Master of Radiation Therapy
Clinical Studies Guidelines for
Radiation Therapists
Updated 2016
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Introduction

Purpose of this Manual

This clinical studies guide is intended as a resource for ALL radiation therapists who work with students. Clinical centres will have electronic copies and there will be a copy on the Moodle Clinical Educators Home Page.

We know that having a student at your side can be challenging and frustrating. In the context of a dynamic workplace setting that values speed and efficiency, meeting the competing needs of your patients and students is a difficult goal to achieve. The challenge is compounded by the need for practitioners to assess the clinical skills development of students and provide meaningful feedback to them. We believe that an increased understanding about teaching and learning principles, can allow interactions between students and practitioners to reach their full potential.

Research has demonstrated that when practitioners are not prepared for their roles as teachers and assessors they tend to rely upon the methods they experienced as students. We all have ideas about how learning occurs and the kind of teaching that is required to bring about learning (Ramsden, 1992).

There is no single recipe we can follow to ensure success. Assisting students to fulfil the aims and objectives associated with degree level education is challenging. Professional education is concerned with the development of thinking practitioners who are able to draw upon a range of knowledge and skills to inform their decision making.

In the context of the Clinical Studies units, students need to go beyond a focus on the technical aspect of radiation therapy. They need to develop “clinical reasoning” skills, communication skills and problem solving strategies (Higgs & Jones, 1995). They need to know why as well as what they are doing. In the light of modern educational theories of learning the emphasis in clinical education has moved to one concerned with the facilitation of learning and the creation by practitioners of supportive and collaborative clinical learning environments.

At the same time, clinical practitioners present powerful images of their practice to students. Whether or not you realise it, you will play a key role in shaping the approach that students ultimately adopt to their practice. Thus, the aims we have for the guide include:

- facilitating the provision of a quality clinical experience for both the radiation therapist and student;
- raising awareness about planning for and learning from the experience of clinical teaching;
- promoting a process of reflective and evidence-based radiation therapy practice;
- promoting insight into cultural differences both within and between placement sites; and
facilitating uniform standards of supervision, teaching and assessment for Master of Radiation Therapy students.

References


Organisation of the Manual

The Manual is divided into four sections, with appendices at the end as section 5:

**Section 1** provides an overview of the objectives and organisation of Clinical Studies.

**Section 2** presents the methods that will be used to facilitate student learning in the clinical context and monitor the development of their professional expertise.

**Section 3** addresses clinical teaching and instruction methods.

**Section 4** considers the issues surrounding the assessment and grading of clinical performance.

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Section 1

Learning Objectives and Organisation of Clinical Studies

Contents

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1. **Clinical Studies: Course Outcomes**

Clinical Studies are extremely important units in the professional curriculum. They are designed to provide students with an opportunity to integrate academic learning with workplace theories and practice. Students should be supervised at all times by a registered practitioner: Generally speaking, throughout the course, students are expected to develop under the guidance of radiation therapist;

1. expertise in the professional and practical implementation and evaluation of wide range of radiation therapy techniques;
2. communication skills, interpersonal relationships with patients and others;
3. patient care and patient management skills;
4. skills in identification of surface and radiographic anatomy and oncological pathology;
5. problem-solving skills in relation to radiation therapy localisation, planning, treatment techniques and patient management;
6. reflective and self monitoring skills in relation to the performance of radiation therapy procedures;
7. critical analysis, evaluation skills and integration of the evidence base into practice and;
8. an understanding of the broader role of radiation therapy within a multi-disciplinary team.

During the various clinical rotations, the Department of Medical Imaging and Radiation Sciences also expects students to gain experience in:

9. departmental routines and the management of information;
10. caring for patients of varying ages, clinical conditions and physical capabilities;
11. the implementation of the principles of OH&S, legal and ethical principles, radiation safety and protection for patients and staff; and
12. the implementation of the principles of quality control with respect to all forms of treatment modalities.

**Clinical Studies Unit Objectives:**

**Year 1**

There are three Clinical Studies placements in the first year of the course (1 week in semester 1 (clinical orientation) as part of RTS4102, 8 weeks in semester 2 (RTS5110 over the summer) and 4 weeks in semester 3 as part of RTS5103. Each placement has specific learning objectives and intended learning
outcomes. These should be reviewed by the students with their supervisors at the commencement of each placement and can be supplemented by additional outcomes depending on the local environment.

In order to familiarise students with the clinical environment in which they will be undertaking their first clinical studies unit proper, the first week is an orientation period.

Clinical Orientation

Clinical orientation should occur in semester 1 of each year. Students will be required to attend for a one week block. Students will be provided with guidelines and advised about professional conduct before they commence orientation. All students will have studied topics on communication, OH&S, Radiation Safety, ethics and cultural competence, in semester 1. All students will have had immunisations, police and a working with children checks prior to commencing orientation. Students will be advised to wear smart clothing and sensible shoes, with Identification badges ad TLD’s at all times. All students will have been advised to read the Faculty policy on clinical placements and this is included in each clinical workbook as appended information. Students will have undertaken a pre-clinical test on their knowledge of the clinical fieldwork policy and professional process including MRPBA codes of conduct and policies.

It is the responsibility of the Clinical Educators in each centre to organise a roster for each student. The university will advise all students to contact their CLE prior to commencement of their first orientation day and provide their learning outcomes. All clinical staff should be reminded that first year students will have only just commenced the course and will therefore have little underpinning knowledge at this stage (they are Beginners). A range of activities for students has been prepared in the form of an Orientation Workbook (these are not formally assessed) but provide structure for students to facilitate their development during the orientation period. If staff have any concerns at this stage about student progress of fitness for the clinical environment then it is important to contact the university so that the appropriate support can be provided to students and staff.

Learning Outcomes for Clinical Orientation

1. demonstrate the use of safe working practices in general and with ionising radiation’s in particular
2. outline emergency procedures and locate, identify and demonstrate the safe and correct use of emergency equipment
3. communicate and interact effectively with patients and colleagues in a professional manner
4. demonstrate the development of observation and listening skills
5. correctly identify and receive patients, respecting confidentiality and preserving patient dignity
6. be familiar with the layout of the radiotherapy department;
7. have familiarised yourself with the hospital environment and be aware of the location of various departments and facilities and the members of the multi-disciplinary team who work there;
8. be able to translate theory into practice with regard to radiation protection by observing and recording elements of protection evident within the department;
9. be able to locate emergency equipment and understand emergency procedures;
10. have recorded basic information about some of the treatment units/simulator and undertaken elementary (observational) experience on these;

11. recognise some individual members of the department and be familiar with the staffing structure and particular roles/responsibilities;

12. appreciate the importance of the staff/patient and staff/staff interactions in achieving high standards of patient care;

13. begin to appreciate the stresses experienced by patients attending for radiotherapy.

14. investigated basic positioning and stabilisation techniques for palliative techniques and pelvic techniques.

**RTS5110 (Summer Semester/S2)**

This 8 week unit will commence in November and conclude in February (specific dates are provided in advance to clinical staff each year). There is a 2 week period of Simulated learning and portfolio study in addition to the 8 weeks of clinical placement. This will involve activities on VERT, planning simulations, 2nd life communication skills practice and other support sessions.

On successful completion of this unit, students will be able to demonstrate and communicate a **broad** and **Beginner** level understanding of generic and discipline specific outcomes.

**Generic Learning Outcomes:**

On successful completion of this unit students will be able to:

1. Apply the principles of anatomy and pathophysiology in the clinical environment;
2. Use human communication theories when dealing with patients and staff;
3. Employ clinical departmental protocols for patient identification, preparation and positioning;
4. Apply the principles of radiation safety to practice;
5. Apply the principles of legal and ethical practice;
6. Apply the principles of infection control and occupational health and safety to practice;
7. Begin to operate within a multi-disciplinary team;
8. Demonstrate the characteristics of a beginning reflective practitioner;
9. Begin to modify patient interactions in light cultural and religious differences;
10. Begin to implement administrative work practices, including the management of resources;
11. Utilise an evidence based critical and analytical approach to practice.
Radiation Therapy Specific Outcomes

On successful completion of this unit, students will be able to demonstrate and communicate a broad and Beginner level understanding of:

1. The concept of profession in the context of the provision of radiation oncology services to patients
2. The structure and function of the modern clinical radiation therapy department
3. Anatomical reference sites and methods used for skin marking/tattooing a patient prior to treatment
4. Anatomical, patho-physiological and radiation oncology theory with respect to metastatic disease and malignancies of the integumentary system, female reproductive and male reproductive systems, lower digestive, urinary and renal systems and lower respiratory system.

In addition, students will be able to demonstrate where possible appropriate professional assistance, at minimum as a Beginner in the localisation/planning/treatment/verification of patients including:

5. Landmarking, palpation and skin marking/tattooing in localisation/planning/treatment
6. Selection and safe use of accessory equipment
7. Delivery of appropriate patient care and professional interactions with patients, their families or carers
8. Simple localisation techniques
9. Simple plan optimisation and evaluation techniques
10. Simple palliative treatment techniques
11. Simple superficial treatment techniques (photons or electrons)
12. Simple radical mega-voltage techniques
13. Simple verification techniques
RTS5103 (Semester 3)

This 4 week placement will commence in March and conclude in April (specific dates are provided in advance to clinical staff each year).

On successful completion of this unit, students will be able to demonstrate and communicate a **broad** and **Intermediate Beginner** level understanding of generic and discipline specific outcomes.

**Generic Learning Outcomes:**

On successful completion of this unit students will be able to:

1. Apply the principles of anatomy and pathophysiology in the clinical environment;
2. Use human communication theories when dealing with patients and staff;
3. Employ clinical departmental protocols for patient identification, preparation and positioning;
4. Apply the principles of radiation safety to practice
5. Apply the principles of legal and ethical practice
6. Apply the principles of infection control and occupational health and safety to practice;
7. Operate within a multi-disciplinary team
8. Demonstrate the characteristics of an Intermediate beginner reflective practitioner;
9. Modify patient interactions in light cultural and religious differences;
10. Implement administrative work practices, including the management of resources
11. Utilise an evidence based critical and analytical approach to practice
12. Begin to integrate knowledge from previous clinical experience;

**Radiation Therapy Specific Outcomes**

On successful completion of this unit, students will be able to demonstrate and communicate a **broad** and **Intermediate Beginner** level understanding of:

1. The concept of profession and the radiation therapy profession in the context of the provision of radiation oncology to patients
2. The structure and function of the modern clinical radiotherapy department
3. Anatomical reference sites and methods used for skin marking/tattooing a patient prior to treatment
4. Anatomical, patho-physiological and radiation oncology theory with respect to metastatic disease and malignancies of the integumentary system, female reproductive and male reproductive
systems, lower digestive, urinary and renal systems and lower respiratory system, cardiovascular and haematological systems, lymphatic and locomotor systems.

In addition, students will be able to demonstrate where possible appropriate professional assistance, at minimum as a Beginner/Intermediate Beginner in the localisation/planning/treatment/verification of patients including:

5. Landmarking, palpation and skin marking/tattooing in localisation/planning/treatment

6. Selection and safe use of accessory equipment

7. Delivery of appropriate patient care and professional interactions with patients, their families or carers

8. Simple and more complex localisation techniques

9. Simple and more complex plan optimisation and evaluation techniques

10. Simple and more complex palliative treatment techniques

11. Simple and more complex superficial treatment techniques (photons or electrons)

12. Simple and more complex radical mega-voltage techniques

13. Simple and more complex verification techniques

Professional Clinical Placement (PCP): RTS5120 (Semester 4-6)

This unit builds upon the foundations established in year 1 with respect to the localisation, planning and treatment and patient care approaches. However, in contrast to conforming to the Beginner stage of practical skill development, the student will assume the role of Intermediate Beginner, then progress to Advanced Beginner and finally Competent Student/practitioner in relation to the procedures covered in the rotation. Students who are not allocated a PCP placement in Victoria will not be able to continue into Year 2 of the program.

There are three Clinical Studies units in the PCP of the course, which are of a longer duration than in first year, each lasts between 13 and 16 weeks. For ease the year long PCP objectives have been split into three for each individual semester 4, 5 and 6. Students are required to pass the hurdle requirements for each semester in order to progress through the year and complete the course.

On successful completion of this unit, students will be able to demonstrate and communicate a detailed and Intermediate Beginner level understanding at the end of semester 4, an Advanced Beginner level understanding at the end of semester 5 and the understanding warranted of a Competent Practitioner at the end of semester 6 for generic and discipline specific outcomes.
Generic Learning Outcomes:

On successful completion of this unit students will be able to:

1. Apply the principles of anatomy and pathophysiology in the clinical environment;
2. Use human communication theories when dealing with patients and staff;
3. Employ clinical departmental protocols for patient identification, preparation and positioning;
4. Apply the principles of radiation safety to practice
5. Apply the principles of legal and ethical practice
6. Apply the principles of infection control and occupational health and safety to practice;
7. Operate within a multi-disciplinary team
8. Demonstrate the characteristics of a reflective practitioner;
9. Modify patient interactions in light cultural and religious differences;
10. Implement administrative work practices, including the management of resources
11. Utilise an evidence based critical and analytical approach to practice
12. Integrate knowledge from previous clinical experience;

These should be demonstrated to the appropriate levels for each semester of study in year 2.

Radiation Therapy Specific Outcomes

On successful completion of this unit, students will be able to demonstrate and communicate a detailed and Intermediate Beginner level understanding at the end of semester 4, an Advanced Beginner level understanding at the end of semester 5 and the understanding warranted of a Competent Practitioner at the end of semester 6 for:

1. The concept of profession and the radiation therapy profession in the context of the provision of radiation oncology to patients
2. The structure and function of the modern clinical radiotherapy department
3. Anatomical reference sites and methods used for skin marking/tattooing a patient prior to treatment
Anatomical, patho-physiological and radiation oncology theory with respect to metastatic disease and malignancies of the integumentary system, female reproductive and male reproductive systems, lower digestive, urinary and renal systems and lower respiratory system, cardiovascular and haematological systems, lymphatic and locomotor systems, central nervous system, upper digestive system, upper respiratory system and organs of special sense.

In addition, students will be able to demonstrate where possible appropriate professional assistance, at minimum as a Beginner/Intermediate Beginner in S 4, Advanced Beginner in semester 5 and Competent practitioner in semester 6 in the localisation/planning/treatment/verification of patients including:

6. Landmarking, palpation and skin marking/tattooing in localisation/planning/treatment
7. Selection and safe use of accessory equipment for complex techniques
8. Delivery of appropriate patient care and professional interactions with patients, their families or carers
9. Simple and more complex localisation techniques
10. Simple and more complex plan optimisation and evaluation techniques
11. Simple and more complex palliative treatment techniques
12. Simple and more complex superficial treatment techniques (photons or electrons)
13. Simple and more complex radical mega-voltage techniques
14. Simple and more complex verification techniques

At the conclusion of the PCP, all students will submit a Portfolio to the University demonstrating their continued professional and academic development throughout the course.

2. Clinical Convenor

The Clinical Convenor is Dr Caroline Wright, Senior Lecturer in Radiation Therapy, Department of Medical Imaging and Radiation Sciences. Caroline is responsible for convening the course and all clinical units.

Phone: (03) 99052741
Email: Caroline.Wright@monash.edu
3. Clinical Studies Model

Clinical rotations and preparation for Clinical Studies

Student numbers are managed by negotiation each year to ensure that they are appropriate for the service and clinical organisations. Each year the Course Convenor will contact the Chief Radiation Therapist/Clinical Educator of the various centres affiliated with the program to determine placements for the following year. The final clinical roster for the first year of the course undertaken in Victoria, will be developed by the Unit Convenor following consultation with students. Interstate departments will organise their own rosters for student placements in negotiation with the university. Where possible all organisations should facilitate some rotation around centres within their organisation (or negotiate placements in other organisations) to allow students to gain a breadth of clinical experience.

In Victoria, placements for the second year of the course will be determined through a combination of employer and student preferences (selection will be undertaken in the form of interviews arranged through PMCV.) Interstate departments may have alternate arrangements for selection into year 2 of the course.

Entry into year 2 of the course is dependant upon students successfully completing all academic and clinical assessments for year 1 and being evaluated as ‘Fit to Practise’ by their clinical centre. It also depends on students being successful in gaining a PCP placement.

If there are any reasons (behavioural, health related or other) why a student should not proceed with clinical placement then please document these and inform the university as soon as they arise.

Each clinical rotation is preceded by an on campus clinical briefing session conducted by the Unit Convenor. The conclusion of the rotation is followed by a formal debriefing session.

The Course Convenor will regularly distribute semester outlines to Clinical Liaison Educators who are then expected to distribute these to clinical staff. All students are supported by a member of the university team throughout the course. Regular video, telephone and email contact is maintained to keep a check on each student’s progress.

Clinical Centre Information

Each year, clinical centres are requested to send current information packages for uploading onto Moodle for students to access. In this manner they are able to familiarise themselves with the names of key staff and the equipment used within the department. Information regarding the nominated Clinical Liaison Educator (CLE) for each clinical centre.

4. Management and support strategies for Clinical Studies

This publication represents one of the strategies that will be used by the Department of Medical Imaging and Radiation Sciences to ensure that “Clinical Studies” is appropriately managed, by the University and clinical centres alike. Additional strategies include the Radiation Therapy Clinical Engagement Committee, whose role it is to ensure that the objectives established for all academic units can be achieved. This Committee is made up of Academic staff from the Department of Medical Imaging and Radiation Sciences.
Sciences as well as Clinical Educators and senior Radiation Therapists. There is also a Course Management Committee with representatives from the university, clinical and student groups. These committees report to the Department of Medical Imaging and Radiation sciences Courses Advisory Committee which reports to the School of Biomedical Sciences Education Committee and Faculty Education Committee.

At regular intervals through the clinical placement period, a representative from the course team will visit or contact each student via video-conference. The purpose of such contact will be to monitor student progress in respect to the development of clinical and professional skills. At the same time the contact is designed to allow for discussions regarding the academic units and any other aspect of the Clinical Studies program including assessment.

Students may contact the Unit Convenor at any time during the clinical block. If during a clinical block, difficulties are encountered that cannot be resolved by the Clinical Liaison Educator or Chief Radiation Therapist, the Clinical Convenor MUST be contacted. If the problem is personal in nature students may be directed to the Monash University Student Counselling Services. [http://www.monash.edu.au/counselling/](http://www.monash.edu.au/counselling/) If the situation is perceived as likely to affect academic progress, advice will be given regarding the procedures that are in place for the application of Special Consideration.

The university has an official policy regarding student placements: "Guidelines for Health and Safety During Student and Staff Placements". In addition to these Guidelines, in 2009 the Faculty issued a document: “Clinical/Fieldwork Placement Guidelines and Procedures”

All the statements made within this publication regarding for example dress code for students must be read in conjunction with the Faculty policy which is reproduced in the Appendices. The Faculty policy has been reproduced in all of the clinical workbooks.

A second policy that is applicable to clinical studies relates to bullying and occupational violence. Students will be provided with a copy of this policy so they are clear as to the processes they should follow if they are bullied or harassed during their placement. A copy of the policy: “Procedures for managing incidents of bullying and occupational violence in the workplace” is provided in the Appendices.

5. Attendance obligations for students

It is expected that students will attend their designated clinical centre from Monday to Friday or as nine-day fortnight if the centre agrees. In Semesters 1-3 (Year 1 of program) students will attend the clinical centre for a one week orientation period, an eight week block and four week block, whilst in Semesters 4-6 (Year 2 of program) students will attend the clinical centres for 13-16 week blocks.
It is also assumed that students will start each day at 9.00 am and leave at 5.00 pm. Most clinical centres work a nine day fortnight and as such students are permitted to do so, if this is agreeable by the clinical centre. It is also expected that students will consult with the Clinical Liaison Educator and seek permission if they need to be absent from the centre. Students will have morning and afternoon tea breaks and a lunch break.

Student should be allowed the equivalent of 30 minutes each day for self-managed study within the department (to gather information for case reports and assignments). The students should negotiate the most appropriate time to take this with a member of the clinical team. Students will need to be flexible in this regard, for example, procedures should be completed before leaving for a break or study.

**Absence and sick leave**

Students have been instructed to inform the Clinical Liaison Educator and Clinical Convenor when they are unable to attend the centre for whatever reason. Any time (which exceeds one to two days in any semester) away from the clinical department will need to be made up during the non-teaching period between whichever semesters the clinical time was not completed. The Clinical Liaison Educator **MUST** inform the University of prolonged absences, inconsistent attendance or other related concerns.

**6. Dress code for students**

Students are obliged to wear either a Monash University shirt or comply with the dress code established by the practice. In addition to the dress code, the following rules are provided for all students:

- **Male students:** Navy blue or black trousers.
- **Female students:** Navy blue or black trousers or skirt.
- **Shoes** should be comfortable and of a sensible heel size appropriate to standing for some hours. For safety reasons the heels and toes of the shoes should be closed in.
- **Hair** should be clean and tidy, tied back if very long.
- **It is expected** students will remove facial studs for the duration of the clinical rotation.

In addition students have been told the following:

- **The chewing of gum is not permitted** in the clinical setting.
- **Hand washing is very important** for you and the patient. Washing of your hands before and after each patient or procedure will help to prevent the transmission of infection to patients, other radiation therapists, and other work colleagues and also to yourself.
- **Keep fingernails** short and clean and without nail varnish. If you have a cut on your hands or forearms, this should be covered. Staff with open or oozing wounds or sores should avoid direct contact in handling patients and/or related equipment.
• Patients, with a diagnosis of cancer may have a lowered resistance making them vulnerable to infection. If you are unwell, stay at home to help prevent cross infection to both staff and patients. Make sure you get adequate sleep, eat well and engage in some exercise. Sometimes you may be faced with personal difficulties and/or worries. Your mental well-being is as important as your physical health. Stress, grief and undue worry should be considered as illnesses and treated as such. It is difficult to perform properly and responsibly when you are faced with anxiety. Please notify the clinical supervisor at your clinical placement if you will be absent or late to work.

Students must ALWAYS wear their MONASH ID BADGE and TLD BADGE.
7. Hygiene guidelines relating to the patient

Students have been given the following information pertaining to hygiene related to the patient and also the equipment used within the department.

- Follow the appropriate hygiene guidelines for each centre you attend and ensure clean linen is used for each patient. Soiled linen should be placed in the appropriate linen basket in each work area (e.g. linear accelerator) and sent to the laundry at day’s end.

- Patients may be issued with a personal gown for the duration of their treatment. Although these will be cleaned after the patient finishes their treatment course, care should be taken to issue a fresh one if required within the treatment period.

- A patient may have individual stabilisation devices, bolus (e.g. wax or superflab) and/or bite blocks made for their treatment. Always ensure such devices are cleaned after each use and stored appropriately.

- Make sure that dressings, syringes and needles (used to tattoo a patient) are disposed of immediately and correctly. Disposable items are designed for one use only and then should be discarded. Needles should never be recapped, and these should be discarded with care in the ‘sharps bin’ closest to the where the procedure is occurring.

- Each hospital will have a procedure for discarding disposable items. Follow the procedure for the institution to which you are rostered. Correct disposal of contaminated items will maintain a safe and sanitary workplace.

- Gloves should be worn when in contact with body fluids, blood and broken or open skin or wounds. The radiation oncology nurses will be available to assist with dressings and advice. Each work unit in the department will have gloves available for use. Gowns may be worn if required when open wounds, body fluids or blood are present.

8. Hygiene guidelines for departmental equipment

- Always ensure the work area is clean and tidy after each patient’s treatment or procedure. Each patient likes to feel that they are your most important patient for the day, so provide a clean and tidy welcome for them. Each work area has washing facilities available.

- For occupational, health and safety reasons equipment used should be stored away in cupboards or shelves. This includes machine accessories as well as standard and individual patient immobilisation devices, of all which should be maintained for cleanliness.

- The floor of any treatment area is considered contaminated so if you drop anything please clean before next use or dispose of it correctly. This includes pens, rulers, linen and any item that may come in contact with you or the patient.
9. Conduct guidelines for students

Patient consent and identification

It is professionally unacceptable for students not to be clearly identified. Patients should be given a chance to say whether or not they wish to be treated by a student. While it is the responsibility of the Clinical Liaison Educator and other supervisors to deal with this issue, students must be encouraged to assume a professional approach to gaining consent. Always ensure the patient knows who the students are. The following phrase might be used when a student first meets the patient: “Good morning (or afternoon), I am Mary Hughes a Radiation Therapy student at Monash University and I will be treating you today with the radiation therapists”.

Students now need to be cognisant of the policies and guidelines promulgated by The Medical Radiation Practice Board of Australia (MRPBA). [http://www.medicalradiationpracticeboard.gov.au/](http://www.medicalradiationpracticeboard.gov.au/)

Students are taught the crucial importance of correctly identifying patients and checking patient identities prior to any procedure. We have provided students with the method for positive patient identification advocated by the Australian Commission for Safety and Quality in Health Care. These are appended in this guide and are appended in all clinical workbooks.

Professional ethics


The purpose of this section is to remind you of the key elements of ethical radiation therapy practice as they apply to the relationship and responsibility radiation therapists have to their patients.

Confidentiality: Radiation therapists must hold in confidence any information obtained through professional attendance on a patient.

Cruelty: Radiation therapists must not engage in, or condone, behaviour that causes unnecessary mental or physical distress to a patient or their relatives.

Respecting patients’ rights: Radiation therapists have a responsibility to promote and protect the dignity, privacy, autonomy and safety of all patients with whom they come into contact.

Advocacy: Radiation therapists must, by virtue of their professional abilities, empower and enable patients such that they make their own decisions about the nature and progress of their examinations or treatment.

In addition students have been told that in no circumstances can they identify a patient, clinical centre or staff member in any part of their Clinical Workbook or assignments.
10. Incident reporting, recording and investigation policy

It is the policy of the Occupational Health, Safety and Environment (OHSE) of Monash University, that any injury or illness to students arising from their studies including – laboratory work, clinical work, performance situations or field work must be reported to the university. Irrespective of the classification of the incident, form OHS 1/97 – Monash University, OHSE Hazard and Incident Report Form must be completed.

In the case of such an incident please contact the Course Convenor or Head of the Department of Medical Imaging and Radiation Sciences IMMEDIATELY.

Please see appendices for examples of information that students are provided with in relation to professional issues relating to registration and notifications.

11. Clinical Liaison Educator (CLE)

Each clinical centre associated with the course is expected to nominate a radiation therapist with two-three years or more post qualification experience to act as a Clinical Liaison Educator during the time students are rostered to the centre for Clinical Studies. However, for day to day supervision of students in the workplace any qualified member of staff who is considered suitable, can supervise and assess students. If the supervising practitioner is more recently qualified then it may be appropriate for them to have a more experienced mentor to support them in their supervision of the student. There are several duties the designated CLE is expected to perform.

1. Orientate students to the department and clinical setting.

2. Devise appropriate rosters to enable students to fulfil the requirements of the clinical learning contracts and the tasks associated with the Professional Skills units.

3. Ensure students are appropriately supervised according to their level of knowledge and clinical experience and within legal and professional parameters.

4. Appoint appropriate radiation therapists to conduct the various graded competency based Clinical Skills assessments.

5. Provide students with written feedback on their “Self Assessment” appraisals regarding their progress in meeting the expectations of an accredited radiation therapist.

6. Facilitate access by students to other members of the radiation oncology team e.g. nursing staff, oncologists and physicists.

7. Act as an information source for Monash in respect to the dissemination of clinical support materials to all departmental radiation therapists.
It is not expected that the designated CLE will be able to spend their entire time with students. It is important however, that students are appropriately supervised when they plan, treat and communicate with patients.

Clinical assessments should be undertaken by the team which the student is working with (not just the decision of one member of staff). These are longitudinal in nature (not a ‘snap-shot’) as this allows students to demonstrate their consistency of performance across a range of techniques and clients over a period of time.

All students are required to have an Interim and final assessment for each area of practice in which they are placed.

12. Supervisory requirements


The registered radiation therapist is responsible for ensuring that the student has conducted the procedure appropriately and has exercised a duty of care to the patient. Students in year 1 and year 2 should be supervised at all times.

13. Faculty Immunisation policy

(Also refer to “Clinical/Fieldwork Placement Guidelines and Procedures”)

For the protection of other students, patients and themselves, students are expected to comply with certain precautionary procedures. This policy is in accordance with the National Health and Medical Research Council advice that educational institutions training students in health sciences should ensure that such students are protected as far as possible by vaccination against risks of infection.

The Faculty’s own policy requires that all students accept responsibility for having a satisfactory immunisation status at the commencement of the course. Immunisations include diphtheria, tetanus, polio, measles, mumps, rubella and hepatitis B.

Students are provided with detailed written information about the effect that HIV, Hepatitis B or other infections may have on the ability of healthcare workers to practice their profession. Prior to commencement of the program, students are asked to make arrangements with medical practitioners, to check their immunisation status and to receive personal advice regarding infectious diseases and their personal health.

14. Needle stick policy and hotline

(Also refer to “Clinical/Fieldwork Placement Guidelines and Procedures”)

1. As part of planning and simulation, patients may be tattooed to assist with verification of landmarking. The student will at all times be under the supervision of the qualified registered radiation therapist.

Students may engage in this activity if the clinical centre permits student engagement with it and provided:

(a) they have had instruction in universal/standard precautions, particularly in the disposal of sharps and the handling of blood waste; and

(b) they are under the direct supervision of an accredited radiation therapist.

Should a needle stick injury occur the following steps must be followed:

(i) Immediately report to the workplace Occupational Health and Safety Officer.

(ii) Completion of appropriate report form.

(iii) A photocopy of the Occupational Health & Safety Report form to be given, by the student, to the Head of the Department of Medical Imaging and Radiation Sciences.

(iv) Monash Incident form to be completed by student and Head of Department.

National Needle Stick Hotline: 1800 804 823.

15. Quality assurance processes and Clinical Studies

The Department of Medical Imaging and Radiation Sciences has instituted a number of processes whereby students can provide the Clinical Convenor with feedback about Clinical Studies and the course in general.

At the conclusion of their clinical placement each semester, students will be asked to complete a questionnaire in relation to their experience of Clinical Studies.

All clinical centres will be invited to provide the Department of Medical Imaging and Radiation Sciences with feedback about their experiences of teaching and supervising students. The results of all of the feedback will be taken to the Clinical Studies Unit Management Committee for consideration.

Dealing with unexpected situations/difficulties

If an unexpected situation arises involving a Monash student that cannot be dealt with using normal processes, the clinical supervisor must contact the year level convenor/s MUST contact the Year level convenor/s. If the problem is personal in nature the student may be directed to the Monash University
Student Counselling Services. If the situation is perceived as likely to affect the academic progress of the student, advice will be given regarding the procedures that are in place for the application of Special Consideration, upon return to the University.

16. Insurance cover for students

Briefing note

This note is to confirm the University’s position on the status of Faculty of Medicine, Nursing & Health Sciences students on placements. Students are placed at agencies under direct supervision for the purpose of learning. They are not paid employees of the agency and are not considered as workers. Their status will remain that of students. We are able to confirm that students on clinical placements are covered by either the Victorian Government or the University’s insurance policies. More specific information is detailed below. The State of Victoria through Victorian Managed Insurance Authority (VMIA) provides cover for Faculty students on placements involving public patients at any Victorian Public Hospital under the Hospital’s Public Liability/Medical Malpractice Insurance Policy.

With regard to other placements, we have recently sought clarification from the University’s insurers and can now confirm that Faculty students, whilst engaged in practical placement, community placement, enterprise experience or other work experiences programmes or training activities, subject to working under professional supervision, are included in the definition of ‘the insured’ in the University Medical Malpractice Policy. In addition Faculty students are also included in the definition of ‘the insured’ in the University’s General (Public) and Products Liability policy as follows: -

“Any student engaged in practical training both on and off campus including but not limited to practical placement, medical and legal clinical placement, community placement, enterprise experience, work experience or off campus field assignments”.

Monash University has a Personal Accident Insurance Policy which provides capital, medical and loss of income benefits for all currently enrolled Monash University students. The policy covers students actually engaged in practical or community placement activities.

*This statement has been prepared in consultation with the University Solicitor and the University Manager, Risk and Insurance*

John Gibson
Manager Resources, Faculty of Medicine, Nursing and Health Sciences
1 March 2005

17. Privacy Policy

Monash University’s Privacy Policy complies with recently enacted Victorian Government legislation – the *Health Records Act 2001 (Vic)* and the *Information Privacy Act 2000 (Vic)*. Each clinical department may have a particular departmental Privacy Policy, so follow up at each clinical placement. For further information please see:

[www.privacy.monash.edu.au](http://www.privacy.monash.edu.au) or contact Student and Staff Services Division, phone 9905 6044.
18. Internet use and phone use

Students must seek permission from the senior staff of the Clinical Centre regarding Internet, and mobile phone use and the use of the centres phone for personal calls. At all times, students use must conform to the clinical centre’s protocol and guidelines. Internet use must only be related to Clinical Studies or the Master’s program and under no circumstances must students use the Internet for extended periods of time.

Use of Social Media

Students have been advised to ensure that if they use social media to chat to fellow students that they do not disclose any identities of patients peers and staff and a respectful of privacy and communication etiquette.

19. Plagiarism and collusion

Plagiarism and collusion are methods of cheating for the purposes of Monash Statute 4.2 – Discipline.

**Plagiarism:** Plagiarism means to take and use another person’s ideas or work and pass these off as one’s own by failing to give appropriate acknowledgment. This includes material from any source – published and unpublished works, staff or students, the Internet.

**Collusion:** Collusion is the presentation of work, which is the result in whole or in part of unauthorised collaboration with another person or persons.

For further information see:


Where there are reasonable grounds for believing that plagiarism has occurred, this will be reported to the Chief Examiner for the course, which in this case is the Head of Department, who will disallow the work concerned by prohibiting assessment or refer the matter to the faculty manager.

For each piece of work submitted by the student, they will be asked to complete an assignment cover sheet and sign to confirm they have not plagiarised. All students should submit their work to Turnitin (a plagiarism detection system).
20. Police checks and other legal requirements

(Also refer to “Clinical/Fieldwork Placement Guidelines and Procedures”)

MRT students **are required** to have current Working with Children and Police Checks Regarding their suitability to undertake clinical and community placements (or the equivalent for their State). All enrolled and prospective students are advised that they will be required to obtain both checks prior to undertaking their course. As the Working with Children checks cover a five year period, most students will only need to obtain a free check at the commencement of year 1, whilst students must apply and pay for a Police check annually. Note that some community partnered programs require a police check be renewed every six months. For more information on faculty policies regarding these checks, please go to: [www.med.monash.edu.au/policies](http://www.med.monash.edu.au/policies). Students interstate must check their State policy as to requirements

**Police Checkks**

**Purpose**
To outline the procedure for the checking and recording of National Police Certificates (NPC). The Course Administrator (CA) for each degree that administers clinical placements is responsible for recording and monitoring police checks within the [policy and guidelines](#) provided by the Department of Health (DoH) and the Victorian Police.

**Responsibility**
Whilst the Faculty will notify each student of the requirement to have a current NPC, it is the students’ responsibility to ensure a current NPC is applied for before going on clinical placement. Refer to DHS guidelines for definition of ‘student’ and ‘current’. It is the faculty’s duty of care to ensure that students are aware of their responsibility and that they have a current police check as required for clinical placements. The faculty is responsible for informing hospitals and clinics accordingly.

**Actions**

**Police Check Application Forms**
Students can access information regarding applying for a police check, along with signed [police check application form](#) via the Faculty [forms](#) page or MUSO. Instructions on how to complete the form and lodge it are included on the Faculty’s [Police Check website](#).
Submission of National Police Certificate to Course Administrators

- Students are required to present their National Police Certificate to the CA for verification and noting.
- At the same time the student is also required to complete a verification/permission slip.
- The verification/permission slip must be checked by the CA to ensure:
  - All student/contact details are supplied
  - It is signed and dated by the student
  - The NPC must be checked by the CA to verify that it is current.
- The verification/permission slip must be signed and dated by the CA. It is then photocopied and the photocopy is given to the student as a receipt and as proof that they have handed in their NPC for sighting
- The original verification/permission slip is to be filed so that it can be recorded that the student has completed the requirement
- The NPC is retained by the student for the duration of the current course year so that they can produce it on demand during their clinical placement
- The CA records that the NPC has been sighted on a spreadsheet
- Each CA is responsible for their students presenting the NPC for checking. Some follow up by the CA may be required
- Forward the names of any students whose NPC discloses a court outcome, outstanding change or matter under investigation to the student’s placement organisation. A determination on the suitability of the student’s placement will be made by the organisation.
- The verification form and the spreadsheet are strictly confidential and should be filed securely in the CA office
- Store copies for the current year of study only.
- Previous years copies should be destroyed each December.

Working with Children Checks

Purpose
To outline the process required for the checking and recording of Working with Children Checks (WWC). The Course Administrator (CA) for each degree that administers clinical placements is responsible for recording and monitoring WWC Checks within the policy and guidelines provided by the Department of Justice. These may differ from state to state.

Responsibility
Whilst the Faculty will notify each student of the requirement to have a current WWC Check, it is the students’ responsibility to ensure a current WWC Check is obtained before going on clinical placements. (Refer to the Department of Justice guidelines regarding classification of ‘student as a volunteer’ and the duration of the check.) It is the faculty’s duty of care to ensure that students are informed of the need to have a current WWC Check as required by the Department of Justice before clinical placements can be undertaken. Students are expected to carry the ID card with them at all times whilst on clinical placements and show the WWC Check ID card to staff of the Institution on demand.

Working with Children Check Application Forms
Students can access information regarding applying for a WWC Check along with instructions on how to complete and lodge form via the Faculty website or MUSO. Application forms are collected from Australian
Post Office branches by students and on completion must be returned there for submission and processing.

**Sighting of Working with Children Check by Course Administrators**

- Students are required to present their Working with Children ID Card to the CA for verification and noting.
- At the same time the student is also required to submit a verification/permission slip.
- The verification/permission slip must be checked by the CA to ensure:
  - All student/contact details are supplied
  - It is signed and dated by the student
  - The ID Card must be checked by the CA to verify that it is current.
- The verification/permission slip must be signed and dated by the CA. It is then photocopied and the photocopy is given to the student as a receipt and as proof that they have shown their WWC Check ID card as proof that they have been cleared to undertaking clinical placements involving children
- The original verification/permission slip is to be filed so that it can be recorded that the student has presented their WWC Check ID card, and is now eligible to attend clinical placements
- The CA records that the WWC Check ID card has been sighted on the WWC spreadsheet
- Each CA is responsible for their students presenting the passed WWC Check ID card. Some follow up by the CA may be required. The “Failure to Submit Card” letter template may be used for this purpose.

**Students receiving a Negative Notice (Failure of the WWC Check)**

Where a student has failed their WWC Check

- They shall receive a Negative notice from the Department of Justice
- CAs may send the student a letter advising them to contact the School/Department to discuss their options.
- Forward their name to the student’s placement organisation and withdraw the student from the placement.
- Organise for the student to see their course convenor regarding their course progression and enrolment options.
- If it is concluded that discontinuation from the course is appropriate, ask the student to complete the required paperwork. Amend the student’s enrolment as necessary. The Course Convenor should complete a student file note covering the discussion undertaken and course of action determined.

**Elapsed WWC Checks**

- Should students continue their studies for a period longer than five years, it is the student’s responsibility to ensure a new WWC Check is obtained.
- CA’s shall communicate this requirement to their students using the Elapsed WWC Check letter.

**Record Keeping**

- The WWC Check is retained by the student for the duration of the current course year so that they can produce it on demand during their clinical placement
- The verification form and the spreadsheet are strictly confidential and should be filed securely in the CA office
- Copies of the verification form and spreadsheet must be retained for the duration of the student’s course or five years (whichever period elapses first).
Section 2

Methods for the Facilitation of Student Learning in the Clinical Context and Monitoring the Development of Clinical Competency

Contents
1. A model of learning for Clinical Studies
2. Learning contracts
3. A model of professional development for Clinical Studies: The novice to expert model of clinical skill development
4. Key descriptors

1. A model of learning for Clinical Studies

Besides caring for patients, professionals in health care settings are expected to “pass on” their knowledge and skills to students and make judgments concerning their clinical competency. Simple as this sounds student feedback paints a worrying picture. Students continue to be expected to pick things up with little or no feedback from practitioners (Kowal et al, 1997; Baird, 1998; Rosie & Murray, 1998). At the same time students are expected to perform tasks at competency levels that have taken practitioners years to achieve. This situation is due in part to the nature of practical knowledge and the way in which it is developed through experience and reflection during and following action. It is also due to a lack of understanding on the part of practitioners about the kinds of teaching and assessment strategies that are required for students to effectively learn from the experience of the clinical world.

In this section we aim to explore the “experiential” model of learning as a way of informing the methods we have devised to facilitate student learning during Clinical Studies.

A particularly useful example of this model of learning is the one associated with Kolb (1984). In this model experiential learning is conceptualised as occurring in cycles involving an actual clinical experience,
a process of active observation and reflective thinking, the action of doing the task and then withdrawing from action and thinking again. This process is illustrated below:

![Learning Cycle Diagram]

In the clinical setting a learning cycle might involve a student observing while you position a patient for a chest simulation. During this period of observation your student might ask you questions about your actions at the same time as she/he is thinking about what the lecture notes had to say about the procedure and how the information relates to the procedure being observed. This active observational phase might then be followed with a period of “active experimentation”. On the basis of observation, questioning and thinking about the theory of the examination, your student may ask you if he/she can position the next patient while you watch and provide him/her with feedback about her/his actions.

The advantage of this model is that learning is seen as an active process that also has outcomes such as those specified in the learning objectives for Clinical Studies. Throughout Clinical Studies students will be learning how to plan, implement and evaluate a range of general radiation therapy procedures. At the same time as the objectives indicate, students need to begin to develop a range of other skills. These include interpersonal, organisational and problem solving skills. Most importantly, students need to develop sound “clinical reasoning” skills.

The primary methods that will be used to assist students to learn from the experience of clinical practice are learning contracts and Professional Development Portfolios.

2. Learning contracts

Throughout all the Clinical Studies units, students will be using learning contracts as a means of ensuring that everyone is clear about the objectives of each clinical rotation and the nature of assessment. A learning contract can be thought of as a learning plan. Contract learning is designed to allow for the development of a more personal agreement between you and your student regarding the day-to-day management of the clinical experience, the area of knowledge and skills to be covered and the timing of assessment and feedback.
The supervising radiation therapist or Clinical Liaison Educator and the student will need to discuss the contracts and sign them. The signature of the student indicates their intention to do their best to complete the contract. The signature of the Clinical Liaison Educator signifies a commitment to provide the student with the opportunity to meet the expectations of the contract.

In the first year of the course many of the learning contracts for the development of clinical competence will be prescriptive but there will be opportunities especially in relation to the Professional Development Contracts for students to develop a more personal learning contract. All contracts will be contained within the student’s Clinical Workbooks.

To record progress in meeting the first kind of learning contract space is provided within the Workbook and amongst other requirements students are required to write up weekly reflective radiation therapy case reports.

**Radiation therapy case reports**

Throughout the Clinical Workbooks, case reports are to be written by the student about their involvement in and learning outcomes in various radiation therapy procedures on patients who present with various clinical indications.

The expected range of procedures recorded will vary from semester to semester in accordance with the students increasing clinical experience. Although a minimum number of cases need to be recorded students are to be encouraged to record more cases for the purposes of maximising their learning in the clinical workplace. If a patient requires planning or treatment to more than one body area, only one area can be selected for inclusion in the report.

The purpose of these case reports is for the student to demonstrate a critical analysis of and reflection upon their work and the varying techniques used by radiation therapists. In this it is anticipated that a “transfer of learning” between similar cases will be demonstrated. Students are encouraged to record brief notes regarding each of the Technical (T) and Professional (P) aspects of the procedure as well as placing a large emphasis on the reflective component of Personal Notes (PN). It is expected that these notes will be approached and written in an academic and professional manner.

**Supervising staff are not expected to mark the reports but can by all means provide the student with feedback.**

Students are also expected to complete a clinical progress tracking form each time they are on placement which demonstrates which procedures they have been involved in and their level of involvement (see appendices for example).
References

Baird, M.A. (1998), *The Preparation for Practice as a Diagnostic Radiographer: The Relationship Between the Practicum and the Profession*, unpublished PhD, LaTrobe University, Bundoora.


Clinical Studies professional portfolio

To record progress in meeting the second kind of learning contract the one recording the student’s professional development, students will complete a variety of projects and case studies. Some projects particularly those in first semester first year will be written up in the Clinical Workbook however other projects will be placed within a professional portfolio. Throughout the two years of the program, students will have many opportunities to add to their professional portfolio. As well as providing storage for Professional Development Contracts, reports, case studies and investigative projects, students are expected to take responsibility for their “individual” professional development and are encouraged to collect interesting journal articles, diagrams etc. The portfolio will be reviewed by academic staff at the conclusion of each semester.

Useful articles about the idea of a professional portfolio include:


The use of learning contracts presents a number of challenges to the radiation therapist. Learning contracts are intended to facilitate the development of independent and well-motivated students. Learning contracts also assume the student is an adult learner. When combined with the nature of each student, the variability in patients, clinical situations and day-to-day practice, clinical teachers need to adopt a variety of teaching and supervisory styles.

We will have more to say about these challenges in Section 3. To complete this section we now need to consider the novice to expert model of clinical skill development, which underpins the assessment approach adopted in the Master of Radiation Therapy.
3. A model of professional development for Clinical Studies: The novice to expert model of clinical skill development

The Clinical Studies program is grounded in the view that professional expertise is the consequence of a lengthy process of professional apprenticeship. Success in the classroom does not necessarily translate into success in the practice setting. Students can only learn how to practice their chosen profession in the actual clinical context.

However, the clinical context is challenging both for students and the university structuring the experience of Clinical Studies. As experienced practitioners know only too well in the context of busy hospital departments, practitioners do not consciously and deliberately apply pure and applied research to medically and socially defined situations. In reality, clinical practice is characterised by a tacit and largely spontaneous “knowing-in-action”. You simply know what works and what to do in the situation that presents itself to you. Dreyfus & Dreyfus (1985) consider human decision making to represent “a mysterious blending of careful analysis, intuition and the wisdom and judgement distilled from experience” (p.8). They also believe that expert decision making is a consequence of a five stage progression which begins with the student assuming the role of “novice practitioner”.

From a position of relying upon “context-free” rules to make sense of the experience of being in the world of the practitioner, the novice begins to use experience to learn how to modify the rules in keeping with the demands of the practice situation. Experience in the field enables the novice to become an Advanced Beginner whose knowledge and skills gradually become situational and context-dependent. With increasing experience, Dreyfus & Dreyfus (1985) argue that the Advanced Beginner stage gives way to competence that is characterised by a hierarchical approach to the decision making process. A stage has been reached whereby a practitioner has attained the ability to “both simplify and improve his or her performance” (p.24). Experience has taught the practitioner how to recognise the salient features of a situation and choose an appropriate course of action. A Competent Practitioner has acquired the ability to “sense” what is important to their practice and plan and modify a course of action accordingly.

Competent Practitioners also have a different relationship with their context than do novice practitioners and Advanced Beginners. Although competence is still characterised by an ability to be somewhat detached from the decision making process, at the same time, the Competent Practitioner is becoming deeply involved and affected by the outcome.

The Master of Radiation Therapy takes seriously the implications of this model of professional development. Thus all the clinical assessments are structured around the idea that students will move through the various stages from Beginner to Intermediate Beginner and Advanced Beginner practitioner and finally attain the level of Competent Practitioner by the end of the course. It is important to note however that competency does not equate with expertise. According to Dreyfus & Dreyfus (1985) a practitioner needs to become proficient before they exhibit the characteristics of the expert practitioner who is one with their practice. The expert is someone who simultaneously “sees” challenges, problems and solutions posited by the practice situation. In fact Dreyfus & Dreyfus (1985) suggest that “when things are proceeding normally, experts don’t solve problems and don’t make decisions; they do what normally works” (p.31).
By the end of Year 1, the expectation is that the student will be demonstrating the characteristics of a Beginner/Intermediate Beginner in relation to general radiation therapy procedures.

By the end of Year 2 it is expected students will be demonstrating the characteristics associated with a Competent Practitioner in relation to general radiation therapy procedures.

The original characteristic attributes of students as they move along the continuum from Beginner to Competent practitioner have been adapted for use within Radiation Therapy. Based upon characteristics developed for radiography, the characteristics for Beginner, Intermediate Beginner, Advanced Beginner and Competent Radiation Therapist are explained in the section on clinical assessment. You will need to refer to these descriptors when you provide feedback to students.
Clinical Teaching and Clinical Instruction Guidelines

Contents
1. The idea of the adult learner
2. Teaching as facilitation and coaching
3. Characteristics of effective clinical teaching
4. Designing an ideal adult learning clinical experience
5. Instructional strategies
6. Criteria for effective instruction
7. Ways of improving instructional skills
8. How to be an effective clinical radiation therapy teacher
9. More than teaching

1. The idea of the adult learner

The learning and assessment tools contained within the Clinical Workbooks that students will use throughout the clinical program are grounded in the assumption that the students coming to your centres are capable of self direction and self assessment. In other words we have created learning tools and assessment approaches that assume students are adult learners and beginning practitioners. Before we examine the characteristics of effective clinical instruction, teaching and supervision we need to think about the characteristics of the adult learner.

Following on from the work of Malcolm Knowles in the 1980s it is argued in contrast to children, adults as learners need to:

- feel that what they learn is relevant;
- be given the opportunity to agree with the goals of the learning experience;
- be provided with a learning environment that fosters self esteem, allows for freedom of expression and acceptance of difference;
• be actively involved in the learning process;
• be given responsibility for determining the pace of the experience; and
• see progress towards the established goals.

What does this mean for our approach to teaching and supervising the adult learner who is assuming the role of a beginning practitioner? It means that teaching in its broadest sense must give way to facilitating student learning in a supportive environment. Today clinical teaching is more properly seen as the art of facilitation and coaching. Remember how you learned a practical skill? Think how hard it was to get the hang of what you were being shown. Learning a practice is tough work and requires the patient supervision of an interested and caring practitioner. The next section will examine the idea of teaching as facilitation and coaching.

2. Teaching as facilitation and coaching

The clinical practice setting, as a forum for teaching, can be quite complex. In their interactions with students it would be true to say that practitioners assume many roles along a continuum from instructor to assessor. Since the seminal work of Donald Schon we understand more clearly the difficulties involved in “teaching” a practice. The more expert the practitioner the more challenging this becomes. Why? Quite simply when a particular level of expertise is reached the relationship the practitioner has with their practice cannot be separated out into chunks of know how for assimilation by the Beginner. So how should we teach a practice?

A Beginner needs to be coached to see the practice world through your eyes. The teacher must become the facilitator of student learning. This term suggests an individual who prepares the way, “opens doors” and unobtrusively assists – when – asked or required; providing gentle motivation through competent ‘presence’. This approach requires considerable skill, experience and self control, but is ideal for allowing and assisting young adult learners to achieve a ‘wholeness’ in their grasp of their professional knowledge and activities.

A purely ‘facilitator’ teaching style may not be appropriate for all students. For example, where a quiet or shy student is unlikely to step forward to ask for assistance and would thus be inadequately motivated by this ‘background presence’. Similarly, some writers and in particular Donald Schon, have subsumed many of the attributes from the continuum into one all encompassing individual under the title of a ‘coach’. This term conjures us the idea that the aim of the clinical teacher is to develop the individual students’ potential abilities or latent qualities that relate to performance.

Alternatively, some ‘coaches’ may interpret their role in terms of acting as an older, knowledgeable mentor. Such a person would have the ability and tough-minded dedication to motivate all of his or her students, by a controlled application of his or her skills, ranging from practical example to sheer force of will, to achieve the level of ‘fitness’, knowledge, deductive reasoning and skill-in-application that they require to succeed in their chosen new profession.
Depending on the student or the moment, there may not be an easily chosen ‘right-way’. However we are of the view that the style of teaching called *quantitative teaching*, in which the teacher simply gives out information or tells students what to do fosters *surface learning*. This may lead to competent recall of facts, but with little real practical understanding of the way the new information ‘fits’ within the student’s global conceptual map for their profession.

Instead, students should regularly be given the opportunity to struggle with the new material as they internalise it, and relate and reconcile what they are learning, with what they know. Before they will accord value to specific informative material and concepts, adult learners need to know why they are incorporating it, where it will contribute to their professional understanding and how they will be able to use it.

In order to foster deeper conceptual learning of the many interlinked issues in the uncertain clinical world of our professional practice, students need to be given plenty of support to grapple with the information within the context for which it was designed. Teaching for this preferred qualitative learning “… requires processes which enable the student to actively construct meaning, largely through interaction with their tutors, their peers, the informative material and the learning environment”.

### 3. Characteristics of effective clinical teaching

Rather than categorise teaching as either good or bad it is more helpful to think about clinical teaching in terms of its effectiveness in facilitating learning.

**Examples of positive interaction**

- Radiation therapist integrates question and answer techniques into teaching.
- Combination of one-to-one, small or select group and larger group discussions.
- Interactions occur in a variety of contexts – in the treatment room, with or without a patient, or elsewhere.
- Students empowered and encouraged to initiate interactions.
- Students conceptual understanding (as well as rote knowledge) regularly probed, challenged and enhanced.
- Probing questions, to draw out level of understanding.
- Individually or grouped, students are pulled into spirited debate, involving why? what? or if? type questions, which require higher order thinking.
- Students who believe they have mastered a given subject are challenged to think even further into the subject or related issues.
Recap and review sessions, to develop or recognise, foster and acknowledge global understanding.

Examples of negative interaction

- Excessive emphasis on factual recall.
- Excessive tutor-talk stifles students ability to test understanding through discussion.
- Limited probing and/or interaction.
- Tutor exercises insufficient active listening skills.
- Too much information and detail in one session.
- Too many one-to-one discussions.
- Not enough group discussion, some individuals singled out (positively or negatively) while others may be neglected.
- Physical separation for one-to-one discussions stifling the possibility of group involvement. Although, at times, such a course is necessary or at least prudent to avoid embarrassment.

4. Designing an ideal adult learning clinical experience

The experiential model of learning and the novice to expert model of clinical skill development were described in the previous section. Keeping in mind these models and the characteristics of the adult learner and the appropriate teaching approach, the following teaching/instructional design is suggested for the beginning practitioner:

**Stage 1: Prior briefing** during which the task and its difficulties are discussed and the clinical supervisor assesses what the Beginner knows about the particular examination.

**Stage 2: Concrete clinical experience** in which:

- the supervisor/expert practitioner will model the appropriate activity; and
- the supervisor/expert allows the Beginner to emulate the approach.

**Stage 3: Application phase** Beginners are provided with a similar activity and the opportunity to apply the skills developed in the first case.

**Stage 4: Debriefing phase** Beginners explore with the supervisor their strengths and weaknesses. This phase provides the parties with the opportunity to develop a clinical action plan to facilitate the further clinical skill development of the Beginner as he or she moves along the continuum from Beginner to expert practitioner.
The creation of an “ideal” adult learning experience is one element in the teaching and learning equation. The next section explores Instructional Strategies that are appropriate for teaching the beginning practitioner a particular clinical skill.

5. Instructional strategies

The instructional technique we will consider in this section is the 5-step “talking out loud” approach suggested by Professor Brian Jolly, Professor of Medical Education at Monash University.

Step 1: Real time instructor demonstration with no commentary. Students simply watch. This step provides an orientation to the task as performed by the instructor. Student will see what will happen (process). Student gets the idea of the teaching objective, what it looks like in real time. The process shows importance of the skill and relates importance to clinical practice.

Step 2: Instructor demonstrates with commentary. Student identifies the skill in pieces of the overall process.

Step 3: Student talk through – and instructor demonstrates from students talking through task. Don’t cue the student, await their instruction.

Step 4: Student practice (with feedback). Include feedback to help improve student performance.

Professor Jolly demonstrated this approach during the Clinical Teaching and Assessment Workshop held in June 2003 for Radiation Therapists. What follows is the feedback obtained from participating radiation therapists during the various “break-out group sessions” held during the day. Participants at the workshop experienced another colleague teaching them new skills based upon the “talking out loud” technique, and the comments have been listed for perusal and discussion.

There was agreement amongst all participants that in order to successfully train or teach a student, each individual step must be followed and there should always be post-teaching discussion and reflection.

Orientation

- See final objective and logical process ⇒ visualise.
- Outcome of the demonstration gives outcome/goal, explaining the endpoint of exercise is important.
- Asked at this stage for prior knowledge, do not assume knowledge and terminology/jargon commonly used in daily practice/setting.
- Important to have complete orientation that is relevant and in context.
- Without a true aim the demonstration may be confusing and/or disconcerting.
Orientation gives purpose to demonstration that is achievable and this leads to successful outcome.

**Demonstration with and without commentary**

- Breakdown the skill into manageable steps – identifies the skills and key points involved. Outline potential ‘pitfalls’ or ‘stumbling points’ as this may assist the student to remember steps in demonstration.

- Spatial orientation and positioning is important for demonstration, beware of ‘mirror image’.

- Commentary should be clear and concise and confident.

- Maintain eye contact, use simple language.

- Give thorough demonstration-if a step is missed then the process cannot be completed ⇒ continuity is important.

- A more complex task requires a more descriptive explanation-tangible products are easier to learn (i.e. planning skills).

- Explanations become more descriptive to cater for various levels of understanding.

- Teacher should have patience and self control – be prepared and organised.

- A checklist can assist with the demonstration- prepare the demonstration before hand written instructions may then be referred to for future reference.

- A finished example if appropriate will assist in the outcome/endpoint and retaining knowledge/lesson.

- Teacher need not be an expert, but should know the skill well.

- Clarification at ‘talk through stage’ helped student.

- Hone in on finer points.

- Teacher will be more willing to teach if participant displays enthusiasm.

- Prior knowledge assists with retraining a skill.

- Methodical in explanation.

- Importance of structure.
With a complex task include a:

- checklist;
- instructions;
- break up task; and simplified diagrams.
- thorough demonstration.

**Skills of demonstrator**

- Fine details from experience.
- Sincerity and enthusiasm.
- Eye contact and simple language.
- Trainer should know her skill.
- Important to view demonstration in the same perspective as trainers, otherwise you see a ‘mirror effect’.
- Watch out for ‘noise’ distraction, the environment for demonstration is important.
- Value of ‘analogy’ in demonstration.
- Have a good example on hand.
- Measurable and precise.
- Recognition of problems early on is easier to troubleshoot because you can ‘see the skill’.

**Student talk through**

- Student learns through errors.
- Don’t pre-empt or prompt the student.
- A keenness to learn will enable faster absorption of task.
- It is harder to talk through the demo, than with ‘hands on’.
- Some students may have a ‘natural ability’ or flair for the task and learn a particular task faster.
- Clarify task.
- Reinforced steps.
• Feeling of nervousness/intimidated – to an ‘air’ of confidence.

• Practice reinforces skill.

• Listen to verbal instructions for reinforcement of demonstration.

• Student verbalised skill as they went along- allow time for questions.

• Watching others demonstrate:
  – perspective (viewing task);
  – learning style; and
  – verbalisation in different ways.

• Student/learner needs to recognise difficulties in their own learning style.

**Student demonstration**

• Feedback is important.

• Feedback reassures the student and offers then the opportunity to improve.

• Reinforcement and repetition helps grasp the skill- it may require more than one practice.

• Continual reinforcement enhances long term skill retention.

• Value of reassurance from teacher.

• Often requires more than one practice, ‘try and try again’.

• Assistance for alternatives.

• If the student falters on a step, cues may be given to get them over the ‘hurdle’ and help them complete the demonstration.

• Some tasks require intensive and ‘one on one’ teaching for some tasks e.g. non-standard treatments.

• Each student in the group should have the opportunity to participate in the demonstration to reinforce the learning process.

• The student gains satisfaction at the successful completion of the skill.

• Difficulties with breaking down task because of nature of task.

• With a useful skill there is motivation to practice.
• Determination to succeed—motivation is high.

• Sequence of teaching task in this manner with breaking down of task and repetition you may find alternative way of teaching the skill.

• The student may assist with the teaching process by suggesting an alternative way or steps in the process.

• Student demonstration allows the group to see how to improve practicality.

6. Criteria for effective instruction

How can we determine the effectiveness of our instructional approach? Best & Rose, (1996) suggest the following criteria:

• clarity of speech;
• appropriate to the Beginner’s level;
• responsive to cues from the Beginner;
• provides encouragement;
• demonstrates flexibility;
• logical sequencing;
• body language and verbal instruction match;
• provides a demonstration; and
• allows permission for clarification.

7. Ways of improving instructional skills

The quality of student learning is shaped by the approach taken by practitioners to the task of passing on their knowledge and skills to Beginners. We can always improve our instructional and teaching approaches. We suggest at this point you might care to respond to the following questions.

• What sort of questioning technique do you use? Open versus closed ended questions.
• How much time do you spend talking – do you let the Beginner explain their needs to you?
• What tone of voice do you use?
• Do you hide your lack of understanding beneath jargon?
• What do you do when the Beginner cannot answer the question? Do you direct them to do some reading, do you tell them the answer? Or do you find other ways to assist them to solve the problem? (adapted from Best & Rose, 1995).
8. How to be an effective clinical radiation therapy teacher

- **Plan reflectively.** Try not to leave anything to chance (may be unavoidable), review and revise your approaches and styles regularly.

- **Nominate others – recognise and use your human resources.** Effectively spreads workload, specific expertise/knowledge, broader/richer range of experience for students, but give clear guidance (to both student and supervisor).

- Use the learning contracts to remind yourself what needs to be achieved during the student’s attachment. Within each ‘teaching event’, be realistic, sequence progress into manageable chunks, based on time, duration and number/seniority of students, always incorporate an assessment of the students prior knowledge. Use feedback with/from students. Modify as appropriate. Set a good example: You (and your designated colleagues) are a role model for the profession, demonstrate your experience in action by performing quality examinations, be wary of the use of short-cuts or the adaptation of a “good enough” approach to patient interactions.

- Involve the students in an active participatory process. Fully observe them in all aspects, to identify and correct any problems. Be sympathetic and supportive, especially with junior students. Again use the contracts to negotiate with the student to vary the level of support as they progress.

- An awareness of such a list of activities can, at first be alarming. However, every clinical supervisor will have recognised most, if not all, of these elements from their memories of their day-to-day interactions with their students, interns and younger qualified peers. Reflective recognition of these and perhaps other functions, can promote a more focussed approach to the quality of the time spent with your students.

9. More than teaching

The role played by radiation therapists when attempting to impart a wide range of professional facts, interpretations and behaviours to young adults is difficult to fully categorise in print. In fact you will be doing more than teaching during those interactions with students. During interactions with students, radiation therapists impart knowledge, promote skill development and promote professionalism and facilitate the development by students of a professional identity.

**The getting of wisdom: Ways of imparting knowledge**

- Help students to identify what he or she does/doesn’t know.

- Focus on literature appropriate to practice.

- Encourage students to regard printed course work as a crucial resource.
• Bring knowledge/experience to relate to general theory for specific cases.

• Help students to achieve a holistic view of the patient.

• Bridge the gap between classroom and clinic.

• Learn from your students – encourage them to bring new knowledge into your sphere of patient assessment and treatment.

• Be aware of the progress and demands of the whole curriculum.

• Encourage reflection – through and on practice.

**Ways of promoting skill development**

• Reflective planning.

• Interaction and communication.

• Procedural.

• Multi-disciplinary.

• Team membership.

• Working with relatives and carers, including domiciliary work.

• Written communication skills: recording patient data, disseminating information, preparing, analysing and ordering reports.

• Reflective evaluation.

**Becoming a member of the profession: Promoting professionalism**

• Maintain, model, explain and ensure continuing standards of professional practice.

• Check and review plans.

• Empower a controlled progression toward independent decision making.

• Explore the students attitudes to people in the clinical situation.

**Reference**

Assessment and Clinical Performance

Contents

1. Assessment as part of the learning process
2. How to give meaningful feedback
3. Formalised assessment
4. Using the novice to expert model of clinical skill development to assess a student’s performance
5. Key descriptors
6. Performance grading for assessment
7. Action in case of a fail grade

1. Assessment as part of the learning process

The experiential model of the learning process together with the novice-to-expert model of clinical skill development explained in Section 2 helps us to understand that knowledge, skills and attitudes are in a continuous process of development. The model can assist us to appreciate why our expectations regarding a student’s ability to plan, implement and evaluate radiation therapy need to be modified.

Another reason for the adoption of this model of learning is that it demonstrates how important feedback is to the quality of the learning outcome. If we want students to develop professionally and personally as a consequence of undertaking Clinical Studies, we need to be committed to providing them with purposeful and fair feedback about their clinical participation and performance. Continuous evaluation in the form of process feedback is an integral part of the teaching process; and is necessary from the initial overview to the final summary of an examination. To facilitate student progress along the continuum from novice to expert practitioner the effective provision of feedback is essential.

Formalised assessment can provide students with multi-level feedback. When conducted in an appropriate manner using a carefully constructed assessment tool, the process can diagnose areas of weakness and areas of strength as well as encourage and challenge students to excel in their approach to clinical practice. At the same time, if a student fails to meet the expected standard, the process should make it clear to the student why such a judgement was made.
At no time should formalised assessment be seen as a disciplinary event. Rather, as with formative assessment, summative assessment should also be seen as an integral part of the learning process.

2. How to give meaningful feedback

Phases of feedback

All radiation therapists who supervise and teach students will need to provide feedback.

There are three major phases of the provision of feedback and these include:

- asking for feedback;
- providing feedback; and
- receiving feedback.

For feedback to be a meaningful exchange between the student and the clinical supervisor there needs to be a give and take of information, feelings and perceptions.

Guidelines for the provision of feedback

- Before giving feedback make sure the student has the opportunity to discuss their performance and feelings about it with you.

- Be clear, precise and specific. Direct the feedback to actual behaviour that has been observed.

Give feedback on the students’ resources and strengths, as well as their limits and weaknesses.

- Give useful, appropriate feedback on behaviour that the student can change in a realistic time frame.

- Give descriptive or factual feedback based on first hand evidence.

- Be fair and honest, not judgemental – feedback should not focus on the others’ values, beliefs and personality traits.

- Immediate feedback is more meaningful and practical since the student can relate it to what has actually happened.

- Too much feedback at once should be avoided.

- Feedback should always be supportive and conducted in private, away from patients, staff and other students.
• Feedback should be focused; descriptive of the behaviour observed and detailed enough so that the student is able to determine what aspects of their performance they must change.

• Verify your perceptions, be flexible enough to change your perceptions and ascertain that the student understands your feedback.

• Highly effective teachers are good providers of “process feedback” (feedback with explanation).

3. Formalised assessment
The attainment of clinical competency is an important goal in the clinical program. However, students are Beginning Radiation Therapists and it is all too easy to forget how daunting the clinical environment can be for Beginners. We therefore need to ensure that our expectation about student performance matches their level of clinical development.

The formalised assessment forms are organised in relation to what we refer to as Dimensions of Radiation Therapy Practice.

The Department of Medical Imaging and Radiation Sciences expects that at the end of each clinical rotation students will have moved along the continuum from novice or Beginner to either Advanced Beginner or Competent Radiation Therapist in relation to the following five Dimensions of Radiation Therapy Practice:

• pre-treatment preparation and patient assessment;
• procedural technique and clinical problem-solving;
• professional communication;
• image interpretation and evaluation; and
• organisational and legal obligations.

In each clinical assessment you will be asked to make a judgment about the student’s performance in each dimension of practice according to their level along the continuum from novice or Beginner to Competent Practitioner.

Note: Examples of the structure of the clinical assessment form is provided in the Appendices.

4. Using the novice to expert model of clinical skill development to assess student’s performance
An explanation of this model and the characteristics behaviours for each level of development was provided in Section 2. The attractiveness of this model is that at the early stages of development students can still pass the assessment according to the criteria established for the level at which they are being assessed. In other words, the model recognises the development nature of clinical skill development and rewards students as they struggle to master the multi-faceted nature of practice.

This means you will need to refer to the summary sheet provided which we have reproduced here.
Characteristics of a Beginner

Most appropriate style of facilitation – *supportive*

Demonstration of procedure, close support with immediate feedback to promote confidence building

- Needs clear direction about how to apply academic knowledge to clinical situations
- Keeps to the rules with a naïve trust in department protocols
- Task oriented and needs guidance in prioritising the tasks
  - Can cope with single tasks but not with more than one demand at a time
- Limited initiative, flexibility and clinical know how
- Limited ability to identify subtle clinical clues
- Rudimentary clinical communication skills
- Limited skills, knowledge and confidence in palpating, positioning and directing patients
- Able to focus upon the needs of patients or technical aspects of the procedure but not both at the same time
- Some awareness of reflection, analysis and problem solving in practice but limited demonstration of this

Key Descriptors

- Clear direction needed
- Singular tasks/task oriented
- Technical or patient oriented
- Rudimentary communication skills
- Limited initiative
- Awareness of reflection, analysis but not demonstrated
Characteristics of an Intermediate Beginner

Most appropriate style of facilitation – *collaborative*

Determining what the student already knows about the procedure then tailoring the style of supervision to suit. Provision of immediate feedback continues to be required

- Begins to integrate knowledge from previous clinical cases with academic knowledge
- Begins to use initiative and see where the rules apply to similar patients with some guidance
- Some ability to identify where procedures need to be modified in light of the clinical question and clinical condition of the patient
- Still task oriented but beginning to prioritise these tasks in keeping with the clinical question
- Begins to cope with more than one demand at a time
- Beginning to develop the ease and work style of a Competent Radiation Therapist
- Begins to recognise subtle clinical clues and their implication for the procedure at hand
- Patient interaction is improving with more eye contact and personalisation of instructions
- Begins to anticipate potential problems
- Attention to the technical aspects of the procedure still dominates clinical actions
- Limited integration of reflection, analysis and problem solving into practice

**Key descriptors**

- Improving patient interaction and communication
- Some integration of knowledge to practice
- Developing organisational skills
- Developing initiative, ability to multi-task and problem solve
- Some reflection and analysis with guidance
Characteristics of an Advanced Beginner

**Most appropriate style of facilitation – consultative**

**Student should be demonstrating the ease and work style of a Competent Radiation Therapist**

- Ability to use knowledge from previous cases but with limited confidence
- Ability to use initiative and see where the rules apply to similar patients but with limited confidence
- Begins to take responsibility for leading procedures
- Implements the procedure in a methodical and efficient manner
- Demonstrates an ability to prioritise tasks in keeping with the clinical question
- Copes with more than one demand at a time
- Demonstrates the ease and work style of a Competent Radiation Therapist but with limited confidence
- Begins to recognise subtle clinical clues and their implication for the procedure at hand
- Able to empathise with a patient and elicit details from the patient in a professional manner
- Anticipates potential problems
- Able to focus upon the needs of patients at the same time as attending to the technical aspects of the procedure
- Has a greater self awareness of their strengths and weaknesses and knows when to refer to supervisors for guidance
- Acts as a member of the team
- Some integration of reflection, analysis and problem solving into practice

**Key descriptors**

- Communicates with multi-disciplinary team and patient, limited confidence
- Able to modify procedures in light of clinical question and patient
Reflects and analyses practice with minimal guidance

Team-worker and developing leadership of procedures

Able to empathise with a patient and elicit details from the patient in a professional manner

Developing self awareness of personal strengths and weaknesses and knows when to refer to others for guidance

Characteristics of a Competent Radiation Therapist

A reliance upon knowledge from previous experience

Ability to use initiative and see where the rules apply to similar patients in a confident manner

Takes responsibility for leading procedures in a confident manner

Acts in a responsible and ethical manner

Grasps the radiation therapy procedure as a whole rather than as a series of tasks

Able to single out relevant information from the irrelevant

Prepares for the procedure and anticipates any complications prior to interacting with the patient

Accomplishes the procedure in a timely and efficient manner

Copes with more than one demand at a time

Recognises subtle clinical clues and their implication for the procedure at hand

Patient focused

Communicates effectively with all members of the health care team

Critically evaluates their performance

Recognises when the limits of their knowledge and experience have been reached and when advice and assistance is required

Fully aware of organisation issues which may impact on practice

Integrates reflection, analysis and problem solving into practice
**Key descriptors**

- Confidently and effectively communicates with multi-disciplinary team and patients
- Able to modify procedures in light of clinical question and patient
- Reflects and analyses practice, problem solves
- Team-worker and developing leadership of procedures
- Able to empathise with a patient and elicit details from the patient in a professional manner
- Self awareness of personal strengths and weaknesses and knows when to refer to others for guidance

**Reference**

Clinical Assessment

Australian Universities Radiation Therapy Student Clinical Assessment Form (AURTSCAF)

The standard of competence and consistency of competence will be assessed over a given time period (i.e. length of placement in a particular area). The continuous assessments will be undertaken in pre-treatment (localisation and planning) and treatment. This assessment will focus on the skills and competence displayed for the body sites which the student has been involved in planning and treating. The objectives set in the Radiation Therapy Practice Contract and the interim discussion and assessment half way through the placement will facilitate the students’ progress through this period of continuous assessment.

Two forms are been provided for both localisation/planning and treatment and the National Assessment form is to be used for professional outcomes. Students should negotiate with their supervisor to complete an assessment part way through (interim) and in the final days (final) of a placement. If additional forms are required for more regular feedback, they may be copied. Marks assigned will be the average of the total number of completed reports.

Students should submit the assessments for signing no later than two days before the end of the placement.

Supervisors should remember to consider the criteria for the level of the Beginner to Competent model at the student should be for that stage in the course e.g. Advanced Beginner for Semester 5.

An average of the final marks for each of the areas of practice will be calculated and then the marks will be added together and scaled out of a percentage.

Note:

If there is an element of the assessment that is not applicable to your centre please mark N/A in the final column.

Instructions

Timing: Clinical skills assessment reports are to be completed by supervisors in conjunction with the team, at an interim and final period during your clinical placement. For example, during a thirteen-week placement, students should have an assessment completed at a mid-point and at the completion of a planning rotation (which may be at week 3 and week 6), and another assessment at a mid-point and at the completion of a treatment rotation (which may be week 9 and week 12). This will allow scope for
development during the rotation period, and assist with ongoing objective setting using the radiation therapy practice contract and self-reflective reports. Students may wish to complete the self-reflective reports and interim progress on your contract in conjunction with the clinical skills assessments.

**Evidence:** Evidence of assessment will be gathered through observation and of interactions with the patient, their carers and members of the multi-disciplinary team. The supervisor will gather evidence from personal observations, discussion, and discussion with the team. Students should provide their supervisor with the reference page to inform the assessment process.

**Range statement:** Students will be assessed in regards to their consistent performance over the duration of the period under assessment, rather than performance with one case. Assessment can include any of the following:

- Treatment procedures
- Planning procedures
- Localisation procedures
- Patients with pelvic disease
- Patients with thorax or breast disease
- Patients with disease of the brain or head and neck
- Patients with disease of the extremities
- Patients prescribed a radical course of treatment
- Patients prescribed a palliative course of treatment

7. **Action in case of a fail grade**

If a student fails any of their assessments their performance will be treated in the same way as it would had the examination been conducted on campus. The Assessment tool affords students to get a score of 2 and pass for interim assessments, however to pass a final assessment the student must get a score of 3 or more. Upon their return to the university their performance in this unit will be recorded and submitted for consideration by the Examination Board. Depending upon their results in other units, they will be given an opportunity to undertake supplementary assessment in Radiation Therapy Clinical Skills at a time to be determined by the University. There is a user guide for the AURTSCAF, this is included on the following pages and is also included prior to any assessment forms in each clinical workbook.

**Clinical Progress Tracking Form**

This form has been designed for students to keep with them throughout their 2 years of clinical placements to allow them to negotiate their learning outcomes. Students will commence their first clinical placement in MMR 4011 and begin asking staff to sign off their skill level along the beginner to competent scale for the routine and non-routine procedures relating to surface land-marking, localisation, planning and treatment. It is the student’s
responsible for ensuring staff sign this in a timely way and then to submit it at the end of the clinical placement block with their clinical workbooks.

Section 5 Appendices

Australian Universities Radiation Therapy Student Clinical Assessment Form (AURTSCAF) User Guide – version 2

Purpose and Structure

The AURTSCAF has been designed to assess students overall performance during clinical placement. It may be used for final summative assessment and/or weekly formative assessment.

For formative assessment: this form is used at various stages during the clinical placement to provide students with feedback and allow students to reflect on their own performance and identify areas that require improvement.

For summative assessment: the Clinical Educator, Preceptor or Supervisor should complete this form at the end of the clinical placement. The assessment should reflect the consistency and standard of performance across the placement, taking into consideration the experience level of the student. It is expected that the student’s skills will develop during the placement period. The final summative assessment should reflect the student’s ability at the end of the placement.

If at any time during the placement (formative or summative assessment) the student does not demonstrate appropriate progression, the relevant University should be informed immediately.

The assessment domains are based on the Australian Institute of Radiography’s Competency Based Standards (CBS) for the Accredited Practitioner (AIR 2005) and have been adapted to fit the scope of practice of a Radiation Therapy student progressing through an accredited program of study in Australia.

Not all domains from the CBS are assessed on this form as some are beyond the scope of practice of a student or assessed via other means in the academic program.

The Assessment Domains (based on the CBS) are as follows:

- Knowledge and Understanding
- Critical Thinking and Evaluation
- Professional and Ethical Practice
- Care and Clinical Management

Additional fifth and sixth domains are also included:
- **Professionalism** (addresses overall student conduct and development during the clinical placement)
- **Fitness to Practise** (the student is able to practice safely and effectively in radiation therapy)

### Student Level

Students complete several clinical placements as they progress through their program of study. Each Australian Radiation Therapy program differs in course content, structure and student requirements, so the relevant University guide should also be consulted in conjunction with this document.

**This generic clinical assessment form may be utilised for students at any stage of their academic program. Criteria for the level of achievement expected of a first, second, third or fourth year student from a particular University should be referred to BEFORE completing this generic form.**

Copyright 2012 by the authors. All rights reserved. No part of this assessment form and associated user guide may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written consent of the authors. The use of the AURTSCAF in research is permitted only after written consent of the authors.

The assessment form and user guide were developed by the Radiation Therapy Program Coordinators Group, representing the six tertiary institutions in Australia, namely, University of South Australia, University of Sydney, Monash University, Queensland University of Technology, University of Newcastle and RMIT University.

Funding for this project was provided by the Department of Health and Ageing.

PLEASE NOTE: The AURTSCAF is a confidential document & constitutes only one element of a range of assessment procedures. As such, it requires correlation with further indicators of both knowledge & performance, during this Clinical course. Therefore this Report remains the property of the University & is not to be duplicated or used as an employment reference.
Using the Evaluation Criteria to assess student performance

Domains 1-4:

1 Knowledge and Understanding
2 Critical Thinking and Evaluation
3 Professional and Ethical Practice
4 Care and Clinical Management

A six-item categorical rating scale is to be used to assess students in these four domains:

<table>
<thead>
<tr>
<th>Evaluation Criteria to assess Student Performance</th>
<th>Use this criteria to rate Domains 1-4 where applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Unsatisfactory level of achievement</td>
<td>2 Requires improvement to progress</td>
</tr>
<tr>
<td>3 Satisfactory level of achievement</td>
<td>4 Occasionally exceeds expected level of achievement</td>
</tr>
<tr>
<td>5 Consistently exceeds expected level of achievement</td>
<td>NA Not Applicable Not Assessed</td>
</tr>
</tbody>
</table>

The scale also provides a Not Applicable – Not Assessed rating when the item has not been evaluated during the clinical placement.

The total score for the assessment will be computed by the University. Note that items which were marked NA will not be included in the computation.

Domains 5-6:

5 Professionalism
6 Fitness to Practise

These are domains of practice where students must demonstrate a satisfactory level of achievement for each criterion. Students are marked as satisfactory or unsatisfactory on the basis of their performance.

<table>
<thead>
<tr>
<th>Evaluation Criteria to assess Student Performance Use this criteria to rate Domain 5 and 6</th>
<th>Satisfactory level of achievement</th>
<th>Unsatisfactory level of achievement</th>
</tr>
</thead>
</table>

Within each of the six domains there are specific criteria that should be assessed for each student. This user guide also provides ‘prompts’ in order to assist with determining a score for each criterion.

*It is important to note that these prompts are listed as general examples and by no means represent an exhaustive list of behaviours that must be demonstrated by each student.*
## Domains of Practice: Generic Descriptors and Cues

<table>
<thead>
<tr>
<th>1. Knowledge &amp; Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.1 Applies &amp; adapts <em>previous</em> knowledge to clinical practice situations</strong></td>
</tr>
<tr>
<td><strong>Prompts:</strong></td>
</tr>
<tr>
<td>• Is prepared for their level of clinical experience</td>
</tr>
<tr>
<td>• Demonstrates knowledge and skills learned at university or on previous placements by actively participating in procedures</td>
</tr>
<tr>
<td>• Is able to adapt knowledge or skills to similar clinical practice procedures</td>
</tr>
<tr>
<td><strong>1.2 Applies &amp; adapts <em>new</em> knowledge to clinical practice situations</strong></td>
</tr>
<tr>
<td><strong>Prompts:</strong></td>
</tr>
<tr>
<td>• Demonstrates continuing development of knowledge and skills throughout the placement</td>
</tr>
<tr>
<td>• Actively participates in learning opportunities</td>
</tr>
<tr>
<td>• Demonstrates that they can apply ‘on the job’ learning</td>
</tr>
<tr>
<td><strong>1.3 Demonstrates knowledge of the role and responsibilities of the Radiation Therapist and how this fits within the multidisciplinary team</strong></td>
</tr>
<tr>
<td><strong>Prompts:</strong></td>
</tr>
<tr>
<td>• Recognises the members of the multidisciplinary team (i.e. RO, nursing, physics etc) and their roles in providing a holistic approach to the care of the patient</td>
</tr>
<tr>
<td>• Develops an understanding of how Radiation Therapists fit within the team, and their roles and responsibilities</td>
</tr>
</tbody>
</table>
## 2. Critical Thinking & Evaluation

### 2.1 Demonstrates the ability to be self-directed

**Prompts:**
- Should include skills relative to both patient treatment and care, and operation and management of the area/unit/department
- Seeks resources or information during machine down time or periods when workload is reduced, or as negotiated with their supervisor
- Carries out administrative/ organisational related activities that contribute to workflow without the need for continual prompting

### 2.2 Demonstrates appropriate time management skills and use of available resources

**Prompts:**
- Uses and sources appropriate information to prepare for simulation/ treatment prior to patient arrival
- Consults protocols before undertaking unfamiliar treatment or planning techniques
- Performs tasks in the correct order e.g. correctly aligns the patient before attempting to fit immobilisation casts or aids
- Performs tasks in the appropriate amount of time

### 2.3 Demonstrates problem solving skills to formulate appropriate clinical decisions

**Prompts:**
- Able to progress a plan toward completion
- Uses appropriate planning skills and reasoning to justify or optimise dosimetry
- Checks documentation in a logical sequence to problem solve a set-up difficulty
- Double checks measurements when tattoo or landmark reference do not correlate
- Can make or identify EPI judgments resulting in the decision to treat/ move/repeat
- Investigates the reasons behind FSDs being out of tolerance and determines possible actions and understands their importance
### 3. Professional & Ethical Practice

#### 3.1 Assumes responsibility for own actions and works within accepted departmental protocols and standards of practice for Radiation Therapy

**Prompts:**
- Student actively seeks out procedural information relative to treatments or accepted practices and either seeks clarification or further discussion with staff and follows accordingly
- Understands responsibility for a duty of care to the patient
- Acknowledges errors and seeks advice regarding the appropriate course of action

#### 3.2 Recognises own abilities and level of professional competence and consults with an experienced practitioner when expertise is required beyond own level of competence

**Prompts:**
- Is aware of the student role of developing competence and does not move beyond accepted boundaries of supervision
- Sets goals that are achievable in conjunction with supervisors
- Reflects on level of ability in order to build on and increase competence
- When consulting an experienced practitioner, the student does so appropriately (i.e. time, place and manner)

#### 3.3 Documents accurately

**Prompts:**
- Documentation can be written or electronic, and may include stamping In-patient notes, transferring information from planning to treatment, stating agreed placement goals and reflection on performance or other administrative or quality assurance documentation
- Completes documentation according to department protocols
- Follows up missing data and information

#### 3.4 Works and communicates effectively with, and demonstrates respect for, all members of the multidisciplinary team

**Prompts:**
- Actively participates in the team
- Clarifies what degree of participation is appropriate/permissible
- Shows initiative to assist the team through tasks such as calling the next patient, directing patients to get changed where appropriate, preparing the room, aiding patient transfer, etc.
- Accepts and responds positively to feedback from team members and uses feedback to reflect on practice
- Is cordial with all team members
- Communicates with other health professionals where appropriate
- Informs the team of activities requiring them to leave the workstation
### 3.5 Demonstrates effective verbal and non-verbal communication with patients, their carers and families

**Prompts:**

- Correctly identifies patients
- Introduces and identifies themself as a student appropriately to patients
- Greets patients by name and maintains conversations to build rapport
- Demonstrates active listening skills
- Obtains and imparts correct and appropriate information to patients and their carers
- Seeks clarification of information where unsure before communicating with patients or carers
- Shows continual progression to maintaining dialogue with patients when completing a treatment or planning set-up, providing explanation of the procedure where appropriate
- Exhibits suitable non-verbal behaviours (e.g. eye-contact, facing patient and attentive, supportive persona, does not appear intrusive or distant)
### 4. Care & Clinical Management

#### 4.1 Demonstrates empathy and respect for individuals and their carers/families

**Prompts:**
- Includes individual’s rights, dignity, values, culture, customs, spiritual beliefs and practices
- E.g. observing privacy and providing gowns or sheets where possible
- Respects patient’s rights to refuse having a student attend the procedure
- Responds to patient needs attentively and with empathy
- Provides material comfort/ assistance where appropriate e.g. blankets, tissues, water, a quiet place to wait if distressed

#### 4.2 Demonstrates awareness of patient’s needs and health issues and takes appropriate action

**Prompts:**
- Is aware of special needs of patients with and takes due care where required (e.g. wheelchair or sick bowl if unwell)
- Examples include care and transfer of palliative or unwell in-patients, assisting with transport and showing care for their condition
- Responds to patients requests for assistance promptly or refers on to the appropriate party without delay
- Knows when to consult an appropriate professional for advice regarding patient care

#### 4.3 Performs technical skills to an appropriate level of competence relative to the stage of their academic program in:

- **Treatment**
- **Planning**
- **Simulation/CT**

*Note: this criterion is based on an overview of performance of technical skills. All students undertake a separate competency assessment requiring demonstration of specific skills, and this is assessed using a separate form. Please refer to each University’s specific technical performance indicators for competency assessment.*

**Treatment Prompts:**
- Has an understanding of the positioning, stabilisation, and localisation principles of the treatment process
- Has knowledge of the data they need to obtain and record for treatment quality assurance purposes
- Has an understanding of the principles and protocols of imaging for treatment verification
- Has an understanding of the record and verify facility

**Planning Prompts:**
- Able to achieve a clinically acceptable treatment plan that follows ICRU and
departmental guidelines, and is deliverable
- Can accurately perform any required calculations
- Able to prepare the documentation for the treatment chart/record
- Has an understanding of the record and verify facility

<table>
<thead>
<tr>
<th>Simulation/CT Prompts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Has an understanding of the positioning, stabilisation, imaging, and localisation principles of the simulation/CT process</td>
</tr>
<tr>
<td>- Has knowledge of the data they need to obtain and record for dosimetry and treatment purposes</td>
</tr>
<tr>
<td>- Assists in the development of ancillary equipment constructed in the mould room</td>
</tr>
</tbody>
</table>
5. Professionalism - *rate these items S or US*

5.1 Demonstrates appropriate interest, enthusiasm, motivation, perseverance in work & learning

Prompts:
- Has a positive demeanour
- Is attentive
- Exhibits open body language
- Asks relevant questions where appropriate
- Initiates own further learning where required
- Uses equipment appropriately (e.g. computer, internet, telephone)

5.2 Punctuality

Prompts:
- Advises of any lateness or absence
- Reports to workstation on time and ready to work and learn
- Returns from breaks within the acceptable timeframe
- Refer to each university’s attendance policy

5.3 Maintains professional appearance

Prompts:
- Observes pride in their appearance, (personal hygiene, laundering of uniform and grooming)
- Adheres to University uniform policy
- Wears name badge
- Wears radiation monitor
- Wears appropriate footwear

5.4 Complies with patient information confidentiality and privacy legislation and policies

Prompts:
- Ensures removal of identifying data from clinical information required for University assessment purposes
- Personal identifying information/data should not be disclosed to staff/students not involved with the care of the patient
- Observes data removal protocols where applicable
- Understands that confidentiality extends to conversations between patients, conversations overheard and information obtained directly and indirectly

5.5 Follows health and safety requirements

Prompts:
- Observes radiation safety
- Correct manual handling skills
- Uses infection control procedures
- Operates machinery and equipment safely
- Observes other legislative policies
6. Fitness to Practise - *rate these items S or US*

‘A student is fit to practise if they are free from any form of impairment which affects their ability to practise safely and effectively in radiation therapy’; this may include:

- mental and physical health issues;
- impairment due to the influence of alcohol, drugs or other intoxicating substances;
- inappropriate behaviour, attitude, or values which affect professional conduct
- less than satisfactory ethical approach to practice
- deficiency in knowledge and understanding or competence (for a specific stage in the students development) which compromises the safety of patients or others

6.1 Demonstrates the capacity to practise safely

**Prompts:**
- Is receptive and responds positively to feedback
- Is aware of patient and staff safety at all times
- Uses equipment appropriately to minimise the risk of harm to themselves, patients, staff and others
- Appears alert, attentive and cognitive in interactions – exhibits behaviour that is not impaired
- Demonstrates no physical impairment which may impede their ability to adhere to safe manual handling processes and manipulates equipment safely
- Observes the OH & S procedures of the organisation

6.2 Demonstrates the behavior/ attitude/ values expected of a student practitioner

**Prompts:**
- Introduces self, letting patient know they are a student
- Exhibits a respectful manner with staff and patients
- Reserves questions about process for times out of the treatment room (ie not in front of a patient)
- Touches patients with consent and professionally
- Is truthful, genuine and trustworthy in all interactions
- Exhibits interest in all clinical tasks
- Respects patient’s privacy and dignity
- Uses resources available at the placement site for the purposes they are intended
<table>
<thead>
<tr>
<th>6.3 Demonstrates an ethical approach to practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompts:</td>
</tr>
<tr>
<td>• Is aware of confidentiality and maintains at all times</td>
</tr>
<tr>
<td>• Discusses patient details appropriately or at an appropriate time or place</td>
</tr>
<tr>
<td>• Uses databases for clinical purposes only</td>
</tr>
<tr>
<td>• Converses with patients appropriately keeping questions of a general nature that are not imposing/ personal</td>
</tr>
<tr>
<td>• Does not disclose personal information about themselves</td>
</tr>
</tbody>
</table>

*Note: this criterion is included as even though section 3 of the assessment form deals with professional and ethical practices, there are no elements of this which specifically state ‘ethical practice’*

<table>
<thead>
<tr>
<th>6.4 Demonstrates competence at the required level for their development to practice safely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompts:</td>
</tr>
<tr>
<td>• Asks for help in situations when out of their depth</td>
</tr>
<tr>
<td>• Does not attempt tasks beyond their scope of practice/ ability/ without supervision/ permission</td>
</tr>
<tr>
<td>• Appears professional demonstrating appropriate confidence during patient interactions</td>
</tr>
<tr>
<td>• Is focussed on the task at hand clinically</td>
</tr>
<tr>
<td>• Listens to and follows staff instruction</td>
</tr>
<tr>
<td>• Uses language that is appropriate for the environment (ie not too casual)</td>
</tr>
</tbody>
</table>

| If the team has any concerns about the student’s fitness to practise, please inform the University immediately |

Assessor’s overall comments:
Please use this section to give the student specific written feedback about their assessment

Sign and date the form and include your name

Student’s overall comments:
Encourage the student to record their response to feedback given

Record any days absent and whether a medical certificate was sighted if appropriate
Australian Universities Radiation Therapy Student Clinical Assessment Form (AURTSCAF) Assessment Form – version 2
University: ___________________________ Placement location: ___________________________

Year of program: ___________ Block No:__________ Week of placement: ___________

Final Summative Assessment / Formative Assessment (circle one)

Instructions:

This form should be completed by the Radiation Therapy Clinical Educator, Preceptor or the student’s immediate clinical supervisor. For more detailed information on completing the assessment form, please refer to the user guide.

There are 6 domains of practice to be assessed including:

1. Knowledge and Understanding
2. Critical Thinking and Evaluation
3. Professional and Ethical Practice
4. Care and Clinical Management
5. Professionalism
6. Fitness to Practise

Each domain contains several criteria and all criteria should be assessed for each student.

Domains 1-4 should be assessed using the five-point scale ranging from ‘Unsatisfactory level of achievement’ through to ‘Consistently exceeds expected level of achievement’, or ‘Not applicable’. Domains 5 and 6 should be assessed either as Satisfactory or Unsatisfactory.
Note: For more detailed information on completing the assessment form, there is a user guide that explains the items within the domain and a training package recommended for new users. Please refer to either the clinical educator within your department, or the University supporting the student placement, for the details of accessing training resources. PLEASE NOTE: This is a confidential document & constitutes only one element of a range of assessment procedures. As such, it requires correlation with further indicators of both knowledge & performance, during this Clinical course. Therefore this Report remains the property of the University & is not to be duplicated or used as an employment reference.

Copyright 2012 by the authors. All rights reserved. No part of this assessment form and associated user guide may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written consent of the authors. The use of the AURTSCAF in research is permitted only after written consent of the authors.

The assessment form and user guide were developed by the Radiation Therapy Program Coordinators Group, representing the six tertiary institutions in Australia, namely, University of South Australia, University of Sydney, Monash University, Queensland University of Technology, University of Newcastle and RMIT University.

Funding for this project was provided by the Department of Health and Ageing.

Area of Practice Loc/Plan/Trt (please circle)

<table>
<thead>
<tr>
<th>Interim 1: Evaluation of Student Performance</th>
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</thead>
<tbody>
<tr>
<td>Use these criteria to rate Domains 1-4</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1. Unsatisfactory level of achievement</td>
</tr>
<tr>
<td>2. Requires improvement to progress</td>
</tr>
<tr>
<td>3. Satisfactory level of achievement</td>
</tr>
<tr>
<td>4. Occasionally exceeds expected level of achievement</td>
</tr>
<tr>
<td>5. Consistently exceeds expected level of achievement</td>
</tr>
<tr>
<td>NA Not applicable Not assessed</td>
</tr>
</tbody>
</table>

1. Knowledge & Understanding

| 1.1 Applies & adapts previous knowledge to clinical practice situations |
| 1.2 Applies & adapts new knowledge to clinical practice situations    |
| 1.3 Demonstrates knowledge of the role and responsibilities of the Radiation Therapist and how this fits within the multidisciplinary team |

2. Critical Thinking & Evaluation

| 2.1 Demonstrates the ability to be self-directed |
| 2.2 Demonstrates appropriate time management skills and use of available resources |
2.3 Demonstrates problem solving skills to formulate appropriate clinical decisions

## 3. Professional & Ethical Practice

<table>
<thead>
<tr>
<th>3.1 Assumes responsibility for own actions and works within accepted departmental protocols and standards of practice for Radiation Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 Recognises own abilities and level of professional competence and consults with an experienced practitioner when expertise is required beyond own level of competence</td>
</tr>
<tr>
<td>3.3 Documents accurately</td>
</tr>
<tr>
<td>3.4 Works and communicates effectively with, and demonstrates respect for, all members of the multidisciplinary team</td>
</tr>
<tr>
<td>3.5 Demonstrates effective verbal and non verbal communication with patients, and their carers and families</td>
</tr>
</tbody>
</table>

## 4. Care & Clinical Management

| 4.1 Demonstrates empathy and respect for individuals and their carers/families |
| 4.2 Demonstrates awareness of patient’s needs and health issues and takes appropriate action |
| 4.3 Performs technical skills to an appropriate level of competence relative to the stage of their academic program in: |

  - Treatment
  - Planning
  - Simulation/CT

*Note: This is not an assessment of specific clinical competencies. Please refer to each University’s specific technical performance indicators for competency assessment.*

## Evaluation of Student Performance

Use these criteria to rate *Domains 5 and 6*

<table>
<thead>
<tr>
<th>S</th>
<th>Unsatisfactory level of achievement</th>
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</thead>
<tbody>
<tr>
<td>Satisfactory level of achievement</td>
<td>US</td>
</tr>
</tbody>
</table>

## 5. Professionalism

| 5.1 Demonstrates appropriate interest, enthusiasm, motivation, perseverance in work & learning |
| 5.2 Punctuality |
| 5.3 Maintains professional appearance |
| 5.4 Complies with patient information confidentiality and privacy legislation and policies |
| 5.5 Follows health and safety requirements |
6. Fitness to Practise

<p>| | | |</p>
<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Demonstrates the capacity to practise safely</td>
<td>S</td>
</tr>
<tr>
<td>6.2</td>
<td>Demonstrates the behavior/ attitude/ values expected of a student practitioner</td>
<td></td>
</tr>
<tr>
<td>6.3</td>
<td>Demonstrates an ethical approach to practice</td>
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<tr>
<td>6.4</td>
<td>Demonstrates competence at the required level for their development to practise safely</td>
<td>US</td>
</tr>
</tbody>
</table>

If the team has any concerns about the student’s fitness to practise, please inform the University immediately

Assessor’s overall comments:
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

Supervisor’s Name: ________________________________

Supervisor’s Signature: ________________________________ Date: ________________________________

Student’s overall comments:
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
Monash University: Localisation/Planning/Treatment Interim Assessment

The student must obtain a point score of 2 or greater for each area of practice in order to pass interim assessment. You should consider the most consistently demonstrated performance exhibited by the student in consultation with the team when undertaking the assessment. Students should be working to the level of Beginner (refer to Beginner descriptors).

| 1 | Unsatisfactory level of achievement |
|   | 2 | Requires improvement to progress |
|   | 3 | Satisfactory level of achievement |
|   | 4 | Occasionally exceeds expected level of achievement |
|   | 5 | Consistently exceeds expected level of achievement |
|   | NA | Not applicable Not assessed |

| 7 | Localisation (Sim/CT/Clinical mark up) (Students should be working to the level of Beginner) |
|   | The student is learning/working at the level of: B IB AB C |
|   | For the following diseases/sites/cases: __________/__________/__________ |
|   | __________/__________/__________/__________/__________ |

Days absent: ______  Medical Certificate provided for all days absent:  Yes / No
### Planning (Students should be working to the level of Beginner)

The student is learning/working at the level of: **B**  **IB**  **AB**  **C**

For the following diseases/sites/cases: __________/________/________
________/________/________/________/________

The student justifies the rationale for and/or demonstrates the ability to:

- **8.1** Identify relevant data and documentation
- **8.2** Identify relevant anatomical reference points on images
- **8.3** Describe and place appropriate field/beam arrangements
- **8.4** Utilise appropriate dose constraints in planning the case
- **8.5** Utilise ICRU constraints in planning the case
- **8.6** Apply appropriate optimisation techniques
- **8.7** Critically analyse dose distribution and data
- **8.8** Apply appropriate Quality Assurance process for the procedure

### Treatment (Students should be working to the level of Beginner)

The student is learning/working at the level of: **B**  **IB**  **AB**  **C**

For the following diseases/sites/cases: __________/________/________
________/________/________/________/________

The student justifies the rationale for and/or demonstrates the ability to:

- **9.1** Prepare room with appropriate accessory equipment for procedure
- **9.2** Provide appropriate instructions to patients/elicit patient status for treatment
- **9.3** Position patient appropriately
- **9.4** Image matching technique and action thresholds
- **9.5** Apply appropriate Quality Assurance process for the procedure

General feedback: localisation/planning/treatment/patient care:
Assessor’s overall comments:

___________________________________________________________________________

___________________________________________________________________________

Supervisor’s Name/Signature: ___________________________ Date: __________

Student Signature ___________________________________________

Area of Practice Loc/Plan/Trt (please circle)

**Final 1: Evaluation of Student Performance**

Use these criteria to rate *Domains 1-4*

<table>
<thead>
<tr>
<th>Unsatisfactory level of achievement</th>
<th>Requires improvement to progress</th>
<th>Satisfactory level of achievement</th>
<th>Occasionally exceeds expected level of achievement</th>
<th>Consistently exceeds expected level of achievement</th>
<th>NA</th>
</tr>
</thead>
</table>

1. Knowledge & Understanding

<table>
<thead>
<tr>
<th>1.1 Applies &amp; adapts <em>previous</em> knowledge to clinical practice situations</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>NA</th>
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</table>

<table>
<thead>
<tr>
<th>1.2 Applies &amp; adapts <em>new</em> knowledge to clinical practice situations</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
<th>NA</th>
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<thead>
<tr>
<th>1.3 Demonstrates knowledge of the role and responsibilities of the Radiation Therapist and how this fits within the multidisciplinary</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>NA</th>
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</table>
### 2. Critical Thinking & Evaluation

<table>
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<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>N/A</th>
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<tbody>
<tr>
<td>2.1 Demonstrates the ability to be self-directed</td>
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<td>2.2 Demonstrates appropriate time management skills and use of available resources</td>
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<td>2.3 Demonstrates problem solving skills to formulate appropriate clinical decisions</td>
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### 3. Professional & Ethical Practice

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<th>5</th>
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<tbody>
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<td>3.4 Works and communicates effectively with, and demonstrates respect for, all members of the multidisciplinary team</td>
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### 4. Care & Clinical Management

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<th>N/A</th>
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<td>Note: This is not an assessment of specific clinical competencies. Please refer to each University’s specific technical performance indicators for competency assessment.</td>
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<td>- Treatment</td>
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<tr>
<td>- Simulation/CT</td>
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</tbody>
</table>

### Evaluation of Student Performance

Use these criteria to rate **Domains 5 and 6**

<table>
<thead>
<tr>
<th></th>
<th>Satisfactory level of achievement</th>
<th>US Unsatisfactory level of achievement</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td></td>
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<tr>
<td>5. Professionalism</td>
<td>S</td>
<td>US</td>
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<td>----------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>5.1 Demonstrates appropriate interest, enthusiasm, motivation, perseverance in work &amp; learning</td>
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<tr>
<td>5.2 Punctuality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3 Maintains professional appearance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4 Complies with patient information confidentiality and privacy legislation and policies</td>
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<td>5.5 Follows health and safety requirements</td>
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<thead>
<tr>
<th>6. Fitness to Practise</th>
<th>S</th>
<th>US</th>
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</thead>
<tbody>
<tr>
<td>6.1 Demonstrates the capacity to practise safely</td>
<td></td>
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<tr>
<td>6.2 Demonstrates the behavior/ attitude/ values expected of a student practitioner</td>
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<tr>
<td>6.3 Demonstrates an ethical approach to practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.4 Demonstrates competence at the required level for their development to practise safely</td>
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</tbody>
</table>

*If the team has any concerns about the student’s fitness to practise, please inform the University immediately*

Assessor’s overall comments:
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

Supervisor’s Name: _______________________________

Supervisor’s Signature: __________________________ Date: __________________________

Student’s overall comments:
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
Student’s Signature: ____________________________ Date: ____________________________

Days absent: _____  Medical Certificate provided for all days absent:  Yes / No
The student must obtain a point score of **3 or greater** for each area of practice in order to pass final assessment. You should consider the most consistently demonstrated performance exhibited by the student in consultation with the team when undertaking the assessment. **Students should be working to the level of Beginner** (refer to Beginner descriptors).

---

### Final 1: Technical Skills Assessment

Use these criteria to rate **Domains 7-9**

<table>
<thead>
<tr>
<th></th>
<th>1 Unsatisfactory level of achievement</th>
<th>2 Requires improvement to progress</th>
<th>3 Satisfactory level of achievement</th>
<th>4 Occasionally exceeds expected level of achievement</th>
<th>5 Consistently exceeds expected level of achievement</th>
<th>NA Not applicable Not assessed</th>
</tr>
</thead>
</table>

#### 7 Localisation (Sim/CT/Clinical mark up) (Students should be working to the level of Beginner)

The student is learning/working at the level of: **B**  **IB**  **AB**  **C**

For the following diseases/sites/cases: ___________/__________/__________

__________/__________/__________/_________/___________

The student justifies the rationale for and/or demonstrates the ability to:

- 7.1 Prepare room with appropriate accessory equipment for procedure
- 7.2 Provide appropriate instructions and information to patients
- 7.3 Position patient appropriately for the procedure
- 7.4 Use the appropriate localisation technique for individual cases
- 7.5 Describe the reason for choice of imaging modality used
- 7.6 Apply appropriate Quality Assurance process for the procedure

#### 8 Planning (Students should be working to the level of Beginner)

The student is learning/working at the level of: **B**  **IB**  **AB**  **C**

For the following diseases/sites/cases: ___________/__________/__________

__________/__________/__________/__________/_________

The student justifies the rationale for and/or demonstrates the ability to:

- 8.1 Identify relevant data and documentation
- 8.2 Identify relevant anatomical reference points on images
- 8.3 Describe and place appropriate field/beam arrangements
- 8.4 Utilise appropriate dose constraints in planning the case
- 8.5 Utilise ICRU constraints in planning the case
- 8.6 Apply appropriate optimisation techniques
8.7 Critically analyse dose distribution and data

8.8 Apply appropriate Quality Assurance process for the procedure

9 Treatment (Students should be working to the level of Beginner)

<table>
<thead>
<tr>
<th>The student is learning/working at the level of:</th>
<th>B</th>
<th>IB</th>
<th>AB</th>
<th>C</th>
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</table>

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<thead>
<tr>
<th>For the following diseases/sites/cases:</th>
<th>_______</th>
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</table>

The student justifies the rationale for and/or demonstrates the ability to:

<table>
<thead>
<tr>
<th>9.1 Prepare room with appropriate accessory equipment for procedure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>NA</th>
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<tbody>
<tr>
<td>9.2 Provide appropriate instructions to patients/elicit patient status for treatment</td>
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<tr>
<td>9.3 Position patient appropriately</td>
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<td>9.4 Image matching technique and action thresholds</td>
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<td>9.5 Apply appropriate Quality Assurance process for the procedure</td>
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</table>

General feedback: localisation/planning/treatment/patient care:

Assessor’s overall comments:

___________________________________________________________________________

________________________
___________________________________________________

_______________________________________________________________________

___________________________
________________________________________________

____________________

Supervisor’s Name/Signature: ____________________________ Date: ___________

Student Signature _________________________________________
COMMUNICATION CASE REPORT

Student ID _____________________ Date _______________

Note: Do NOT identify patient name, staff name or clinical centre name. Use pseudonyms in these cases. You will automatically fail if confidentiality is breached. Use note and bullet point form and support with evidence from literature. Literature should be used where appropriate to support each case. All information should be specific to the case. Please read case report guide and assessment criteria rubric in the MMR 4011 unit guide. Communication case reports should be submitted via moodle. This communication case report will be marked out of 20. Please stay within the word limit specified (500 words), additional words will not be marked.

Concise description of interaction (250 words)

In the space below, describe in concise note form an interaction which you have observed or participated in whilst on this placement. This may be between patients, relatives, staff or students. Consider what you observed occur and why this happened. Also think about communication strategies which people may have used during the interaction and any psychosocial issues which may have led to the interaction. Utilise the evidence base on communication and any other relevant topic to illustrate the importance of this case to your learning.

2. Reflection

Critical reflection/learning from this case: (150 words)

Action plan as a result of learning from this case: (100 words)

Note: Supervisors are no longer required to sign this form to verify that student was involved in procedure. However, please note that the academic team remain in contact with all clinical sites and may randomly contact them to verify your involvement.
EMPATHY CASE REPORT  1

Student ID _____________________ Date

Note: Do NOT identify patient name, staff name or clinical centre name. Use pseudonyms in these cases. You will automatically fail if confidentiality is breached. Use note and bullet point form and support with evidence from literature. Literature should be used where appropriate to support each case. All information should be specific to the case. Please read case report guide in MMR 4011 unit guide. Empathy case reports should be submitted to Moodle. This empathy case report will be marked out of 20. Please stick to the word limit (500 words), additional words will not be marked.

1. Concise description of interaction (250 words)

Describe an interaction which you have observed or participated in whilst on this placement. This may be between patients, relatives, staff or students. Consider what you observed occur and why this happened. Also think about communication strategies related to empathy which people may have used during the interaction. Utilise the evidence base on communication, empathy and any other relevant topic to illustrate the importance of this case to your learning.

2. Reflection

Critical reflection/learning from this case: (150 words)

Action plan as a result of learning from this case: (100 words)

Note: Supervisors are no longer required to sign this form to verify that student was involved in procedure. However, please note that the academic team remain in contact with all clinical sites and may randomly contact them to verify your involvement.
1. Patient history and prescription (approx. 150 words)

Age

Gender

Treatment site

Histological diagnosis

Describe grade of disease

Description of stage in relation to an appropriate staging system

Dose/Fractionation

Investigations performed as a work up for current treatment: State whether used for diagnostic (D), staging (S), planning (P) or monitoring purposes (M):
2. Localisation procedure (approx. 200 words)

Evidence based rationale for patient position and methods of immobilisation (including organ reproducibility protocols):

Brief description of localisation procedure:

Rationale for use of imaging modality: CT, MRI, PET, (including fusion), Simulator or Clinical mark-up: (150 words)

Patient preparation and explanations/instructions for localisation:

Anatomical upper and lower levels of scan used for localisation:

Rationale for number of slices and slice thickness for this particular patient case:

 Orientations of DRR’s produced, other information recorded (append DRRs and any other relevant information at the end of this form):

3. Relational description of anatomy in/close to the volume (approx. 150 words - not including tables)
   (reference to DRR and plans in appendices where appropriate)

<table>
<thead>
<tr>
<th>Organ</th>
<th>Relation to the PTV (Anterior/Posterior/Superior/Inferior etc)</th>
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</table>
Lymphatics of the region

Specific Issues (patient/equipment) and reasons for consideration of these on the first day of localisation/planning

4. Plan evaluation (approx. 400 words – not including tables):

a) Evaluation of plan and details of volumes defined

Rationale for field arrangement:

Rationale for volume margins:

Rationale for beam energy and modality:

Rationale for plan optimisation (weightings, wedges, shielding, compensators, field in field techniques):

b) Thorough analysis of dose distribution in relation to ICRU (a copy of the plan and DVH to be attached to the report as an appendix):

Homogeneity/heterogeneity of the distribution (if superficial case/non-planned electrons please comment on the shape of expected distribution and why).

Describe where the points of maximum and minimum dose occur and why this is:

Organs at risk (evidence based tolerance doses):

<table>
<thead>
<tr>
<th>Organ</th>
<th>Tolerance dose</th>
<th>Potential acute/late effect</th>
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</table>
Analysis of DVH (comment on what is demonstrated by your DVH for the PTV and organs at risk and their tolerances with respect to volume)

c) Technique Adaptation:

Identify other diagnoses for which this type of technique may be used and discuss any subtle differences which would be noticed providing reasons why:

5. Reflection (approx. 100 words)

Critical reflection/learning from your involvement in the procedure:

Action plan as a result of learning:

Note: Supervisors are no longer required to sign this form to verify that student was involved in procedure. However, please note that the academic team remain in contact with all clinical sites and may randomly contact them to verify your involvement.
MMRRT: Student progress tracking in areas of radiation therapy practice

When students are confident that they have reached each level (Beginner, Intermediate Beginner, Advanced Beginner and Competent) they should approach one of their supervising team and request a signature to verify that they have achieved this level. Practitioners are advised to refer to the Clinical Studies Manual for Radiation Therapists or the Student Clinical Workbook for greater detail as to descriptors for the above progression levels. Students should note that they may be advised by staff that they are not at the required level and that they need to gain more experience before they are verified.

<table>
<thead>
<tr>
<th>Area of radiation therapy practice</th>
<th>Beginner Verification/Date of achievement</th>
<th>Intermediate Beginner Verification/Date of achievement</th>
<th>Advanced Beginner Verification/Date of achievement</th>
<th>Competent Verification/Date of achievement</th>
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<tbody>
<tr>
<td>Highly Recommended Surface anatomy/land-marking</td>
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<tr>
<td>Thorax</td>
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<tr>
<td>Pelvis/Abdomen</td>
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<tr>
<td>Head and Neck</td>
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<tr>
<td>Highly Recommended Localisation Techniques</td>
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<tr>
<td>Simple palliative</td>
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<td>Pelvis, Prostate, Rectum, Bladder, Gynae</td>
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<tr>
<td>Breast</td>
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<tr>
<td>Radical Lung/Oesophagus</td>
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<td>Oral cavity/Pharynx/Larynx/Neck</td>
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<tr>
<td>Brain</td>
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<tr>
<td>Recommended Localisation Techniques</td>
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<tr>
<td>Limb/Extremity (Recommended)</td>
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<tr>
<td>Highly Recommended Planning Techniques</td>
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<tr>
<td>Simple palliative</td>
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<td>Pelvis</td>
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<td>Prostate, Rectum, Bladder, Gynae</td>
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<td>Breast</td>
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<tr>
<td>Oral cavity/Pharynx/larynx/Neck</td>
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<td>Brain</td>
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<thead>
<tr>
<th>Recommended Planning Techniques</th>
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<tbody>
<tr>
<td>Complex techniques: IMRT, Junctioning, Multi-phase, VMAT, RapidArc, Limb/Extremity (Recommended)</td>
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<tr>
<th>Highly Recommended Treatment techniques</th>
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<tbody>
<tr>
<td>Simple palliative: Single field/parallel opposed fields</td>
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<tr>
<td>Simple pelvic fields (3/4 fields) Prostate, Rectum, Bladder, Gynae</td>
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<tr>
<td>Complex pelvic fields (IMRT): Prostate, Rectum, Bladder, Gynae</td>
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<tr>
<td>Simple breast: 2 field tangential/including field in field</td>
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<tr>
<td>Complex breast: 3 fields breast and nodes/IMRT</td>
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<tr>
<td>Radical Lung/Oesophagus</td>
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<tr>
<td>Oral cavity/pharynx/larynx/neck</td>
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<tr>
<td>Brain</td>
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<tr>
<td>Simple electron e.g. breast boost</td>
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<tr>
<td>Complex electron e.g. skin</td>
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<tr>
<td>Junctioning technique Photons/electrons</td>
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<tr>
<td>Multi-phase technique</td>
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Recommended treatment techniques depending on availability

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<tr>
<th>TBI/TBE</th>
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<tbody>
<tr>
<td>Limb/Extremity</td>
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<tr>
<td>Stereotactic</td>
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<tr>
<td>Brachytherapy</td>
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<td>Superficial</td>
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<td>Complex CNS</td>
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<td>IGRT</td>
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<tr>
<td>VMAT/Rapidarc</td>
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<tr>
<td>Orthovoltage</td>
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