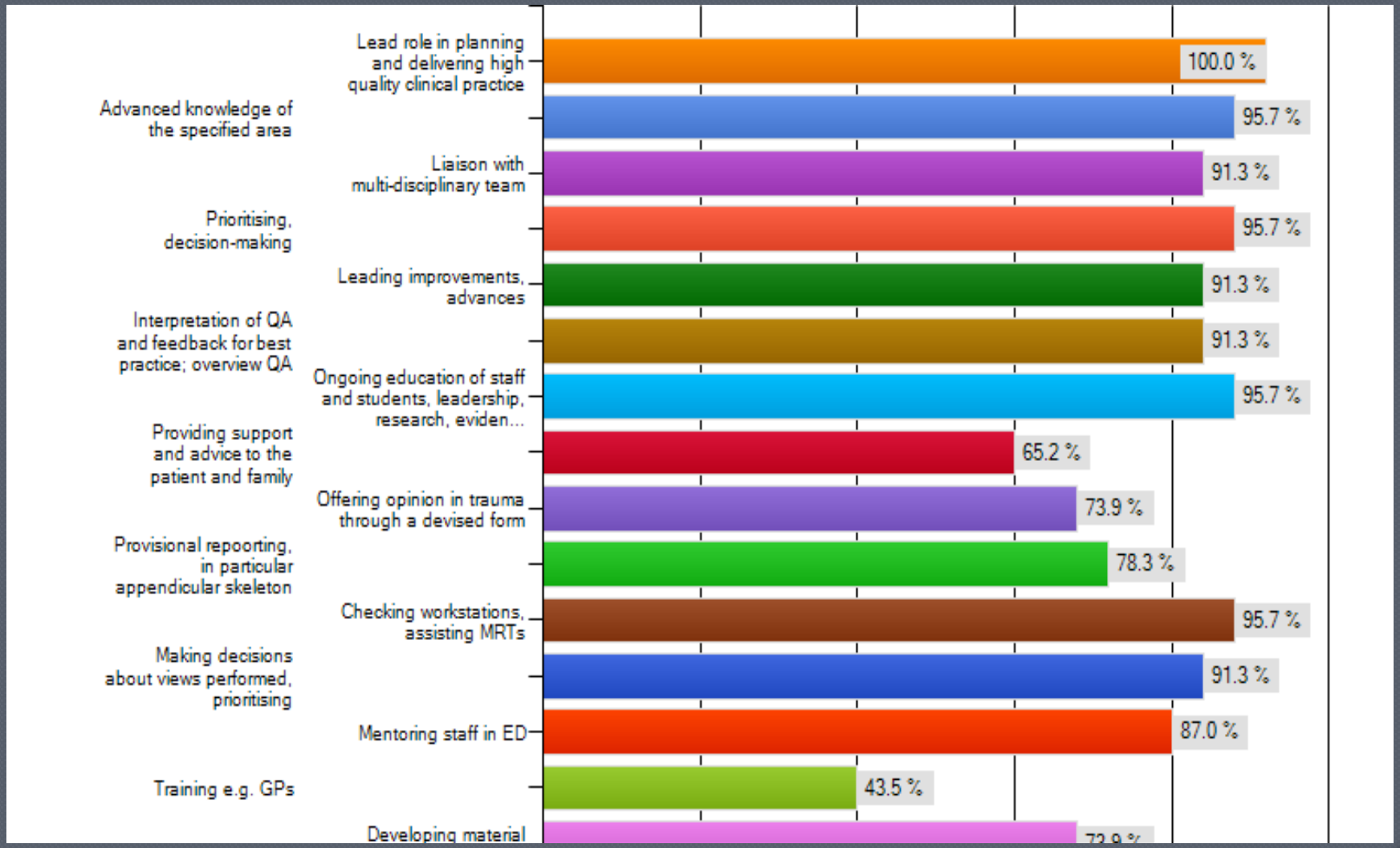
MI Results

- For each profile more than half the participants agreed with all the proposed criteria

- Out of 169 suggested criteria, 155 criteria had an agreement of > 50%; with 13 reaching an agreement of 100%
  - only 14 criteria had the agreement of < 50% (mostly in fluoro and research/education profiles)

- Of the key generic criteria (90 possible responses)
  - 2 had an agreement of 50%
  - all others were higher, with 13 reaching an agreement of 100%

Example Profile: Trauma



Comments

- Further aspects that could be included:

"Assist in the training of ED nurses for Nurse Initiated X-Rays programme. Provisional reporting to eventually include all ED and trauma imaging. Input into house surgeon training."

- Reasons for excluding any criteria:

"Time management issues and no support from other health professionals that may feel we're intruding into their territory "

Further Suggested Profiles

- RT
  - New technology
  - Site specialist
  - Quality assurance

- MI
  - Cardiac imaging
  - IVU reporting
  - Theatre/Intensive care
  - Vascular ultrasound

Advantages of AP for RT & MI

- Job satisfaction 32.9%RT 83%MI
- Encourage to remain in profession 73%MI
- Professional development & career progression 41.1%RT
- Enhanced patient care 31.5%RT
- Departmental efficiency 31.5%RT

Barriers to Advanced Practice

Resources involved in the training, implementation and remuneration of APs	50.7% RT 14.8% MI
Acceptance from other disciplines (Radiologists) (Nurses & other doctors)	35.6% RT 34% MI 4.5% MI
Perception/resistance of some MRTs	19.2% RT
Culture of the department	17.8% RT 4.5% MI
Legal issues/indemnity insurance	2.3% MI
Study required/provision of courses	4.5% MI

Conclusions

- Similar support for all profiles
  - Department culture & needs
  - ‘Advanced skills’ may become ‘standard’
  - AP will lead other developments
- Generic academic structure gives flexibility
- Concern about support to recognise AP

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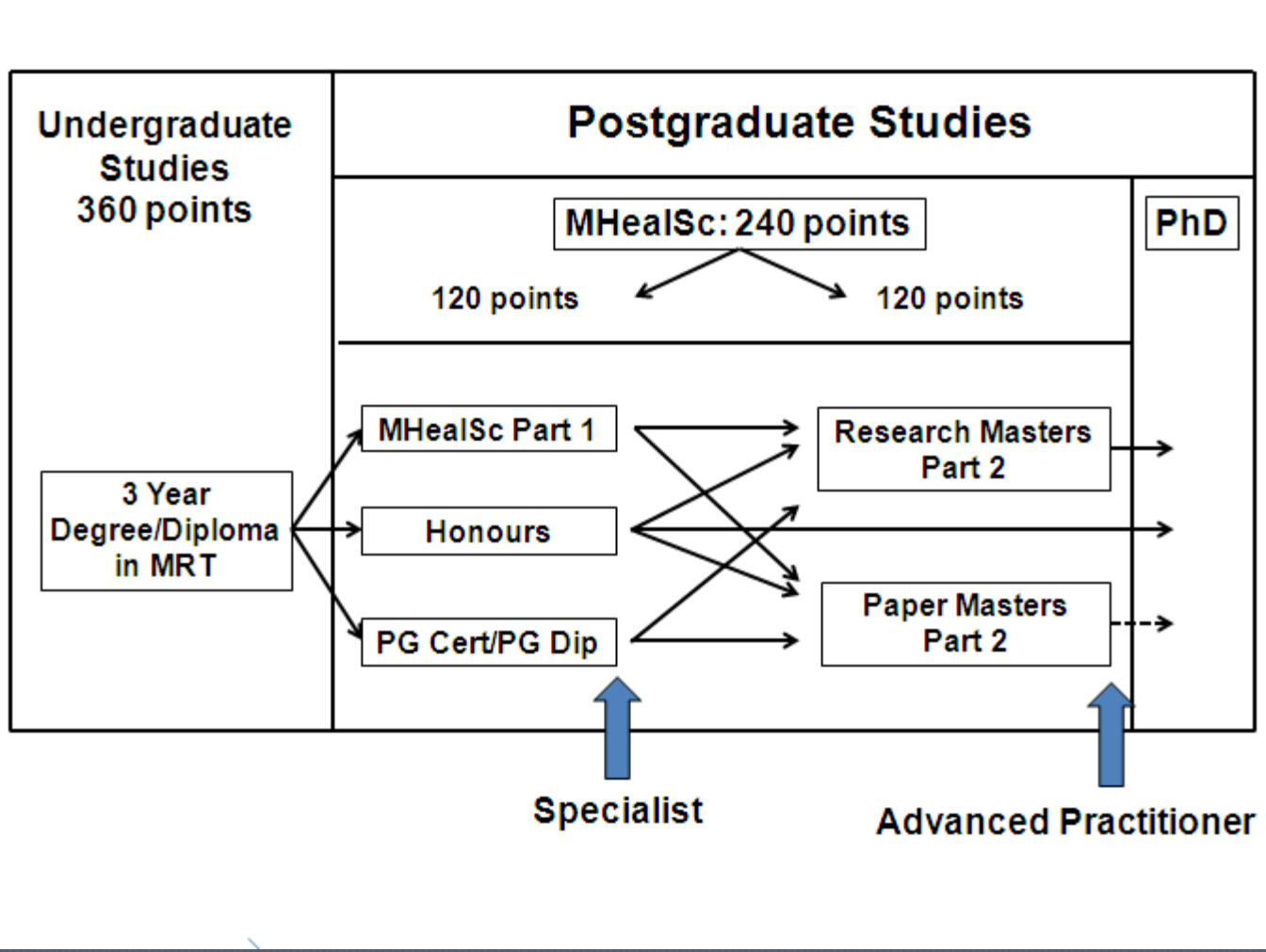
Suggestions for AP Academic Framework



Future Direction

- Present the findings to the NZIMRT
- Publications
- Awaiting direction from the NZIMRT Board of Directors
- Medical Radiation Technologists Board
  - Advanced Practitioner 'scope of practice'
- Implement generic and skills based academic options to underpin clinical advanced practice

Acknowledgments

- NZIMRT Advanced Practice Working Group
- NZIMRT Board of Directors
- University of Otago, Wellington
- University of Auckland

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