

Education renewal

Advanced Training in Cardiology (Paediatrics & Child Health)

Program handbook



About this document

This program handbook outlines the learning, teaching, and assessment (LTA) programs for Advanced Training in Cardiology (Paediatrics & Child Health) for trainees and supervisors.

This handbook should be used in conjunction with the Advanced Training in Cardiology (Paediatrics & Child Health) curriculum standards.

For more information or to provide feedback contact curriculum@racp.edu.au.

Contents

Program overview	3
Purpose of Advanced Training	3
Learning, teaching, and assessment structure	4
Learning goals	5
Training program requirements summary	8
Procedural requirements.....	12
Program requirements by phase of Advanced Training	14
Specialty foundation phase	14
Specialty consolidation phase	17
Transition to Fellowship phase.....	20
Appendix 1: Learning and assessment tools.....	23

Program overview

Purpose of Advanced Training

The RACP offers Advanced Training in 33 diverse medical specialties as part of Division, Chapter, or Faculty training programs.

The purpose of Advanced Training is to develop a workforce of physicians who:

- have received breadth and depth of focused specialist training, and experience with a wide variety of health problems and contexts
- are prepared for and committed to independent expert practice, lifelong learning, and continuous improvement
- provide safe, quality health care that meets the needs of the communities of Australia and Aotearoa New Zealand.



Learning, teaching, and assessment structure

The learning, teaching and assessment (LTA) structure defines the framework for delivery and trainee achievement of the curriculum standards in the Advanced Training program.

Advanced Training is structured in three phases. These phases will establish clear checkpoints for trainee progression and completion.

- 1 Specialty foundation**
 - Orient trainees and confirm their readiness to progress in the Advanced Training program
- 2 Specialty consolidation**
 - Continue trainees' professional development in the specialty and support progress towards the learning goals
- 3 Transition to Fellowship**
 - Confirm trainees' achievement of the curriculum standards, completion of Advanced Training, and admission to Fellowship
 - Support trainees' transition to unsupervised practice



Figure 1: Advanced Training learning, teaching, and assessment structure

- An **entry decision** is made before entry into the program.
- **Progress decisions**, based on competence, are made at the end of the specialty foundation and specialty consolidation phases of training.
- A **completion decision**, based on competence, is made at the end of the training program, resulting in eligibility for admission to Fellowship.

Learning goals

For Cardiology (Paediatrics & Child Health), the curriculum standards are summarised as **18** learning goals.

Learning and assessment activities are linked to the learning goals to ensure that these activities align with the standards and trainees are able to demonstrate learning across the breadth of the curriculum.

The learning goals articulate what trainees need to be, do, and know, and are assessed throughout training on a five-point scale.

		Progression criteria		Completion criteria
	Learning goals	Specialty foundation <i>By the end of this phase, trainees will:</i>	Specialty consolidation <i>By the end of this phase, trainees will:</i>	Transition to Fellowship <i>By the end of training, trainees will:</i>
Be	1. Professional behaviours	Level 4 need to work on behaviour in 1 or 2 domains of professional practice	Level 5 consistently behave in line with all 10 domains of professional practice	Level 5 consistently behave in line with all 10 domains of professional practice
	2. Team leadership: Lead a team of health professionals	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance	Level 5 be able to provide supervision
Do (work tasks)	3. Supervision and teaching: Supervise and teach professional colleagues	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance	Level 5 be able to provide supervision
	4. Quality improvement: Identify and address failures in health care delivery	Level 2 be able to be present and observe	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance
	5. Clinical assessment and management: Clinically assess and manage the ongoing care of patients	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance	Level 5 be able to provide supervision
	6. Management of transitions from paediatric to adult care: Manage transitions of patient care from paediatric to adult medicine	Level 2 be able to be present and observe	Level 4 be able to act with supervision at a distance	Level 4 be able to act with supervision at a distance
	7. Acute paediatric cardiac care: Assess and manage the care of acutely unwell patients	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance	Level 5 be able to provide supervision
	8. Management of cardiac conditions from fetal to adolescence, including end-of-life care: Manage and coordinate the longitudinal care of patients with complex cardiac conditions, including end-of-life	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance	Level 4 be able to act with supervision at a distance


		Progression criteria		Completion criteria
	Learning goals	Specialty foundation <i>By the end of this phase, trainees will:</i>	Specialty consolidation <i>By the end of this phase, trainees will:</i>	Transition to Fellowship <i>By the end of training, trainees will:</i>
	9. Communication with patients: Discuss diagnoses and management plans with patients	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance	Level 5 be able to provide supervision
	10. Prescribing: Prescribe therapies tailored to patients' needs and conditions	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance	Level 5 be able to provide supervision
	11. Procedures: Plan, prepare for, perform, and provide aftercare for important practical procedures and investigations	Level 2 be able to be present and observe	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance
	12. Investigations: Select, organise, and interpret investigations	Level 3 be able to act with indirect supervision	Level 4 be able to act with supervision at a distance	Level 5 be able to provide supervision

		Progression criteria		Completion criteria
	Learning goals	Specialty foundation <i>By the end of this phase, trainees will:</i>	Specialty consolidation <i>By the end of this phase, trainees will:</i>	Transition to Fellowship <i>By the end of training, trainees will:</i>
Know (Knowledge guides)	13. Scientific foundations of paediatric cardiology	Level 3 know how to apply the knowledge in this knowledge guide to patient care (<i>knows how</i>)	Level 4 frequently show they can apply the knowledge in this knowledge guide to patient care (<i>shows how</i>)	Level 5 consistently apply sound knowledge in this knowledge guide to patient care (<i>does</i>)
	14. Acute paediatric cardiac care	Level 3 know how to apply the knowledge in this knowledge guide to patient care (<i>knows how</i>)	Level 4 frequently show they can apply the knowledge in this knowledge guide to patient care (<i>shows how</i>)	Level 5 consistently apply sound knowledge in this knowledge guide to patient care (<i>does</i>)
	15. Structural heart disease, including valvular and congenital heart disease	Level 3 know how to apply the knowledge in this knowledge guide to patient care (<i>knows how</i>)	Level 4 frequently show they can apply the knowledge in this knowledge guide to patient care (<i>shows how</i>)	Level 5 consistently apply sound knowledge in this knowledge guide to patient care (<i>does</i>)

		Progression criteria		Completion criteria
	Learning goals	Specialty foundation <i>By the end of this phase, trainees will:</i>	Specialty consolidation <i>By the end of this phase, trainees will:</i>	Transition to Fellowship <i>By the end of training, trainees will:</i>
	16. Acquired heart disease	Level 3 know how to apply the knowledge in this knowledge guide to patient care (<i>knows how</i>)	Level 4 frequently show they can apply the knowledge in this knowledge guide to patient care (<i>shows how</i>)	Level 5 consistently apply sound knowledge in this knowledge guide to patient care (<i>does</i>)
	17. Arrhythmias	Level 3 know how to apply the knowledge in this knowledge guide to patient care (<i>knows how</i>)	Level 4 frequently show they can apply the knowledge in this knowledge guide to patient care (<i>shows how</i>)	Level 5 consistently apply sound knowledge in this knowledge guide to patient care (<i>does</i>)
	18. Genetic cardiac disorders	Level 2 know the topics and concepts in the knowledge guide that underpin patient care (<i>knows</i>)	Level 4 frequently show they can apply the knowledge in this knowledge guide to patient care (<i>shows how</i>)	Level 5 consistently apply sound knowledge in this knowledge guide to patient care (<i>does</i>)

Training program requirements summary

Entry and registration requirements

What do I need to do?	When do I need to do it?
 1 registration form	<i>At the start of each phase of training</i>

Prospective trainees can demonstrate:

Entry attributes	<ul style="list-style-type: none">• The commitment and capability to pursue a career as a paediatric cardiologist.• The ability and willingness to achieve the following learning goals:<ul style="list-style-type: none">» team leadership» supervision and teaching» professional behaviours, as outlined in the Competencies.
Entry criteria	<ul style="list-style-type: none">• Completion of the RACP Basic Training Program.• General medical registration with the Medical Board of Australia if applying in Australia, or medical registration with a general scope of practice with the Medical Council of New Zealand and a practising certificate if applying in Aotearoa New Zealand.• An RACP-accredited clinical training position for core Advanced Training in RACP Paediatric Cardiology.



Learning program requirements








What do I need to do?	When do I need to do it?
Clinical experience	
<ul style="list-style-type: none"> Complete at least 36 months of relevant professional experience in approved rotations in at least 2 different training settings. 	<ul style="list-style-type: none"> In any sequence over the course of training.
Location of training	
<ul style="list-style-type: none"> Complete training in at least 2 different accredited training settings (may include prospectively approved overseas training time). Complete at least 24 months of training in accredited training settings in Australia and/or Aotearoa New Zealand. 	<ul style="list-style-type: none"> In any sequence over the course of training.
Learning courses	
<ul style="list-style-type: none"> RACP Induction to Advanced Training self-paced online resource* RACP Health Policy, Systems and Advocacy self-paced online resource* RACP Supervisor Professional Development Program (SPDP) Cardiac Society of Australia and New Zealand Cardiac Genomics masterclass (optional) 	<ul style="list-style-type: none"> Once within the first 6 months of Advanced Training. Once, recommended completion before the Transition to Fellowship phase. Once over the course of training. Optional course

*Resource to be developed.

Teaching program requirements

What do I need to do?	When do I need to do it?
Name 2 individuals for the role of Education Supervisor .	Each accredited or approved training rotation.
Nominate 1 RACP training committee to act as a Progress Review Panel .	1 over the course of training.
Name 1 individual for the role of Research Project Supervisor (may or may not be the Education Supervisor).	1 over the course of training.

Assessment program requirements

What do I need to do?	When do I need to do it?
<i>Per phase of training (i.e. each year)</i>	
 1 learning plan.	At the start of each phase of training, and reviewed every 3 months.
 12 learning captures, across the range of learning goals.	Minimum 1 per month.
 12 observation captures, across the range of learning goals.	Minimum 1 per month.
 4 progress reports.	Minimum of 1 every 3 months. (Note: fourth progress report includes end-of-phase review.)
<i>Once over the course of training (if passed)</i>	
 1 research project proposal.	Submitted during the Specialty foundation phase.
 1 research project.	Submitted for marking before the start of the Transition to Fellowship phase.
 1 logbook that demonstrates completion of the minimum procedural requirements .	To be maintained over the course of training.

The RACP has set these as the minimum assessment requirements, though more work-based assessments are encouraged.

See [Appendix 1](#) for details on each of the learning and assessment tools.

Procedural requirements

Over the course of training, trainees are required to record evidence of completion of procedural experience in their logbook.

Procedures	Minimum number required
Adenosine challenge: trainee to perform	10 cases
Ambulatory care (outpatient) setting: manage patients under supervision	300 patients including at least 20 patients transitioning to adult care, or who are adult congenital patients
Balloon atrial septostomy: perform under supervision and demonstrate competency as first operator	5 cases
Cardiac catheterisation and haemodynamics: participate in, interpret and report	80 cases
Cardiac catheterisation: perform and report diagnostics as primary operator for the haemodynamics component of the catheter, with assistance	20 cases
Direct current cardioversion: trainee to perform	5 cases
Fetal echocardiograms: observe and counsel patients, families, and/or carers	20 studies (10 studies with complex lesions)
Transoesophageal echocardiograms: all studies should be reviewed by a consultant and have finalised consultant reports	50 studies 25 studies as primary operator
Transthoracic echocardiograms: all studies should be reviewed and have finalised consultant reports <ul style="list-style-type: none"> cases under the supervision of paediatric echocardiographer or cardiologist cases with cardiac pathology 	600 cases in total 300 of the 600 cases 500 of the 600 cases
Electrocardiograms: interpret and report on both inpatients and outpatients	100 cases
Electrophysiology study/ablation procedure: participate in clinical decision-making for, including observation of procedures and interpretation of reports <i>*The same patient may be used to demonstrate experience in more than one type of instance.</i>	25 instances* 10 instances that demonstrate clinical decision making 5 instances where the trainee has observed and interpreted the study/procedure 10 instances where the trainee has interpreted the report
Exercise tests: trainee to supervise and report	50 cases
Holter monitor: trainee to report and interpret	50 cases
Chest X-rays: trainee to interpret results	25 cases

Procedures	Minimum number required
Cardiac MRI: trainee to interpret results	25 cases Trainees should be present for 5 procedures
CT angiogram: trainee to interpret results	25 cases Trainees should be present for 5 procedures
Testing permanent pacemaker function: trainee to participate in	20 cases
Pericardial aspiration: trainee to perform under supervision and demonstrate competency as first operator	3 cases

Program requirements by phase of Advanced Training

Specialty foundation phase



Purpose

- Orient trainees and confirm their readiness to progress in their Advanced Training specialty.
-



Duration

- 12 months full-time equivalent (FTE).
-



Entry attributes and criteria

Entry attributes

Prospective trainees can demonstrate:

- the commitment and capability to pursue a career as a paediatrician in cardiology
- the ability and willingness to achieve the common learning goals for Advanced Training:
 - » team leadership
 - » supervision and teaching
 - » the professional behaviours, as outlined in the Competencies.

Entry criteria

- An Advanced Training position in an RACP-accredited training setting or network.
 - General medical registration with the Medical Board of Australia if applying in Australia, or a medical registration with a general scope of practice with the Medical Council of New Zealand and a practising certificate if applying in Aotearoa New Zealand.
 - Completion of Basic Physician Training.
-



Learning program

- 12 months' FTE **relevant professional experience** in approved training rotations.
- Required **learning courses**:
 - » RACP Induction to Advanced Training resource*
 - » Health Policy, Systems and Advocacy resource*[^]
 - » RACP [Supervisor Professional Development Program](#)[^]
- Recommended learning courses:
 - » RACP Research Projects [resource](#)
 - » RACP [eLearning resources](#)
 - » RACP [curated collections](#)

*Resource to be developed.

[^]Required over the course of Advanced Training.



Teaching program

- 2 named individuals for the role of Education Supervisor*
- 1 nominated **RACP training committee** to act as a Progress Review Panel
- 1 named individual for the role of **Research Project Supervisor** (may or may not be the Education Supervisor)
- Supplementary resources for **supervisors**:
 - » Supervisor Professional Development [Program](#)
 - » RACP Research Supervision [resource](#)
 - » RACP Training Support [resource](#)
 - » RACP Creating a Safe Workplace [resource](#)
- Supplementary resources for **training settings and networks**:
 - » Training provider [standards](#) for clinical training programs
 - » Training network [principles](#)
 - » RACP Trainee Selection and Recruitment [guide](#)



Assessment program

- 12 learning captures (minimum of 1 per month) across the range of learning goals.
- 12 observation captures (minimum of 1 per month) across the range of learning goals.
- 1 learning plan, reviewed quarterly.
- 1 research project proposal.
- 1 logbook.
- 4 progress reports (minimum 1 per quarter).



Progression criteria

To progress to the Specialty consolidation phase, trainees can demonstrate:

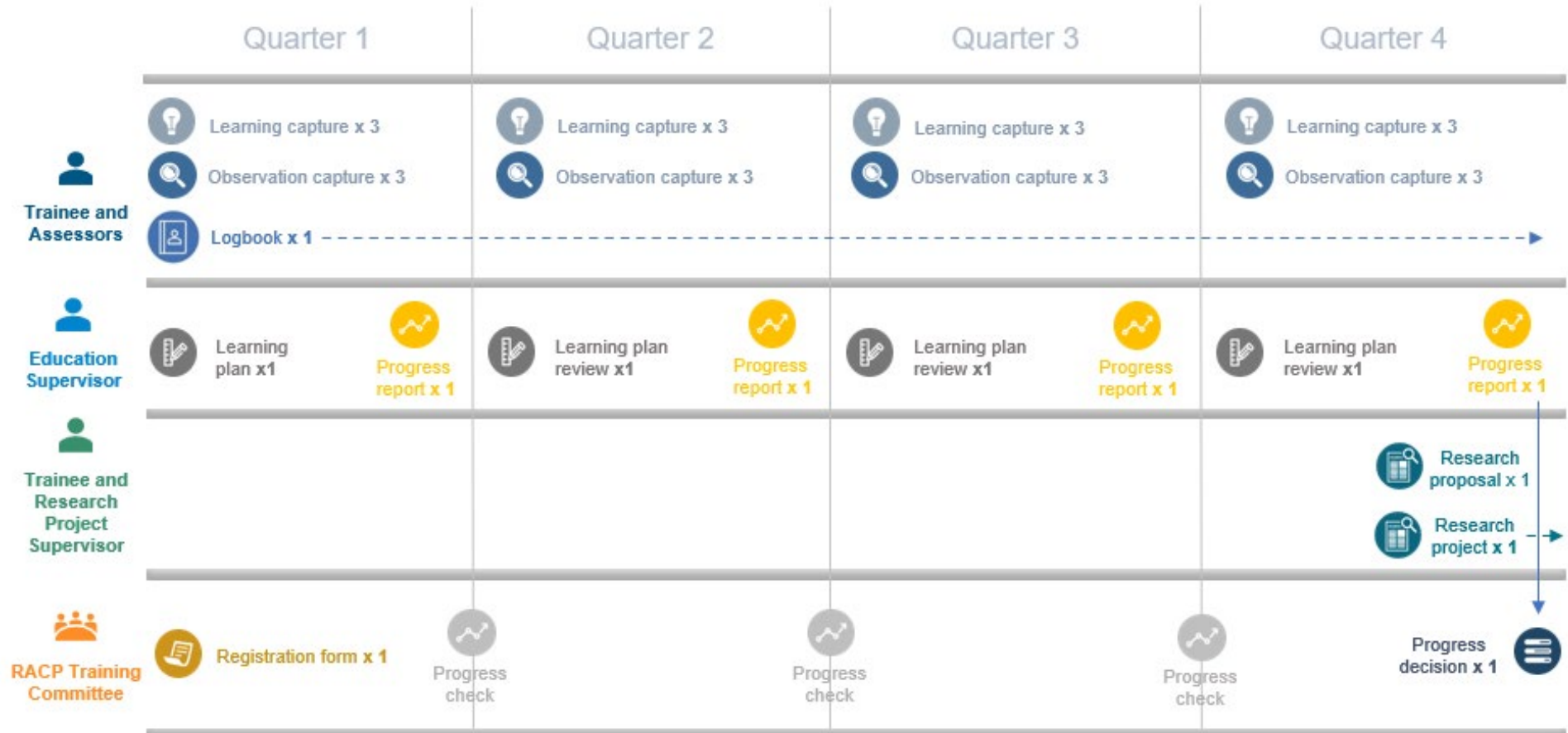
- the ability to plan and manage their learning, and complete their learning and assessment requirements in a timely manner
- achievement of the learning goals to the levels outlined in the [progression criteria](#).

The following learning courses are a requirement of the new Basic Training [programs](#). It is **recommended** that trainees complete them during the specialty foundation phase if they have not been completed previously, and the courses must be completed by the end of Advanced Training:

- RACP Communication skills [resource](#)
- RACP Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence [resource](#)
- RACP Ethics and Professional Behaviour [resource](#)
- RACP Leadership, Management, and Teamwork [resource](#).

If a trainee cannot demonstrate they have satisfied the above criteria, they need to continue in their current phase and complete a learning plan to focus on areas in which they need to improve.

Specialty foundation phase



Specialty consolidation phase



Purpose

- Continue trainees' professional development in the specialty and support progress towards the learning goals.
-



Duration

- 12 months full-time equivalent (FTE).
-



Entry criteria

Prospective trainees can demonstrate:

- certification of the Specialty foundation phase by the training committee overseeing the Specialty consolidation phase
 - an Advanced Training position in an RACP-accredited training setting or network.
-



Learning program

- 12 months' FTE **professional experience** in approved training rotations.
- Required **learning courses**:
 - » Health Policy, Systems and Advocacy resource*^
 - » RACP Supervisor Professional Development [Program](#)^
- Recommended **learning course**:
 - » RACP Communicating Risks and Benefits [resource](#)

*Resource to be developed

^Required over the course of Advanced Training



Teaching program

- As per Specialty foundation phase.
-



Assessment program

- **12** learning captures (minimum of 1 per month) across the range of learning goals.
 - **12** Observation captures (minimum of 1 per month) across the range of learning goals.
 - **1** learning plan, reviewed quarterly.
 - **1** research project.
 - **1** logbook.
 - **4** progress reports (minimum 1 per quarter).
-



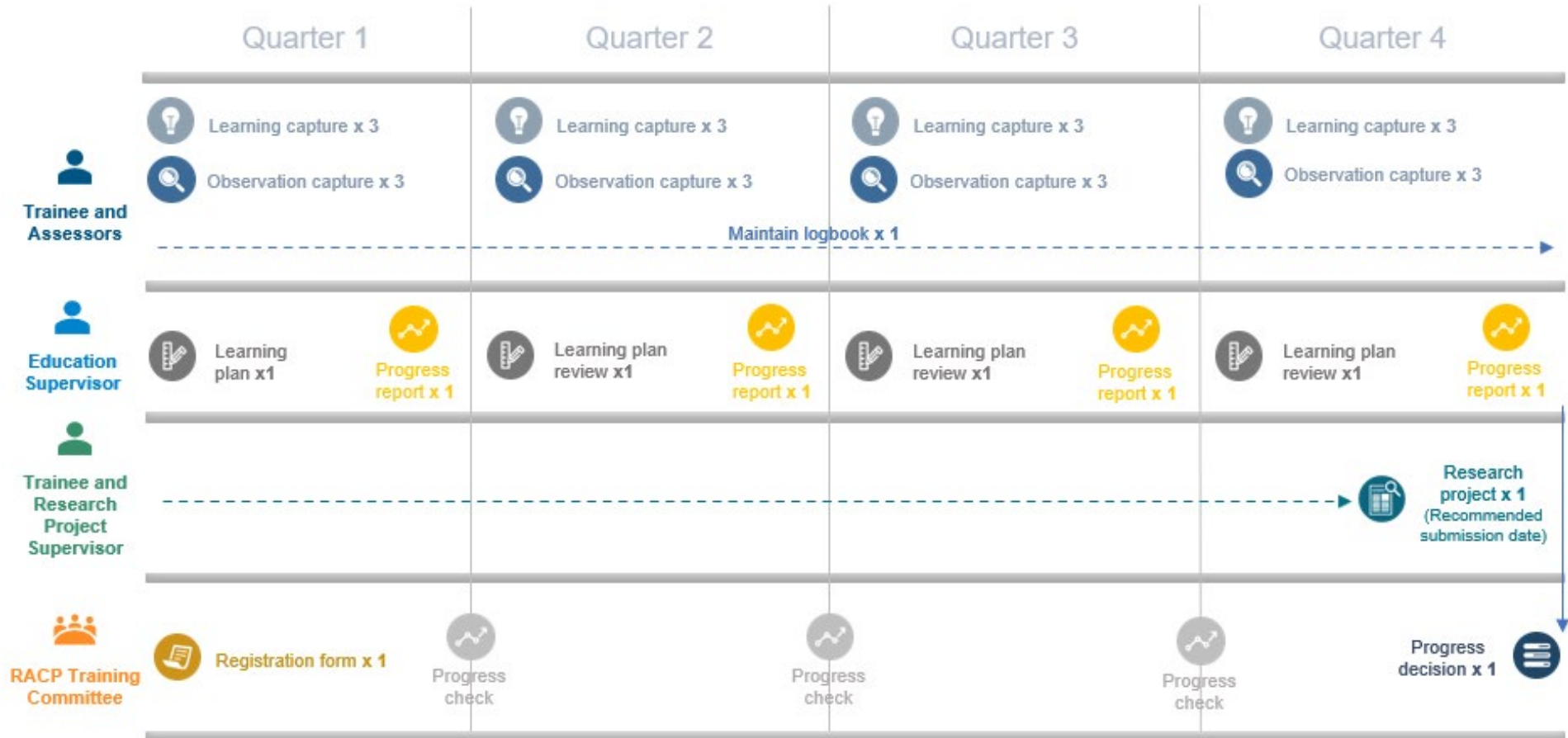
Progression criteria

To progress to the Specialty consolidation phase, trainees can demonstrate:

- submission of the research project
- the ability to plan and manage their learning, and to complete their learning and assessment requirements in a timely manner
- achievement of the learning goals to the levels outlined in the [progression criteria](#).

If a trainee cannot demonstrate they have satisfied the above criteria, they need to continue in their current phase and complete a learning plan to focus on areas in which they need to improve.

Specialty consolidation phase



Transition to Fellowship phase



Purpose

- Confirm trainees' achievement of the curriculum standards, completion of Advanced Training, and admission to Fellowship.
 - Support trainees' transition to unsupervised practice.
-



Duration

- 12 months full-time equivalent (FTE).
-



Entry criteria

Prospective trainees can demonstrate:

- certification of the specialty consolidation phase by the training committee overseeing the Transition to Fellowship phase.
 - submission of 1 research project.
 - an Advanced Training position in an RACP-accredited training setting or network.
-



Learning program

- 12 months' FTE **professional experience** in approved training rotations.
- Required **learning courses**:
 - » Health Policy, Systems and Advocacy resource*
 - » RACP Supervisor Professional Development [Program](#).

*Resource to be developed



Teaching program

- As per Specialty foundation phase.
-



Assessment program

- **12** learning captures (minimum of 1 per month) across the range of learning goals.
 - **12** observation captures (minimum of 1 per month) across the range of learning goals.
 - **1** learning plan, reviewed quarterly.
 - **1** research project.
 - **1** logbook.
 - **4** progress reports (minimum 1 per quarter).
-



Progression criteria

To progress to the Specialty consolidation phase, trainees can demonstrate:

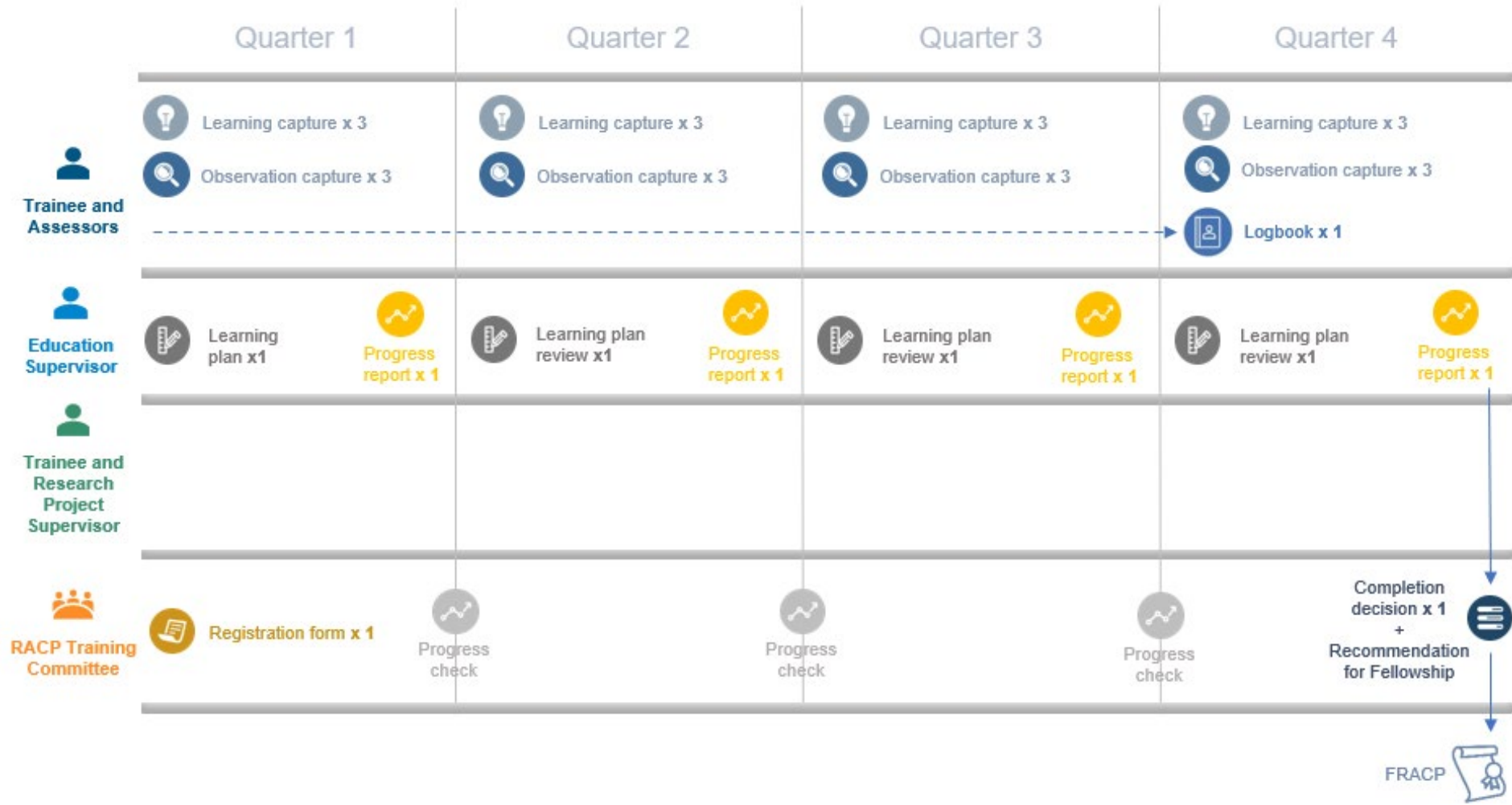
- the ability to plan and manage their learning, and to complete their learning and assessment requirements in a timely manner
- achievement of the learning goals to the levels outlined in the [progression criteria](#).

The following learning courses are a requirement of the new Basic Training [programs](#). It is **recommended** that trainees complete them during the specialty foundation phase if they have not been completed previously, and the courses must be completed by the end of Advanced Training:

- RACP Communication skills [resource](#)
- RACP Australian Aboriginal, Torres Strait Islander and Māori Cultural Competence [resource](#)
- RACP Ethics and Professional Behaviour [resource](#)
- RACP Leadership, Management, and Teamwork [resource](#).




If a trainee cannot demonstrate they have satisfied the above criteria, they need to continue in their current phase and complete a learning plan to focus on areas in which they need to improve.

Transition to Fellowship phase



Appendix 1: Learning and assessment tools

A suite of tools will be used to support learning and assess the curriculum standards.

	Registration form A College-run process to enrol trainees and assess entry attributes and criteria.
	Learning plan A work-based tool to facilitate the planning and review of learning goals at regular intervals.
	Learning capture A trainee-driven tool to facilitate the gathering of evidence of work-based learning linked to learning goals.
	Observation capture Supervised observation of trainees' work-based performance, linked to learning goals.
	Research project Enable trainees to develop experience in research methods in a work-based context, the ability to interpret research literature and quality improvement skills, and achieve the Professional Behaviours learning goal (the Research domain).
	Progress report Assess progress against all learning goals for the quarter and the phase, and progress against the criteria to progress to the next phase.
	Logbook A tool to facilitate the capture of data about specific workplace experiences.
