

AOA Training Program Handbook



Australian Orthopaedic Association Limited

Level 26, 201 Kent Street, SYDNEY NSW 2000

T +61 2 8071 8000

E training@aoa.org.au

www.aoa.org.au

Contents

Contents

INTRODUCTION	4
SECTION 1 - OVERVIEW OF THE TRAINING PROGRAM	6
The AOA/RACS Partnership	6
AOA Governance and Roles	6
Clinical Training and Posts	8
Training Fees	9
Contact Information	10
SECTION 2 - ABOUT THE AOA REVISED CURRICULUM	11
Overview	11
Section 1 - Foundation Competencies	12
Section 2 - Medical and Surgical Expertise	14
Section 3 - Medical and Surgical Expertise in Orthopaedics	15
SECTION 3 - STAGES OF TRAINING	16
Stage 1 - Introduction to Orthopaedics	17
Stage 2 - Core Orthopaedics	18
Stage 3 - Transition to Practice	19
SECTION 4 - AOA TRAINING AND RELATED POLICIES	21
Active Learning	21
Training Program Requirements	21
Stage Progression Requirements	21
Flexible Training	21
Additional Support	21
Official Warnings and Dismissal from Training	22
Trainee Misconduct	22
Appeals	22
Bullying and Harassment	22
Other AOA/RACS Policies	22
SECTION 5 - TEACHING AND LEARNING	23
Self Appraisal and Learning Plan	23
<i>Transition to Practice Learning Plan</i>	23

Contents

eLog	24
AOA Bone Camp	24
AOA Bone School	24
<i>Bone School Guidelines</i>	25
RACS Skills Training Courses	28
AOA 21 Workshops	29
Research	31
Paediatric Rotation at Shriners Hospital for Children	37
Transition to Practice - Continuing Professional Development Activities	38
SECTION 6 - ASSESSMENT	40
Overview	40
Feedback Entries	41
Workplace Based Assessment (WBA)	42
Examinations	45
Orthopaedic Modules	46
Performance Appraisal	49
Progress Review	51
Stage Review	52
SECTION 7 - eLEARNING	53
Overview	53
About AOA's Trainee Information Management System (TIMS)	53
Instructions for the use of the AOA Training App and TIMS	54
The Learning Management System (LMS)	54
SECTION 8 - TRAINEE PROGRAM EVALUATION	55
AOA/AORA Trainee Survey Process	55

Introduction

Chair of Education & Training

On behalf of the AOA Federal Training Committee (FTC), I would like to welcome you to the AOA 21 Training Program. AOA has invested significant resources in developing this program and we believe that it will be recognized as the best orthopaedic training program in the world.



How do you define 'best'? We have formally recognised the fact that as orthopaedic surgeons, we have multiple roles in our interactions with our patients, colleagues and the broader community. A 'good' surgeon is one who is able to meet all of the needs of his or her patients and excel in multiple roles. Technical skill is only one small aspect of orthopaedic practice, but it is the one on which the majority of training has traditionally focused.

As you progress through the training program, your trainers - all volunteers and future colleagues - will do their best to equip you with the skills and attributes that are required for safe and effective practice. This is an adult learning program. Although there are many requirements along the way, it is the effort you put in, the extent to which you engage with the program and with the learning opportunities that come your way that will define your success in the program.

The implementation of the AOA 21 Training Program represented a significant change in the training environment within the hospital systems. The requirements may seem onerous at times, but they have been carefully designed to ensure that you have access to the teaching, breadth of experience and supervision that you require to ensure a successful career as an orthopaedic surgeon.

The AOA 21 curriculum has a deliberate and obvious focus on 'Foundation Competencies'. These will be taught and assessed throughout the program, with a particular focus during 'Introduction to Orthopaedics'. Throughout the program, we expect our trainees to conduct themselves as professionals and any examples of inappropriate behaviour will be identified and addressed within the program. AOA has zero tolerance to bullying and harassment and expects the highest standards of behaviour from our trainees, trainers, staff and members. Any trainees exposed to inappropriate behaviour must report it to the appropriate authority within the hospital system and to AOA and/or RACS if the behaviour relates to an AOA member or trainee.

Feedback is an important part of training and AOA has gone to significant lengths to ensure that regular and specific feedback is provided to trainees throughout the training program. Sometimes that feedback will be challenging and it is important that trainees are willing to accept feedback, to understand the purpose of feedback and to implement any changes required as a result of feedback. Similarly, it is important that feedback is provided to trainers and the Training Program about the quality of the training experience from a trainee perspective. Without feedback, change for the better is unlikely to occur.

Whilst passing the RACS Fellowship Examination has been the focus of a traditional surgical training program in Australia, AOA 21 is different. You are required to demonstrate your skills, knowledge and attributes all the way along the training program, including your skill at defined surgical procedures. AOA trainees approved to sit the Fellowship Examination will have been signed off already on the majority of orthopaedic presentations and procedures and the idea is that the Fellowship Examination will become a formality with a very high pass rate. We will not be using the Fellowship Examination to 'weed out' weaker candidates. Trainees with performance issues will be identified early and provided with specific remediation plans and plenty of opportunity to address the identified issues. Completion of the Fellowship Examination is an important milestone but it does not define the completion of training.

Progression between stages of training is not automatic and provides the training program with the opportunity to review your training performance along the way and make sure that every trainee that progresses to the next stage is ready and equipped for the challenges ahead. That means that you will progress through the training program at different rates to your colleagues.

The FTC strongly believes in the value of the AOA 21 program and we look forward to sharing the journey with you. Please read this handbook carefully and familiarize yourself with the program requirements and processes. Remember to communicate feedback regularly through surveys, the Australian Orthopaedic Registrars Association (AORA) and your RTCs. Any direct feedback can be emailed to me at chris.kondogiannis@aoa.org.au.

This will be a challenging program, but I hope you enjoy your time as an AOA trainee and I wish you all the best of luck.

Chris Kondogiannis
Chair, Education and Training

AOA Education & Training	Document created	September 2017
	Version	February 2022
	Last reviewed	February 2022
	Next scheduled review	February 2025

Section 1

Overview of the Training Program



The AOA/RACS Partnership

The Australian Orthopaedic Association (AOA) is the peak professional body in Australia for advancing excellence of orthopaedic practice in the interests of patients and the community, and in the training of surgeons to world-class standards.

The Australia Medical Council (AMC), on behalf of the Medical Board of Australia (MBA), accredits the Royal Australasian College of Surgeons (RACS) surgical education and training programs. The AOA and RACS work collaboratively in delivery of the surgical education and training program in orthopaedic surgery. The conduct of the orthopaedic surgical education and training program has been delegated to the AOA, and is known as the AOA 21 Training Program. AOA's responsibilities to develop, implement and manage the training program are outlined in the [AOA RACS Service Agreement](#). According to the Service Agreement, the AOA 21 Training Program operates within parameters defined by [RACS Principle Based Policies](#).

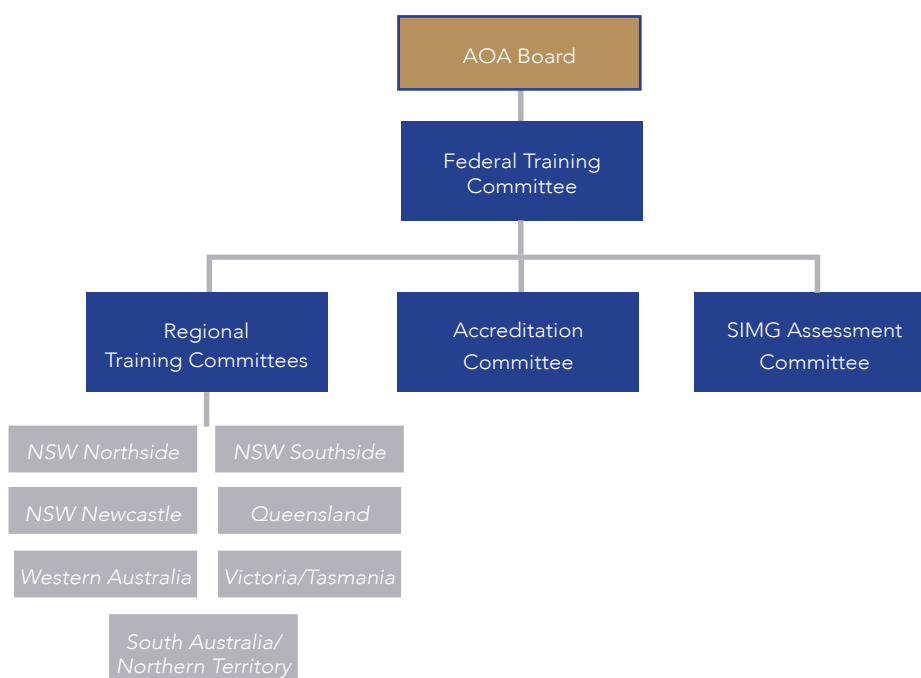
AOA Governance and Roles

AOA is governed by the [Board of Directors](#), according to the [AOA Constitution](#).

Chair of Education and Training

AOA Fellows elect a [Chair of Education and Training](#) responsible for the Education and Training Portfolio of AOA. The governance structure of the Education and Training Portfolio is illustrated below.

AOA Education & Training Organisation Chart



The Chair of Education and Training is responsible for overseeing the implementation of the AOA 21 Training Program, administering AOA policies as appropriate and providing guidance to trainees.

The Chair is an office bearer of the AOA Board of Directors, where they report on AOA training matters. This individual also chairs the Federal Training Committee (FTC); in this capacity they may interchangeably be referred to as the Chair of Education and Training or as the FTC Chair.

Federal Training Committee and its Subcommittees

The Board delegates to [FTC](#) the responsibility for all routine matters pertaining to education and training (except Continuing Professional Development). This includes [Selection to the AOA Training Program](#), AOA 21 Training Program development, implementation and review (including curriculum, assessment and progression), [accreditation reviews of hospitals and training posts](#), and specialist international medical graduate assessment. The FTC has a number of sub-committees and working groups with defined areas of responsibility.

The AOA 21 Training Program is delivered on a regional basis as follows: Queensland, New South Wales – Newcastle, New South Wales – Northside, New South Wales – Southside, Victoria/Tasmania, South Australia/Northern Territory and Western Australia. Each training region has a Regional Training Committee (RTC) to manage delivery of the curriculum and monitoring of trainee assessment and progression at a regional level. Each RTC reports to the FTC via the RTC Chair. Each training site is represented on the RTC by its Director of Training (DoT).

Directors of Training & Trainee Supervisors

The [AOA Director of Training \(DoT\)](#) is the individual primarily responsible for training within each accredited training site. The DoT works with Trainee Supervisors, as well as with other surgeons and consultants within the training environment, to provide the best possible learning environment for the trainee. The DoT meets regularly with the trainee to complete Progress Reviews and orthopaedic module forms. Additionally, the DoT has responsibilities as a member of the relevant RTC.

The [AOA Trainee Supervisor](#) is the designated individual responsible for the day-to-day supervision and training of trainees in a specified training post. The Trainee Supervisor completes 3-monthly Performance Appraisals with the Trainee, workplace based assessments and feedback entries. The Trainee Supervisor is expected to provide direction and feedback to the trainee on a regular basis and reports on the trainee's performance to the Director of Training.

Other AOA members (Fellows/consultants) are involved in providing feedback and in completing Workplace Based Assessments as defined in the assessment and [eLearning section](#).

AORA

The [Australian Orthopaedic Registrars Association \(AORA\)](#) is an engaged and active body representing, and advocating for, trainees across all levels of AOA. The AORA President is a

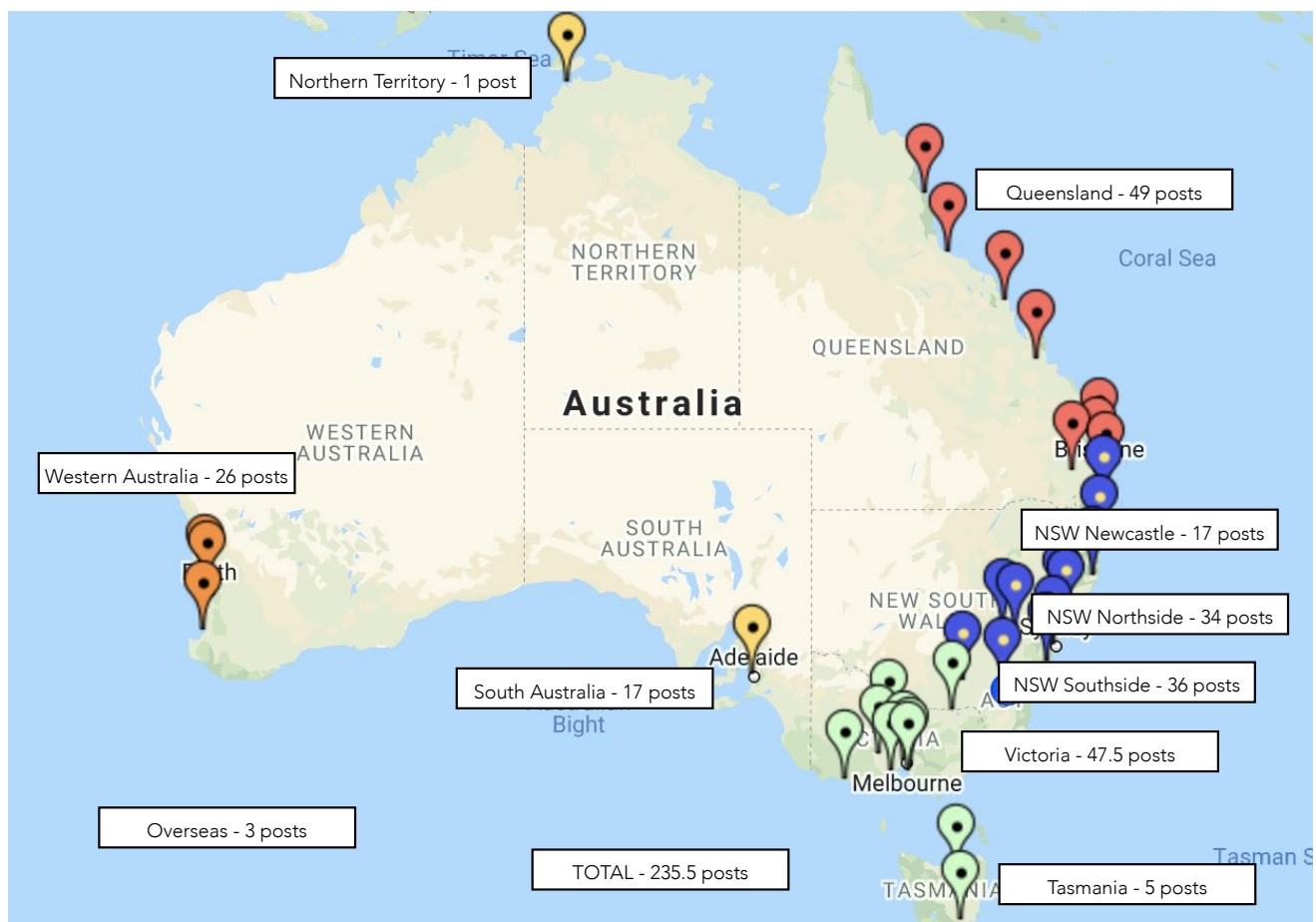
full voting member on both the AOA Board and the FTC. Regional AORA Representatives sit on each RTC. Trainees are encouraged to be involved with AORA.

Clinical Training and Posts

Clinical training is an essential element of the AOA 21 Training Program. AOA accredits training posts in orthopaedic surgery against [Accreditation Standards](#), which ensure a site is equipped to provide an optimal learning environment that supports the AOA curriculum. Hospitals work in partnership with AOA to manage the balance between service delivery and training.

Trainees are allocated to a training post within their training region. Trainees are recommended to the allocated hospital for employment. On employment by the hospital, Trainees take on the role of Registrar at the hospital while simultaneously being a trainee of AOA. It is important to note that AOA does not employ trainees.

Trainees are generally allocated to a new training post every six months, except during Introduction to Orthopaedics where posts are usually allocated for 12 months, to ensure a broad experience of Orthopaedic Surgery. By rotating to different training posts, trainees are able to receive experience in a variety of settings and across the breadth of the [curriculum](#).



As trainees progress through the training program, they demonstrate varying levels of competence. The [curriculum](#) allows for progressive development of skills, knowledge and experience facilitated by graduated levels of supervision and independence. As a trainee

demonstrates competence they are entrusted with greater degrees of independence or responsibility.

The FTC has identified specific training posts which are suitable for trainees commencing on the training program according to the following guidelines. To be suitable for trainees commencing Introduction to Orthopaedics, posts:

- Must be within a large hospital with multiple accredited training posts with a strong teaching environment and other trainees available to support the trainee in the introductory stage
- Must include in the trainee's roster the equivalent of one half-day trauma list per week directly supervised by a consultant
- Must include exposure to an adequate trauma case load and case mix to ensure that the trainee can meet the requirements of the Introduction to Orthopaedics stage of training

The FTC has also developed criteria for posts which are suitable for Transition to Practice (TTP) trainees. For a training post to be suitable for trainees completing TTP, a post must meet the following criteria:

- The post is within a large hospital with multiple accredited training posts, OR is a rural training site
- The post provides a strong learning environment with the opportunity for the TTP trainee to engage in teaching of junior colleagues. Where it is a rural site with only one training post, the TTP trainee teaches unaccredited registrars
- The DoT monitors the TTP trainee's progression with TTP training program requirements and the trainee's TTP Learning Plan. It is desirable for a mentor who is CPD and AOA 21 compliant to be appointed in addition to the DoT to provide surgical coaching.
- The site nominates a TTP facilitator to support the TTP trainee and the TTP education program. The facilitator attends each TTP Regional Gathering meeting.

AOA has three accredited training posts at Shriners Paediatric Hospital in Portland, Oregon USA. Each year up to six AOA trainees are selected to undertake a 6-month rotation in Paediatric Orthopaedic Surgery at Shriners. The purpose of the Shriners rotation is twofold; to provide otherwise unavailable exposure to paediatric orthopaedic surgery, and, to allow trainees with a special interest in paediatrics to gain additional experience in this area. Trainees cannot complete a term at Shriners until they are in Core Orthopaedics.

Further information on the Shriners application process is available [here](#).

Accredited research training posts are available during Core Orthopaedics to support trainees who elect to complete the [PhD Research Pathway](#).

During Transition to Practice, some trainees may propose to complete an accredited Transition to Practice Fellowship post. Approval of such a proposal will be at the discretion of the relevant RTC. More information is available [here](#).

Training Fees

The **training fee** is comprised of two components – an AOA fee and a RACS fee. AOA and RACS each determine their own fee. The AOA fee has been determined via a thorough activity-based costing exercise with a view to recovering the majority of training costs. AOA is responsible for the invoicing and collection of training fees for both AOA and RACS. Invoices are issued prior to the commencement of the training year.

In the event that a trainee ceases to train part way through a training year, due to withdrawal or dismissal, the training fee for the remainder of the year, in accordance with RACS policy, will not be refunded.

Fees are due for settlement by no later than 31 March each year. AOA's fee may be paid in three installments (31 March, 30 June and 30 September) provided the first installment is paid by the due date. If an AOA installment is not paid by 31 March the full fee becomes immediately due and payable, payment by installment will not be permitted, and late fees apply monthly until full payment is completed. RACS fees are payable in full on or before 31 March. Failure to pay the training fee despite follow up may result in termination of membership and therefore dismissal from training.

Contact Information

The AOA training program is managed from AOA head office in Sydney. Each region also has a Regional Manager, who is responsible for a variety of local training matters.

Contact information for all AOA Education & Training staff members and the Regional Managers can be found [here](#).

Section 2

About the AOA Revised Curriculum



Overview

AOA 21 Curriculum Framework

Quality Patient Care										
Section 3 - Applied Medical and Surgical Expertise Applied Sciences, Assessment, Management, Surgical Skills										
Trauma & Injury		Shoulder, Elbow, Hand & Wrist		Hip, Knee, Foot & Ankle, Spine		Tumour & Tumour-like Conditions		Paediatrics		Systemic Medical Conditions
Section 2 - Medical and Surgical Expertise Orthopaedic Basic Sciences, Medical Expertise, Surgical Expertise										
Section 1 - Foundation Competencies										
Communication	Teamwork & Conflict Management	Professionalism	Management & Leadership	Advocacy	Education & Research					

© Australia Orthopaedic Association 2016

This document is owned by the Australia Orthopaedic Association and must not be reproduced, disclosed, or distributed without the prior written consent of the Australia Orthopaedic Association.

The overarching goal of the curriculum for education and training in Orthopaedic Surgery, 2017, is to guide trainees in learning and refining Foundation Competencies, in addition to those related to medical and surgical expertise, to improve the patient care they provide. The framework identifies and describes the abilities required of trainees to effectively meet the health care needs of patients.

This curriculum is divided into three sections.

SECTION 1 – FOUNDATION COMPETENCIES

Competencies that, together with medical and surgical expertise, are the foundation for quality patient care.

1.1 Communication	Establishing relationships with patients and their families* Eliciting relevant information Sharing information with patients and their families Sharing information with colleagues and others
1.2 Teamwork and Conflict Management	Working with others Handover Conflict management
1.3 Professionalism	Professional and ethical behaviour Commitment to Orthopaedic Surgery as a Profession Health and sustainable practice
1.4 Leadership and Organisational Skills	Leadership Organisational practice (including practice management) Cost and allocation of healthcare
1.5 Advocacy	Advocacy for individual patients Advocacy for the community Cultural awareness and sensitivity
1.6 Education and Research	Ongoing learning (CPD and integration of evidence) Teaching Critical evaluation of literature Research, development and dissemination of new knowledge

** Please note that throughout the curriculum, phrases such as 'patients and their families' are intended to include all those that are personally significant to the patient and are concerned with his or her care.*

Based on the CanMEDs approach, Section 1 competencies together with medical and surgical expertise are the foundations of quality patient care. They are applied across all stages of training and have been brought together at the beginning of the curriculum document to emphasise their importance.

Competencies on conflict management and handover, practice management and critical evaluation of literature have been included. In keeping with current medical education best practice, professional and ethical behaviour, and health and sustainable practice are distinct subsections of Professionalism. Although cultural awareness and sensitivity spans a number of Foundation Competencies, it has been included within Advocacy.

Each section of the curriculum builds upon the previous one. The achievement of specific competencies with regard to orthopaedic surgery detailed in later sections is underpinned by the development of Foundation Competencies.

The FTC's vision for the implementation of the foundation competencies in the Training Program is that they will be integral to clinical discussions, as well as being explicitly referenced and taught.

The Bone School Program includes sessions on Risk Management Education. When possible, AOA works in partnership with lawyers from the three Medical Defence Organisations (MDOs) to develop and deliver the sessions, following guidelines provided by the FTC.

Ethics Education is also a vital component of the AOA 21 Training Program. The [AOA Ethical Framework](#) and the [AOA Code of Conduct](#) are important resources for review and discussion. Discussion of ethical decision making are incorporated into clinical scenarios in Bone Camp and during Bone School.

All trainees are encouraged to have a Mentor. Education about Mentoring is included in both Bone School and Bone Camp annually. Further information regarding the AOA Mentoring Program can be found [on the AOA website](#).

Various other Foundation Competency topics will be addressed over the Bone School cycle. These include:

- Diversity Awareness education – unconscious bias, inclusive leadership and workplaces
- Communication with ABTSI Patients
- Advocacy
- Confidentiality
- Delivering Bad News
- Discharge Summaries & Letters
- Refugee patients
- Working with Interpreters
- WHO Guidelines

All trainees are also required to complete all AOA 21 Workshops by the end of training. These are offered in each region during the TTP stage of training.

SECTION 2 - MEDICAL AND SURGICAL EXPERTISE

Medical and surgical expertise competencies underpin competencies within Section 3.

2.1 Orthopaedic Principles and Basic Sciences (OPBS)	Musculoskeletal Pathology Biomechanics and motion Materials and engineering Infection, immunology and inflammation Neurovascular Pharmacology Radiology and investigations
2.2 Medical Expertise (ME)	Applied Science Assessment Management
2.3 Surgical Expertise (SE)	Pre operative Intra operative Post operative

The medical and surgical expertise competencies define the fundamental specialty knowledge and skills of orthopaedic surgeons across all areas of practice. The collation of these 'generic' orthopaedic surgery competencies prevents repetition throughout the curriculum, and when applied to a specific context within Section 3, reflects a spiral learning approach.

SECTION 3 - MEDICAL AND SURGICAL EXPERTISE IN ORTHOPAEDICS

Medical and surgical expertise competencies applied to each topic area.

Topics: 3.1 Trauma and Injury 3.2 Shoulder 3.3 Elbow 3.4 Hand and Wrist 3.5 Hip 3.6 Knee 3.7 Foot and Ankle 3.8 Spine 3.9 Tumour and Tumour-like Conditions 3.10 Paediatric 3.11 Systemic Medical Conditions	<u>ME - Applied Sciences</u> Anatomy, including surgical approaches Biomechanics Pathology
	<u>ME - Assessment</u> History taking Physical Examination Investigations
	<u>ME - Management</u> Non operative Management Management Plans
	<u>SE - Surgical Skills</u> Level One - Perform independently Level Two - Have observed, assisted with or performed with supervision Level Three – Discuss how procedure would be performed

Each topic area is divided into four sub-sections: Applied Science; Assessment; Management; and Surgical Skills.

Surgical skills are categorised into three levels. On their first day of independent practice, all trainees graduating from the AOA education and training program will be able to competently perform all procedures listed in level one. They will have been provided with the opportunity to observe, assist with or perform under supervision those procedures listed in level two. In addition, they will be able to discuss how procedures in level three would be performed. In summary the levels indicate – ‘must perform’, ‘should have performed’, ‘would be beneficial to have had some educational exposure’.

It is expected that many trainees may also be able to independently perform procedures that are listed in level two and three. The goal is to train to excellence, and assess for competence. Regional training centres will encourage trainees to achieve beyond the minimum required, as described in this curriculum.

The AOA 21 Curriculum is found [here](#).

Section 3

Stages of Training



The AOA 21 Training Program is comprised of three unique Stages of Training as illustrated in the diagram below:

Introduction to Orthopaedics

Trainees will spend a minimum of 12 months in the Introduction to Orthopaedics stage. This phase of training is designed to facilitate the acquisition of basic orthopaedic surgical skills and foundation competencies of an orthopaedic consultant, from which trainees can develop further in the subsequent stages.

Core Orthopaedics

Trainees will usually complete the Core Orthopaedics stage in approximately 3 years. The minimum time frame to complete this stage is 24 months. Core Orthopaedics is designed to develop trainees' orthopaedic assessment, management and surgical skills to a level of proficiency across the breadth of general orthopaedic surgery as articulated by the curriculum. Trainees completing this stage will deliver safe and effective care to all patients.

Transition to Practice

Trainees will spend a minimum of 12 months in the Transition to Practice stage. This stage is designed to refine advanced foundation competencies in preparation for work as a specialist orthopaedic surgeon, and may allow trainees to pursue more focused development in an area of interest.

AOA Training Program						
Stage	Pre – requisites for training	Introduction to Orthopaedics	Core Orthopaedics	Transition to Consultant Practice	Fellowship	
Approx. time frame*	Approx. 30-48 months	Approx. 12 - 18 months	Approx. 36 months	Approx. 12 months	Career	
Focus	Knowledge of Surgical Science Basic orthopaedic surgery skills	All Foundation Competencies Orthopaedic Basic Sciences Section 2 – General Orthopaedic Medical and Surgical Expertise Section 3 - Trauma & Injury	All Foundation Competencies Section 3 – Medical and Surgical Expertise applied to each topic area.	Leadership & Organisation Skills, Education & Research Refining expertise in selected areas	Continuing Professional Development	
		SELECTION	REVIEW OF COMPETENCE TO PROGRESS	REVIEW OF COMPETENCE TO PROGRESS	REVIEW OF ELIGIBILITY FOR FELLOWSHIP	

* Competency-based assessment. Approximate time frame indicates anticipated progression for the majority of trainees.

[Click here for the Training Program Requirements and Stage Progression Requirements.](#)

Stage 1: Introduction to Orthopaedics

Education

During Introduction to Orthopaedics, trainees need to complete:

- [Bone Camp](#) – an intensive workshop shortly after commencement of training.
- [RACS Australia & New Zealand Surgical Skills Education & Training \(ASSET\) course](#)
- [RACS Care of the Critically Ill Surgical Patient \(CCrISP\) course](#).
- [RACS Training in Professional Skills \(TIPS\) course](#)

Research

During Introduction to Orthopaedics, trainees need to select one of three pathways for completion of the [Research Requirement](#).

Assessment and Feedback

[Feedback entries](#) submitted via the [AOA Training App](#) or online through the [Trainee Information Management System \(TIMS\)](#) provide regular feedback to trainees on their performance during Introduction to Orthopaedics. A minimum of one Feedback Entry per week is required.

Workplace Based Assessments in Introduction to Orthopaedics include:

- [Patient Consultation Assessment](#)
- [Management Plan Assessment](#)
- [Surgical Skills Assessment](#)

Please refer to the [Assessment section](#) for information regarding each WBA.

Specifically, during Introduction to Orthopaedics trainees must complete [Surgical Skills Assessments](#) that demonstrate a level of competence (a score of three on the global scale) for a key list of trauma procedures.

Trainees commence recording their involvement in surgical procedures via the [eLog](#) during Introduction to Orthopaedics.

The [Orthopaedic Principles and Basic Sciences \(OPBS\) Examination](#) must be completed during Introduction to Orthopaedics. Trainees may make a maximum of four (4) attempts at the OPBS. The OPBS must be completed by the second available sitting in the second year of training. Trainees who do not complete the OPBS within four (4) attempts and/or the second available sitting in the second year of training will be dismissed from the program.

The OPBS is run by RACS with further information available [here](#) and on the [RACS website](#).

Monitoring and Review

During Introduction to Orthopaedics, trainees will have 3-monthly [Performance Appraisal Meetings](#) with their Trainee Supervisor and 6-monthly [Progress Review Meetings](#) with their Director of Training. The purpose of these meetings is to monitor performance and progress against the expectations of performance for Introduction to Orthopaedics.

Please refer to the [Training Program Requirements](#) for additional information.

Progression to Core Orthopaedics

When trainees have completed the requirements of Introduction to Orthopaedics they may apply for an Introduction to Orthopaedics Stage Review. A Stage Review Panel will assess the Trainee's portfolio to ascertain if there is evidence sufficient to demonstrate that the [expectations of performance](#) for Introduction to Orthopaedics have been achieved. This Stage Review will determine progression to Core Orthopaedics.

Please refer to the [Stage Progression Requirements Policy](#) for additional information.

Stage 2: Core Orthopaedics

Education

During Core Orthopaedics, trainees need to:

- Complete RACS [Early Management of Severe Trauma \(EMST\) Course](#)
- Attend [Bone School](#)

Research

Trainees should continue to work on their selected [Research Pathway](#) during Core Orthopaedics in order to be able to demonstrate progress against the requirement.

Assessment and Feedback

[Feedback entries](#) submitted via the [AOA Training App](#) or online through the [Trainee Information Management System \(TIMS\)](#) continue to provide regular feedback to trainees on their performance during Core Orthopaedics.

Workplace Based Assessments in Introduction to Orthopaedics include:

- [Patient Consultation Assessment](#)
- [Management Plan Assessment](#)
- [Case based Discussion](#)
- [Surgical Skills Assessment](#)

Please refer to the [Assessment section](#) for information regarding each WBA.

Trainees continue recording their involvement in surgical procedures via the [eLog](#) during Core Orthopaedics. Cases recorded in the eLog will demonstrate experience which, along with requisite Workplace Based Assessments, may be used as evidence of completion of orthopaedic modules.

During Core Orthopaedics trainees will complete the [Fellowship Examination](#). The Fellowship Examination is a summative examination and is run by RACS. Further information is available [here](#) and on the [RACS website](#).

Monitoring and Review

Trainees will continue to have 3-monthly [Performance Appraisal Meetings](#) with their Trainee Supervisor and 6-monthly [Progress Review Meetings](#) with their Director of Training to monitor performance and progress against the [expectations of performance](#) for Core Orthopaedics.

Trainees will need to prepare a [Transition to Practice Learning Plan](#) for approval before being eligible to progress to Transition to Practice.

Please refer to the [Training Program Requirements](#) for further information.

Progression to Transition to Practice

When trainees have completed the requirements of Core Orthopaedics they may apply for a Core Orthopaedics Stage Review. A Stage Review Panel will assess the trainee's portfolio to ascertain if there is evidence sufficient to demonstrate that the [expectations of performance](#) for Core Orthopaedics have been achieved. This Stage Review will determine progression to Transition to Practice.

Please refer to the [Stage Progression Requirements Policy](#) for further information.

Stage 3: Transition to Practice

Education

During Transition to practice, trainees need to complete the suite of [AOA Workshops](#) and the Transition to Practice education sessions.

Research

Trainees complete their selected [Research Pathway](#) during Transition to Practice.

Assessment and Feedback

[Feedback entries](#) submitted via the [AOA Training App](#) or online through the [Trainee Information Management System \(TIMS\)](#) continue to provide regular feedback to trainees on their performance during Transition to Practice.

In preparation for consultant practice, the Transition to Practice stage is structured according to the AOA Continuing Professional Development Program and trainees will be required to collect points across a range of activities. Before commencing Transition to Practice, trainees are required to submit a [Learning Plan](#) outlining the activities they intend to complete to achieve the required points. Further information regarding the activities is available [here](#).

Monitoring and Review

Trainees will continue to have 6-monthly [Progress Review Meetings](#) with their Director of Training to monitor performance and progress against the [expectations of performance](#) for

Transition to Practice.

Please refer to the [Training Program Requirements](#) for further information.

Completion of Training

When the requirements of Transition to Practice are nearing completion, trainees may apply for a Transition to Practice Stage Review. A Review Panel will assess the trainee's portfolio to ascertain if there is evidence sufficient to demonstrate that the [expectations of performance](#) for Transition to Practice have been achieved. This Stage Review will determine completion of training.

Please refer to the [Stage Progression Requirement Policy](#) for further information.

Completion of Training and Applying for Fellowship

AOA Trainees (i.e. Associate Members) who have completed all requirements of the AOA 21 Training Program and who are considered "Training Complete" are eligible to apply to become a Fellow of AOA and of RACS.

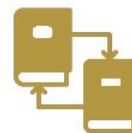
Training Complete surgeons will receive a letter inviting them to apply to become a full Fellow of AOA. On completion of an *Application for Membership as a Fellow form*, and payment of a Fellow membership fee, recently Training Complete surgeons will be confirmed as Fellows of AOA. Fellow membership is offered at a significantly discounted rate in the first year after completion of training.

New Fellows will be invited, and are encouraged to attend, the AOA Fellowship Ceremony held in conjunction with the Annual Scientific Meeting in October each year.

Information relating to application for admission to Fellowship of RACS is available on the [RACS website](#). This process is not automatic and must be initiated by the trainee.

Section 4

AOA Training and Related Policies



Active Learning

The [AOA 21 Active Learning Policy](#) outlines the expectation for trainees to drive their learning and take responsibility for engaging with the Training Program. The consequences for failing to complete Training Program Requirements with the required regularity or within the maximum timeframe are also laid out.

Training Program Requirements which need to be completed regularly include Feedback Entries, WBAs, Monitoring and Review meetings and attendance at Bone School.

Training Program Requirements which need to be completed within a maximum timeframe include courses, exams, research and Stages of Training.

Training Program Requirements

The [AOA 21 Training Program Requirements](#) outlines the requirements for trainees at each Stage of Training.

Stage Progression Requirements

The [AOA 21 Stage Progression Requirements](#) outlines the requirements for trainees to progress between the stages of training and for completion of training

Flexible Training

AOA acknowledges diversity amongst trainees and is committed to tailoring training to a trainee's individual circumstances, wherever this is possible without affecting the standard of training. The [AOA 21 Flexible Training policy](#) addresses situations where a trainee may need to vary their training from the standard model, including deferral of training commencement, interruption of training, leave from training, training region transfers, part-time training, recognition of prior learning and special consideration.

AOA is actively working towards identifying part-time training posts in each region. It is recommended that trainees do not plan to train in a part-time capacity during Introduction to Orthopaedics. This is an intensive stage of training that lends itself to full-time participation. If you are considering part-time training during Introduction to Orthopaedics, you are encouraged to raise this with your RTC Chair as soon as possible.

Additional Support

The [AOA 21 Additional Support policy](#) outlines the additional support available to trainees to rectify areas of concern identified via Performance Appraisal meetings.

A Performance Improvement Plan template can be found [here](#).

Official Warnings and Dismissal from Training

A trainee's continued participation in the training program may be reviewed under the following circumstances:

- Continued unsatisfactory clinical performance
- Failure to comply with AOA or RACS direction
- Failure to complete requirements within specified timeframes
- Failure to satisfy medical registration
- Failure to satisfy employment requirements

Please refer to the [Review of Continued Participation in the Training Program Policy](#)

Trainee Misconduct

Allegations of trainee misconduct will be taken very seriously. The [Trainee Misconduct policy](#) outlines management of trainee misconduct and the possible consequences to training program participation.

Appeals

Decisions relating to training may be reconsidered, reviewed or appealed in accordance with AOA's [Reconsideration, Review and Appeal of Training Decisions policy](#). Requests should be directed to the the AOA National Education Manager (training@aoa.org.au).

Bullying and Harassment

AOA does not condone bullying, harassment or discrimination in any form and is committed to its prevention. The AOA [Bullying, Harassment and Discrimination Policy](#) outlines definitions of these unacceptable behaviours and procedures for filing a complaint. All training related complaints should be initially directed to the Chair of Education and Training (training@aoa.org.au) according to the policy.

AOA fully supports the [RACS Let's Operate with Respect](#) initiative. The AOA Board is pleased to work with RACS to ensure that all AOA members are adequately equipped to recognise and respond to unacceptable behaviour. Completion of the [Operating with Respect eLearning module](#) is mandatory for all AOA trainees and Fellows.

Other AOA/RACS Policies

Trainees are reminded to familiarise themselves with other AOA policies:

- [AOA Code of Conduct](#)
- [AOA Position Statement on Interaction with Medical Industry](#)
- [AOA Constitution](#)
- [AOA Privacy Collection Notice](#)

According to the AOA/RACS Service Agreement, the AOA 21 Training Program operates within parameters defined by [RACS Principle Based Policies](#) which are available on the RACS website.

Section 5

Teaching and Learning



As adult learners it is expected that trainees will seek and take as many opportunities as possible to enhance their learning and develop their skills.

Trainees are required to document their involvement in cases via the eLog, attend bone school and complete a number of courses throughout training. Other learning opportunities are available and trainees are encouraged to take advantage of these. Tools are also available to help trainees plan their learning.

Some training program requirements are delivered by RACS. It is the trainee's responsibility to ensure they familiarise themselves with the timelines and processes for completion of these requirements.

Self-Appraisal and Learning Plan

During Introduction to Orthopaedics and Core Orthopaedics, the trainee should complete a self-appraisal and create a Learning Plan for each 6-month training period/rotation. While these tools are not mandatory, they provide an excellent framework for reflection and purposeful learning. It is recommended that the trainee complete these documents and arrange an initial meeting with their Trainee Supervisor to discuss their learning for the rotation within two weeks of commencing each 6-monthly rotation.

The goal of the [Trainee Self-Appraisal](#) form is to:

- Help trainees identify specific strengths and areas that require further development
- Encourage discussion between a supervisor and trainee regarding the areas the trainee needs guidance and how this can be incorporated in training.

The self-appraisal form is not submitted to AOA head office.

The [Learning Plan](#) is completed utilising the insight gleaned from the self-appraisal form and discussion with the Trainee Supervisor. It assists with identifying learning opportunities and resources available to meet the learning outcomes identified to focus on for the training period.

Transition to Practice Learning Plan

Before progressing to Transition to Practice the trainee must submit a [Transition to Practice Learning Plan](#) for approval. The Transition to Practice Learning Plan should outline the activities the trainee intends to complete toward achieving the Training Program Requirements for the Stage. Trainees may utilise their Transition to Practice year to pursue more focused development in an area of interest. To this end, the trainee, in conjunction with the relevant DoT, may also include preferences for posts where they would like to be allocated.

Some trainees will also have the option of proposing to complete an accredited Transition to Practice Fellowship position in accordance with the parameters of the [TTP Accredited Fellowships Fact Sheet](#). Approval of such a proposal will be at the discretion of the relevant

RTC and in accordance with the [Guidelines for Assessment of AOA Accredited Fellowship Positions for TTP](#). Only AOA Accredited Fellowships in Australia will be considered. Completion of a Transition to Practice Fellowship will be a special arrangement and not the norm.

The [Transition to Practice Learning Plan](#) must be submitted to the RTC for review and approval no less than six months prior to the Core Orthopaedics Stage Review and subsequent progression to Transition to Practice.

eLog

Throughout the AOA 21 Training Program, trainees must contemporaneously record in the eLog all surgical procedures in which they are involved. Operative experience can be recorded via the AOA Training App or on TIMS. The eLog must be up to date up until the end of the previous calendar month at all times. The eLog summary may be reviewed at any time. Failure to maintain an accurate eLog may result in a formal warning (refer to the [Review of Continued Participation in the Training Program Policy](#))

AOA Bone Camp

Bone Camp is conducted at the commencement of the training year for trainees new to the AOA 21 Training Program. Its purpose is to support trainees' orientation to the training program, to provide opportunities for skill development in physical assessment, as well as in many of the Foundation Competencies areas such as Communication, Ethical Decision Making, Professionalism and Education and Research. It is hoped that the social and group aspects of the program will assist trainees to build relationships, which will support them during the years of training.

AOA Bone School

Trainees in Core Orthopaedics are required to attend Bone School sessions, and in-training exams when offered. Bone School may be held face to face or via Zoom. Where they are held via Zoom, recordings of the sessions will be stored on the LMS. These recordings will be available to trainees from all regions.

Two or three national Bone School sessions are likely to be scheduled annually, via Zoom, outside the usual Bone School times, in order to provide education in some of the Foundation Competencies.

Attendance at Bone School is mandatory and will be monitored. Some training regions also require Introduction to Orthopaedics trainees to attend Introduction-specific bone school sessions. Bone School is held regularly in each region and comprises lectures, tutorials and clinical/outpatient sessions according to the Bone School Guidelines. Each metropolitan training site in a Training Region should host a minimum of one clinical session each year.

The Bone School program is mapped to the curriculum and runs on an 18-month cycle. Thus each orthopaedic topic area will be 'revisited' or covered twice over a 3-year period. Across 18 months, each region will deliver at minimum:

- The equivalent of a minimum of 54 tutorial sessions of 2 hours duration
- The equivalent of a minimum of 15 clinical sessions of 2-3 hours' duration

It is agreed as part of the Hospital Accreditation processes that trainees attend Bone School – they are not to be rostered on nor expected to be in the hospital during scheduled Bone School sessions.

Consultants who are invited to present at these sessions give their time freely to guide and support training.

Trainees completing a rural rotation are required to join bone-school sessions remotely. The Regional Manager will provide rural trainees with teleconference dial in details.

Part-time trainees are required to attend bone school sessions.

Rural or part-time trainees who anticipate they will have difficulty maintaining attendance at Bone School should seek formal adjustment of the requirement from their RTC Chair.

Attendance records are maintained for each session. If trainees are unable to attend a Bone School session they are required to email the details/reasons for their absence to their Regional Manager no later than a day before the session. Please note exemptions from attending Bone School or in-training exams will only be granted by the RTC Chair in exceptional circumstances. Trainees whose attendance falls below 80% for a particular training period will be flagged for review. This threshold includes allowance for approved leave.

If a Trainee's attendance at Bone School is deemed unsatisfactory for a particular training period, the trainee will be notified in writing that they will receive a formal warning in accordance with the [Review of Continued Participation in the Training Program policy](#).

Bone School Guidelines

"Intro" Bone School (where offered)

- Conducted in regions
- Focus on study of orthopaedic basic principles and sciences
- 4 clinical sessions on clinical examination to reinforce principles learnt at Bone Camp
 - 2 sessions for upper limb
 - 2 sessions for lower limb

Core Orthopaedics Bone School

The program should include:

- A combination of tutorial and clinical sessions (trainees assessing patients)
- The equivalent of a minimum of 54 tutorial sessions of 2 hours duration per 18 month period
- The equivalent of a minimum of 15 clinical sessions of 2-3 hours duration per 18 month period
- An 18 month cycle for curriculum delivery – thus within the Core Orthopaedics stage, each topic area will be 'revisited' or covered twice.

<i>Topic Area</i>	<i>No. of sessions/ cycle</i>
Orthopaedic Infection	1
Biomechanics	1
Education & Teaching	1
Research Methodology	2
Risk Management	3
Tumour	4
Systemic Medical Conditions	1
<i>Each must include trauma sessions within the topic:</i>	
Shoulder	4
Elbow	2
Hand & wrist	6
Hip	6
Knee	6
Foot & Ankle	4
Spine	4
Paediatrics	5
Other, including in-training assessment	5
TOTAL	54

Various other Foundation Competency topics will be addressed over the Bone School cycle. These include:

- Diversity Awareness education – unconscious bias, inclusive leadership and workplaces
- Communication with ABTSI Patients
- Advocacy
- Confidentiality
- Delivering Bad News
- Discharge Summaries & Letters
- Refugee patients
- Working with Interpreters
- WHO Guidelines

In some regions, longer tutorial sessions are offered, for example, 3 hours. In this instance, 36 sessions should be offered over the 18 months.

Training sites that are not within the metropolitan area should have a mechanism to deliver the equivalent educational experience either by ensuring trainees can attend tutorials remotely or by delivering the equivalent material locally. It is acknowledged that one on one teaching during a dedicated tutorial session may not need to be of the same duration, but trainees must be provided with the time for directed self-study on the topic area, followed by case discussion with a Fellow.

Training sites within each region's metropolitan area should host a minimum of one clinical session.

The requirement to participate in teaching/offering clinical sessions will be reinforced through the accreditation of training sites.

Tutorial Sessions

The following principles apply in relation to tutorial sessions:

- Pre-reading material should be provided with the expectation that trainees will attend prepared to apply knowledge on the topic area.
- Didactic lectures should be minimised.
- Case discussion should be the focus of sessions.
- Learning related to Foundation Competencies must be dispersed through each session by incorporating relevant questions in case discussions.
- Where possible, trainees should be separated into junior and senior groups to target learning appropriate to level of experience. Trainees in the Transition to Practice stage should be utilised as a resource to facilitate junior tutorial groups.
- Flexibility would need to be retained in the delivery of tutorial sessions to ensure presenters/facilitators are available for the sessions. However, it is preferable for the schedule for the subsequent 12 months to be published, to assist planning and trainee preparation.
- Delivery of a series of tutorial sessions or module on the same topic area is preferred. In the future, this could be followed by an assessment of knowledge on this topic area.
- A 'Topic Area Co-ordinator' should be appointed and be responsible for the coordination of sessions on the relevant topic area. The Topic Area Coordinator organises a combination of sessions according to the learning outcomes of the relevant topic area from the curriculum. Session presenters/facilitators should be given clear guidance on the learning outcomes the session is aiming to achieve to guide the development of content for the session and selection of cases.
- In some states, where the travelling time for registrars to attend tutorial sessions is considerable, fewer but longer tutorials of 3-4 hours duration may be preferred. In this instance, adequate breaks, multiple speakers and/or sub sessions of varying format should be used to maintain trainee engagement.
- Equivalent tutorial and clinical sessions should be provided at training sites outside metropolitan areas. The health and safety of trainees driving from these sites to attend sessions from time to time, especially when also on call, must be taken into consideration. Trainees must attend a minimum of 80% of sessions.

Clinical sessions

The following principles apply in relation to clinical sessions:

- Clinical sessions should be conducted in major hospitals that have one or more training positions.
- Junior registrars from the training site hosting the clinical session should help to select and organise the patients.
- All sessions should be scheduled prior to the start of the training year to assist in planning.
- The trainees attending the session should be divided into groups of 3-4 trainees.

- One consultant or trainee in the Transition to Practice stage must be available for each group.
- Trainees should see approximately 4-6 patients during the clinical session.
- All trainees should be engaged appropriately according to their level of training. Junior registrars should not just be observing trainees who are preparing for their Fellowship Examination.
- Foundation competencies should be reinforced throughout each session, including patient communication skills. Fellowship Examination short case technique should not be the focus.
- Some states may run clinical sessions immediately before or after tutorial sessions, for a shorter period of time, more frequently.

RACS Skills Training Courses

Training in Professional Skills (TIPS) Course

The TIPS course correlates well with the content identified for the acquisition of three very significant Foundation Competencies of the AOA 21 Training Program: Communication, Teamwork & Conflict Management, and Professionalism, which, together with medical and surgical expertise, are the foundations for quality patient care.

TIPS teaches patient-centred communication and team-oriented non-technical skills in a clinical context. Through simulation, participants address issues and events that occur in the clinical and operating theatre environment.

TIPS runs for two days and is conducted for 12 participants.

For further information please go to:

<http://www.surgeons.org/for-health-professionals/register-courses-events/skills-training-courses/tips/tips-registration/>

The Australian and New Zealand Surgical Skills Education and Training (ASSET) Course

The ASSET course provides an educational package of agreed generic surgical skills required by surgical Trainees in the Australian and New Zealand context. The emphasis of this course is on small group teaching, intensive hands-on practice of basic skills, individual tuition, personal feedback to participants and the performance of practical procedures.

Four modules are undertaken over the two day course:

- Suturing and dissection
- Tubular structures and electrosurgery
- Endoscopic surgery
- Musculoskeletal surgery

For further information about the course please go to: <http://www.surgeons.org/for-health-professionals/register-courses-events/skills-training-courses/asset/>

Care of the Critically Ill Surgical Patient (CCrISP) Course

The CCrISP® course assists doctors in developing simple, useful skills for managing critically ill patients, and promotes the coordination of multidisciplinary care where appropriate. The

course is as much about putting clinical knowledge, acumen, and procedural skills to use as it is about communication, responsibility and leadership. The CCrISP® course encourages trainees to adopt a system of assessment to avoid errors and omissions, and uses relevant clinical scenarios to reinforce the objectives.

The course is conducted over 3 days.

For further information please go to: [http://www.surgeons.org/for-health-professionals/register-courses-events/skills-training-courses/ccrisp/ccrisp-overview/Early Management of Severe Trauma \(EMST\) Course](http://www.surgeons.org/for-health-professionals/register-courses-events/skills-training-courses/ccrisp/ccrisp-overview/Early%20Management%20of%20Severe%20Trauma%20(EMST)%20Course)

EMST is concerned with the management of injury victims in the first hour or two following injury, which emphasises a systematic clinical approach. The course is designed for all doctors who are involved in the early treatment of serious injuries in urban or rural areas, whether or not sophisticated emergency facilities are available.

For further information go to: <http://www.surgeons.org/for-health-professionals/register-courses-events/skills-training-courses/emst/>

For information regarding completion of RACS Skills Training Courses please refer to the [Training Program Requirements](#).

AOA 21 Workshops

AOA has a series of workshops designed for Fellows involved in the AOA 21 Training Program. Trainees are encouraged to attend these workshops when they are available in their region. All AOA 21 Workshops need to be completed prior to the end of Transition To Practice. They are scheduled into the annual program of Education Modules for delivery to TTP trainees.

A schedule of workshops is regularly published in the eNews and will be available from Regional Managers.

Workplace Based Assessment

The Workplace Based Assessment workshop will give any member involved in training, including trainees, the opportunity to learn more about the principles of valid and reliable assessment and how the new tools will help inform assessment review meetings.

The workshop will focus on:

- The rationale for workplace based assessment in the new assessment strategy
- AOA 21 new WBA tools for trainee learning
- The role of expert judgement
- Explanation of the global rating scale and comparison of trainee performance to consultant level of practice
- Volume WBAs and the variety of assessments required for completion of orthopaedic modules
- Practice using WBA tools and developing constructive suggestions for improvement
- Introduction to the AOA Training App

Effective Feedback

The Effective Feedback workshop will give any member, specifically those involved in training, the opportunity to discuss the concept of feedback, participate in activities to help strengthen skills for having feedback conversations and address concerns about giving frank performance appraisal.

The workshop will focus on:

- Barriers to giving and receiving feedback
- Principles of effective feedback for trainee learning
- Creating an environment for honest performance feedback
- Strategies for approaching difficult conversations

Helping Underperforming Trainees

The Helping Underperforming Trainees workshop will give any member, specifically those involved in training, the opportunity to ask questions, discuss concerns and share challenging cases.

The workshop focuses on:

- Identifying trainees experiencing difficulty
- Steps in addressing underperformance
- Using the AOA Training App and documenting meetings
- Possible interventions for underlying issues
- Probation, remediation and prevention

Trainee Rotations – A Planned Approach

Trainee Rotations – A Planned Approach workshop is suitable for any AOA member involved in training and includes practical strategies to guide trainees through the program, and aligning trainee experiences with the revised AOA curriculum.

The workshop will focus on:

- Maximising learning experiences for trainees by planning before the rotation and then with the trainee
- Aligning expectations of the supervisor and trainee
- Developing a plan with the trainee for the rotation
- Using observation and feedback
- Documenting trainee progress
- Incorporating information from feedback entries and WBAs into reviews

Teaching in the Clinical Setting

The Teaching in the Clinical Setting workshop is suitable for any AOA member involved in training and includes practical strategies to guide trainees through the program.

The workshop will focus on:

- The importance of effective clinical teaching
- Deliberate teaching of foundation competencies or 'non- technical' skills such as ethics and professionalism
- Models of clinical teaching that can easily be applied in practice
- Teaching procedural/surgical skills

Introduction

Trainees are required to select one of the following Research Pathways during Introduction to Orthopaedics:

- Project Pathway:
- Coursework Pathway:
- PhD Pathway:

Project Pathway

Trainees complete a full research project and present the results at the AOA ASM (or equivalent).

The AOA Research Coordinators will assess whether the project has met program requirements. Trainees will be encouraged to incorporate any feedback from the coordinators and submit an article for publication. Trainees will need to select a research supervisor for the duration of the project and have a research plan and supervisor approved prior to commencing the project.

Coursework Pathway

Part A: Trainees complete a Master degree, graduate diploma or graduate certificate. The course must include two of the following subjects: Clinical Epidemiology, Biostatistics, Research Methods and Evidence Based Medicine.

Part B: Trainees are required to complete a 'mini' research project, which can include a study design as per the Project Pathway, systematic review, case series/case report or clinical audit. The mini project must be presented at an AOA branch ASM, AORA ASM or the AOA ASM.

PhD pathway

Accredited research training posts will be available during Core Orthopaedics to support trainees who elect to complete a PhD during training. Trainees would need to apply directly to the training site for the post. The posts will have a reduced clinical load (0.5 FTE) to facilitate participating in research.

Trainees will have until the end of Transition To Practice to complete their chosen Research Pathway. Please refer to the [Training Program Requirements](#) for more details.

Trainees who have completed research within 5 years prior to the commencement of training may apply for recognition of prior learning via the [Research RPL form](#). Research must be directly relevant to orthopaedic surgery and meet the minimum criteria required of the project or coursework pathway.

Project Pathway

Trainees who select the Project Pathway complete a full research project and present the results at the AOA ASM (or equivalent).

Trainees will need to select a research supervisor for the duration of the project and have a research proposal and supervisor approved prior to commencing the project.

The Research Project may be a:

- Randomised controlled trial
- Cross sectional study
- Prospective cohort study
- Retrospective cohort study
- Comparative study

Definitions of each study type are provided [here](#).

The Project will have five broad components as follows:

1. Literature Review
2. Hypothesis and Study Design
3. Data Collection and Analysis
4. Interpretation Results
5. Discussion and Conclusions

To fulfill the requirements of the Project Pathway, the research project must be directly relevant to orthopaedic surgery, and include the following:

- A clear, focused research question/hypothesis
- A comprehensive literature review, which includes key findings
- A study design that is suited to the aims of the study
- A precise depiction of design and execution of the method and recognition of any limitations of design or methods selected
- Ethics approval or a statement with regard to why ethics approval was not required.
- Details of selection criteria for research participants
- How bias was minimised
- Response rate and rate of loss to follow up, if appropriate
- Sample size calculation
- Statistical Analysis Plan
- Data analysis including study population and management of any missing data; statistical methods appropriate to the type of data; and statistical software used.
- Well-structured presentation of data with findings formulated descriptively; inclusion of all results, even those that do not attain statistical significance.
- Discussion and conclusion which includes:
 - A concise summary of the main findings
 - Clinical relevance of results
 - Results in relation to previous research
 - Due consideration to weaknesses of the study (sources of bias or error and impact on results)
 - Conflicts of interest, if any (authors, funding)

Trainees must submit their completed research project, in the form of a journal article, to the Research Coordinator for assessment. All research submitted must have the support of the research supervisor involved in the project.

The Research Coordinator will either:

- a) Accept the research project as meeting the requirements of the program, and

- may provide suggestions to improve the work prior to submitting for publication;
or
- b) Provide more extensive feedback on changes, which need to be made prior to re-assessment.

It is expected that accepted research submissions will be submitted to a peer-reviewed journal for publication.

Trainees must present the findings of their research project at the AOA ASM (or equivalent). Presentations at AOA state branch meetings and the AORA ASM will also be acceptable as long as the presentation is formally assessed as being of equivalent to the standard accepted at the national AOA ASM. Trainees wishing to present at a state branch meeting or AORA are asked to contact research@aoa.org.au in advance of the meeting to discuss the requirements for this option.

Trainee Collaboration

For the project pathway, there is the opportunity for up to three trainees to collaborate on each project. Trainees can contribute to a maximum of two research projects.

One trainee could complete a research project up until the data collection phase (components 1 and 2). It would be submitted for review at this time. A second trainee could complete the data collection and analysis (component 3). A third trainee could complete the interpretation phase (components 4 and 5). In this instance, the appointed supervisor would provide the continuity. The trainees involved would co-author the paper for presentation and if published.

Each trainee must still complete all phases of the research requirement, however these may be spread across two different projects.

Applying for Approval of a Research Project

Trainees must select a research supervisor and submit a [Research Proposal form](#) for approval. The research proposal must include:

- Title of research study
- Name and position of principal research supervisor
- Aims and hypothesis of the project
- Background to the research project with brief literature review
- Research design – description and rationale for study design, data collection, statistical analysis
- Significance of the project to orthopaedics
- Timetable/plan – tasks proposed and expected stages/times for completion
- Role and involvement of the trainee in the project, including the anticipated involvement of other trainees in the project.

For new proposals, the research supervisor must sign the proposal to confirm that they are willing to supervise the project to completion.

If the trainee is intending to only complete a portion of the project, this should be included in the proposal.

Trainees who would like to contribute to a research project that has already been approved

and is underway, should complete the [Contribution to Research form](#).

This form must include:

- The original approved research proposal.
- The previous role of another trainee/s in the project and the elements of the project that have been completed to date.
- Proposed role and involvement of this trainee in the project, including a broad outline of expected timeframes for completion of various elements.
- Confirmation from the research supervisor that the trainee can contribute to the nominated sections in the timeframe suggested.

The trainee responsible for each of the five elements of the project is responsible for actioning feedback on that specific element.

Trainees will be expected to maintain a log of their research activity toward completing research requirements. The log should demonstrate adequate involvement and will be reviewed together with the submission.

[Coursework Pathway](#)

Part A - Research Methodology Learning

Trainees who have selected the Coursework Pathway must complete a Master degree, graduate diploma or graduate certificate. The course must include two of the following subjects: Clinical Epidemiology, Biostatistics, Research Methods and Evidence Based Medicine.

The trainee must submit a [Coursework Proposal Form](#) for approval of the course of study and include:

- Name of degree or diploma
- Institution
- Web links to information about the course of study which confirms the degree includes successful completion of a minimum of two of the following subjects:
 - Clinical Epidemiology
 - Biostatistics
 - Research Methods
 - Evidence Based Medicine

A list of previously approved courses will be maintained for the information of trainees. Selection of a previously approved course does not preclude the need to submit an application for approval of the course of study.

Part B – Demonstration of Research Skills

Using the skills gained via completion of Part A - Research Methodology Learning, trainees are required to complete a 'mini' research project.

Trainees will need to select a research supervisor for the duration of the project and have a research proposal and supervisor approved prior to commencing the project.

The project study design may be any of the options accepted for the Project Pathway or a:

- Systematic review
- Case series/case reports

- Clinical Audit

To fulfill the requirements of the coursework pathway, the research project must be directly relevant to orthopaedic surgery and include the following detailed criteria:

- Be based on a clearly stated question/hypothesis
- Include a critical literature review
- Have an appropriate study design
- Include suitable methods of statistical analysis.

Trainees must submit the completed research project to the Research Coordinator for assessment. The Research Coordinator will either:

- a) Accept the research project as meeting the requirements of the program; or
- b) Provide more extensive feedback on changes which need to be made prior to re-assessment.

Trainees must present the findings of their research project at an AOA branch ASM, the AORA conference, AOA ASM or equivalent.

Applying for Approval of a Mini Research Project

Trainees must select a research supervisor and submit a [Research Proposal form](#) for approval. The research proposal must include:

- Title of research study
- Name and position of principal research supervisor
- Aims and hypothesis of the project
- Background to the research project with brief literature review
- Research design – description and rationale for study design, data collection, statistical analysis
- Significance of the project to orthopaedics
- Timetable/plan – tasks proposed and expected stages/times for completion

The research supervisor must sign the proposal to confirm that they are willing to supervise the project to completion.

PhD pathway

Accredited research training posts will be available during Core Orthopaedics to support trainees who elect to complete the PhD Research Pathway.

Trainees will need to apply directly to the training site for the accredited research training post. Please contact research@aoa.org.au for information on accredited PhD pathway posts.

Taking up an accredited research training post does not require an Interruption to Training. Accredited research training posts will have a reduced clinical load (0.5 FTE) to facilitate participation in research.

It is expected that Trainees occupying these posts will complete a PhD relevant to orthopaedic surgery prior to the end of the Transition to Practice stage.

Trainees completing the PhD pathway will need to provide a letter of offer/acceptance of the accredited research training post, preferably by the end of Introduction to Orthopaedics.

Trainees with Prior Research Experience

Trainees who have completed research within 5 years prior to the commencement of training may apply for recognition of prior learning (RPL) via the [Research RPL form](#). Research must be directly relevant to orthopaedic surgery and meet the minimum criteria required of the relevant research pathway. It is the responsibility of the trainee to demonstrate that their prior research experience satisfies the research requirement.

Project pathway

Trainees who have completed one or more suitable research projects prior to commencing training may apply for an exemption from the project pathway by submitting a [Research RPL form](#).

The Research Coordinator will determine whether the research project(s) meet the minimum criteria for the Project Pathway. If so, the trainee will only be required to present the findings of their research at the AOA ASM (or equivalent).

Coursework pathway

Trainees who have completed a Master degree, graduate diploma or graduate certificate which meets the requirements outlined for the Coursework Pathway may apply for an exemption from Part A – Research Methodology Learning. If the qualification is deemed to be equivalent, the trainee will need to complete Part B.

Trainees may also apply for exemption from the Part B – Demonstration of Research Skills. The Research Coordinator will determine whether a research thesis completed toward attainment of the qualification or research that resulted in a publication in a peer-reviewed journal meets the minimum criteria. If so, the trainee will only be required to present the findings of their research at an AOA branch ASM, the AORA conference, AOA ASM or equivalent.

Other involvement in research in the five years prior to selection on to the AOA 21 training program may be considered. Trainees must clearly outline how research experience and outcome meets the learning outcomes of the curriculum and equivalence to the research requirements of the project or coursework pathway.

Research Project Type Definitions

The following project types are accepted for the Project and Coursework Pathways:

- **Randomised controlled trial**
A type of study in which participants are randomly assigned to either a treatment or control group. The treatment group receives the intervention and results are compared to those of the control group.
- **Cross sectional study**

A study of a population, or representative subset of a population, at a specific point in time.

- **Prospective cohort study**

A study of a group of individuals who are similar but differ in one key characteristic. Individuals are split into a group of interest and a comparison group based upon whether or not they display the particular characteristic or not. Both groups are followed over a defined period of time and outcomes are monitored and compared. A prospective cohort study monitors outcomes during the study period.

- **Retrospective cohort study**

A retrospective cohort is the same in structure as a prospective cohort study, but instead of prospectively monitoring the group for outcomes, the cohort is retrospectively selected and examined for exposures and other risk factors in relation to an established outcome.

- **Comparative study**

A study that examines two or more cases or events and compares each one to identify where they differ and the reasons for the differences.

The following project types are accepted for the Coursework Pathway only:

- **Systematic review**

A complete summary of current literature on a particular research question. Involves a systematic review of the literature and a narrative or quantitative synthesis of the results of all studies that meet predefined inclusion criteria.

- **Case series/case reports**

A descriptive study of a single patient (case report) or a series of patients (case series) with a particular disease or injury.

- **Clinical Audit**

An audit that is designed to assess the quality of care and/or patient outcomes against a set of defined criteria or standards.

Paediatric Rotation at Shriners Hospital for Children

AOA is proud to offer trainees the opportunity to undertake a rotation at the Shriners Hospital for Children in Portland, Oregon, USA.

Shriners Hospital was first accredited by the AOA in 2005 to provide two training posts in Paediatric Orthopaedics. In 2021 Shriners were accredited for a third post.

Each year up to six AOA trainees are selected to undertake a 6-month rotation in Paediatric Orthopaedic Surgery at Shriners.

Purpose

The purpose of the Shriners rotation is twofold; to provide otherwise unavailable exposure to paediatric orthopaedic surgery, and, to allow trainees with a special interest in paediatrics to gain additional experience in this area. Further, AOA trainees will benefit from this rotation as it provides a unique, structured learning experience in the area of paediatric orthopaedic surgery. During the rotation AOA Trainees will act as an observer under the direct supervision of the Shriners' attending physicians in all areas of clinical care in paediatric orthopaedics.

AOA trainees will be exposed to and experience a broad spectrum of paediatric orthopaedics, with special emphasis on Cerebral Palsy, Spina Bifida, Neuromuscular disorders, Dysplasia and Metaplasia of bone and joint, in addition to many other paediatric orthopaedic conditions. There is also an opportunity for trainees to participate in a number of research programs, including clinical review, basic science and molecular biology.

Furthermore, trainees will participate in other clinical education and didactic activities relating to paediatric orthopaedic services. Further information regarding the orthopaedic staff and care specialties at the hospital can be found at: -

<http://www.shrinershospitalsforchildren.org/Hospitals/Locations/Portland>

An information pack on the Shriners rotation can be found [here](#).

Please refer to the [Shriners Guidelines](#) for information on the application process.

Trainees who are successful in gaining a Shriners Post will be put in direct contact with the Shriners Department, who will provide further information.

Transition to Practice – Continuing Professional Development Activities

AOA believes that participation in lifelong learning is an integral part of surgical practice and that all orthopaedic surgeons should strive for ongoing improvement. CPD is a lifelong learning activity, its purpose is to ensure that medical specialists maintain, enhance and develop skills and knowledge to ensure the highest standards of patient care.

CPD improves the standard of practice through a commitment to a continuum of learning in the specialist discipline. Once qualified as a specialist, compliance with CPD requirements is required for medical registration, and often employment. The AOA Code of Conduct requires all Fellows to maintain CPD compliance.

The AOA CPD program is based on the principles of adult education. It is self-directed, providing the flexibility for learning to be tailored to individual learning needs. The program reflects the competencies of the curriculum thus ensuring that the skills, knowledge and attributes achieved through the AOA 21 Training Program can be maintained and built upon in the Post-Fellowship years. By utilising the CPD Program framework, the Transition to Practice stage of the AOA 21 Training Program establishes a clear link between training and specialist practice.

During Transition to Practice, trainees must accrue and verify 110 CPD points. Trainees are required to submit a Learning Plan, prior to commencing Transition to Practice, outlining the activities they intend to complete to achieve the required points.

The AOA CPD program recognises a broad range of activities, grouped into four sections. Each section has an annual requirement for a minimum number of points/activity. The CPD activities available to Transition to Practice Trainees are a sub-set of activities from the AOA CPD program and are outlined below.

Unlike the AOA CPD Program, 110 points does not need to be accrued in a calendar year, instead the points may be accrued across the duration of Transition To Practice where this is greater than 12 months.

Where trainees are completing a second year of Transition to Practice and accrued 110 points in the first 12 months, they are encouraged to participate in the AOA CPD Program as 'Operating' surgeons for the remainder of their training time.

Section	Minimum Requirement
Section 1 - Surgical Audit and Peer Review	One peer reviewed audit
Section 2 - Personal Review, Development and Research	25 points
Section 3 - Clinical Services	25 points
Section 4 - Education	60 points

CPD Activity can be logged via [CPD Online](#) on TIMS.

Section 1 – Surgical Audit and Peer Review

This section requires completion of a Surgical Audit with Peer Review.

Section 2 – Personal Review, Development and Research 25 Points

This section includes completion of Multi-Source Feedback, Patient Experience Survey and presentation at scientific meetings.

Section 3 – Clinical Services 25 Points

This section covers teaching at Bone School or another approved training activity, completing WBAs on junior colleagues, being a trainee representative on an AOA committee or accreditation review team, involvement in Orthopaedic Outreach, and attendance at regular clinical meetings.

Section 4 – Education 60 Points

Attendance at scientific meetings, attendance at workshops and courses, including AOA 21 workshops undertaken during TTP, completion of online modules, attending the practice of a senior colleague, and journal club attendance

A CPD for TTP trainees document will be published annually on the LMS and will be made available to TTP trainees at the beginning of TTP. This document includes detailed information on the CPD activities available as well as information on how to log CPD activity via CPD Online on TIMS.

Section 6

Assessment



Overview

An assessment strategy has been developed to align to the competencies contained in the curriculum and the expected performance of trainees at each stage of training. The training program employs a blend of formative and summative assessment.

Feedback entries submitted via the [AOA Training App](#) or online through the [Trainee Information Management System \(TIMS\)](#) provide regular feedback to trainees on their performance.

[Workplace based Assessment \(WBA\)](#) is a more detailed observation of a trainee completing a specific clinical activity. Trainees are assessed on a global scale, indicating their ability to provide effective patient care for the next similar case.

Assessors are asked to apply their expert judgment to determine the overall performance of the trainee and indicate the likely assistance (if any), which is required for the next similar case. Rather than the trainee's performance being compared to the standard expected of a trainee at a particular level or stage of training, the performance of the trainee (i.e. the quality of the care the trainee provided) is compared to the quality of patient care that every patient deserves (specialist level).

The trainee has achieved competence with that particular clinical activity when the assessor is confident that, for the next similar case, they or a colleague would not need to provide any input. On the WBA forms, this equates to a rating of 4 or 5 on the global scale. The aim of these assessments is trainee learning. Rather than a pass or fail assessment, these tools provide an opportunity for trainees to receive feedback on their clinical skills. Items on the WBA forms highlight specific aspects of the clinical activity, and prompt the assessor to provide feedback on Foundation Competencies (non-technical skills) as well as competencies related to medical and surgical expertise.

Trainees should actively request completion of WBAs as a routine part of their working week. Trainees with insufficient WBAs will not be able to demonstrate completion of orthopaedic modules and therefore will not progress through the training program. It is recommended that trainees work towards completing one WBA for every clinic or list you undertake OR an average of one WBA each fortnight.

Workplace based Assessments in the program include:

- [Patient Consultation Assessment](#)
- [Management Plan Assessment](#)
- [Case based Discussion](#)
- [Surgical Skills Assessment](#)

Summative Assessment includes examinations in both the Introduction to Orthopaedics and Core Orthopaedics stages.

[Performance Appraisals](#) completed during Introduction to Orthopaedics and Core

Orthopaedics at the completion of each 3-month training period review trainee performance, provide feedback and identify any areas where additional support may be required.

[Progress Reviews](#) completed during the training program, at minimum intervals of 6 months, confirm progression toward requirements for that particular stage of training. Progress Reviews in Core Orthopaedics utilise completion of Orthopaedic Modules.

Stage Review

A Stage Review Panel will assess the trainee's portfolio to ascertain if there is evidence sufficient to demonstrate that the trainee has met the expectations of performance for the Stage and to confirm progression to the next Stage or Completion of Training.

A broad *Assessment Matrix* is available [here](#).

Expectations of Performance in relation to each Foundation Competency and Medical and Surgical Expertise are defined for each stage of training and are available [here](#).

Feedback Entries

Feedback entries submitted via the [AOA Training App](#) or online through the [Trainee Information Management System \(TIMS\)](#) provide regular feedback to trainees on their performance.

It takes approximately 60 seconds to make a Feedback entry on the AOA Training App and allows for multiple samples of feedback across a range of contexts and competencies to be collected. Trainees are encouraged to initiate feedback entries.

Feedback focuses on foundation competencies, as well as medical and surgical expertise, e.g.:

- Communication on the ward
- Teamwork in theatre
- Decision-making while on call
- Presenting at a meeting
- Professionalism observed in the ED

Its process encourages 'in the moment' feedback when an observed trainee-trainer interaction occurs.

- Either party suggests a feedback discussion using the Feedback App
- A feedback conversation occurs about the specific event
- Trainer or trainee enters into the Feedback App a brief summary, for reflection on action or as a reminder regarding a suggested action for the future.

Feedback is based on 'observation, review and reflection'. It is anchored in readiness for practice and provides for trainees a 'snapshot' of what is expected and how well they are doing in demonstrating competence and good professional practice.

Its focus is on what went well and/or could be improved – and includes documenting a recommended action for next time in a similar setting.

Trainees are encouraged to seek feedback from a number of consultants and across a range of contexts and competencies. The ePortfolio should reflect completion of a minimum of *one Feedback Entry each week*.

Workplace Based Assessment (WBA)

There are four different WBAs.

Patient Consultation Assessment

The PCA is a direct observation tool designed to assess trainees against a range of competencies associated with an initial assessment of a patient.

Competency areas assessed:

- Communication
- Professionalism
- Medical Expertise

Process:

- The Trainee initiates this assessment by approaching their Assessor prior to an initial assessment of a patient and requesting for a PCA to be completed.
- The exercise should take approximately 10-15 minutes of observation and 5-10 minutes of feedback.
- The Assessor directly observes the trainee's initial assessment of a patient and may intervene/help if required.
- After the patient has been assessed, the Assessor completes the form and provides specific verbal feedback that will help the trainee to improve toward providing high quality patient care for the next similar case.
- Prior to completing the individual items on the form, the Assessor should provide a rating on the 'Global Scale' based on the trainee's overall performance and the assistance that the trainee is likely to require in order to provide effective patient care for the next similar case.
- Next, for each aspect of the patient assessment the Assessor should consider and rate the trainee against a standard of consultant level practice. For each item the Assessor should indicate if 'substantial improvement' is required, 'some development' is needed, if the trainee demonstrates 'competent' performance, is 'accomplished' with this aspect or if the rating is 'not applicable' (n/a). Unless there are no areas for improvement, trainees should be given 'substantial improvement' or 'some development' rating as appropriate.
- The Assessor uses the above criteria to provide feedback to the Trainee, according to their observation and provides specific comments to direct improvement or refinement.
- The Trainee must then finalise the PCA form, by adding 'suggestions to action feedback' and acknowledging completion of the assessment.
- The Trainee then adds comments and actions they will take to implement the feedback provided.
- It is the Trainees responsibility to ensure the form is finalised.

Management Plan Assessment

The MPA is a direct observation tool designed to assess a trainee's performance against a range of competencies associated with communication and implementation of a patient management plan.

Competency areas assessed:

- Communication
- Professionalism
- Health Advocacy
- Medical Expertise

Process:

- The Trainee initiates this assessment by approaching their Assessor prior to discussing management options with the patient and requests for a MPA to be completed.
- The exercise should take approximately 10-15 minutes of observation and 5-10 minutes of feedback.
- The Assessor directly observes the trainee while they are discussing management options with the patient and may intervene/help if required.
- Following the discussion, the Assessor completes the form and provides specific verbal feedback to the trainee.
- Prior to completing the individual items on the form, the Assessor should provide a rating on the 'Global Scale' based on the trainee's overall performance and the assistance that the trainee is likely to require in order to provide effective patient care for the next similar case.
- Next, for each aspect of the assessment the Assessor should consider and rate the trainee against a standard of consultant level practice. For each item the Assessor should indicate if 'substantial improvement' is required, 'some development' is needed, if the trainee demonstrates 'competent' performance, is 'accomplished' with this aspect or if the rating is 'not applicable' (n/a). Unless there are no areas for improvement, trainees should be given 'substantial improvement' or 'some development' rating as appropriate.
- The Assessor uses the above criteria to provide feedback to the Trainee, according to their observation and provides specific comments to direct improvement or refinement.
- The Trainee must then finalise the MPA form, by adding 'suggestions to action feedback' and acknowledging completion of the assessment.
- It is the Trainees responsibility to ensure the form is finalised.

Case based Discussion

The CbD is an assessment tool designed to assess a Trainee's clinical reasoning by discussing the rationale underpinning their decision making. It is also an opportunity for the trainee to reflect on the case and consider what they might do differently to improve the outcome for the patient. The case should be one which the trainee managed fairly independently.

Competency areas assessed:

- Communication

- Professionalism
- Teamwork
- Health Advocacy
- Medical Expertise

Process:

- The Trainee initiates this assessment by approaching their Assessor and organising an appropriate time for the assessment.
- The exercise should take approximately 30 minutes.
- The trainee provides the Assessor with a patient record from 4 or more weeks ago. The Assessor may request a specific case to be discussed.
- The trainee presents the case and then the Assessor leads a discussion about the trainee's management of the case and rationale for clinical decision making. The Assessor also reviews the patient record and written correspondence regarding the patient.
- The Assessor should encourage the trainee to reflect on their performance and consider other approaches to care which may have improved the outcome for the patient.
- Prior to completing the individual items on the form, the Assessor should provide a rating on the 'Global Scale' based on the trainee's overall performance and the assistance that the trainee is likely to require in order to provide effective patient care for the next similar case.
- Next, for each aspect of the case discussion the Assessor should consider and rate the trainee against a standard of consultant level practice. For each item the Assessor should indicate if 'substantial improvement' is required, 'some development' is needed, if the trainee demonstrates 'competent' performance, is 'accomplished' with this aspect or if the rating is 'not applicable' (n/a). Unless there are no areas for improvement, trainees should be given 'substantial improvement' or 'some development' rating as appropriate.
- The Assessor uses the above criteria to provide feedback to the Trainee, according to their observation and provides specific comments to direct improvement or refinement.
- The Trainee then adds comments and actions they will take to implement the feedback provided.
- It is the Trainee's responsibility to ensure the form is finalised.

Surgical Skills Assessment

"Procedural skill competence requires both safe technical performance and appropriate knowledge for decision-making in the preparation, performance and post-performance phases of the procedure."¹

Competency areas assessed:

- Communication
- Teamwork
- Professionalism
- Surgical Expertise

Process:

- The Trainee initiates this assessment by approaching their Assessor prior to an

- operative procedure and requesting for a SSA to be completed.
- The Trainee should actively seek out completion of the SSA across a range of topic areas and procedures during training. Within each rotation, the cases chosen should reflect the caseload of the training post.
 - The Assessor directly observes the trainee while in theatre and may intervene/help if required.
 - After the procedure has been completed the Assessor completes the form and provides verbal feedback to the trainee.
 - Prior to completing the individual items on the form, the Assessor should provide a rating on the 'Global Scale' based on the trainee's overall performance and the assistance that the trainee is likely to require in order to provide effective patient care for the next similar case. If the Trainee was not able to complete the case, this box should be ticked.
 - Next, for each aspect of the case discussion the assessor should consider and rate the trainee against a standard of consultant level practice. For each item the Assessor should indicate if 'substantial improvement' is required, 'some development' is needed, if the trainee demonstrates 'competent' performance, is 'accomplished' with this aspect or if this rating is 'not applicable' (n/a). Unless there are no areas for improvement, trainees should be given 'substantial improvement' or 'some development' rating as appropriate.
 - The Assessor uses the above criteria to provide feedback to the Trainee, according to their observation and provide specific comments to direct improvement or refinement.
 - The Trainee must then finalise the SSA form, by adding 'suggestions to action feedback' and acknowledging completion of the assessment.
 - The trainee then adds comments and actions they will take to implement the feedback provided.
 - It is the Trainee's responsibility to ensure the form is finalised.

*1 - The CanMEDs Assessment Tools Handbook – An Introductory Guide to Assessment Methods for the CanMEDs Competencies: RCPSC

Examinations

Orthopaedic Principles and Basic Science (OPBS)

The purpose of the Orthopaedic Principles and Basic Science (OPBS) Examination is to ensure that trainees are equipped with knowledge of the basic sciences relevant to Orthopaedic Surgery early in their surgical training.

For further information go to: <http://www.surgeons.org/becoming-a-surgeon/surgical-education-training/examinations/specialty-examinations/opbs-examination/>

Fellowship Examination (FEX)

The Fellowship Examination (FEX) comprises seven segments in total, divided into two written papers and five clinical/viva segments.

The required standard for this examination is a level of competency equivalent to that of a consultant surgeon in his or her first year of independent practice. The nine surgical

competencies are used as a guideline for the examiners who follow pre-agreed marking guidelines and the predetermined standard. The examination is blueprinted to the AOA 21 curriculum.

For further information go to: <http://www.surgeons.org/becoming-a-surgeon/surgical-education-training/examinations/fellowship-examination/>

For information regarding training program requirements for completion please refer to the [Progression Requirements](#).

Orthopaedic Modules

During Core Orthopaedics, trainees are required to complete Orthopaedic Modules to demonstrate their competence across the topics of the applied medical and surgical expertise section of the curriculum. Each Orthopaedic Module must be supported by evidence in the form of specified WBAs. Trainees must have been assessed by a range of different assessors to meet the requirements.

By the end of Core Orthopaedics trainees must have a minimum of one assessment in their portfolio that indicates 4 or 5 on the global scale for each of the following.

Trauma

- Surgical Skills Assessment
 - Internal fixation of a carpal, metacarpal or phalangeal fracture
 - Peri-articular fracture of knee, shoulder or ankle
 - Internal fixation of a midfoot fracture
 - Repair of an acute tendon injury
 - Percutaneous fixation of a paediatric supracondylar elbow fracture
 - Closed reduction and plastering of a paediatric forearm fracture
- Patient Consultation Assessment & Management Plan Assessment
 - Soft tissue injury
 - Adult fracture
 - Paediatric fracture
- Case Based Discussion
 - Adult multi-trauma case
 - Paediatric multi-trauma case
 - Adult - major complication associated with treatment of a fracture or dislocation
 - Paediatric - major complication associated with treatment of a fracture or dislocation

Shoulder

- Patient Consultation Assessment & Management Plan Assessment
 - Painful shoulder
 - Injured shoulder
 - Post-surgical shoulder

- Case-based Discussion
 - Shoulder case, possibly with a complication to discuss
- Surgical Skills Assessment
 - Rotator cuff repair
 - Shoulder arthroscopy
 - Shoulder arthrotomy

Elbow

- Patient Consultation Assessment & Management Plan Assessment
 - Painful elbow
 - Injured elbow
 - Post-surgical elbow
- Case-based Discussion
 - Elbow case, possibly with a complication to discuss
- Surgical Skills Assessment
 - Elbow arthrotomy
 - Ulnar nerve release

Hand and Wrist

- Patient Consultation Assessment & Management Plan Assessment
 - Painful hand or wrist
 - Injured hand or wrist
 - Post-surgical hand or wrist
- Case-based Discussion
 - Hand or wrist case, possibly with a complication to discuss
- Surgical Skills Assessment
 - A1 pulley release
 - Carpal tunnel release
 - Excision of a ganglion
 - Wrist arthrotomy

Hip

- Patient Consultation Assessment & Management Plan Assessment
 - Painful hip
 - Injured hip
 - Post-surgical hip
- Case-based Discussion
 - Hip case, possibly with a complication to discuss
- Surgical Skills Assessment

- Total hip replacement
- Bone graft harvest from the pelvis

Knee

- Patient Consultation Assessment & Management Plan Assessment
 - Painful knee
 - Injured knee
 - Post-surgical knee
- Case-based Discussion
 - Knee case, possibly with a complication to discuss
- Surgical Skills Assessment
 - ACL reconstruction
 - Total knee replacement
 - Therapeutic arthroscopy

Foot and Ankle

- Patient Consultation Assessment & Management Plan Assessment
 - Painful foot or ankle
 - Injured foot or ankle
 - Post-surgical foot or ankle
- Case-based Discussion
 - Foot or ankle case, possibly with a complication to discuss
- Surgical Skills Assessment
 - Correction of hallux valgus
 - Arthrodesis of any joint

Spine

- Patient Consultation Assessment & Management Plan Assessment
 - Painful back or neck
 - Injured back or neck
 - Post-surgical spine
- Case-based Discussion
 - Spine case, possibly with a complication to discuss

Paediatrics

- Patient Consultation Assessment & Management Plan Assessment
 - Scoliosis/Spinal abnormality
 - Leg length discrepancy
 - Neonatal hip instability
- Case-based Discussion

- Paediatric case, possibly with a complication to discuss
- Surgical Skills Assessment
 - Stabilisation of SCFE
 - Therapeutic arthrotomy of the paediatric hip

Tumour and Tumour Related Conditions

- Case-based Discussion
 - 2 different tumour cases

Systemic Medical Conditions

- Case-based Discussion
 - 2 cases involving diagnosis and treatment of different systemic medical conditions.

Trainees will also need to demonstrate competence in Level 1 surgical skills for each module.

The Director of Training will confirm completion of Orthopaedic Modules on Orthopaedic Module Completion Forms. Completion of the modules will be monitored via Progress Review meetings.

During Introduction to Orthopaedics, trainees may collect evidence to support demonstration of competence for presentation during Core Orthopaedics.

Performance Appraisal

At the conclusion of each 3-month training period the trainee must arrange a Performance Appraisal Meeting with their Trainee Supervisor resulting in submission of a 3-monthly Performance Appraisal Form. In the event that the Trainee Supervisor is away or unavailable, the DoT may fill this role.

The Trainee Supervisor reviews the trainee's ePortfolio and prepares a 3-monthly Performance Appraisal Report. The report includes the trainee feedback summary table, WBA Completion graph, Ratings by Competency graph and eLog summary table and graphs. The Trainee Supervisor can also view individual WBA forms. The Trainee Supervisor may discuss the trainee's performance with other members of the surgical team/ department.

The Trainee Supervisor then confirms progress on the 3-monthly Performance Appraisal Form with regard to:

- Feedback entries
- Workplace Based Assessments (WBAs)
- Response to feedback
- Accuracy of eLog

It is the trainee's responsibility to ensure all required documentation, including eLog entries and WBA forms, are recorded in the ePortfolio by the due date.

For any item on the 3-monthly Performance Appraisal Form where concerns are indicated, comments must be provided in the relevant competency category on the form.

The Trainee Supervisor assigns an overall assessment of the trainee's progress for the 3-month training period. The trainee may be assessed as:

- Progressing well or
- Improvement Required or
- Performance Concern/s

The Trainee Supervisor refers to the expectations of performance for the trainee's stage of training and, on the Performance Appraisal Form notes feedback regarding competency in:

- Communication
- Teamwork
- Professionalism
- Leadership and Organisational Skills
- Health Advocacy
- Education & Research
- Medical Expertise
- Surgical Expertise

The Trainee Supervisor documents actions and next steps for the trainee to implement in the following 3-month Training Period.

Where the Trainee Supervisor assesses the Trainee as 'Improvement Required', a mid-term meeting will be scheduled in 4-6 weeks where the trainee must demonstrate implementation of feedback.

Where the Trainee Supervisor has identified serious concerns in one area, or concerns in two or more areas, the trainee must be assessed as 'Performance Concern/s'. The Trainee Supervisor is encouraged to discuss this assessment with the DoT ahead of the Performance Appraisal meeting and, where possible, the DoT should attend the meeting to provide additional support. In these circumstances the trainee will need to meet with the RTC Chair, the DoT and the Trainee Supervisor (where available) to discuss additional support to address the concerns raised. A [performance improvement plan](#) is developed and a mid-term meeting is organised.

The [AOA 21 Additional Support Policy](#) outlines the process for the trainee who is assessed as 'Improvement Required' or 'Performance Concern/s'.

The Performance Appraisal Form must be completed online via [TIMS](#) and will be retained as part of the ePortfolio.

The Performance Appraisal Meeting must be held, and the Performance Appraisal Form submitted, during the advertised Performance Appraisal Period. Late submission of Performance Appraisal Forms may result in a formal warning (refer to the [Review of Continued Participation in the Training Program policy](#)).

Where concern has been raised regarding performance during a 3-month training period and the Trainee Supervisor wants to initiate a performance improvement period prior to the end of the training period, an extraordinary mid-term Performance Appraisal may

be completed outside the 3-monthly cycle of Appraisals. The extraordinary mid-term Performance Appraisal may be completed at any point during the 3-month training period and will result in a longer performance improvement period to align with the 3-monthly training period cycle.

Progress Review

At the conclusion of each 6-month training period the trainee must arrange a Progress Review Meeting with their Director of Training resulting in submission of a 6-monthly Progress Review Form.

The Director of Training:

- Reviews two Performance Appraisal forms submitted by the Trainee Supervisor (*Introduction and Core only*)
- Discusses trainee progress with the Trainee Supervisor
- Prepares a Progress Review Report
- Reviews the trainee's ePortfolio
- May discuss the trainee's performance with other members of the surgical team/department.
- Completes the Progress Review Form
- In completing the Progress Review Form, the Director of Training confirms progress on the form with regard to:
 - Completion of Training Program Requirements for the Stage of Training
 - 3-monthly Performance Appraisals (*Introduction and Core only*)
 - Progress towards meeting the expectations of performance for the Stage
 - Orthopaedic Modules (*Introduction and Core only*)

The Director of Training documents actions and next steps for the trainee to implement in the following 6-month Training Period on the Progress Review Form. When appropriate, the DoT will confirm that the trainee has completed the minimum requirements for the Stage and is eligible to apply for a Stage Review.

In the event where:

- the trainee has completed the minimum training time and Training Program Requirements for a Stage, and
- has an overall rating of 'Progressing Well' on the most recent 3-monthly Performance Appraisal form (Introduction to Orthopaedics and Core Orthopaedics only) however,
- the Director of Training has not assessed the trainee as having completed the minimum requirements for the stage

the trainee may seek review from the RTC Chair in accordance with the [AOA 21 Stage Progression Requirements](#).

The Progress Review Form must be completed online via [TIMS](#) and will be retained as part of the ePortfolio.

The Progress Review Meeting must be held, and the Progress Review Form submitted, during the advertised Progress Review Period.

Late submission of Progress Review Forms may result in a formal warning (refer to the [Review of Continued Participation in the Training Program policy](#)).

Stage Review

A Stage Review Panel (SRP) will assess the trainee's portfolio to ascertain if there is evidence sufficient to demonstrate that the trainee has met the expectations of performance for the Stage and to confirm progression to the next Stage or Completion of Training.

A schedule of SRP meetings, including application timelines will be made available. The SRP will meet in March, August and January and November (as needed). The trainee can only progress to the next stage or complete training at the conclusion of a 6-month training period/rotation. Where the SRP approves progression to the next stage the commencement date for the new Stage may be backdated to compensate for elapsed time while the Stage Review was underway. (E.g. If a trainee has completed Introduction to Orthopaedics at the end of January, they would apply to the March SRP meeting. If approved for progression, the outcome may indicate that the trainee progressed to Core Orthopaedics as of February).

The Trainee cannot apply for Stage Review until they have met all of the Training Program Requirements for their current Stage and meet the eligibility requirements outlined in the [AOA 21 Stage Progression Requirements](#). There will be no prospective, conditional or accelerated approval process.

In the event where the trainee has completed the minimum training time and Training Program Requirements for a Stage, and has an overall rating of 'Progressing Well' on the most recent 3-monthly Performance Appraisal form (Introduction to Orthopaedics and Core Orthopaedics only) however, the Director of Training has not assessed the trainee as having completed the minimum requirements for the stage, the trainee may seek review from the RTC Chair in accordance with the [AOA 21 Stage Progression Requirements](#).

Where the trainee is nearing the maximum training time for a Stage or the maximum period of completion for the training program and has not applied for a Stage Review, the trainee's portfolio will automatically be submitted for Stage Review prior to dismissal.

Each RTC will form a SRP. The SRP will have a minimum of three members, two members should be representatives from the local RTC and one should be from another RTC.

Section 7

eLearning



Overview

A range of online tools to support the training program are designed to create a national learning community where education, collaboration and the management of trainee progression through training program are facilitated. They support formative and summative assessment and the logging of operative procedures, while the Learning Management System (LMS) offers a repository for learning resources and training policies, as well as supporting self-paced online courses.

Online tools for tracking and reporting progress are designed to ensure that trainees demonstrate the competencies and abilities required as independent practitioners to effectively meet the health care needs of patients.

[Feedback entries](#) submitted via the AOA Training App or online through the Trainee Information Management System (TIMS) provide regular feedback to trainees on their performance in a range of clinical and other hospital contexts.

[Workplace Based Assessments \(WBAs\)](#) allow a more detailed observation of a trainee completing a specific clinical activity. Trainees are assessed on a global scale, indicating their ability to provide effective patient care for the next similar case.

Operative Procedures, which are undertaken by trainees, can be recorded online via the [eLog](#) which is available on the AOA Training App or online through TIMS.

Performance Appraisal Forms, Progress Review Forms, as well as the Orthopaedic Module completion forms are all available for completion in TIMS; these forms are completed, submitted and stored in TIMS and form part of the trainee's ePortfolio.

Reports which aggregate and graph trainee progress are also available to be generated from TIMS.

About AOA's Trainee Information Management System (TIMS)

The [Training Information Management System \(TIMS\)](#) is a platform for tracking trainee progression through the AOA 21 Training Program. It incorporates tools for assessment, an eLog for logging trainee operative procedures and an ePortfolio, which tracks and demonstrates trainee progress on both formative and summative assessments.

The [AOA Training App](#) synchronises with TIMS and enables assessments to be completed on personal mobile devices. The Training App can be used to complete Feedback Entries, Workplace Based Assessments (WBAs) and for trainees to log Procedures.

The AOA Training App is accessible via any smartphone device, including Apple or Android phones, iPads or tablets. The screen size automatically adjusts to the device.

Access to [TIMS via computer](#) enables completion of all of the above assessments that can

be undertaken on the AOA Training App. Additionally, it enables completion of 3-monthly Performance Appraisal and 6-monthly Progress Review forms as well as the orthopaedic module forms; and the viewing of trainee progression graphs. Reports (in csv and/or PDF format) can be generated and downloaded from TIMS.

TIMS accesses member data from AOA's Avalon database. Assessment and eLog data in the Training App synchronises to TIMS.

Please note, TIMS, the Trainee Information Management System, can only be accessed using a desktop or laptop computer. *It cannot be accessed from a mobile device.*

Instructions for the use of the AOA Training App and TIMS

Please click here to view the instructions for the use of TIMS:

<https://www.aoa.org.au/orthopaedic-training/learn@aoa-home/tims---trainee-information-management-system>

Please click here for instructions for using the Training App:

<https://www.aoa.org.au/orthopaedic-training/learn@aoa-home/tims---trainee-information-management-system>

Please click here to download the Training App:

<https://trainingapp.aoa.org.au/>

The Learning Management System (LMS)

The AOA LMS is available on the AOA website. The LMS is an important repository for a wide range of learning resources that will support your training. Resources include Bone School recordings and links, important dates, training policies, online learning modules and other training resources. Please take time to log in and explore the resources available on the LMS.

Please click here to access the LMS:

<https://lms.aoa.org.au/login/index.php>

Should you need assistance accessing or navigating the LMS, you can contact the Training team on training@aoa.org.au or your regional manager.

Section 8

Trainee Program Evaluation



AOA/AORA Trainee Survey Process

At the conclusion of each 6-month training period, the trainee must complete an AOA/AORA Trainee Survey.

The data is collated by the Education and Training Team. De-identified data is then presented in a high level report to the Federal Training Committee and provided to Accreditation Review Teams for accreditation reviews. Individual trainee comments associated with accredited sites are collated and reported over an extended period to ensure that specific feedback cannot be linked with the trainee who provided the feedback.

Failure to complete a Trainee Survey by the due date may result in a formal warning (refer to the [Review of Continued Participation in the Training Program policy](#))