# Health Education and Training

## Clinical training: governance and organisation

## Submission from the Australian Institute of Radiography (AIR)

### **Section 1- Demographics**

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The Australian Institute Radiography (AIR) is the professional body representing over 5,000 radiographers and radiation therapists practicing throughout Australia. We currently have just under 1200 members living and working in Victoria.

Assessment of clinical training is a key operational function of the AIR and our Competency Based Standards (CBS) are recognised as the benchmark standard for competent practice.

#### **Section2- General Comments**

Please provide any general comments around the issues raised in the discussion paper.

The paper on which this submission is based makes the following comment, "Clinical training' is the training component that is undertaken in a clinical setting (broadly defined) for the purposes of building practical competencies relating to clinical practice. Clinical placements would normally offer supervision and may involve 'class room' work. For the purposes of this paper, clinical education is defined as compulsory placements in health and health related services that are intended to ensure students attain the competencies that cannot otherwise be attained in a formal education setting." The AIR acknowledges that this definition is fully compatible with the requirements we mandate of our graduates embarking on clinical / professional practice. It is within this context that our submission is made.

We would like it recorded that this professional association and the regulatory or statutory agencies, in our profession the various Medical Radiation Practitioner Boards in all states

<sup>&</sup>lt;sup>1</sup> P2. National Health Workforce Taskforce (2009): Clinical training: governance and organisation, February 2009.

and territories except New South Wales and South Australia, use a common language to describe the setting of standards, the assessment of practitioners against those standards and the accreditation of the training providers who develop the academic skills and learning which underpins those standards. Despite this common language we have distinctly differing roles and responsibilities. The regulatory boards exist by statute 'to protect the public'; this is customarily an opening statement in the objects of their legislation. The professional association exists to promote the professions and by definition this means set the standards of competent practice.

It is only the professional associations through their conferences, their professional development seminars, their research symposia and the hours of volunteer time in contributing to the various educational panels and the branch committees which have the resource and the 'pull' to encourage members of their profession to contribute in activities which lead to the establishing of standards.

If this submission is to make a contribution to this debate, then this fundamental distinction of role and resource must be acknowledged. It is important to also record that the AIR has been instrumental in the establishing of clinical standards since it's inception in 1952, though the practical experience and standard setting activities of our members in various guises go back to early in the 1920's. We are not a profession which has taken this role frivolously, nor in jealous protection of our professional status. We have worked with many other health professionals in the development of world class recognised standards of clinical practice, equal to or better than most countries around the world.

The AIR recognises that the workforce implications inherent in all aspects of training are critical factors in the review, but would argue, as strongly as we can, that any assumption by a profession that the importance of their standards are over-rated and therefore unnecessary in the face of consumer demand, is a completely unacceptable and immoral position. The reason students join our profession is, simply put, so that they can 'help people'. If the profession were to promote a position which attempted to maintain so-called standards just so as to ensure a limited work opportunity for a closed shop of experts, then there would be a public revolt of our membership.

The standards we have established and pursue, exist so as to ensure that our form of professional help is provided in as safe and efficacious manner as possible. To do that requires not only academic training and critical thinking rigour, but also clinical expertise and practice. We would like to record our deep dismay at those states where the statutory authority prefers to ignore the well established standards defined and administered by it's own profession. There is a correlation between matters of unprofessional conduct and the regulatory Board's unilateral approval of individuals to practice without requiring that they hold the profession's certificate of recognition; the Statement of Accreditation.

# **Section 3- Responses to Discussion Questions**

# What is your experience of clinical training planning, organisation and management?

As the peak professional body for medical imaging and radiation therapy in Australia, the AIR has been required to respond to changes and developments in the education of beginning practitioners. Over the last fifty years, the minimum entry-level qualification to obtain recognition from the AIR has evolved from a certificate to associate diploma, to diploma and, currently, Bachelor degree. By 1995 the AIR required that all medical imaging and radiation therapy programmes in Australia must be at the level of Bachelor degree. The Australian experience was similar to that which took place in the United Kingdom (UK) – the move to degree programmes occurred because graduates of diploma-level programmes, while technically proficient, lacked the skills to interpret and apply their knowledge in practice<sup>(6)</sup>.

At each stage of this educational evolution, the academic requirements of students in the educational programmes have steadily and necessarily increased. As students were required to dedicate increasing time and effort to academic study, it became impossible for them to undertake the same level of clinical practice. It seems unlikely that a fulltime student in a degree programme could undertake the 5400 hours of clinical practice reported in a certificate programme<sup>(7)</sup>, or the 3500-4000 hours common in the diploma-level cadetship. The fact remains, however, that medical imaging and radiation therapy are clinical professions and that beginning practitioners must obtain some degree of mastery of the associated practical skills. It has been argued that the reduction in clinical experience time that occurred in the transition from diploma to degree has exacerbated the problem of integrating theory and practice<sup>(8)</sup>. Anecdotally some members of the medical radiations professional community expressed concern that the reduction in clinical practice hours may result in a lesser degree of capability. Irrespective of the rationale, by 1986 the then Conjoint Board of the AIR required that, in order to obtain the Statement of Accreditation, graduates of Australian university programmes should complete 2600 hours of clinical practice or equivalent<sup>(9)</sup>.

In 1986, RMIT was the first Australian education institution to replace diploma programmes with degree programmes. It was not possible to include the requisite 2600 hours of clinical experience in a degree-level programme where academic requirements are significantly greater than those of a diploma-level programme. In order to facilitate the clinical practice requirement, a postgraduate clinical programme was developed in Victoria, ultimately known as the Internship<sup>(10)</sup>. Subsequently other universities in Australia began to upgrade programmes to degree level and the medical radiations professional community was required to consider how the minimum requirement of clinical experience could be achieved in areas outside Victoria where no internship programme existed. In response, the AIR adopted a policy whereby from 1995 all graduates would be required to undertake a year of postgraduate clinical practice in order to be eligible for the AIR Statement of Accreditation<sup>(11)</sup>. This policy was developed as a consequence of a motion introduced at the AIR Annual General Meeting in Newcastle in 1991, carried predominantly on the basis of the proxy votes of those unable to attend<sup>(2)</sup>. The year of postgraduate clinical experience was implemented as the Professional Development Year.

The PDY was introduced in Australia in 1992 and is described by the AIR as "a mediated entry to the profession, allowing the development of clinical proficiency based on skills and knowledge acquired during the undergraduate program" (1). This mediated entry was considered necessary due mainly to the expected reduction in clinical time graduates of Bachelor degrees would have compared to diploma-level graduates (3, 4).

It is unclear precisely how "mediated entry" is defined by the AIR. In the AIR Educational Policies (2005) mediated entry is clearly contextualised as incorporating controlled introduction of clinical experiences, assessment and supervision<sup>(1)</sup>, while other AIR documentation suggests that mediated entry is analogous to professional work experience with undefined structure<sup>(4)</sup>. The PDY is predicated on the notion that the graduate practitioner in the first year following graduation requires the guidance of more experienced practitioners. The PDY also aims to prevent graduate practitioners from being placed in sole practice situations which are not perceived as conducive to development of skills and competencies<sup>(1)</sup>. The AIR intends that the structure and context of the PDY should

"ensure that the graduate practitioner develops the necessary confidence, skills and understanding of the Accredited Practitioner role" (1). Irrespective of semantics, in providing a PDY programme with defined duration and supervision, requiring evidence of a range of clinical experiences and two defined evaluation points, it is apparent that the AIR considers that mediated entry to the profession will entail more than unstructured professional work experience. The AIR has led the MRS profession in Australia by determining exacting standards of clinical capability for practitioners attaining professional accreditation. Expectations for competence among graduate practitioners are assured through stringent review of the academic and clinical aspects of educational programmes during the professional accreditation processes conducted by the AIR. Educational institutions are required to provide clinical education programmes that adequately support clinical competence and the development of essential professional skills and attributes. The profession's active engagement in supporting educational programme development through stringent accreditation review of student clinical development ensures that MRS graduates enter the workforce appropriately equipped to undertake a period of supervised practice

#### The Professional Development Year in practice

When the PDY was introduced all university programmes in Australia were three years in length and were only able to be studied on-campus. By 1995 all the programmes were at Bachelor degree level. By contrast, Australian programmes now include three-year and four-year undergraduate Bachelor degree programmes and two-year graduate entry Master degree programmes, one of which is delivered in distance education mode. Some of these programmes result in graduate eligibility for the AIR Provisional Statement of Accreditation (graduate practitioner status), others in eligibility for the Validated Statement of Accreditation (accredited practitioner status). The AIR defines a graduate practitioner as "a graduate from an AIR accredited Medical Radiation Science course whom, upon completion of such course, would receive the Statement of Provisional Accreditation of the AIR. The graduate practitioner is required to successfully complete the Professional Development Year (PDY) / Intern Model Program (IMP) of the AIR to gain recognition as an accredited practitioner"<sup>(1)</sup>. The AIR recognises an accredited practitioner as one who "will have achieved a level of competence to enable them to accept the responsibilities of practising

independently and be capable of performing the expected role of a practitioner in a sole practitioner situation" <sup>(1)</sup>.

The experience of graduate practitioners in their first postgraduate year of professional practice varies considerably throughout Australia. The AIR PDY programme exists largely unchanged in Western Australia, the Northern Territory, South Australia and Tasmania. This does not suggest that the PDY programme is uniformly and consistently implemented in these areas, simply that the fundamental programme is the same.

The Professional Accreditation and Education Committee (PAEC) in NSW has attempted to improve the PDY programme structure and evaluation for graduate medical imaging practitioners in that state. While the core PDY programme remains consistent with the broader AIR model, the NSW PAEC has established different, arguably more stringent, requirements for clinical centre accreditation, supervision and assessment.

Graduate practitioners who opt to undertake their first year of professional clinical practice in Victoria generally do so within the Intern Model Programme. The Victorian internship model predates the PDY programme, having been implemented to support the first degree-level graduate practitioners from RMIT in 1988. It has been suggested that clinical centre accreditation requirements, range of experiences and assessment requirements are more demanding in the Intern Model Programme<sup>(10)</sup>. The documented perceptions of the professional community indicate that such contentions may be valid<sup>(2, 5)</sup>.

In Queensland, the Supervised Practice Program of the Medical Radiation Technologists Board of Queensland runs concurrently with the PDY programme<sup>(12)</sup>, providing a pathway for graduate practitioners to achieve registration to practice in that state. Assessment, supervision requirements and expectations for clinical practice experiences required during the first year of postgraduate professional practice are explicitly defined<sup>(13)</sup>, substantially more so than that defined for the AIR PDY<sup>(1)</sup>.

In addition to variation in the PDY experiences noted at a State level, individual clinical centres provide variable contribution and support to the first postgraduate year. This support ranges from clinical centres that provide highly structured educational programmes

and ongoing performance assessment to those clinical centres where there is no perceivable distinction between the expectations of graduate practitioners and other professionals<sup>(5)</sup>. Where centre-based programmes exist, it is likely that the content, structure and format might vary considerably. PDY programmes that primarily intend to introduce clinical working practices<sup>(14)</sup>, while unquestionably important, may lack explicit focus on other dimensions of professional practice.

Depending upon the state of residence, graduate practitioners may undertake the Professional Development Year, the Intern Model Programme or the Supervised Practice Program. It has been argued that such variation results in a lack of consistency in the learning environment for newly graduated medical imaging and radiation therapy professionals<sup>(5)</sup>. The minimum standard for the PDY is 48 fulltime-equivalent weeks of supervised clinical practice in an appropriately accredited Australian clinical centre. Accredited clinical centres must demonstrate the ability to provide a satisfactory degree of supervision and staffing and an appropriate range of clinical procedures or experiences. Graduates undertaking the PDY must possess a Provisional Statement of Accreditation from the AIR. An assessment of performance is completed at the mid-point and the conclusion of the 48-week period. It is only upon acceptance of a satisfactory final report that the relevant State PAEC will recommend that the graduate practitioner is eligible for a Validated Statement of Accreditation<sup>(1)</sup>. Irrespective of the personal views of medical imaging and radiation therapy professionals, there is no compelling documented evidence that demonstrates whether the national format and structure of the PDY effectively achieves the intended outcomes.

The administration of the PDY programme hinges upon the PAEC in each state operating in the capacity of a subcommittee of the PAEB<sup>(1)</sup>. The PAEC is responsible for accreditation of clinical centres, verification of PDY reports, monitoring the PDY programme and acting appropriately in response to deviations and issues<sup>(1,3,4)</sup>. Such responsibilities are significant, particularly in those areas where there are many graduate practitioners, many accredited clinical centres or where distance or remoteness are considerations. Members of the PAEC are volunteers contributing this professional service in their own time. The AIR provides

little or no support to manage this workload, nor do the PAEC volunteers receive formal training or credentialing<sup>(5)</sup>. In general, clinical professionals who supervise the PDY receive no formal training from the AIR to ensure consistency and equity<sup>(5)</sup>. Such circumstances have likely contributed to variations in the structure, format, content and rigour of the Professional Development Year.

Perceptions of the PDY programme are likely to be diverse, yet there is little evidence demonstrating how the professional community and others perceive it. The PAEB conducted a survey in 2001 to identify these perceptions<sup>(2)</sup>, but the results were unclear and inconclusive due partly to difficulties with the survey design. A total of 178 participants responded to the survey. At that time 8326 individuals were identified as radiographers in the 2001 Australian Population Census<sup>(15)</sup>. Less than half of the respondents had recently completed a Professional Development Year. The survey showed that approximately 10% of the survey respondents claimed the PDY was unnecessary and that almost one-fifth indicated that the PDY programme did not fulfil its intended purpose<sup>(2)</sup>. Significantly, the PAEB noted from the survey that a number of respondents clearly did not understand the intention of the PDY<sup>(2)</sup>.

The external review of the PDY programme conducted in 2008 confirmed that concerns exist. Seventeen individuals are recorded as having been interviewed<sup>(5)</sup>. The report of the external review suggests that there is a perception that the PDY programme "caters to the lowest common denominator" as all graduate practitioners undertake the same 48-week period of professional practice irrespective of performance<sup>(5)</sup>. While the report identified that some professionals maintain that the PDY is essential to achieve mediated entry to the profession, the authors of this report question whether this is actually occurring given the lack of national uniformity of structure and experience<sup>(5)</sup>. Observations in the report echoed the concerns previously expressed by the PAEB relating to inconsistency<sup>(4)</sup>. The review identified that the PDY programme is perceived as facilitating a graduate practitioner's progression to independent practice where the PDY period is appropriately structured and supervised, but it is apparent that structure and supervision are considered as highly variable<sup>(2-5)</sup>. In combination, the findings of the external review and the observations of the

PAEB suggest that aspects of the PDY programme require substantial review and development, including programme guidelines, structure, expectations for clinical experiences, supervision requirements, clinical centre requirements, duration and assessment<sup>(2-5)</sup>.

## Can you identify any other examples of good practice or approaches?

The AIR is the peak professional body representing radiographers and radiation therapists in Australia but it is not the determinant entity for practice in Australia. Where it exists, registration with, or possession of an appropriate licence from, the relevant regulatory body determines the practitioner's legal authority to practice medical imaging or radiation therapy. By contrast, possession of a Validated Statement of Accreditation from the AIR is acknowledgement that, in the view of the professional body, the individual practitioner has achieved an acceptable level of competence facilitating independent practice<sup>(1)</sup>. In itself, practitioner accreditation by the AIR does not confer legal authority to practice as a radiographer or radiation therapist in Australia.

The situation is similar for MRS professional organisations and associations in a number of other countries including New Zealand<sup>(16)</sup>, the UK<sup>(17)</sup>, Japan<sup>(18)</sup>, Hong Kong<sup>(19)</sup>, Norway<sup>(20)</sup>, Singapore<sup>(21)</sup>, South Africa<sup>(22)</sup> and the United States<sup>(23)</sup>. In each of these countries an entity other than the professional association determines who may and may not legally practice. The Canadian professional association, the Canadian Association of Medical Radiation Technologists, is the sole provider of the certification process for MRS professionals to gain entry to practice in Canada<sup>(24)</sup>. The Irish professional association, the Irish Institute of Radiography & Radiation Therapy, is recognised by the Competent Authority, the Irish Minister for Health, as the organisation responsible for validating the credentials of MRS professionals for eligibility to practice in Ireland<sup>(25)</sup>.

Of the abovementioned MRS professional bodies, the AIR is the only organisation to require additional professional development to enable the graduate practitioner to progress to professional accreditation or equivalent. Most of the aforementioned MRS professional bodies deem that graduates of appropriately approved university programmes should be

eligible to attain recognition as a qualified practitioner and member<sup>(25-30)</sup>. The likely rationale is that university programmes are not entitled to professional accreditation status unless it can be demonstrated that graduates are equipped with the knowledge and skills required to engage in entry-level practice. In the United States and Canada, graduate practitioners are required to successfully complete a certification examination to obtain recognition from the relevant professional association<sup>(24, 31)</sup>.

The UK College of Radiographers promotes the concept of preceptorship for new graduates but largely leaves the structure, duration and format to individual workplaces or employers<sup>(6, 32, 33)</sup>. The general intent of this preceptorship is to for the beginning practitioner to achieve independence and gain confidence<sup>(33)</sup>. The preceptorship is sometimes used as a mechanism or a requirement for entry-level practitioners to progress to a higher job level or grading.

### Supervised practice – Australian health professions

The non-medicine health professions in Australia have widely varying processes for practitioner accreditation and requirements for registration and licensing. Like medical imaging and radiation therapy, State-based registration and licensing authorities where they exist determine eligibility to practice for chiropractors<sup>(34)</sup>, dentists<sup>(35)</sup>, nurses<sup>(36)</sup>, occupational therapists<sup>(37)</sup>, optometrists<sup>(38)</sup>, osteopaths<sup>(39)</sup>, pharmacists<sup>(40)</sup>, physiotherapists<sup>(41)</sup>, podiatrists<sup>(42)</sup>, psychologists<sup>(43)</sup>, speech pathologists<sup>(36)</sup> and veterinarians<sup>(44)</sup>. Compulsory registration or licensing does not apply to medical physicists, dietitians, orthoptists, orthotists, prosthetists, or exercise physiologists<sup>(36, 45-48)</sup>. In March 2008, the Council of Australian Governments resolved to establish a single national system responsible for accreditation and registration of certain health professions, specifically chiropractors, dentists, medical practitioners, nurses, optometrists, osteopaths, pharmacists, physiotherapists, podiatrists and psychologists<sup>(49)</sup>.

For most health professions, membership of, or accreditation by, the peak professional association is optional, albeit that such accreditation may confer a degree of professional recognition. Accreditation or similar with the peak professional association is a requirement

for psychologists, dietitians, speech pathologists, audiologists, exercise physiologists, occupational therapists and podiatrists in order to provide particular Medicare items or for their clients to be eligible for private health insurance rebates<sup>(43, 46, 50)</sup>. To attain ordinary membership of the AIR, MRS professionals must possess relevant practitioner accreditation<sup>(51)</sup>. Unlike the AIR, some peak professional associations use eligibility for registration with the relevant state body as a requirement for eligibility for ordinary membership<sup>(35, 37, 38, 41, 44, 45, 52)</sup>, while practitioner accreditation represents a separate professional process members may choose to pursue.

Only a small number of these other Australian health professions include specified requirements for graduate practitioners to undertake postgraduate supervised practice. In order to obtain practitioner registration, pharmacists and psychologists may be required to undertake a period of internship or supervised practice<sup>(52-64)</sup>. In the case of pharmacy, the period of supervised practice is implemented and managed by the relevant state registration authority. The supervised practice programme in each state varies but, fundamentally, practitioners must demonstrate between 1748 and 2500 hours of clinical practice experience over a minimum 48-week period, in addition to postgraduate professional development that may include written assignments, practical and online assessment, written examination, practical demonstration of competencies, participation in educational seminars or project work (54-58). In order to obtain registration to practice, beginning psychologists may be required to undertake a two-year period of supervised practice where a graduate has undertaken a four-year academic programme rather than a six-year academic sequence. The structure, expectations, degree of supervision and assessment of this period of supervised practice depends upon the individualised plan for each practitioner, approved by the relevant state registration authority<sup>(53, 59-64)</sup>. Although not currently a registered profession, graduate audiologists are required to complete a clinical internship of one year in order to attain full membership of the Audiological Society of Australia<sup>(65)</sup>. Requirements of the internship include, variously, preparation of learning agreements, documentation of a graded level of supervision across a range of clinical experiences, reflective writing and maintenance of a professional portfolio (65).

# What are the strengths and weaknesses of the governance models presented in the paper?

Perceptions exist that the AIR's PDY is a minimalist approach to supporting graduate practitioners in consolidating skills and knowledge during the first year of postgraduate professional practice. When one considers the degree of variation in structure, supervision, experience and assessment, it is arguable whether the AIR's PDY programme consistently or effectively achieves the intended purpose of mediated entry for beginning medical imaging and radiation therapy practitioners. The NPDPR presents an opportunity to comprehensively review the professional development programme for practitioners in their first year of postgraduate practice. It is important that this review is informed by the professional development models for medical radiations regulatory authorities and professional associations in Australia and internationally. The models used by other non-medicine health professions in Australia will, similarly, provide important context to the NPDPR. Most critically, members of the Australian professional medical imaging and radiation therapy community should be acknowledged as key stakeholders in the review process.

Is there another model for clinical education governance other than those already identified? If so, please describe and provide an overview of its strengths and weaknesses. Please ensure it encompasses a cross disciplinary approach and is able to adapt to evolving service models and training needs.

The AIR would argue that the preceding paragraph identifies that we are in the process of review and that another model may possibly emerge.

# What are your thoughts on how the new agency could best support clinical placement management?

MRS schools exist on a shoe-string and are, on the whole, under-resourced, partly because of the profession's relative youthfulness, and partly through a shortage of MRS academics. A consequence of this is that academic remuneration does not reflect the broader market for professional experts. With the clinical placement programme run out of the MRS this means that "experts" in universities are often wasting time on clinical placement

coordination that could be better spent responding to the profession's demands for continuous improvement & quality assurance. So the AIR would argue that there is a role for the agency in removing some of the nonsense administrivia so that academics can better focus on delivery of their knowledge and academic expertise.

# Are there other opportunities to improve the governance and organisation of clinical education in Australia?

Yes! is the simple answer and the AIR welcomes the general directions of this paper to explore options as widely as possible. We are acutely conscious that the financial implications of these opportunities are not insignificant, and would encourage Governments to fully explore the real financial parameters which the professional associations have borne in the past.

Specifically a national agency has one useful role to accomplish which is to facilitate function and knowledge sharing between associations. There are bodies already in existence such as the Allied Health Professions Australia which offers their member the ability to share information and protocols in this fashion and it may be that the most effective use funding would be to contact such projects to such peak agencies.

The AIR is exploring other benchmarking opportunities, from expanding the review panels for their programs to measuring Australian activities against similar international protocols. This has happened regularly in an informal manner in the past, but as the need for rigorous standards continues to develop, then such actions need to be formalised.

#### **Further Comments**

This submission would comment on the intent in the document that; "It is envisaged that the agency will take a major role in the planning, coordinating and funding of professional entry clinical training across all disciplines, drawing upon funding from all governments. The key driver will be to ensure increased capacity and that funding models for clinical training are based on achieving quality, efficiency and effectiveness"<sup>2</sup>. The AIR has no disagreement with the intent other than to suggest that the agency could save a lot of time and energy if it were to **build** upon existing coordinated, planned and funded programmes of professional entry clinical training.

The AIR has one further observation which must be that in our profession the delivery and use of ionizing radiation **MUST** be undertaken by fully trained and competent professionals. We would be deeply concerned if, in the greater scheme of this project, that the clinical

<sup>&</sup>lt;sup>2</sup> P10. National Health Workforce Taskforce (2009): Clinical training: governance and organisation, February 2009

delivery expanded into elements of role extension. There is much that can be done in this area so long as the 'assistant' does not cross the irradiation or patient safety line in the light of our practitioners responsibilities for accurate identification, manipulation and storage of our records, these 'administrative' tasks are not nearly as trivial as some might think. There is an irreversible risk that is a fixed part of medical radiations delivery.

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Australian Institute of Radiography March 2009

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