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Submission from the Faculty of Health Sciences, The University of Sydney to the Medical Radiation Practice Board's Draft Registration Standard (November, 2011).

Thank you for allowing us to provide feedback on the Draft Registration Standards for Medical Radiation Practitioners. The following feedback was generated through consultation and discussion with members of the Discipline of Medical Radiation Sciences in the Faculty of Health Sciences at The University of Sydney and the Associate Dean Undergraduate Learning and Teaching who is responsible for a range of allied health professional preparation courses.

The Faculty of Health Sciences (FHS) has a long history of graduating Diagnostic Radiographers, Radiation Therapists and Nuclear Medicine Scientists at the undergraduate and postgraduate level. We currently run a three year undergraduate diagnostic radiography degree and two year graduate entry masters degrees in diagnostic radiography, nuclear medicine and radiation therapy. FHS is also making a substantial contribution to research which underpins evidence based practice in the Medical Radiation Sciences (MRS). Academic staff within the Discipline of MRS are committed to providing excellent educational experiences for their students and to working collaboratively with members of the profession in NSW and nationally to ensure our graduates meet the needs of the future workforce. We are currently engaged in substantial curriculum revision in our undergraduate Diagnostic Radiography degree and will work to align this new version of the degree with the requirements of the Medical Radiation Practice Board.

We hope that the feedback offered below is helpful to the deliberations of the Board. We have contained our feedback to the areas specifically requested by the Board in the draft document.

- a. *The number of clinical practice hours required to be completed by a recent graduate for the purposes of general registration from:***
- i. A three year course of study, and***
 - ii. A four year course of study***

At the outset we would like to suggest that the Board consider moving to a competency based assessment system rather than an arbitrary number of hours. We would like to suggest that it is not necessary to specify the number of clinical hours required for a graduate to be eligible for general registration, as this appears to be using hours of clinical practice as a proxy for competent practice. The link between hours of practice and competence in beginning practitioners is at best tenuous. It is worth noting that just about all other allied health professions have moved away from requiring a specific number of hours of clinical practice for registration or accreditation, for example Physiotherapy, Speech Pathology and Nursing.

We would like to see registration contingent on demonstration of competent levels of practice either at the undergraduate, postgraduate or post tertiary study levels. The development of a valid and reliable competency assessment tool would allow assessment to occur at any or all of these levels. This would introduce equity, transparency and fairness to the registration process as well as ensure a uniform standard of competence for all registered medical radiation practitioners. This system is also likely to introduce efficiencies within the system as provisional registrants would receive supervision only until they were assessed as competent.

The current system requires that graduates complete 48 weeks of supervised practice, with the assumption that they reach competence sometime during this period. This assumption is both inefficient and risky. Additionally it is worthwhile noting that this period of required supervision is much greater than other allied health professions. For example physiotherapists complete approximately 25 weeks of supervised practice during their 4 year undergraduate degree and then are registerable to practice, speech pathologists complete approximately 18 weeks of supervised clinical practice, at the end of which they must pass a validated and reliable competency assessment before being eligible for membership of their professional association. It should also be noted that physiotherapists, speech pathologists and occupational therapy graduates are registered or accredited to practice independently and in sole positions immediately following graduation. Research in Speech Pathology shows that university students reached the required competency levels after a range of 150 to 400 hours of direct client work (McAllister, Lincoln, Ferguson & McAllister, 2011). This result highlights the risk involved in assuming that all provisional registrants completing 48 weeks of supervised practice are competent. Similarly, a research study of Diagnostic Radiography students by Steffen, Neep and Nuss (submitted) found that Diagnostic Radiography directors and clinical educators believed that graduates had acquired competency in seven clinical skills areas and six professional responsibility areas between 1 month and 12 months of work in the profession. Importantly 37% of respondents reported that graduates from 3 year degrees were competent to practice independently in general radiography after only 1 month of supervised practice.

The notion that new graduates in the MRS professions need support is undisputed. New graduates in all allied health professions require mentoring in areas such as professional and ethical development and workload management. The other allied health professions recognise this by stating clearly in the professions' competency based occupational standards that full independence in some areas is not expected without professional support. We argue that this is what is also required for new graduates in the medical radiation sciences: realistic entry level standards of occupational competence and a commitment from the professions to ethically mentor and support new graduates.

Below are links to the occupational competencies of other allied health professions

Physiotherapy: <http://www.physiocouncil.com.au/files/the-australian-standards-for-physiotherapy>

Speech Pathology: <http://www.speechpathologyaustralia.org.au/resources/compassr>

Finally we would also argue that a distinction needs to be made between entry level competency, on-going professional development activities for graduates and workplace orientation activities that are required for any professional commencing employment in a workplace. All professionals are required to learn the protocols and procedures of each new workplace they are employed in. It is unclear why when these activities are undertaken for the first time they require the framework of the NPDP. We urge the Board to view the development of clinical competence as a continuum that begins in the early years of

university study and continues into the final clinical placements, then into the new graduate period and throughout careers. Viewed in this way it is possible to specify a level of competency required for safe and effective practice by beginning practitioners and which assumes that practitioners will continue to develop expertise throughout their career. This view places generic competencies such as self management of learning, ability to seek assistance when required, teamwork and clinical reasoning as paramount above and beyond technical competencies that may change as technology changes.

We recommend that as a matter of priority the Board supports financially the review of occupational competencies for medical radiation practitioners and that subsequent to this, reliable and fair assessments of competence are developed. Occupational Therapy, Physiotherapy, Speech Pathology and Nursing are all currently implementing national competency based assessment tools. The MRS profession could benefit from and contribute to the work of their colleagues in allied health who have already done both of these things. A project for the development of a national competence assessment tool in diagnostic radiography has already been commenced by the University of Sydney's Clinical Educator in Diagnostic Radiography, Andrew Kilgour, with the support of Professor Patrick Brennan and Associate Professor Tania Gerzina. It has been referenced against the national assessment tools developed by the disciplines of Speech Pathology and Physiotherapy. The project has a signed agreement of collaboration from all Australian Radiography courses and has recently been funded by the 2011 Australian Institute of Radiography Research Scholarship.

The development of such an assessment tool will allow the Board in future to determine the level of competence required for both provisional and general registration.

In summary we recommend the Board replace the 48 week requirement for NPDP with robust and valid competency based assessment. The same competency standards and competency assessment should be applied to 3, 4 or 2 year GEM courses and graduates. This is currently the case for other allied health graduates.

b. *How “fitness to practice” (clinical competence, professional conduct and compliance with regulatory standards) should be assessed during supervised practice.*

“Fitness to practice” would be an integral part of a national competency based assessment tool in medical radiation sciences.

c. *How to achieve consistency in implementation of supervised practice and consistency in clinical evaluation.*

We do not agree with the Board's view that a ‘supervisor’ should have 3 years of general registration before taking on the role of supervisor. We suggest that the role of supervisor could be assumed in less than 3 years after general registration. In order to achieve consistency in supervised practice and clinical evaluation we strongly recommend that supervisors should undertake training in supervision, education and assessment before assuming this role. We would also like to recommend that medical radiation practitioners commence being mentored by supervisors immediately after gaining general registration.

d. *The level or extent of supervision for provisional registrants – i.e. direct supervision and indirect supervision.*

Skilful supervisors assess the developing competence and confidence of students and beginning practitioners and seamlessly adjust the level of supervision they provide based on their assessment. Specifying a level or ratio of direct to indirect supervision is problematic as it may result in under supervision of students and beginning practitioners and over supervision of provisional registrants as they near meeting the criteria for general

registration. In lieu of recommended levels of supervision we suggest the Board specify training levels for supervisors, and that the training include models of supervision, assessment of competency and matching supervision to supervisee performance and requirements. Supervision should also involve the regular provision of feedback between the supervisee and supervisor. Consideration also needs to be given to issues of patient safety and hazardous activities. It may be the case that some activities should always receive 100% supervision until the registrant has demonstrated competency in the activity on multiple occasions.

Anecdotally, colleagues and graduates tell us that compliance with the current requirement of 24 weeks of **direct** supervision of practice for NPDP candidates is rarely implemented in diagnostic radiography due to the dynamic nature of the clinical workflow in departments and physical restrictions imposed by some facilities.

e. *What ratio, if any, should exist between Supervising practitioners and those practitioners being supervised?*

Ideally supervisors should be experienced, rigorous and highly competent practitioners and educators. This role should be recognised, celebrated and remunerated appropriately. Again we believe specifying a ratio here would be unhelpful. A competent supervisor should be able to self assess, reflect and evaluate regarding their role and be able to identify how many supervisees they can manage at any one time. This is likely to vary based on experience, work roles and employment conditions.

f. *At what point, and under what conditions, is it appropriate for a practitioner being supervised to undertake On Call duties.*

Under our approach practitioners could undertake On Call duties once they have been assessed as competent. It would be expected that for the new, or junior, practitioner undertaking On Call duties that they would be supported for a specific period, or a time based on performance, by a secondary, experienced practitioner. The new, or junior, practitioner would need to be competent in a large number of routine examinations and in the event of work that is outside their scope of practice or a complication arises they would be supported by a secondary, experienced practitioner.

g. *The level of training or experience required of a Supervising Practitioner.*

See feedback above regarding training requirements for supervisors.

h. *The impact of supervised practice requirements on the transition of graduates into the workforce.*

In NSW currently there is a critical shortage in NPDP places for new graduates. To the extent that we estimate 20% of new graduates from 2010 did not successfully secure an NPDP position. This represents a “waste” in terms of the future MRS workforce and is also damaging to future recruitment of MRS students. This will result in a reduction of the workforce rather than growing the size of the workforce for the long term. Change is needed quickly to end this “bottle neck” for entry to the profession and growth of the workforce.

i. *The advantages and disadvantages of implementing and maintaining a supervised practice program*

We believe that a supervised practice program should be considered as the entirety of individuals' clinical experience, commencing with university clinical education placements. However, for the purpose of this question we have identified the advantages and disadvantages of maintaining an NPDP.

Advantages

- Prevents new graduates from working as sole practitioners
- Mandates experience in specific areas of practice (scope of practice)
- Obligates workplaces to provide supervision and for supervisors to complete the NPDP liaison course.
- Enforces CPD requirements of practitioners
- Mandates supervision requirements in lieu of ethical supervision practices

Disadvantages

- Cost
- Creates a bottleneck for entry to the workforce
- Supervision requirements are reported as being difficult to implement
- No reliable or valid assessment of competency
- Implies all learners learn at the same rate – inefficiency
- Depends on time rather than ability
- No control over quality of supervision
- Restricts employment options
- Inconsistent entry point of competency development into the NPDP year
- Not consistent with other allied health professions
- Disadvantages and potentially discriminates against international students
- Potential burden on workplaces
- One size fits all approach of NPDP is an inefficient and unreliable way of attempting to ensure a basic level of competency in the MRS
- Allows for variable and individual interpretations of what “entry level” competence is

j. Alternative structures of supervised practice that address

One possible option here is to mandate that medical radiation degrees are 4 years in duration at the undergraduate and 2 years at the postgraduate level and that students must be assessed as competent for general registration at the end of their degree. This would relieve the need for a NPDP and make universities responsible for ensuring the competency levels of graduates. This of course would be done in the context of workplace based assessment and in consultation with practitioners in the profession.

i. Reducing costs on healthcare and workforce

Shifts the cost of training for supervision and administration of assessment to universities.

ii. Increase workforce access and flexibility

This approach will relieve the bottleneck the NPDP creates. New graduates are work ready with no restrictions on practice beyond those in scope of practice and codes of ethics.

iii. Provide consistent, measurable clinical outcomes

A national competency based assessment tool with updated national standards will ensure consistency in the minimum competencies of all graduates regardless of course length and university.

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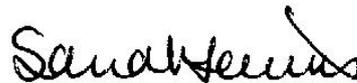
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