Review of Proposed Registration Standard – Supervised Practice

The Medical Radiations Practitioners Board of Victoria (MRPBV) has previously addressed the subject of Supervised Practice in some depth. The Board established an Education Sub-committee who's first Term of Reference included a broad review and evaluation of Supervised Practice. The Sub-committee report "Response to Term of Reference 1" April 2009 is attached as Appendix 1.

The report was developed by a working group comprising people teaching and managing courses in universities, and people managing supervised practice in work environments. All had extensive experience outside those teaching roles including working with registration boards and professional associations in Australia and overseas and undertaking higher degree research in areas related to supervised practice. Two project officers with practical and research experience in health professional education worked with the group. Useful references and a bibliography are included.

This methodology was chosen because the more traditional method of surveying practitioners could not be shown to avoid the bias of respondents. For example, senior clinicians tend to be employers and have a "work ready" bias, section leaders see supervised practice as training of future employees and tutors have management of supervised practice as a significant part of their job role.

The response made 20 recommendations (Appendix 1pages 25 and 26). A core recommendation (No.2) is the "the MRPB include 'fitness to practice' as part of their standards and that universities include 'fitness to practice' as one of their graduate outcomes".

The MRPBV adopted the report but its timing with respect to the implementation of national registration restricted implementation in Victoria.

The MRPBV commends the report as a scholarly study of supervised practice and recommends implementation of its recommendations.

The MRPBV views the implementation of a National Scheme for regulation of Medical Radiation Practitioners as providing a unique opportunity to specify a uniform standard for graduates from University courses. We recommend this uniform standard should require that graduates from Medical Radiation Practice courses have achieved a "fitness to practice" level of competence and other requirements such as professional conduct and compliance with regulatory standards. Such graduates would then have achieved the requirements for general registration. The theme behind this recommendation *is to adopt an educational approach to supervised practice and to have a standards competencies outcomes framework*.

We note this recommendation is in accordance with the approach taken by eight of the Boards operating under the National Law, the exceptions being Medicine and Pharmacy. (Appendix 2)

Under this model the Supervised practice currently undertaken by graduates from some university courses prior to registration or accreditation (depending on the jurisdiction) would be included in the course structure and this proposed standard would not apply as it is currently structured. However, Supervised Practice would necessarily form a significant part of the course of study and as such would need to be rigorously assessed. Conditions required by the Board for such practice and its assessment will need to be included in Accreditation Standards which we understand are not yet drafted.

For a change of this magnitude to be achieved a transitional period would be required and it is suggested the current requirements be maintained for those in transitional circumstances. Therefore the Supervised Practice Registration Standard would have relevance to recent graduates from some courses for the transitional period.

The Supervised Practice Registration Standard is also applicable to other categories listed in the proposed standard and this will be ongoing.

Determining what is "fitness to practice" is critical in this. The Board will need to determine what "fitness to practice" means and this will determine the criteria of ALL registrants (be they new grads, return to work etc). Systems in place to date have not ensured new registrants have ever been actually measured against established CBS standards of the profession. Once the Board establishes "Fitness to Practice" standards, the role of AMRAC will be to ensure that courses meet the fitness to practice standards.

The comments below address requirements presuming pre-registration supervised clinical practice for new graduates is in the context of a University course of study.

The Board seeks feedback on –

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

Under our recommended requirement for graduates to have attained "fitness to practice" standard this is a redundant question.

For those requiring supervised practice under transitional arrangements or as otherwise determined by the board, a simple number of clinical practice hours has long been discredited as the best practice method for specifying the requirement to produce a required outcome (eg fitness to practice) and this simplistic approach is not appropriate in any circumstances. The MRPBV strong recommendation is that an educational approach to supervised practice be adopted and it have a standards competencies outcomes framework.

Number of examinations as in completion of a Log Book is an alternative or addition to "number of hours" required previously and continues to be proposed by some. This does not overcome the limitations of a without specified goals and continuous assessment.

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

Continuous assessment by approved clinical staff (registrants) for graduates undertaking supervised practice, with the addition of academic staff from the university where the supervised practice programme is being undertaken by university students. This assessment should be against defined goals and criteria.

Clinical staff carrying out assessments should have training to assist them.

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

Implementation –

Departments accepting the responsibility of providing supervised practice need to be approved as appropriate. Conditions required may vary depending on the needs of the practitioner to undertake the supervised practice. For example the range of equipment and examinations or treatments required to attain learning outcomes required for the practitioner.

Supervised practice being undertaken by undergraduates may vary in organisation according to the particular course structure. However, overarching requirements of the Accreditation Standard (supervision, training and qualification of assessors etc.) would be required to be observed.

Clinical evaluation – the headings used above in explaining fitness to practice, *competence, professional conduct and compliance with regulatory standards,* require expansion and definition as a statement of expected outcomes for graduates aspiring to registration. The assessment of practitioners and students undertaking supervised practice should be by approved clinical staff with training in assessment and must be against criteria which meet these requirements (Appendix 1 Page 6).

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

Graduates required to undertake supervised practice will have specified needs and learning outcomes. The supervision required will depend on the clinical practice status of the provisional registrant (eg. New graduate never registered or experienced practitioner returning to practice). In every case it should be an individual decision regarding the extent of supervision dependent on the competencies achieved.

Supervised practice includes a continuum from first patient contact as a student to attaining a standard commensurate with the awarding of registration. Direct supervision is required at the beginning of the process and indirect supervision is appropriate at the end of the process. Progress from one to the other for individual students should be according to progress measured by the continuous assessment mentioned above. As individual students or Provisional Registrants achieve particular competencies progress to indirect supervision for that competency is appropriate. Direct supervision for areas of practice in which competency has not been achieved would continue to be required.

Therefore it would be inappropriate to specify a period of time, or percentage of a total as a blanket requirement.

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

Direct supervision implies a one on one relationship between supervisor and student. Indirect supervision is not as specific but again one on one is an appropriate minimum.

Attempts have been made at specifying a ratio between supervising practitioners and those being supervised so as to guarantee the practitioner being supervised is not left in a sole situation due to the unexpected unavailability of the supervisor. This is an unnecessary exercise if the standard requires that a practitioner undertaking supervised practice must never practice unsupervised. The clinical department must then evaluate the reasonable minimum number of supervising practitioners so as to ensure there will always be supervision, or what alternative arrangements may be made eg. Cancelling services until supervision is available.

Therefore the recommendation is not to specify a ratio but make clear statements about never practising unsupervised.

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

All supervised practice should be governed by the same requirements of supervision. Whether this practice is during core hours, rostered out of core hour periods or as a result of a call in is not material. The practitioner being supervised must continue to have direct or indirect supervision as required by competencies attained at the time.

g. The level of training or experience required of a supervising practitioner.

The title "Supervising Practitioner" is not defined. We recommend a distinction is drawn between a Supervising Practitioner and a Practitioner undertaking the assessment of the practitioner against the "fitness to practice" standard. In this case we recommend no requirement more than Registered Practitioner for a Supervising Practitioner but recommend the Clinical Assessor have, say, a minimum three years experience and some training in assessment.

There is general agreement within the health science literature that practitioners who assume supervisory roles require some degree of education and training. At the very least, practitioners seeking to assume roles as supervisors need to be capable of reflecting upon their practice, have an awareness of what constitutes effective clinical teaching and how to implement a facilitation and coaching framework to the undertaking. Supervisors should be cognisant of a range of instructional techniques and how to improve them effectively. Finally, these practitioners need to understand the elements of what constitutes a positive supervisor trainee interaction and why some professional interactions are detrimental to learning. Assessors need to understand the distinction between formative and summative assessment and how to tailor feedback that each phase of the assessment process requires.

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

The *clinical competence, professional conduct and compliance with regulatory standards* required above for 'fitness to practice' should be such as to provide for a seamless transition of graduates into the workforce.

Obviously, new appointees will require onsite training with the specific equipment and protocols of the appointing employer as would any other new appointee. The new graduate

should not be required to practice beyond his/her level of competence without further training, the level of competence for new graduates having been defined as a requirement for registration, not a statement of competence in all modalities and techniques.

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

Supervised practice is an obvious requirement to produce practitioners who practice at a standard which would enable registration. This supervised practice should be a requirement of University programmes for accreditation by AMRSAC.

j. Alternative structures of supervised practice that address

i. Reducing costs of healthcare and workforce

Supervised practice included in University programmes may decrease workforce costs.

ii. Increasing workforce access and flexibility

Supervised practice included in University programmes should increase access as the universities would be required to source clinical placements for students. This would defend against academically qualified graduates being unable to complete the clinical requirements for registration and thus being lost to the workforce.

Flexibility should also be improved because a well structured University clinical practice program will ensure students experience a variety of clinical environments and may include rural placements.

iii. Provide consistent, measurable clinical outcomes

Continuous assessment against defined standards for the duration of the clinical practice programme.

Appendix 1 page 8 includes –

2.4.2 Assessment of Clinical Studies

Assessment methods of a clinical studies program must be directly related to the expected standards competencies and outcomes. During clinical studies, students should be aware of the outcomes they are aiming for and be receiving constant feedback on how close they are to achieving competency. Students gradually develop knowledge, skills and judgment that build up towards competence. Once competence is gained, students should then be capable of adequate performance.

Assessing clinical skills is a complex task and in all health professions there are critical issues. Theory suggests that a range of methods need to be used and performance needs to be sampled across a range of situations and patients in order to achieve a reliable measure. Outcomes should include observable behaviours related to critical self appraisal, self directed learning, ethical conduct, punctuality,

respect for others, initiative, taking responsibility for one's decisions and actions and social and environmental responsibility as well as proficient technical skills.

A range of assessment methods are available for clinical studies – each with pros and cons

e.g. observation of practice, checklists, Objective Structured Clinical Exams (OSCEs), use of simulated patients, cases, portfolios etc. Methods chosen should relate to the standard and competency being addressed and cover both process of activity and outcomes. Recent research has shown that portfolios are particularly helpful for both students and assessors. At the same time it must be recognised that the whole concept of 'fitness to practice' cannot simply be broken down into component parts. It is a more global concept.

Criteria for 'fitness to practice' need to be agreed and understood; raters or examiners need to be trained in using the instruments; students need to be clear about what is expected. In general, sampling across cases increases reliability as do global professional judgments, provided criteria are clear and agreed. If the purpose of assessment is to grant a license to practice then sampling a wide variety of problems and settings is important.

Further, to address Fitness to Practice properly requires ongoing monitoring not just assessment at the end.

Some health professions are developing national assessment tools for clinical practice eg

physiotherapy, occupational therapy, speech pathology. The University of South Australia is coordinating a national collaborative project with involvement from all Radiation Therapy education providers with a view to developing a tool for assessing Fitness to Practice in Radiation Therapy. This approach is to be commended.

Comments regarding the proposed Supervised Practice Registration Standard

Requirements

i. graduates may only undertake supervised practice if they have completed a course approved by the Board

Should an overseas qualified applicant be assessed as requiring to complete academic units and complete supervised practice, this will preclude the two being undertaken concurrently. This is an undesirable situation as it will necessarily prolong the period for the applicant to be available to the workforce.

ii. the period of supervised practice to be undertaken to meet requirements for general registration will be in accordance with Guidelines developed by the Board.

As stated above a "period" or number of hours is an inappropriate measure. A competency based statement is required.

2. In the case of graduates of Medical Radiation Practice courses conducted by an overseas course provider, upon the Board's acceptance of that qualification, the period of supervised practice is to be determined in accordance with guidelines developed by the Board.

The statement above does not provide for any overseas course producing graduates as 'fit to practice'. This should be provided for. Secondly, Graduates from overseas courses who have clinical experience overseas are similarly not provided for and should be.

4. Supervised practice must be undertaken under the following conditions:

d. For other practitioners required to undertake a period of supervised practice the supervised practice must be undertaken at a minimum of half full time equivalent, or as determined by the Board.

The requirement of half full time equivalent may be unreasonably restrictive in some cases. For example: a practitioner has ten years full time experience prior to a four year absence. This period of absence will require a period of Supervised Practice. However, due to family or other responsibilities the practitioner may wish to return to the workforce for two days per week. The above condition does not provide the flexibility to approve this and seems unnecessarily restrictive.

5. A person identified as a Supervising Practitioner must have a minimum of 3 years current clinical experience.

The title "Supervising Practitioner" is not defined. We recommend a distinction is drawn between a Supervising Practitioner and a Practitioner undertaking the assessment of the practitioner against the "fitness to practice" standard. In this case we recommend no requirement more than Registered Practitioner for a Supervising Practitioner but recommend the Clinical Assessor have, say, a minimum three years experience and some training in assessment.

Exemptions

1. Upon application, the Board may grant a partial or complete exemption from the requirements. The Board will issue a written notice to the applicant under section 81 of the National Law.

We support the Board having a power to grant exemptions but the unlimited nature of the above provision and the lack of a need to justify an exemption being granted may see unreasonable pressure applied to the Board to grant an exemption. Some criteria against which an application will be considered should be included and the Board should make public grounds for exemptions which have been granted.

Appendix 1

EDUCATION SUB-COMMITTEE

RESPONSE TO TERM OF REFERENCE 1

TERM OF REFERENCE 1 – SUPERVISED PRACTICE	
1.1	To review the capacity of the approved university clinical studies programs and assessment methods to assure professional bodies and registering authorities that their graduates are "fit to practice".
1.2	To determine the need if any, for graduates from approved university courses in medical radiation science to undertake a period of supervised practice prior to registration as a medical radiation practitioner.
1.3	To evaluate the reliability and validity of the current approach to "supervised practice" endorsed and monitored by the professional bodies and ascertain the extent to which they can assure the MRPB that upon completion of such programs, provisional registrants are "fit to practice".
1.4	To recommend to the Board a policy regarding Supervised Practice that takes into account the current literature, stakeholder views and the capacity of the Board to implement the recommendations

Prepared by Members of MRPB Education Committee with supervision provided by the Chair of the Committee Associate Professor Jan McKay

Jonathan McConnell

Kate Wilkinson

Caroline Wright

and Project Officers

Dawn Best

Helen Edwards

APRIL 2009

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1.0 Introduction to the Report

This report was developed by a working group of the Education Committee of MRPB. The group comprised people teaching and managing courses in universities, and people managing supervised practice in work environments. All had extensive experience outside those roles including working with registration boards and professional associations in Australia and overseas and undertaking higher degree research in areas related to supervised practice. Two Project Officers with practical and research experience in health professional education worked with the group.

Information gathered included:

- documents from professional associations;
- documents from universities;
- existing data relating to supervised practice; and
- literature in the area.

Discussions were held with:

- Clinical Education Managers;
- University staff; and
- Other health professions

Existing unpublished data on intern satisfaction and perceptions of supervisors on competency were consulted.

Using the information gathered responses were made to the Term of Reference 1 (TOR 1). These responses focus on the educational process of supervised practice. The responses to TOR 1 are written in an easy to read manner rather than as an academic tract. Thus, with very few exceptions, references are not quoted directly. However, any statement made can be justified in the literature. There is an extensive bibliography that contains our direct sources and some general sources.

The theme running through the document is the recommendation to adopt an educational approach to supervised practice and to have a standards competencies outcomes framework. Cooperation between all parties involved in supervised practice is encouraged. We have highlighted recommendations coming out of the discussion and suggest the way forward for the Board. These recommendations are based on good practice.

There are areas of technical competence and provision that have not yet been addressed by the subgroup. These are normally well covered in existing documentation. It will be necessary to deal with later under guidance of subject experts.

2.0Response to Term of Reference 1.1

TOR 1.1

Review capacity of approved university clinical studies programs and assessment methods to assure professional bodies and registering authorities that their graduates are 'fit to practice'.

2.1Introduction

In considering TOR 1.1, the group determined that 'approved university clinical studies programs and assessment methods' did not include the PDY/intern year. For that reason, the PDY/intern year is not included in discussion of TOR 1.1. However, the principles espoused in the discussion apply equally to the PDY/intern year.

Further, the group determined that currently in Victoria, courses such as the RMIT Bachelor of Applied Science (Medical Radiation) do not set out to produce graduates who are 'fit to practice'. Such courses have been designed on the assumption that graduates will go on to complete an intern year before registration at the end of which they should be 'fit to practice'.

2.2 Fitness to Practice

'Fitness to Practice' is a relatively new concept. It is difficult to define and even harder to measure. The paper in Appendix 1 gives a detailed discussion of the area. For the purposes of this draft we have adopted the model of fitness to practice outlined in Appendix 1. 'Fitness to Practice' includes Clinical Competence, Professional Conduct, Awareness of Self and Others and Accountability and Regulation - both of self and from an organisational perspective.

Clinical competence (good clinical care)

Knowledge and skills, limits of competence, safe practice, critical errors, quality assurance.

Consulting, teamwork, keeping up to date, life-long learning, teaching, training and assessing.

Professional conduct (good relationships with patients and colleagues)

Knowledge and skills (ethics/professional domains), professional virtues consistent with patient-centred, ethical practice, avoid / deal with conflicts of interest.

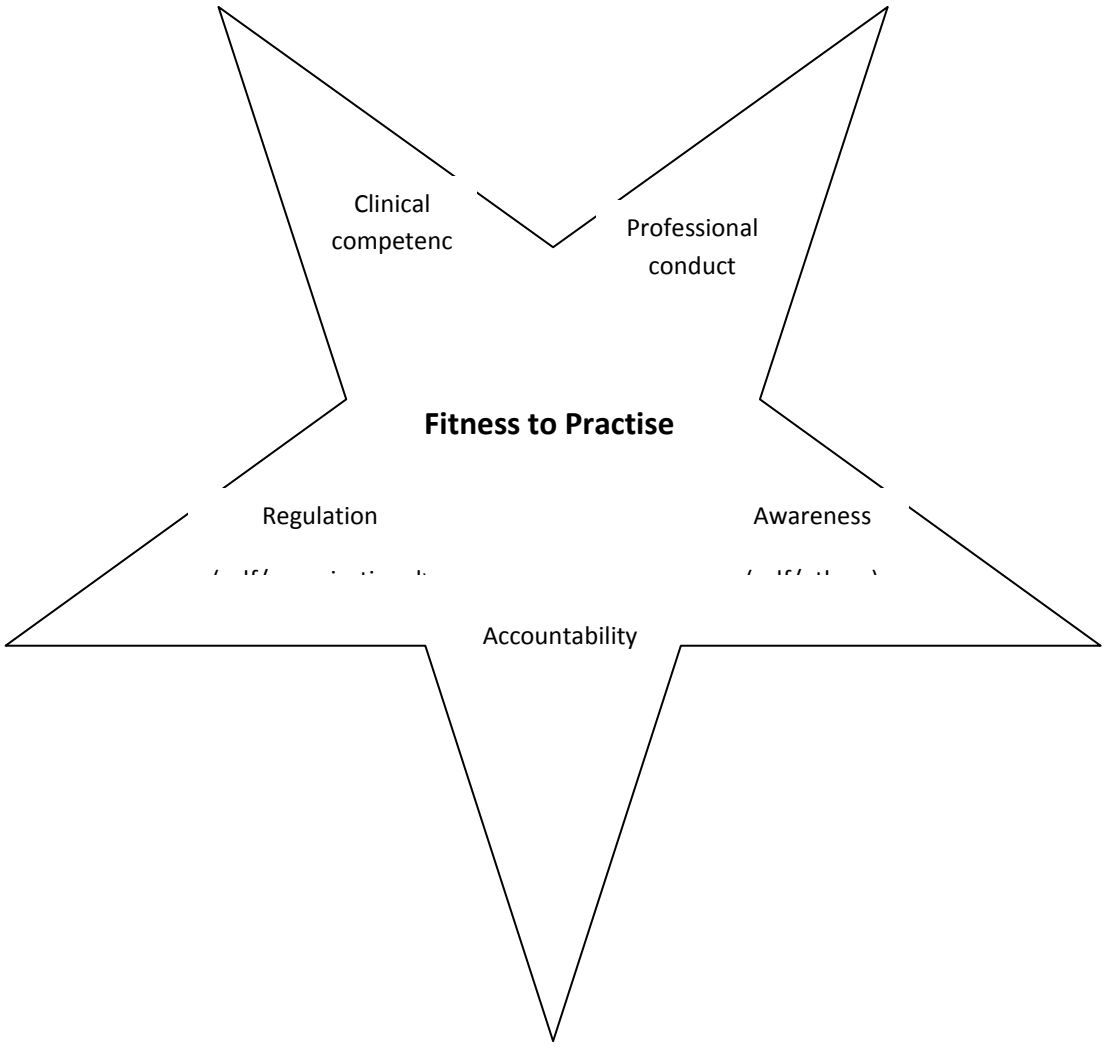
Regulation/Accountability/Awareness

Recognise illness and seek assistance for stress, fatigue, impairment, poor performance (self and others), report unsafe, incompetent, unethical conduct and adverse events, avoid exploitation.

Figure 1. Diagrammatic representation of the dimensions of Fitness to Practise in Medical Radiation Science (Adapted from Parker 2005 and GMC guidelines 2007)

How can 'fitness to practice' be measured?

The key research question to address TOR 1.1
can



be construed as 'How do we know if graduates from this course ARE 'fit to practice'? In order to answer that question adequately, to provide an evidence base, it would be necessary to undertake workplace studies and collect data from at least: *Graduates commencing practice*

Newly registered Medical Radiations practitioners after a period of practice – say 6 months and 12 months

Supervisors of the newly registered practitioners in their first 6 – 12 months

Employers of newly registered practitioners in their first 6 – 12 months

Within the timeframe for this working group it was not possible to undertake such a study.

The Australian Institute of Radiography (AIR) has begun a significant investigation into the Professional Development Year (PDY). That study might help inform the MRPB's discussion on TOR 1.1. A Project Officer has been employed for a period of two years to undertake an evidence-based evaluation of the current system and identify a series of options in relation to the need for and structure of the PDY. The first discussion paper from that project has outlined a number of difficulties and anomalies including purpose of PDY, quality of the experience for students, lack of specificity about content and outcomes, lack of training for supervisors, inadequacies of the assessment system and the volunteer nature of much of the work associated with implementing the PDY. 'Fitness to Practice' is a relatively recent term in the literature with most discussion being focussed on medical practitioners. If the Medical Radiation Professions wish to adopt the term, they may choose to further define it for their own purposes.

2.3 Standards Competencies Outcomes Approach

Recommendation 1

R1

In order to approach the aim that graduates are 'fit to practice' it is recommended that both university curricula and registering bodies adopt a standards competencies outcomes approach.

Having defined Standards for Practice can assure the profession and the public that practitioners are competent. Competency is the ability to apply skills, knowledge and attitudes to professional practice in order to achieve the required outcomes in the workplace. Competency standards define the outcomes required, provide benchmarks which allow the assessment of competency and provide a means of recognition of competency wherever or however it is gained.

The Competency Based Standards for the Accredited Radiation Therapist and Radiographer Practitioner were revised in 2005 and the Competency Standards for entry level practitioners of Nuclear Medicine Science in Australia were revised in 2006.

Ideally, the registering body defines standards and competencies and is informed by the profession to achieve this. Universities indicate how the students achieve the standards and competencies through their curricula and design assessment systems that measure the outcomes. Many health professions have very well developed systems for checking university curricula against competency standards, once standards have been defined.

e.g Physiotherapy delegates to the Physiotherapy Council
(http://www.physiocouncil.com.au/australian_standards_for_physiotherapy/)

and Pharmacy uses the Australian Pharmacy Council
(http://www.apec.asn.au/PDF/NAPSACAccredCriteria.pdf)

In UK, Radiography does it through the Health Professions Council

(http://www.hpc-uk.org/assets/documents/10000DBDStandards_of_Proficiency_Radiographers.pdf)

and The College of Radiographers (2003) A Curriculum Framework for Radiography London.

Recommendation 2

R2

It is recommended that the Medical Radiation Practitioners Board include 'fitness to practice' as part of its standards and that universities include 'fitness to practice' as one of their graduate outcomes.

If standards are adequately defined and outcomes are competency based then graduates will be 'fit to practice'.

2.4Educational Approach to Clinical Studies

2.4.1 Content of Clinical Studies

A University Clinical Studies Programs leading to 'fitness to practice' in medical radiations requires a clear educational approach to clinical studies. This will include

- clear standards and outcomes related to clinical competence and professionalism;
- preclinical preparation about expectations on learners and the workplace realities and culture;
- opportunities for learners to interact with professional role models who assist them to develop a professional identity;
- encouragement of and support for reflective processes;
- opportunities for autonomy in learning e.g. contract learning or similar mechanism for students to have input to learning outcomes and choice of learning strategies;
- development of clinical reasoning skills and decision making abilities;
- opportunities for problem solving;
- opportunities to practise technical and clinical skills in a safe environment;
- experience of a broad range of practice;
- structured supervised practice with trained supervisors who establish and maintain a supportive collegiate relationship;
- encouragement of discussion on ethical and moral issues;
- tutorials;
- ongoing feedback related to competency standards, which include professional behaviours such as self appraisal, self directed learning, ethical conduct, taking responsibility for one's decisions and actions and social and environmental responsibility;
- opportunities for self and peer assessment; and
- assessment processes that indicate how learners are developing their theoretical, personal and practical knowledge.

In addition, University academic programs need to describe and highlight fitness to practice issues in their policies and procedures and explicitly monitor the development of professionalism in their students.

2.4.2 Assessment of Clinical Studies

Assessment methods of a clinical studies program must be directly related to the expected standards competencies and outcomes. During clinical studies, students should be aware of the outcomes they are aiming for and be receiving constant feedback on how close they are to achieving competency. Students gradually develop knowledge, skills and judgment that build up towards competence. Once competence is gained, students should then be capable of adequate performance.

Assessing clinical skills is a complex task and in all health professions there are critical issues. Theory suggests that a range of methods need to be used and performance needs to be sampled across a range of situations and patients in order to achieve a reliable measure. Outcomes should include observable behaviours related to critical self appraisal, self directed learning, ethical conduct, punctuality, respect for others, initiative, taking responsibility for one's decisions and actions and social and environmental responsibility as well as proficient technical skills.

A range of assessment methods are available for clinical studies – each with pros and cons e.g. observation of practice, checklists, Objective Structured Clinical Exams (OSCEs), use of simulated patients, cases, portfolios etc. Methods chosen should relate to the standard and competency being addressed and cover both process of activity and outcomes. Recent research has shown that portfolios are particularly helpful for both students and assessors.

At the same time it must be recognised that the whole concept of 'fitness to practice' cannot simply be broken down into component parts. It is a more global concept.

Criteria for 'fitness to practice' need to be agreed and understood; raters or examiners need to be trained in using the instruments; students need to be clear about what is expected. In general, sampling across cases increases reliability as do global professional judgments, provided criteria are clear and agreed. If the purpose of assessment is to grant a license to practice then sampling a wide variety of problems and settings is important.

Further, to address Fitness to Practice properly requires ongoing monitoring not just assessment at the end.

Some health professions are developing national assessment tools for clinical practice eg physiotherapy, occupational therapy, speech pathology. The University of South Australia is coordinating a national collaborative project with involvement from all Radiation Therapy education providers with a view to developing a tool for assessing Fitness to Practice in Radiation Therapy. This approach is to be commended.

The next stage in meeting TOR 1.1 is for MRPB to consider and perhaps accept an approach to the assessment of 'fit to practice' like the one described here. Once that is adopted, then universities and clinical placements can incorporate the concept into their activities. Given the recency of the concept it is unlikely to be explicit in the documents and processes at the moment. However some of it will be covered under 'professionalism'.

Recommendations 3 and 4

R3

University programs utilise multiple assessment processes for clinical competencies

R4

Consider development of national assessment tools for fitness to practice

3.0 Response to Term of Reference 1.2

TOR 1.2

To determine the need, if any, for graduates from approved university courses in medical radiation sciences to undertake a period of supervised practice prior to registration as a medical radiation practitioner.

3.1 Introduction to Response to TOR 1.2

There are two sections to the response to TOR 1.2. First there is a response to the specific question of 'the need, if any, for graduates from approved university courses in medical radiation sciences to undertake a period of supervised practice prior to registration as a medical radiation practitioner'. Discussion at the Education Committee meeting of 8 December revealed that the term 'supervised practice' in TOR 1.2 was intended to refer only to the current system of supervised practice undertaken after graduation but before full registration – often referred to as The Professional Development Year or PDY.

Section 3.2 addresses the question of the need for supervised practice in this restricted sense.

Before this clarification, the group had provided a detailed discussion on what constitutes good supervised practice, using a much wider definition of supervised practice. That discussion is contained in sections 3.3 to 3.6

3.2 Is there a need for graduates from approved university courses to undertake a period of supervised practice?

A review of approved university MRS courses in Australia reveals a variety of models and processes before full registration.

Three year undergraduate followed by one year PDY then full registration

Four year undergraduate then full registration

Two year graduate entry then full registration

Two year graduate entry followed by PDY then full registration

Internationally the norm is for full registration after an appropriate undergraduate or graduate entry course. New Zealand, United Kingdom and many countries in Europe have adopted this approach.

Where full registration occurs after graduation and without 'supervised practice' (in its restricted sense of PDY year), graduates have met agreed standards and competencies during their university course.

Thus, there is no need for graduates from approved university courses in medical radiation sciences to undertake a period of supervised practice prior to registration as a medical radiation practitioner when the university courses meet agreed and approved competencies and standards. Such competencies and standards should be defined by the Registration Boards with advice from universities and the professions.

As mentioned in section 2.2 a discussion paper from an AIR national project on Supervised Practice in the PDY year has outlined a number of difficulties and anomalies including purpose of PDY, quality of the experience for students, lack of specificity about content and outcomes, lack of training for supervisors, inadequacies of the assessment system and the volunteer nature of much of the work associated with implementing supervised practice in the PDY.

Given this, the MRPB might consider following usual and best international practice by working towards all university MRS courses preparing graduates who are fit to practice.[1]

Recommendation 5

R5

The MRPB consider following usual and best international practice for MRS education in which approved university MRS courses prepare students to meet requirements for full registration at the point of graduation from the course.

Sections 3.3 to 3.6 contain a wider definition and discussion of supervised practice. This is useful for consideration of education for clinical practice, whenever it occurs.

3.3Defining Supervised Practice

Supervised practice is *a dynamic collaborative educative process in a workplace setting between a more experienced practitioner and a student or graduate practitioner which enables the development of knowledge of health care delivery and client issues, theoretical knowledge and technical skills as well as the individual learner's personal and professional development at all times respecting the need to ensure quality health care practice.*

This definition is drawn from a number of sources and agreed by the working group. The following sections use supervised practice in this extended sense (as opposed to referring only to activity in the PDY year).

[1] Notwithstanding the above, the Board could choose to seek assurances and to accredit supervised practice systems developed for implementation after an academic course of study leading to a MRS qualification (eg current PDY year). In such an event, the Board must ensure that the clinical outcomes and standards are met by individuals during the course of their 'supervised practice' and before registration.

Assumptions

Supervised practice in radiation science for students before they have full registration fulfills the dual responsibilities to the public and the individual learner by:

- focusing on the student or new graduate's ability to meet the accepted standards of the profession and hence may relate to undergraduate and graduate entry students as well as pre registration candidates /new graduates; and
- taking a gate keeping responsibility to the profession prior to the full registration of new practitioners to ensure quality health care delivery.

3.4Supervised Practice Before Full Registration

There is widespread agreement that supervised practice is a vital and irreplaceable component in preparing students for the reality of their professional roles and overwhelming acceptance that a period of supervised practice is required prior to professional registration.

Alternative models of how and when supervised practice occurs exist in different health professions and in the case of medical radiation sciences in different university course structures. Supervised practice may be scheduled within a University based course or post graduation and prior to full registration (eg in a PDY year).

3.5Supervised Practice - length of time required before registration

There is scant evidence base about the length of time learners require to develop professional competence. Traditionally, professional bodies stipulated a required number of hours or weeks that learners needed to complete prior to registration. This arose from an apprenticeship model of health science education. However, with the emergence of the outcomes movement which focuses on the pre-registration learner's ability to meet the recognised standards of the profession, many professions no longer stipulate the number of hours of supervised required by students or new graduates prior to registration e.g World Confederation of Physiotherapy dropped its requirement for 1000 hours of supervised practice in 1991.

Recommendations 6 7 and 8

R6

Undertake graduate surveys and workforce studies to ensure supervised practice reflects workplace needs and standards.

R7

Assess the outcomes of supervised practice using competency based assessment.

R8

Encourage collaboration between universities and medical radiation professions to ensure supervised practice is relevant to changing health care practice.

3.6Standards for Supervised Practice

Provisional standards for the practice of clinical supervision have been developed by Rafferty et al (2007). These appear in Appendix 2. The provisional standards focus on the dual responsibility of a supervision process to ensure accountability to the public and to provide the individual supervisee with professional development and support and the opportunity to reach professional competency. They provide a structure with which to review current supervised practice policies. Incorporating such standards into the requirements for supervised practice would enable optimal learning for candidates working towards full registration as well as ensuring quality health care.

The standards relate to:

- the resources of the clinical facility;
- the practice opportunities of the workplace;
- the availability of supervisors who have both professional and educational competence;
- a collaborative relationship between learners and supervisors; and
- a supportive workplace culture.

They are illustrated schematically in Figure 2 below:

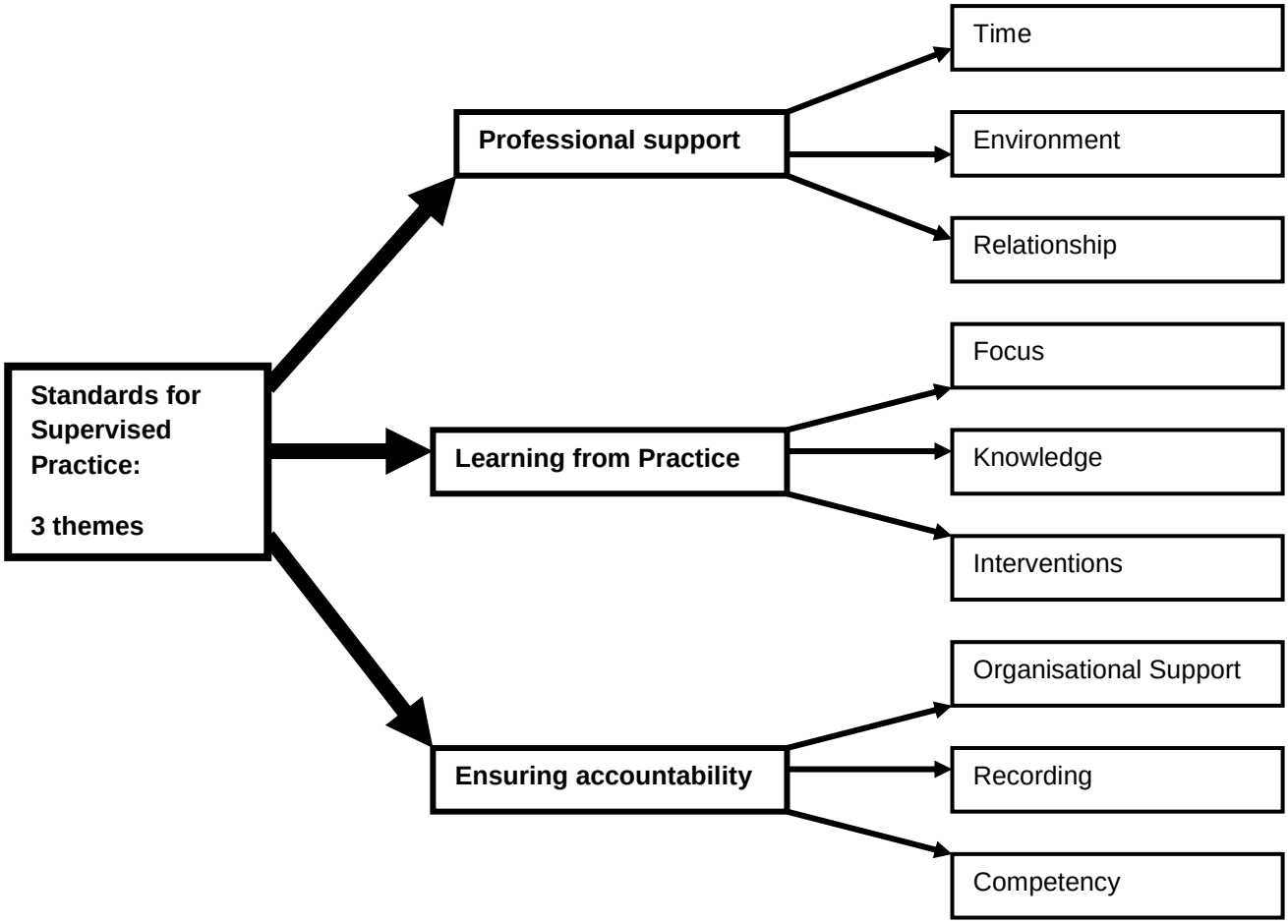


Figure 2 Schematic Representation of Rafferty's 9 provisional standards for Supervised Practice

Table 1 has been constructed by translating Rafferty's standards for clinical supervision into the context of medical radiation sciences education. The 9 Standards would require further development before being used.

TABLE 1

Standards for Supervised Practice: 9 Standards related to 3 Themes

3 THEMES	**9 STANDARDS**		
Theme 1 **Professional support**	**Standard 1** **Time**	**Standard 2** **Environment**	**Standard 3** **Relationship**
Relates to developing a professional identity	Preparation and education for task of supervised practice. Commit time to actively supervising learners including observation, demonstration and feedback	As well as operating in normal work environments, find private space for discussions and giving feedback	Establish a working relationship with learners based on trust and mutual recognition of roles and obligations. Show enthusiasm for working with learners
Theme 2 **Learning from Practice**	**Standard 4** **Focus**	**Standard 5 Knowledge**	**Standard 6** **Interventions**
Relates to how best learning occurs during supervised practice	Attention is given to the competency standards as a framework for how professionals operate ethically and responsibly in practice. This includes working with patients, working with equipment and operating as part of a health care team	Encourage learners to develop personal meaning and understanding of their professional practice. This involves integrating theoretical and empirical knowledge with practice experience through reflective processes and role modeling	Develop a secure supportive relationship with the learner. Provide a guided program of experiences and challenges suitable for the learners' level of experience. Provide constructive feedback at all times, and encourage self and peer assessment. Focus on learners' ability to reach agreed competency standards based on observation and using agreed format.

Theme 3 **Ensuring accountability**	**Standard 7** **Organisational Support**	**Standard 8** **Recording**	**Standard 9** **Competency**
Relates to achieving high practice and ethical standards.	Ensure that the location and the personnel are committed to providing quality supervised practice and have high professional and educational competence This includes having supervisors educated for the task and having the range of equipment and patients necessary to allow the learner to reach competency standards.	Clear agreement reached about minimum content, ownership of and access to records kept. This includes orientation details, departmental protocols, learning contracts, assessment and evaluation forms and patient records.	Ensure that supervisors are prepared for their task including recognition of personal and professional boundaries, capacity to demonstrate good professional practice, encouragement of reflective practice in themselves and in learners and assessment of learners against competency standards.

Recommendations 9 10 11 12 and 13

R9

Adopt a set of standards for the provision of supervised practice that includes educational and organisational criteria

R10

Adopt a learner centred approach to supervised practice

R11

Educate supervisors and learners about the standards

R12

Ensure supervisors are prepared for their broader education role

R13

Ensure students are prepared for supervised practice before they enter the clinical field

4.0Response to Term of Reference 1. 3

TOR 1.3

To evaluate the reliability and validity of the current approach to 'supervised practice' endorsed by the professional bodies and ascertain the extent to which they can assure the MRPB that upon completion of such programs, provisional registrants are 'fit to practice'

4.1. Reliability and Validity and Practicality

Reliability and Validity are statistical terms with a complex array of assumptions and measurement systems behind them. They are used in the world of psychometrics and testing and while the principles behind them can be applied to supervised practice it is arguably impractical to apply them to the social clinical situation where supervised practice occurs. However, for the purposes of this discussion we can adopt a very straightforward approach that can be useful in addressing TOR 1.3.

Reliability is about the consistency and repeatability of a measurement – the degree to which an instrument measures the same way each time it is used under the same conditions and gives the same result over and over again. There are different kinds of reliability e.g. test/retest, inter rater reliability, internal consistency.

In the case of supervised practice, reliability can include the construction and use of the assessment form, the training of supervisors to use the assessment form, the training and performance of the person who does the supervision, and the clinical opportunities that the supervised practice delivers. Ideally, to be reliable a test/person/situation should be reasonably stable over time, across different people, and in different situations.

Supervised Practice is such a variable and varied situation that the chances of getting 'the same conditions' are not high. However, careful construction of assessment forms, training of supervisors and accreditation of placements will increase reliability. All of these in turn should relate directly to the competency standards of the profession.

Consideration of the reliability of the current approach to supervised practice might cover all these elements.

Validity is about the strength of our conclusions. Are we measuring what we are supposed to measure? (As with reliability, statistically there are various different types of validity, but these are not considered here). In considering the validity of an approach to supervised practice we might ask how the supervised practice relates to the everyday activities of the profession and to the competency standards.

It is worth noting that reliability does not imply validity. That is, a reliable measure could be measuring something consistently, but not necessarily what it is supposed to be measuring. Likewise validity does not imply reliability. A valid measure or approach might be targeting the desired activity but not in any consistent way. It can be argued that in supervised practice it is more important to aim for validity than reliability.

Practicality A third area to consider in this discussion is practicality – is the test /system being proposed or used practical to apply and operate? This is an important consideration.

Any system will be a compromise between the three elements of reliability, validity and practicality.

The group considered these definitions and determined that it would be impossible in the time available to collect sufficient data to apply reliability and validity to the current approach to 'supervised practice' and 'fit to practice'.

4.2Current approach to supervised practice

4.2.1. Professional standards

Extensive collaboration between stakeholders has resulted in the development of the following professional standards:

- Competency based Standards for the Accredited Radiation Therapist and Radiographer Practitioner Nov 2005; and
- Competency standards for entry level practitioners Nuclear Medicine Science in Australia 3rd Edition 2006.

Ultimately, it is the responsibility of the Registration Board to decide standards, informed strongly by the profession and the universities and by international standards.

Recommendations 14, 15 and 16

R14

Ensure concepts of fitness to practice as described in recent literature are included in future professional standards documents.

R15

Utilise professional standards in curriculum development and course structure of University programs that seek professional registration of graduates.

R16

Utilise professional standards in any PDY/intern program.

4.2.2 Assessment of Supervised Practice

Preliminary evaluation of the extent to which current assessment processes measure professional competency standards including fitness to practice focused on review of the current PDY assessment documents for radiography and radiation therapy. It appears that:

PDY assessment forms for radiation therapy appear to relate to an earlier set of standards; and

PDY assessment forms for diagnostic radiography currently assess only technical competencies.

4.2.3 Educational Policies

Descriptions of the expectations and requirements for clinical practice as described in policy documents provide additional information on the current approach to clinical practice.

The Australian Institute of Radiography - Educational Policies January 2004 provide the following details for the professional development year:

- eligibility of the graduate practitioner;
- structure of the program;
- assessment requirements;
- requirements of an approved clinical centre;
- selection requirements for a clinical supervisor; and
- responsibilities of the supervisor and graduate practitioner.

Australian and New Zealand Society for Nuclear Medicine Internship Program 2007 requires students to be competent in patient care, interpersonal skills, administrative abilities, hospital safety, radiation protection, laboratory skills, radionuclide administration, diagnostic imaging, have exposure to allied health fields and participate in professional development

The International Society of Radiographers and Radiological Technologists

Guidelines for the education of entry-level professional practice in Medical Radiation Sciences November 2004 identifies essential clinical education standards for clinical sites e.g. minimum space, staffing and equipment requirements. It also includes a section on measuring student clinical competence. This highlights the importance of assessment in ensuring student clinical competence and the need for multiple strategies e.g. robust assessment tools and well-defined guidelines, appropriate education and training for clinical assessors, formative and summative assessment and evaluation by all stakeholders.

A section on program accreditation/validation (p22) recommends that stated outcomes acknowledge the clinical capabilities of the graduates, and suggests a number of assessment strategies to assess clinical competence e.g. the use of role play, OSCE, clinical competency tasks, sampling a variety of experiences, clinical practical assessment and clinical portfolios.

4.2.4 Perceptions of the current approach to clinical practice

A preliminary analysis of some unpublished data is included in Appendix 3. It indicates that senior supervisors and chief radiographers felt that:

- intern competence should be derived from repeated supervisor intern interaction across a wide range of general radiography examinations;

- assessment of clinical competence should not be left to universities and required direct observation of the core clinical skills and behaviours expected of an accredited practitioner.

A review of intern satisfaction surveys from 2004 and 2005 for radiation therapy and diagnostic interns indicate that:

- the majority were highly satisfied with their learning and appreciated the specific educational input of the tutorial program
- some placements sites appeared to breach guidelines and a small number of interns identified problems.

Such statements require further investigation in future data collection.

5.0Response to Term of Reference 1.4

TOR 1.4

To recommend to the Board a policy regarding Supervised Practice that takes into account the current literature, stakeholder views and the capacity of the Board to implement the recommendations.

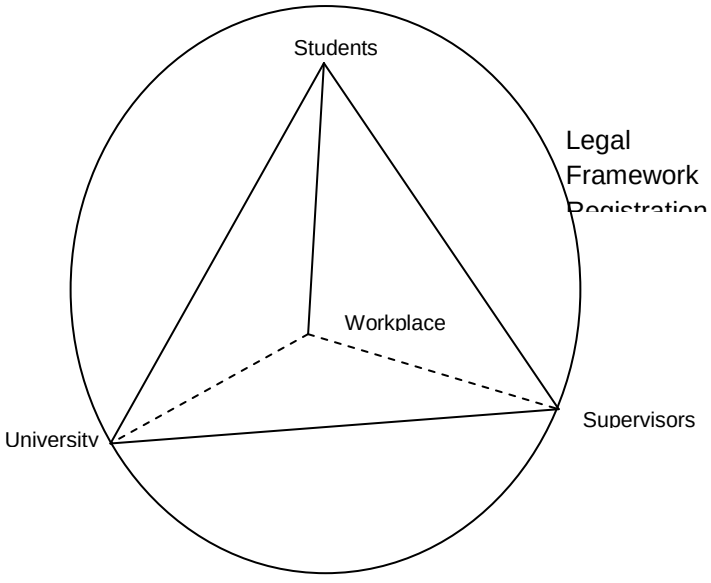
5.1Purpose of the Policy

To guide universities, the profession and clinical sites on planning, implementing and assessing supervised practice for students of medical radiation sciences.

5.2Rationale for the Policy

Education and supervision of new entrants is a hallmark responsibility of every profession. Having a system of Supervised Practice in work settings is a key part of producing competent medical radiation practitioners. To implement such supervised practice effectively requires a clear educational rationale, supervisors who are well prepared for the task, and guidance to clinical sites on the organisation and provision of supervised clinical experiences for learners. The best way to achieve this is for the universities, professional associations and clinical sites to work together cooperatively. The relationship between these groups and the legal context of the practice of medical radiations is outlined in Appendix 4 and summarised here in Figure 3.

Figure 3 Relationships between Stakeholders and Supervised Clinical Practice.



Key to terms

Students – those studying for a given award where supervised practice is required

University – tertiary education institute providing academic support and designing course of study that meets the requirements of the professional award

Work place – the organisation that, in agreement with the University, provides the clinical experience required

Supervisors – staff members, who have been appropriately instructed and have the necessary experience to act on behalf of the University designed course at the work place to deliver, monitor and assess clinical performance of students placed there for a given course of study

Legal Framework – the construct that ensures experiential learning is provided in a student, patient and supervisor safe way. It is enacted to meet the requirements of the registration board and professional body and is the legal structure that guides the operation of all parties discussed previously

5.3 Audience for Policy

The policy is aimed at people involved in the provision of supervised practice for learners working towards full registration. This includes universities, clinical sites and the profession.

5.4Scope of Policy

The policy covers supervised practice for learners working under guidance in clinical settings at undergraduate and postgraduate levels and in the PDY/intern year.

5.5 Definitions

In this policy Supervised Practice is:

> *a dynamic collaborative educative process in a workplace setting between a more experienced practitioner and a student or graduate practitioner which enables the development of knowledge of health care delivery and client issues, theoretical knowledge and technical skills as well as the individual learner's personal and professional development at all times respecting the need to ensure quality health care practice.*

For the Medical Radiation Professions, a *practitioner* is a professional with full registration with the MRPB. A *graduate practitioner* is a person undertaking a period of supervised practice subsequent to completion of a relevant course of study and who has provisional registration with the MRPB (e.g. an intern or PDY).

Students and graduate practitioners must be supervised by discipline specific professionals with full registration with the MRPB.

5.6Overarching Framework for Policy on Supervised Practice

In the Medical Radiation Professions, Supervised Practice is a crucial element in the education of students working towards registration. Responsibility for the development and implementation of supervised practice should be the joint domain of Universities, the Profession and employers. The ultimate aim of good supervised practice is quality care for patients now and in future and a profession whose members engage in ethical competent practice, life long learning and reflective practice. The outcome of supervised practice is competent practitioners who meet the standards of the profession.

5.7Standards for Supervised Practice

Developing standards for Supervised Practice is a complex process that must encompass student learning needs, skills of supervisors and accountability. Building on work by Rafferty Llewellyn-Davies and Hewitt (2007) this policy on supervised practice suggests nine standards for supervised practice related to the three themes of Professional Support, Learning from Practice and Ensuring Accountability. The suggested standards are summarised in Table 2 below. While these standards are proposed here for pre full registration supervised practice they can be applied to post registration workplace supervision (Table 2 is the similar Table 1 in the response to TOR 1.2).

TABLE 2: Standards for Supervised Practice: 9 standards related to 3 themes

3 THEMES	9 STANDARDS		
Theme 1 **Professional support**	**Standard 1** **Time**	**Standard 2** **Environment**	**Standard 3** **Relationship**
Relates to developing a professional identity	Preparation and education for task of supervised practice. Commit time to actively supervising learners including observation, demonstration and feedback	As well as operating in normal work environments, find private space for discussions and giving feedback	Establish a working relationship with learners based on trust and mutual recognition of roles and obligations. Show enthusiasm for working with learners
Theme 2 **Learning from Practice**	**Standard 4** **Focus**	**Standard 5** **Knowledge**	**Standard 6** **Interventions**
Relates to how best learning occurs during supervised practice	Attention is given to the competency standards as a framework for how professionals operate ethically and responsibly in practice. This includes working with patients, working with equipment and operating as part of a health care team	Encourage learners to develop personal meaning and understanding of their professional practice. This involves integrating theoretical and empirical knowledge with practice experience through reflective processes and role modeling	Develop a secure supportive relationship with the learner. Provide a guided program of experiences and challenges suitable for the learners' level of experience. Provide constructive feedback at all times, and encourage self and peer assessment. Focus on learners' ability to reach agreed competency standards based on observation and using agreed format.
Theme 3 **Ensuring accountability**	**Standard 7** **Organisational Support**	**Standard 8 Recording**	**Standard 9** **Competency**
Relates to achieving high practice and ethical standards.	Ensure that the location and the personnel are committed to providing quality supervised practice and have high professional and educational competence This includes having supervisors educated for	Clear agreement reached about minimum content, ownership of and access to records kept. This includes orientation details, departmental protocols, learning contracts, assessment and evaluation forms and	Ensure that supervisors are prepared for their task including recognition of personal and professional boundaries, capacity to demonstrate good professional practice, encouragement of reflective practice in

	the task and having the range of equipment and patients necessary to allow the learner to reach competency standards.	patient records.	themselves and in learners and assessment of learners against competency standards.

Current education policies of the medical radiations professions cover some of these areas in detail. Other areas, mainly educational aspects, are less obvious.

5.8Education and Preparation for Clinical Supervisors

5.8.1 Supervision of learners in clinical settings is a skilled task.

People undertaking the role of supervisor need adequate preparation and training for the task particularly in the areas of teaching in clinical settings, giving feedback, using assessment tools and evaluating their practice as supervisors.

This policy recommends that as well as being experienced and competent clinicians, **supervisors should be trained in educational aspects of supervised practice.** Suggested skill areas include creating a supportive learning environment, teaching in clinical settings, giving feedback, and assessing students.

Recommendation 17

R17

It is recommended that supervisors be skilled and experienced clinicians who are enthusiastic about teaching students. Further, it is recommended that supervisors be trained in educational aspects of supervision.

5.8.2 Teaching in clinical settings

Teaching in clinical settings is a complex task. Typically health professionals supervising students in a clinical setting have a number of facets to their role. These include managing the process, observing student activity, giving feedback to students, instructing students, assessing students and counselling students. They have to be teacher, supervisor, coach and mentor.

The task is made more complex by the environment in which it occurs - real practice settings with real patients. Students are required to learn complex manual and physical skills along with developing skills in clinical decision making and interacting with patients. It requires teachers to understand how students learn in clinical settings and provide the circumstances and processes through which this learning can occur.

As well as learning the physical and cognitive aspects of the role, students are also becoming acculturated and socialised into the profession and the workplace. Teachers provide a strong role model.

Teaching in clinical settings requires understanding of all those processes along with having the skills to guide students towards independent ethical practice. Practitioners need to learn how to facilitate student learning through the use of effective instructional and teaching strategies. They need to use processes which enable students to actively construct meaning through their interactions with staff, patients and the clinical environment and make vital connections with the concepts they have learned at university. Practitioners need to learn how to probe and challenge student's conceptual understanding and individually or grouped, engage students in debate, involving why? what? or if? type questions, which require higher order thinking.

5.8.3 Giving Feedback

Giving and receiving feedback is a crucial element of supervised practice. Learners require constant feedback related to their performance and their progress towards achieving competence. Learners need to have the skills and emotional maturity to receive and act on feedback. Supervisors need to be skilled in giving feedback. The literature suggests that in order to be effective, feedback should be specific, accurate, objective, timely, useable, desired by the receiver. It can be provided by a variety of methods.

5.8.4 Assessing Students

Assessment is a key part of supervised practice. In essence, assessment is an attempt to estimate or measure whether the student has met the competency standards for their level. To be competent as assessors, supervisors need to be familiar with assessment tools and to be able to use them to report on a learner's performance in relation to the standards. Training in use of the assessment tools improves reliability.

A number of professions have moved to a national assessment tool for clinical practice. It is recommended that the MRPB consider this option. Such a tool might be developed cooperatively by the universities and the professions.

Recommendation 18

R18

The Board consider the possibilities of a national assessment tool for clinical practice

5.8.5 Evaluating Supervised Practice

The Quality Cycle process of Plan Implement Evaluate Improve is a useful framework for ongoing review and improvement and could be adopted to look at the quality of supervised practice. Such evaluation should happen on a regular basis and gather data from key players including learners, supervisors and employers. Data should focus on whether and how supervised practice led to the attainment of competencies and how the process might be improved.

Recommendation 19

R19

The Board adopt a quality cycle approach to evaluating supervised practice. In the evaluation phase the Board collect data from learners, supervisors, employers and from the key players of universities, clinical sites and professional associations.

5.8.6 Preparing Students for Supervised Practice

It is important for universities to prepare students well before they enter clinical practice.

It is acknowledged that learning in clinical settings is crucial for health professionals. It is also acknowledged that time and facilities in clinical settings are scarce resources and that students must be able to take best advantage of them. Universities can help this process by preparing their students for supervised practice before they enter the field. This preparation can cover organisation of health care facilities, knowledge of the health care team, appropriate behaviours in clinical settings, information on how clinical learning occurs, encouraging students to develop learning contracts, and skills in reflective practice. Further, students can consider the psychological impact of working in clinical settings and have information on the support systems available to them.

5.8.7 Accreditation of locations that provide supervised practice.

During supervised practice, students are expected to gain the competencies expected of a beginning professional. To achieve this, locations where supervised practice occurs must provide suitable equipment, patients and supervisors to enable students to reach required competency. The exact nature of such requirements should be articulated by the MRPB after consultation with the professions.

5.8.8 Agreement between parties

All parties involved in the process of supervised practice need to be clear on expectations and obligations. This includes the university, the workplace and the professionals who will be doing the supervision. This is best articulated through a formal agreement between the university and the workplace.

5.9 Capacity of the Board to Implement the Recommendations

TOR 1.4 includes the phrase 'capacity of board to implement the recommendations'.

To this stage, the recommendations on policy have been developed based on sound educational practice and views of some stakeholders. The question then arises about the 'capacity of the Board to implement the recommendations. Consideration of this has a number of elements.

The MRPB has the legal obligation to advise on and monitor the policies concerning supervised practice. However given its resources and staffing, the Board clearly cannot achieve this on its own. Further, best practice from around the world and the example set by many professions in Australia would suggest that the most effective model is a conjoint effort between the Board, the professions and the Universities that offer courses.

Recommendation 20

R20

It is recommended that the Board includes the universities and professions as it develops policy and monitoring processes. In this way the outcomes are owned by and acceptable to all parties.

Monitoring can have a 'self regulating' focus. Parties involved can follow the agreed policies and report back regularly to the Board. This reporting cycle can be tied in with universities' normal quality review processes, thus minimising paperwork and double reporting. The Board can also undertake spot checking and pick up on difficulties that come to its attention.

6.0 Summary of Recommendations

Recommendation 1

In order to approach the aim that graduates are 'fit to practice' it is recommended that both university curricula and registering bodies adopt a standards competencies outcomes approach.

Recommendation 2

It is recommended that the Medical Radiation Practitioners Board include 'fitness to practice' as part of their standards and that universities include 'fitness to practice' as one of their graduate outcomes.

Recommendation 3

It is recommended that University programs utilise multiple assessment processes for clinical competencies.

Recommendation 4

Consider development of national assessment tools for fitness to practice.

Recommendation 5

The MRPB consider following usual and best international practice for MRS education in which approved university MRS courses prepare students to meet requirements for full registration at the point of graduation from the course.

Recommendation 6

Undertake graduate surveys and workforce studies to ensure supervised practice reflects workplace needs and standards.

Recommendation 7

Assess the outcomes of supervised practice using competency based assessment.

Recommendation 8

Encourage collaboration between universities, medical radiation professions and workplaces to ensure supervised practice is relevant to changing health care practice.

Recommendation 9

Adopt a set of standards for the provision of supervised practice that includes educational and organisational criteria.

Recommendation 19

Adopt a learner centred approach to supervised practice.

Recommendation 11

Educate supervisors and learners about the standards.

Recommendation 12

Ensure supervisors are prepared for their broader education role.

Recommendation 13

Ensure students are prepared for supervised practice before they enter the clinical field.

Recommendations 14

Ensure concepts of fitness to practice as described in recent literature are included in future professional standards documents.

Recommendation 15

Utilise professional standards in curriculum development and course structure of University programs that seek professional registration of graduates.

Recommendation 16

Utilise professional standards in the PDY/intern program.

Recommendation 17

It is recommended that supervisors be skilled and experienced clinicians who are enthusiastic about teaching students.

Recommendation 18

The Board consider the possibilities of a national assessment tool for clinical practice.

Recommendation 19

The MRPB adopt a quality cycle approach to evaluating supervised practice. In the evaluation phase the Board could collect data from learners, supervisors, employers and from the key players of universities, clinical sites and professional associations.

Recommendation 20

The Board include the universities and professions as it develops policy and monitoring processes. In this way the outcomes are owned by and acceptable to all parties.

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Appendix 2

Excerpts from accreditation bodies accessed through the AHPRA website

Chiropractic

Educational Standards for First Professional Award programs in Chiropractic
5.3 Student Competencies
.....The competencies must be focused on educational outcomes. Competencies must incorporate the requirements listed in the Competency-Based Standards for Entry Level Chiropractors.

Nursing and Midwifery

Australian Nursing and Midwifery Accreditation Council
As required under the National Law the Nursing and Midwifery Board of Australia (NMBA) has approved the ANMAC Standards and Criteria for the Accreditation of Nursing and Midwifery Courses leading to Registration, ...

Optometry

Optometry Council of Australia and New Zealand
OCANZ assesses undergraduate optometry courses and postgraduate courses in ocular therapeutics in Australia and New Zealand. Accreditation performs a number of important functions, including: Assuring the registration boards that graduates are effectively prepared for entry to the profession and/or for therapeutic practice

Osteopathy

The Australian and New Zealand Osteopathic Council
The Australian and New Zealand Osteopathic Council (ANZOC) is an independent organisation to assess and accredit osteopathic education programs leading to eligibility for registration as an osteopath in Australia and New Zealand, and to assess the suitability of overseas-qualified osteopaths to practise in Australia and New Zealand.

Physiotherapy

Australian Physiotherapy Council
The document ***Accreditation of Entry Level Physiotherapy Programs - a Manual for Universities*** is intended to serve as a resource for universities engaged in the planning, design, review and continuous quality improvement of entry level physiotherapy education programs

Podiatry

Australian and New Zealand Podiatry Accreditation Council
As part of discharging this responsibility the ANZPAC must satisfy itself that the entry-level qualifications in podiatry recognised for the purpose of registration provide appropriate education and training in podiatry. This is done by a process of accreditation.

Psychology

Australian Psychology Accreditation Council
Since 2003, APAC has been the national accrediting authority responsible for the assessment and accreditation of courses of study recognised as suitable training for registration as a psychologist in Australia.

Dental

Australian Dental Council
The role of the Accreditation Committee is to advise the ADC and DCNZ on accreditation matters, including criteria for the accreditation of educational programs leading to registration as a dentist, dental specialist, dental hygienist, dental therapist, oral health therapist or dental prosthetist, and to assess programs using these criteria.

Medicine

Australian Medical Council
The outcomes are consistent with the AMC's goal for medical education, to develop junior doctors who possess attributes that will ensure that they are competent to practise safely and effectively under supervision as interns in Australia or New Zealand, and that they have an appropriate foundation for lifelong learning and for further training in any branch of medicine.