

PAEDIATRIC SURGERY

A GUIDE TO PAEDIATRIC SURGICAL TRAINING IN NEW ZEALAND AND AUSTRALIA FOR TRAINEES, TRAINERS AND SUPERVISORS OF SURGICAL TRAINING

This guide provides an overview of the Paediatric Surgical Education and Training (SET) program in Australia and New Zealand. It does not constitute or replace the published policies of RACS and the [Paediatric Surgery Training Regulations](#) for SET. Where there is an apparent difference between this guide and the policies and regulations, the latter take precedence.

Specific questions regarding training should be addressed to the Executive Officer of the Board of Paediatric Surgery and documentation on the RACS website.

It should be noted that the Board of Paediatric Surgery strongly endorses and supports the RACS *“Guidelines to Bullying and Harassment – Recognition, Avoidance and Management”* and subsequent publications of the Expert Advisory Group formed by RACS to deal with this issue in 2015.

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INTRODUCTION

The intent of this guide is to act as a ready reference for those intending to train as paediatric surgeons and those involved with their training. An overview of training principles will be presented, followed by focused attention to each stage of training.

Much work has been done, under the auspices of the Royal Australasian College of Surgeons (RACS) and the Board of Paediatric Surgery (the Board), to clarify and codify the training process. A number of the principles of RACS need to be acknowledged and reflected in our training program. These include but are not limited to principles of fairness and natural justice, recognition of the principles of adult learning and teaching, a working understanding of the overarching “nine core competencies” of RACS, implementation of a competency based (as opposed to a time-based) training program, and a natural progression within training that reflects all these areas.

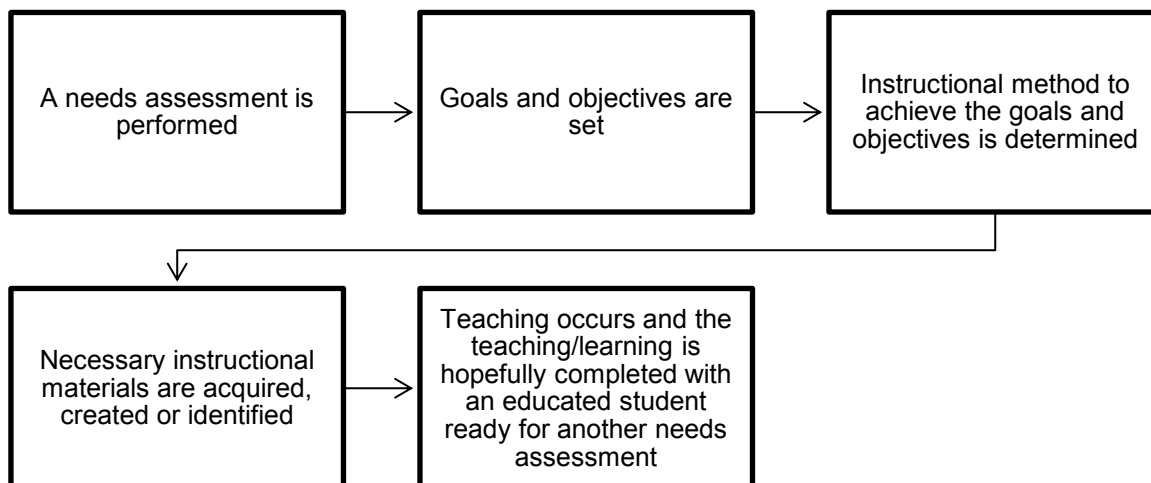
Terms and Abbreviations

The following terms and abbreviations are used throughout this document.

- **ANZAPS** is the Australian and New Zealand Association of Paediatric Surgeons
- **Board** is the Royal Australasian College of Surgeons Board of Paediatric Surgery. The Terms of Reference for the Board is available on the RACS website.
- **CAT** is a Critical Appraisal Task. It is a training tool designed to enable trainees to address a clinical question using the best available evidence.
- **College/RACS** is the Royal Australasian College of Surgeons.
- **DOGS** is Directed Online Group Studies. DOGS has been designed to encourage discussion and understanding of management plans related to clinical paediatric surgical problems and are based on our curriculum modules.
- **DOPS** is a Direct Observation of Procedures assessment form.
- **FRACS** is a Fellow of the Royal Australasian College of Surgeons
- **MINI-CEX** is a Mini-Clinical Evaluation assessment form.
- **MOUSE** is a Measure of Operative Understanding and Surgical Experience assessment form.
- **Rotation** is a period of summative clinical training, sometimes also referred to as term. A rotation is three (3) months for SET One and 6 months for all other phases of training.
- **SET Program** is the Surgical Education and Training (SET) Program in Paediatric Surgery as approved by the Royal Australasian College of Surgeons Board of Paediatric Surgery, and accredited by the Australian Medical Council (AMC) and the Medical Council of New Zealand (MCNZ).
- **Supervisor** is a surgical supervisor of an accredited training position approved by the Royal Australasian College of Surgeons Board of Paediatric Surgery.
- **Trainee** is a registered Surgical Education and Training Trainee in Paediatric Surgery of the Royal Australasian College of Surgeons.
- **Training Calendar** is the published calendar of submission dates, training and examination events and other deadlines which can be obtained from the Executive Officer of the Board and on the RACS website

COMPETENCY BASED TRAINING

The Educational Framework, as had been taught in the Surgeons as Teachers Course, flows sequentially:



Along the way, feedback is sought and generated specifically to evaluate each step of the process. The performance evaluation methods used to demonstrate the competence of an educated student are necessarily linked with the goals and objectives – you shouldn't assess what wasn't on the curriculum. Performance evaluation can be formative – assessments and feedback provided to direct future learning or improvement; or it can be summative – “this term was satisfactory or unsatisfactory”, the exam was “passed or failed”.

As a competency based program, the Board has divided SET into:

- SET One ([page 14](#))
- Early SET ([page 21](#))
- Mid SET ([page 24](#))
- Senior SET ([page 27](#))

Progression through these stages of training depends on acquisition of desired competencies and successful completion of the exams necessary to each stage. These stages of competency acquisition comprise a spiral curriculum format to training.

Many trainees will complete their training in Paediatric Surgery in the expected timeframe of seven years. However, as we are no longer a time-based program, but a competency based program, the duration of training can be shortened or lengthened to reflect the different pace at which individual trainees will demonstrate the necessary competencies.

How does this work? Well, it is assumed that in the Curriculum, Training Regulations, notes such as this guide etc., the Board has outlined the competencies that all trainees need to demonstrate to signal the end of their training. If this is done in four years, then further years of training are simply not needed and should not be imposed. If it takes nine years, this is also OK, as long as the trajectory of the acquisition of competencies is one of steady unimpeded accrual, no persisting borderline or unsatisfactory assessments are present, and the maximum duration of training is not exceeded.

It is possible for some trainees to reach full competency/proficiency in one of the nine core competencies very early in training, especially if they are mature in years and experience. In order to complete SET, all of the nine competencies need to demonstrably reach this competent/proficient

level. If 'medical expertise', 'technical expertise' and 'judgement/clinical decision making' are all demonstrably proficient in an individual, it may seem to them and others that they are ready for independent practice as a consultant surgeon FRACS. However, if one or other of the other six core competencies are below this standard, then it is likely the Board will not allow the trainee to sit the Fellowship Examination (FEX) and will definitely not sign off the trainee as having completed SET. A large proportion of trainees do not complete SET because of difficulties with only one or two of the nine competencies, despite talent and skill in the others. It is best then that deficiencies are recognised and addressed early in training.

How can the Board judge this trajectory, especially when we have to take into account all nine of the RACS competencies? We necessarily need to have assessments that provide evidence for such judgements. We use a number of different assessment tools, as each assessment tool will only be good at measuring some (but not all) of the nine core competencies. Taken in combination, the different assessment tools provide biopsies that allow competence to be assessed. How do we improve the sensitivity and specificity of this biopsy process? This answer is easy – more biopsies with as much diversity as possible. There can be diversity in the individual assessors as well as in the timing and nature of the assessments. Please read [Work-based assessment: a practical guide - Tripartite Alliance/RACS March 2014](#) for further information and insight with respect to work based assessment (WBA).

The designated minimum requirement for assessment frequency in the Training Regulations allows the Board to make a reasoned judgment of the average trainee who is advancing through training at the average rate. In order to make a judgement that progression is out of the ordinary, more assessment evidence is usually needed – for example, more MOUSEs each of which reflect maximum level of competence (not an inguinal hernia for a Senior SET trainee, but an index neonatal case like meconium ileus), more Mini-CEXs each of which reflect maximum level of competence, CATs and DOGs which are of extra-ordinary standard, and mid-term and end of term assessments that are consistent with the judgements shown by work-based assessments such as the MOUSEs, Mini-CEXs, CATs and DOGs.

From a logistic point of view, the frequency of CATs and DOGs cannot be increased, so it is important that the standard of answers presented by a trainee is their best possible effort. Whilst there are mandated minimum MOUSE and Mini-CEX numbers, there are no maximum numbers mandated. Trainees should make the most of every clinical opportunity that arises to demonstrate their competency levels via these assessment tools. Regular use of these assessment tools also stimulates “buy-in” from their Consultants, their Consultants are more likely to be in a “training frame of mind” and more likely to be mindful of providing timely and frequent informal feedback to improve future performance.

The Board is keen to discern the trajectory of skill acquisition. It may not be unusual for an early Mid SET trainee to do a MOUSE for orchidopexy, and for the first MOUSE to outline problems. If subsequent MOUSEs over a six-month period show rapid improvement in performance of this procedure as assessed by the same or different Consultants (i.e. competent after four months), then this tells a story that is different than if a similar number of MOUSEs over the same time frame demonstrates that the same problem is recurring. Having a “bad” MOUSE is not a problem as long as subsequent MOUSEs show steady improvement, this process demonstrates the trainee can be trained. The same can be said for Mini-CEXs.

If a Mid SET trainee is assessed as not being a team player, how might they demonstrate to the Board that this assessment is unreasonable? The best way may be for the trainee to arrange with their Supervisor or the Board for non-mandated 360s to be performed (these are mandated in SET One). If the 360s provide evidence that function in a team is in fact satisfactory, then this is the best response to the assertion.

In an endeavor to improve this “biopsy” process, new assessment tools such as Entrustable Professional Activities (EPAs) are being considered by the Board of Surgical Education and Training (BSET).

There are a number of scenarios in which the Board recommends increased frequency of assessments. When a Performance Management Plan is created, frequent use of assessment tools is made to ensure remediation is occurring satisfactorily. When there is a return to work following interruption, the assessment tools are used in the first three months to allow the Board to determine the new baseline level of competence that is present following interruption, as this may be lower than that previously measured prior to interruption. It will then be improvement from this newly calibrated level of competency that will be tracked with subsequent assessments. Also, when a “mature” trainee has entered training and has had previous experience and training that is not eligible under the Training Regulations for Recognition of Prior Learning, increased frequency of assessments may be arranged so that the higher than expected level of competence can be demonstrated and acknowledged. Sometimes we have trainees who are “gifted”, and this is clear from the routine assessments that are made. Accelerating such trainees can be defended if evidence exists from the assessment tools which are being used with greater frequency. Similarly some trainees may be acquiring skills more slowly than average – there may be pressures at home affecting training, or acquiring particular competencies may not come naturally. As long as this trainee can demonstrate incremental steady improvement such that it can be expected they will complete training within the maximum allowable time, then training can continue albeit at a slower than average rate – perhaps three years for Mid SET rather than two years.

Operative logbook numbers have been a traditional method of gauging a trainee’s clinical experience. With the introduction of fatigue management measures in our hospitals, registrar numbers have increased and caseload per registrar has reduced. Simple numbers are not a proxy for learning – 10 badly performed appendicectomies without supervision do not outweigh three well done mentored cases. With MALT as our electronic logbook system, we have a powerful way of tracking this data, together with degrees of supervision, across all trainees and hospitals. The Board has commissioned a study as to how this information could be used to good training effect. We have, to date, been careful to not produce target numbers required for various procedures (as the Board in General Surgery and the British Association of Paediatric Surgeons has done); mainly because of the heterogeneity between rotations within hospitals, hospitals and health systems across New Zealand and Australia in our specialty. The Board hopes that the review of MALT data will allow benchmarking of desirable logbook targets to commence in the period 2017-2018.

The discerning reader might have by this stage pondered the importance of how carefully the consultant measuring performance needs to be when using the assessment tools. Careful observation of performance, and accurate recording of this, is important for the trainees. Having Consultants who are prepared to provide time and attention to this process is important. Having clearly defined competency levels in the Curriculum is also essential. Timely renewal of the Curriculum is important. Having a Board that examines this evidence in a fair and transparent manner is important. Having clear lines of communication between the Board, Supervisors, all Consultants who act as trainers and also trainees is important.

Next is an overview of the nine “core competencies” identified and espoused by RACS. Mastery of all nine competencies is necessary for completion of SET training.

THE NINE CORE COMPETENCIES OF RACS

Medical Expertise

Medical Expertise relates to the acquisition, integrating and application of medical knowledge, clinical skills, and professional attitudes in the provision of patient care:

- a) Demonstrating medical skills and expertise
- b) Monitoring and evaluating care
- c) Managing safety and risk

Judgement – Clinical Decision Making

Judgement – clinical decision making involves making informed and timely decisions regarding assessment, diagnosis, surgical management, follow-up, health maintenance, and promotion:

- a) Considering options
- b) Planning ahead
- c) Implementing and reviewing decisions

Technical Expertise

Technical expertise relates to safely and effectively performing surgical procedures conducted in the unit in which they are training or working:

- a) Recognising conditions for which surgery may be necessary
- b) Maintaining dexterity and technical skills
- c) Defining scope of practice

Professionalism and Ethics

Professionalism and ethics involves demonstrating commitment to patients, the community, and the profession through the ethical practice of surgery:

- a) Having awareness and insight
- b) Observing ethics and probity
- c) Maintaining health and well-being

Health Advocacy

Health advocacy involves responding appropriately to the health needs and expectations of individual patients, families, carers and communities:

- a) Caring with compassion and respect for patient rights
- b) Meeting patient, carer and family needs
- c) Responding to cultural and community needs

Communication

All surgeons are required to be able to communicate effectively with patients, families, carers, colleagues and other staff:

- a) Gathering and understanding information
- b) Discussing and communicating options
- c) Communicating effectively

Collaboration and Teamwork

Collaboration and teamwork involves developing a high level ability to work in a cooperative context to ensure that the surgical team has a shared understanding of the clinical situation and can complete tasks effectively:

- a) Documenting and exchanging information
- b) Establishing a shared understanding
- c) Playing an active role in clinical teams

Management and Leadership

Management and leadership involves leading the team and providing direction, demonstrating high standards of clinical practice and care, and being considerate about the needs of team members:

- a) Setting and maintaining standards
- b) Leading that inspires others
- c) Supporting others

Scholarship and Teaching

As scholars and teachers, surgeons demonstrate a life-long commitment to reflective learning, and the translation, application, dissemination, and creation of medical knowledge:

- a) Showing commitment to life-long learning
- b) Teaching, supervision and assessment
- c) Improving surgical practice

One of the nine core competencies of RACS listed above is that of “Scholarship/Teaching”. Recognising that this competency is part of SET training for trainees, introductory instruction of this is included in Paediatric Surgery Boot Camp (now known as NEWTS – New Trainee Symposium) in the form of information derived from the Supervisors and Trainers for SET (SATSET) Course and the Keeping Trainees on Track (KTOT) Course. It is not unreasonable for trainees at the commencement of their training to understand how their training is structured and assessed, and if need be, remediated. SATSET and KTOT is available as an on-line module. All Paediatric Surgical Supervisors should have done these courses as a minimum standard – their trainees in essence have. All SET One Supervisors should be familiar with the content of NEWTS/Boot Camp – their trainees are.

The Surgical Teachers course of RACS is also highly recommended for all Supervisors of Training; it is open to all Fellows (and has also been done by some of our SET trainees).

All Supervisors of Training should also be familiar with the document [Standards for Surgical Trainers](#) sponsored by the Faculty of Surgical Trainers of the RCS (Ed) April 2014. This document allows us insight into how we might benchmark ourselves against international best practice.

It is hoped that by the time current trainees have been awarded a FRACS, they would be competent paediatric surgical trainers and if nominated, competent Supervisors of Paediatric Surgical Training. All Fellows/Trainers should be familiar with how SET is structured, familiar with the SET assessment tools, and how a Performance Management Plan is formulated and implemented.

Supervisors of Paediatric Surgical Training do not serve in isolation, but are the colleagues designated by local trainers to have ‘situational awareness’ of how trainees are travelling through SET, what assessments are due and when, and assist with organising departmental meetings during which trainee progress is discussed. The Supervisors will ensure that a Start of Term meeting is held, and will help coordinate the Mid and End of Term Assessments. If required, the Supervisor of Training (at the direction of and with the assistance of the Board of Paediatric Surgery) will construct with the SET trainee a Performance Management Plan. The Board is committed to maintain good communication with Supervisors of Paediatric Surgical Training and assist with ongoing training for this role.

THE STRUCTURE OF A SET ROTATION

Needs Assessment – The Start of Term Meeting

A needs assessment is a fundamental component of all adult learning – we need to know what our trainees already know, and what they need to know by the end of the rotation. The “cognitive gap” thus defined by this knowledge should form the basis for the development of goals for the rotation. Easier said than done!

Unless we identify these goals, neither the trainee or the trainers will be alert to what exactly needs to be, or can be, taught and learnt on the rotation. Unless this is known, how can we assess whether or not the trainee has “passed” the rotation? How can we tell if they have exceeded expectations? How can we assess how good the training and training opportunities were?

It is first suggested that you review, from the trainee’s portfolio, correspondence they have received from the Board. This will outline any problems or concerns that already might exist. If any problems are found, they form the primary task for teacher and trainee, as persisting deficits are bound to result in a probationary term, or if already on probation - dismissal from training. These problems are usually outlined in detail in the previous rotation report(s). Document these goals.

Secondly, mandatory exams/courses/research/assessments that require completion before the end of the rotation are identified. We have already had trainees dismissed from training as they have not successfully passed the Generic Surgical Sciences Examination (GSSE) in the allotted time frame, this particular scenario will soon not occur. Trainees are not cleared to sit the FEX until they have satisfied the research requirements of training. Document these goals.

Thirdly, I would suggest that you enquire as to what the trainee is hoping to learn from the rotation, this response should be met with a realistic explanation from the supervisor as to whether these particular goals can be achieved given their familiarity with the resources available at the facility. The trainer can offer insights regarding opportunities typically available during the term that the trainee may be unaware of. Opportunities for research can be discussed and agreed upon. Document these goals.

Fourthly, take time to review the curriculum, regulations and this guide - these will provide guidance to the trainee and supervisor as to the expected level of performance that should reasonably be expected. This is covered in detail later. Document any topics identified as being potential problems for the trainee.

Finally, the trainee should be invited to provide any information that they feel may impact on their performance. Such information is often not required to be provided, but when provided may make it easier to plan duties and leave, for instance. Such issues may include pregnancy, illness, family stresses, and annual leave requests. These should be documented.

We would then suggest the supervisor agree to draft a document that outlines the goals that have been identified in the meeting, any sub-goals or objectives that flow from these broad goals, and the assessment tools that will be used (Mini-CEX, MOUSE, presentation, paper, logbook, etc.) to assess whether the goals have been achieved. An effort should also be made to identify resources that are available and the likely teaching episodes that are available to help achieve the goals identified. The timeline for assessments and the date for the mid-term assessment(s) are identified. This draft might then be sent only to the trainee, and the trainee is asked to make any changes they feel are appropriate (especially if there are any privacy concerns). Once signed off by the trainee, the final document is then provided (for instance by email or at a departmental meeting) to all members of the department. This ensures that the trainee knows that all the surgeons in the department know what the trainee is meant to learn and be taught, and all surgeons know that the trainee knows! The final copy of the needs assessment should be provided to the trainee for their portfolio, and a copy retained by the supervisor. For good measure, these goals can also be sent to the Executive Officer of the Board to be placed in the trainees file. These goals provide a good template for conducting the mid-term assessment, our next topic.

Summary

1. Previous bad news identified
2. Upcoming assessment tasks identified
3. Specific term opportunities identified
4. Research review
5. Curriculum review
6. Other relevant issues
7. Trainee agrees with plan
8. Plan goes to rest of Department

NB. A similar but more concentrated needs assessment is done when trainees receive a warning from the Board – a Performance Management Plan will be constructed along the lines identified above to provide the best opportunity for the trainees to return to demonstrably satisfactory performance.

MID-TERM AND END OF TERM ASSESSMENTS

At the start of term meeting, a needs assessment is performed, learning/training goals are set and agreed to and disseminated to all members of the Department. During the term, assessment tasks are conducted (Mini-CEX, MOUSE, and perhaps 360s) and feedback on performance is provided to the trainee. At the Start of Term meeting the dates for submission of Mid Term and End-of-Term Assessments should also have been noted.

The Mid-Term Assessment is usually a formative assessment. (In the context of being on probation, the mid-term assessment may be used to perform a Board mandated summative assessment. Also, SET ONE trainees are assessed in three month increments, and unsatisfactory performance in any two of these three month increments will usually result in dismissal from SET). A formative assessment is a process by which formal feedback can be provided to the trainee to provide direction for their efforts to become competent paediatric surgeons. (An assessment of satisfactory or not-satisfactory performance (a summative assessment) is usually made at the end of term assessment meeting.) Such formative feedback should firstly relate to the goals set at the Start of Term Meeting, and secondly relate to any concerns identified during the initial part of the rotation. The feedback should be specific (“the behaviour we observed was ... and what we expected of you is...”) and then related to the documented standard (usually either the curriculum of Paediatric SET which relates expected knowledge and skill to each SET level, and also the RACS document [Becoming a competent and proficient surgeon RACS February 2012](#), in which non-technical competencies are excellently addressed). Later in this document is a helpful compilation of this information which allows trainers to ‘calibrate’ their assessment to the expected level of competency of the trainee. Of course the aim of providing timely and specific feedback is to provide direction to encourage improved observed performance. That being said, if you have identified a problem, such discussion of the problem should necessarily also introduce the potential solution(s) to the problem for the trainee – don’t leave them hanging.

In order to conduct an effective Mid Term Assessment, it is therefore necessary for the Fellows in the Department of Surgery to find time to discuss each trainee, identify performance against that expected for the appropriate SET stage and against the goals set. Then the task is to identify deficiencies and reach agreement on new goals and teaching opportunities for the trainee before the actual assessment is discussed with the trainee. **It is important that the trainee be assessed against criteria relevant to their stage of training** (SET One, Early, Mid or Senior SET) – some good trainees, say at Mid SET, are often assessed as being “OK” as they are perceived as being more advanced, when in fact they should get an “excellent” if they are judged against Mid SET criteria. Using standards such as these will also allow you to clearly state observed behaviour, link this observed behavior to the benchmarks provided, and thus accurately assess competence according to expected training outcomes. Such calibration is vital in our competency based program, as it allows for good trainees to be accelerated and not so good trainees to be allocated more time to accrue competencies.

If you study the Assessment Form used, you will notice that the criteria that is marked covers all nine core competencies acknowledged by RACS. It is important that such global assessments are made regularly, as some trainees may be especially weak in just one or two of these areas. Such weakness

needs to be identified and addressed promptly. The weaknesses most difficult to identify, judge and provide feedback for are the six non-technical competencies, this is why RACS document [Becoming a competent and proficient surgeon RACS February 2012](#) is so valuable. Many trainees who were unable to complete SET had issues with one or other of the six 'non-technical' competencies, the importance of these 'non-technical' competencies to training and surgical clinical practice should not be under-estimated.

At the end of the Mid-Term Assessment it should be clear to both trainee and trainers what the goals of training are for that trainee for the remainder of the term/rotation. It should be clear, if there are identified deficiencies, what observed behaviour is required in order for the term/rotation to be subsequently assessed as being satisfactory. This information needs to be clearly documented.

As stated earlier, the Mid Term Assessment is usually a formative assessment, this means it provides opportunity for trainees to plan for improved performance before the end of term summative (pass/fail, satisfactory/unsatisfactory) assessment is made.

The End of Term Assessment is made in a similar fashion to the Mid Term Assessment, remembering that it is a summative assessment for trainees. An unsatisfactory End of Term Assessment triggers the need for a warning and consideration for the creation of a Performance Management Plan for that Trainee. If identified deficiencies continue to persist, then Dismissal from Training will follow. It is because of this possible outcome that many Fellows and Supervisors are wary when making this assessment; they do not want to be seen as "pulling the trigger". Whilst this is understandable, such sentiment is not helpful to the Board or the Trainee in the long run. Fellows and Supervisors need to be aware that it is the observed behaviour that is being assessed, not the integrity or character traits of the trainee. All of our trainees have established to the medical community their intelligence, integrity and value – this is not in question. What is in question is whether paediatric surgery is a career option that is viable for them. If our process has validity, re-directing struggling trainees to alternative career paths can and should be made earlier, rather than later, to enable our junior colleague to get on with a satisfying career. This can be done with compassion, empathy and fairness if our framework is followed – needs assessment, goal setting, regular assessments of observed behaviour and subsequent feedback in order to encourage and direct improved performance. If this is done in a timely transparent fashion and follows principles of natural justice, then we have done the best by each trainee regardless of outcome. If we gloss over or mask problems, then the process becomes confused and drawn out, this is helpful for no-one involved. It is for this reason that careful consideration is given by each Hospital Department of Paediatric Surgery to achieve consensus in their assessments of each trainee if at all possible. If consensus is not possible, then dissenting assessments (which again make reference to observed behaviour) are accepted by the Board for consideration.

Recent discussion at BSET noted that if the specialty Board receives emails/phone calls from any trainer or fellow indicating that there is less than optimal trainee performance, and that email is taken into account for assessment of training progress, then that email/phone call becomes available to the trainee for their review. This is to achieve transparency and follow rules of natural justice. In some past (not to be repeated) unfortunate situations, such documentation only became available to trainees as part of an appeals process – clearly natural justice in the process was not followed and the appeal by the trainee quite correctly succeeds on procedural grounds. If the email is not used or tabled in any way (as writer of email wants it to be "confidential"), then the receiver of the email should not discuss the content with board members and should note that it is not being taken into account in discussion or decision making from point of view of trainee assessment. If this information has created a situation of apparent (apprehended) bias, the Board member will excuse themselves from deliberation. Phone calls cannot be discussed by a Board unless the conversation is documented with permission from the caller and formally tabled. There is no role for hearsay in trainee assessments – observed behaviour which demonstrates lower/expected/higher than expected competence needs to be directly observed, documented, discussed with the trainee, and a path for remediation/acceptance/acceleration of training offered.

When perusing assessments, the Board in particular notes "ticks to the left" that indicate a borderline or unsatisfactory assessment, and the Board assumes these assessments are made against the

published criteria relevant for the stage of SET that the trainee is in. The Board also in particular notes the comments section at the end in which strengths and weaknesses of trainees are outlined. Each End of Term Assessment is marked as being either satisfactory or not satisfactory. Each of the assessments, in concert with other evidence such as Mini-CEX and MOUSEs, also enable the Board to form an opinion as to whether training time should be extended or shortened, and also determine which future posts may best suit the training needs of that trainee.

ACCREDITED TRAINING POSTS

Training posts are accredited by the Board. The duration of accreditation will depend on local circumstances – it can be reduced if local conditions are changeable or potential problems have been identified. Each hospital will have posts accredited that are ascribed to a particular stage of Paediatric SET training (SET One, Early SET, Mid SET, and Senior SET).

Trainees are asked to submit their preferences for training posts usually in April of each year. This allows for allocation of posts to be determined by the time Selection is completed each year (June). Trainees appear to consult closely with their peers to assess the training benefits of particular posts to assist with their deliberations. Factors such as geography (family support, minimising the total number of moves etc.), stage of training (Fellowship Exam preparation for instance), plus adverse remarks from colleagues all seem to play a part in this process. Seniority of trainees (as described in the Training Regulations) provides an order of precedence when the Board examines submitted term preferences.

The Board recognises that it has a role and duty to override trainee preferences when allocating posts if there are specific identified training issues of a trainee that suggest a different post would be better for the trainee's educational and training needs. Reasons for this will be discussed with the trainee involved.

There is opportunity for training hospitals to identify and target the training needs of each stage of SET for which their hospital is accredited in order to promote to prospective trainees the opportunities on offer. Construction of rotations that provide suitable clinical material (clinics and operating theatre) together with formal training sessions and enthusiastic trainers and supervisors are valued by trainees.

Trainees are obliged to participate in research during training. This would involve investigating a relevant question after having obtained ethics approval, and presenting their findings at a national or international meeting and seeking publication of their findings. This process necessarily requires a competent research supervisor who can guide the trainee through this process, and quarantined time commensurate with the project's requirements. This time is needed for meetings with the Supervisor to review progress, and time in the laboratory or similar venue to collate data.

Trainees are also obliged to attend one of the ANZAPS Annual Scientific Meeting once during each phase of SET training (SET One, Early, Mid and Senior SET). They should present at least once out of these four attendances. Trainees are obliged to attend the Registrar Annual Training Seminar (RATS) each year and there is a strict obligation for hospitals to release their trainees to attend RATS in its entirety – this obligation is delineated in the Training Regulations. Attendance at these meetings encourages exchange of information relevant for training, exchange of information relevant for practice, and networking to encourage collegiality within our group.

The material provided in this section and guide as a whole should help Departments of Paediatric Surgery with the process of attracting trainees to their hospital. Opportunities exist for trainers from any hospital to meet with trainees at the RACS ASC/ ANZAPS meeting annually, and also at RATS annually. Current or prospective SET One Supervisors are also welcome to attend NEWTS which is held annually.

JDOCS

[JDOCS](#) is a new initiative of RACS to assist junior doctors who are considering a career as a surgeon. The JDOCS framework emphasises competencies and skills that junior doctors should set about acquiring during this stage of professional life.

If junior doctors approach you to get advice as to how to prepare themselves for selection into Paediatric Surgical SET, this is the obvious first document that you should direct them to. There is a specific [JDOCS website](#) that provides other tools and support material. It is also possible for junior doctors to access MALT to create a surgical case logbook.

The regulations associated with selection into the SET in Paediatric Surgery are published on the [RACS website](#); prospective trainees should also be directed to these regulations. The regulations will outline experience that is scored in the assessment of the Curriculum Vitae (CV), and also outlines the process for obtaining referees and the interview process. A clear understanding of this process early in planning will allow prospective trainees an opportunity for efficient preparation.

SELECTION

[Selection into SET](#), as alluded to earlier, is based on the scoring of the submitted CV and referee reports, together with an assessment made during the interview process. The interview comprises four panels; each panel generates a score for the attributes being assessed. Each panel also generates a score for “communication skills”; the communication scores of each panel are averaged and used to provide a fifth component that contributes to the overall interview score.

At completion of the interviews the overall scores of all candidates are de-identified and examined by the Board. A pre-determined benchmark is then applied to create the list of appointable (still de-identified) candidates. The pattern of scores is then discussed, this is to decide which candidates cannot be separated (e.g. if two candidates scaled scores are separated by less than one mark, they are considered as being equal). Consideration is then given to the number of training posts available, taking into account trainees who may have deferred from the previous year, and also potential bottlenecks to training post allocation that may occur in the future if excessive candidates are approved. The overall aim is to fill all available training posts with appointable scores, with preference going to those of higher ranking in the scores.

Reviews of the Selection process have consistently demonstrated that the components that appear to assist most with predicting successful selection are the CV and the Interview. Referee reports are usually uniformly excellent and do not greatly separate those candidates who end up scoring well in the overall process compared to those that score poorly. The Board continues to examine processes to try and improve the value of the referee report in the selection process. These findings may in fact reflect a uniformly high standard of the candidate, or may represent a “halo effect” operating amongst referees, we don’t know!

Whilst assessment of the selection process is examined from the point of view as to which components are good at predicting successful selection, we as yet have no good data as to whether particular components predict successful outcome to SET training, which in fact would be the best assessment of selection tools. In the absence of this, and recognising the potential flaws with selection, the Board has introduced a SET One year to the training program. The SET One year in many respects acts as an extension of selection.

Between successful selection and commencing SET One is Boot Camp, or as it is now termed NEWTS (New Trainee Symposium). The current format of NEWTS is a relatively informal platform to explain to new trainees how their training is structured from an educational viewpoint, how their training will be conducted and assessed, and also an overview of the Training Regulations. There is often another course bolted onto NEWTS such as the Process Communication Model Part One Course, or other featured additions to RATS such as the oncology study day in Auckland in 2015 and the colorectal course in Melbourne in 2016, both of which had international speakers. Being co-located and coordinated with RATS, NEWTS provides an excellent opportunity for new trainees to network with their senior trainee colleagues and all Board members.

STAGES OF SET – SET ONE

The SET One year acknowledges the imperfection of the selection process by becoming in some ways an extension of selection. The Board hopes that by spending a year in a tertiary paediatric surgical unit, this year will confirm in the trainee's mind that they do in fact wish to pursue paediatric surgery as a career. Specific goals and assessments are set out, and each SET One trainee should have a supervisor whose sole supervisory responsibility is the SET One trainee. During this year the trainee can demonstrate that they are trainable, and the trainee gains a good working understanding of Paediatric SET before they rotate to adult surgical units in Early SET.

Specific tasks are to be completed satisfactorily within a defined timeframe. We hope that by immersing trainees in a tertiary paediatric surgical environment we will give opportunity for trainees to decide for themselves if they are not suited to our craft. We also try and identify trainees who have demonstrated that they are unlikely to succeed with training – this is best done early in training to allow these doctors the opportunity to seek an alternate vocation in a timely manner. If a trainee is recognised as being borderline only at the end of SET One, the Board will not allow progression to the General Surgery rotations of Early SET, but will instead keep the trainee in a paediatric surgical environment for further close oversight and mentoring. Competencies thus obtained in this “extra” year at a paediatric institution should shorten the period of training required in Mid SET, so is not a waste of time for successful trainees.

The tasks that are used to assess performance in SET One are straightforward and eminently achievable. The standard apparent is aligned to the JDOCS Year 3 standard outlined by RACS in 2015, together with technical skills (such as laparoscopic appendicectomy and scrotal exploration) that will be useful in Early SET. A strict timeframe is attached to each of the tasks. The usual structure of six month rotations with mid-term and end of term assessments **does not** occur in SET One. SET One comprises of four three month terms – an unsatisfactory assessment in any two of these terms will normally result in dismissal from training. Every SET One post should have a SET One supervisor who is different to the Supervisor of Training for Mid and Senior SET trainees in that hospital. No hospital has more than one SET One trainee – one hospital, one trainee and one supervisor. If a SET One trainee is concerned that their post is not providing the opportunity to achieve the specific tasks required for their assessment, this should be in the first instance discussed with the SET One supervisor. If these concerns, in the opinion of the SET One trainee, are not satisfactorily addressed, the SET One trainee should write to the [Executive Officer](#) so that the Board can be made aware of the situation as soon as possible and well before the due date for assessments.

There is now an established practice that if a successful applicant for Paediatric Surgical SET happens to be working at a hospital that has a SET One supervisor at the time they accept a position to SET, then that successful applicant can commence having the SET One tasks assessed and signed off prior to their official commencement the following year. This is consistent with the desire of the Board to truly have a competency-based program. It has therefore occurred that a SET One trainee has had all of their tasks signed off prior to officially commencing SET One. After officially commencing their SET One year, such a trainee may then be reassessed as being at Mid SET level of training if appropriate, perhaps shortening the duration of training.

An important thing for supervisors to remember is that even though this is the first year of SET for these trainees, each of these individuals has proven maturity with respect to adult life, adult learning and teaching, and clinical care delivery. While this raises the expectations that we may have for observed performance, it also means that professional respect and collegiality are deserved by all of our SET One colleagues.

Consideration should be given by SET One trainees to participating in the Process Communication Model (PCM) Part One Course. The PCM course is badged by RACS to help with communication skills and also facilitates individual insight as to how to deal with the stresses time in training can take on trainees and their loved ones. Many trainees have now done the course and may be approached during NEWTS to ask their opinion on its usefulness.

The following standards are taken directly from the booklet “JDOCS Framework – Learning Outcomes and Professional Standards” RACS Version 1.1 November 2014. They are those listed for PGY 3. It is

assumed that trainees entering SET One will be familiar with this document already. Some additions/modifications have been made to make these more pertinent to Paediatric Surgery SET. Additional relevant resources are the SET One Assessment Plan and the SET One Assessment Plan Record available on the [RACS website](#). Also, [Becoming a Competent and Proficient Surgeon RACS February 2012](#) should be consulted (Pre-vocational and novice standards).

As with all the stages of SET described later; all available descriptors are provided to assist the reader to fully comprehend the standard expected. Repetition of sorts is to be expected.

Medical Expertise

- ✓ Can perform an effective clinical assessment of a patient for most common conditions and presentations.
- ✓ Present complex cases effectively to senior medical staff and other health professionals.
- ✓ Seeks advice when unsure of appropriate management.
- ✓ Considers the potential for error.
- ✓ Willing to involve themselves in an audit process.
- ✓ Willing to report incidents utilizing available systems.
- ✓ Prescribe, calculate and administer all medications safely, mindful of their risk profile. Understand medicines with a high risk of adverse events. Double check and document dose calculations.
- ✓ Understand the actions and interaction, indications, monitoring requirements, contraindications and potential adverse effects of each medication used.
- ✓ Evaluate outcomes of medication therapy. Monitor and review the patient's response to treatment (aligned to NPS MedicineWise).
- ✓ Anticipate risks associated with common conditions and procedures, and implement steps to avoid them.
- ✓ Provide appropriate aftercare and arrange follow-up for all procedures.
- ✓ Identify patients suitable for, and refers to, special needs care, rehabilitation, or palliative care programs.
- ✓ Apply criteria for referral or consultation relevant to a particular problem or condition.
- ✓ Identify gaps in own knowledge and address these.
- ✓ Audit own and team performance in relation to patient progress and outcome.
- ✓ Review and update unit protocols manual regarding pre-operative assessment and care, operative procedures and post-operative care.

Judgement – Clinical Decision Making

- ✓ Identifies the significant clinical issues from history and examination. To this end SET ONE trainees should be familiar with material within "The Surgical Examination of Children" by Hutson and Beasley.
- ✓ Aware of the need to make timely decisions.
- ✓ Manages common problems utilizing basic algorithms and decision trees.
- ✓ Judicious request and justify use of diagnostic tests for common conditions.
- ✓ Use investigation findings to refine diagnoses for common conditions.
- ✓ Undertake continued timely reviews of patient progress and respond appropriately to any changes of condition.
- ✓ Readily seeks advice and guidance for management plans.
- ✓ Recognise when a management plan is failing and, where appropriate, seek senior input to devise an alternate plan.
- ✓ Retrieve, comprehend and apply results of systematic reviews, clinical prediction rules, decision analysis and clinical practice guidelines.
- ✓ Identify own error in reasoning and reflect on one's own clinical reasoning process.

- ✓ Plan the order of an operating list and discuss with consultant.
- ✓ Present case management reports on common cases to unit meeting.
- ✓ Recognise instances of uncertainty and conflicting values, and able to alleviate their potential impact.
- ✓ Can explain their decision making while performing a simple procedure.
- ✓ Reviews decisions and recognizes their own limitations.
- ✓ Recognises when they do not know what is going on.

Technical Expertise

- ✓ Identifies key indications and contraindications for the management of common conditions in surgical patients.
- ✓ Discusses the advantages of operative versus non-operative management of common surgical conditions.
- ✓ Competency with generic elementary technical skills 1 to 9 can be demonstrated verbally or practically.
- ✓ Basic Essential Surgical Skills constructs on p37 are well established. Can perform basic clinical skills such as resuscitation, suturing simple superficial wounds, knot tying, maintaining a sterile field, and pain management.
- ✓ Able to safely demonstrate these skills and constructs.
- ✓ Able to teach these to juniors and supervise their clinical application.
- ✓ Assess advanced Essential Surgical Skills constructs (competent with basic and intermediate) both for use in current position as well as for surgical education and training (SET) application – career pathway.
- ✓ Competent with intermediate and many of the advanced Essential Surgical Skills constructs.
- ✓ Able to perform basic surgical skills and tasks related to surgical speciality.
- ✓ Demonstrates understanding of the importance of gentle handling of soft tissue and of wound care.
- ✓ Demonstrates basic use of common surgical tools such as diathermy, suction and retractors.
- ✓ Aware of how to use surgical instruments and use of local anesthetic.
- ✓ Acknowledges limits of experience and knowledge and always seeks assistance where this is required.
- ✓ Asks for assistance when appropriate.
- ✓ Maintains accurate data on all procedures in which they are involved.
- ✓ Seeks and/or readily accepts supervision for all procedures.
- ✓ By the end of SET One is comfortable with most situations requiring laparoscopic appendicectomy and scrotal exploration for presumed torsion.

Professionalism and Ethics

- ✓ Able to learn from mistakes.
- ✓ Acknowledges error.
- ✓ Able to analyse and critically reflect on own performance.
- ✓ Positively responds to suggestions on how to improve.
- ✓ Is honest and respects patients' rights and confidentiality.
- ✓ Considers the Code of Conduct of the AMC and MCNZ and its implications for medical practice.
- ✓ Understands the RACS Code of Conduct and its implications for surgical practice.
- ✓ Gives primacy to patient welfare.
- ✓ Is honest in the presentation of clinical assessments.
- ✓ Respects doctor patient relationships.

- ✓ Liaise with legal and statutory authorities including mandatory reporting where applicable.
- ✓ Provide evidence or attend court to support a colleague.
- ✓ Prepare police reports or reports for community advocate/guardian that have been appropriately reviewed by hospital management's legal advisors.
- ✓ Recognise signs of a colleague in difficulty and respond with empathy.
- ✓ Act as a role model of professional behaviour in the workplace.
- ✓ Identify and actively intervene in areas of unprofessional behaviour.
- ✓ Respond positively to suggestions for performance improvement.
- ✓ Aware of the RACS Code of Conduct and its implications for surgical practice.
- ✓ Deal with ethical uncertainty and conflicting values; maintain ethical standards.
- ✓ Recognise that it is inappropriate to practice when impaired, e.g. fatigue, ill health, alcohol, medications.
- ✓ Maintains fitness for work.
- ✓ Aware of the need to balance the demands of life and work.
- ✓ Recognises that it is inappropriate to practice when impaired by fatigue, alcohol or drugs.
- ✓ Recognises when their own health issues need addressing.

Health Advocacy

- ✓ Contribute to continuing education of patient support network and community groups.
- ✓ Contribute to the hospital's work on prioritized health issues.
- ✓ Counsel patients appropriately on the benefits and risks of screening and health promotion activities.
- ✓ Acknowledge the potential impact of cultural differences in the acceptance of treatment for common conditions and work within those parameters.
- ✓ Identify own knowledge gaps in relation to different community groups, their histories and specific health issues, and undertake self-directed learning.
- ✓ Able to advise on health needs of an individual patient beyond their immediate condition.
- ✓ Identify any gaps between management plan and patient wishes.
- ✓ Adapt communication strategy according to the culture, values and beliefs of each patient.
- ✓ Work with the patient/family/carers to develop a management plan that addresses the needs and preferences of the patient.
- ✓ Advise patients (and their families and carers) of relevant risks of options.
- ✓ Sensitive to the private and confidential issues of information provided in a clinical setting.
- ✓ Is courteous and compassionate to all patients without discrimination.
- ✓ Recognises that culture and beliefs affect patients and their expectations.
- ✓ Recognises the limits of patient information that is able to be divulged in a clinical setting.
- ✓ Informs patients as to their options.
- ✓ Copes with the challenges presented by different value systems.
- ✓ Identifies the needs for families and carers to have information updates. Understands importance of keeping family and carers informed – may need prompting at times to do it.
- ✓ Recognises and reports to the team the health needs of an individual patient beyond their immediate condition.
- ✓ Recognises differing individual patient rights and needs.
- ✓ Identifies the gaps between management plan and patient wishes.
- ✓ Identifies key differences in culture and expression within the community they serve.
- ✓ Recognises key health issues arising from the different cultural values.
- ✓ Identifies vulnerable or marginalized populations that may have limited access to health care resources.

- ✓ Is aware of the potential impact of cultural differences on the acceptance of treatment for common conditions.
- ✓ Recognises the need to engage the extended family in the consent process in some cultures.

Communication

- ✓ Use effective strategies to deal with difficult or vulnerable patients.
- ✓ Obtain fully informed consent for common elective and emergency conditions.
- ✓ Set an appropriate tone for any communication with patients and their families, peers and colleagues.
- ✓ Communicate effectively with patients to take clinical history, identify key comorbidities, e.g. uses open and closed questions to elicit information.
- ✓ Communicate clearly and compassionately when breaking bad news or discussing difficult topics (deterioration, poor prognosis, resuscitation and end-of-life issues).
- ✓ Able to co-ordinate and lead open disclosure discussions.
- ✓ Use graded assertiveness when appropriate.
- ✓ Collect and collate relevant information from other team members or specialist teams pertinent to decision making or patient management.
- ✓ Conform to principles of open disclosure, noting the hospital's policy if involved in an adverse event.
- ✓ Contribute to case analysis of complex cases and imperfect outcomes, and identify any changes needed to care processes or systems.
- ✓ Attentively listens to patients (and their families), peers and colleagues.
- ✓ Respects patient diversity and adapts communication using appropriate language, patterns and levels.
- ✓ Respect patient confidentiality, privacy and autonomy.
- ✓ Gathers information from a variety of sources including the patient, their families, other team members, referral letters, case records, results, and information available electronically.
- ✓ Sets an appropriate 'tone' for any communication with patients (their families), peers and colleagues.
- ✓ Elicits information from patients with a combination of open and closed questions.
- ✓ Collects relevant information from other team members or specialist teams pertinent to decision making or patient management.
- ✓ Recognises and adapt communication appropriately to people of differing status.
- ✓ Provides accurate and concise information when communicating with patients, their relatives and the team.
- ✓ Ensures hand-over takes place and that the information provided is relevant and up to date.
- ✓ Ensures patients are fully informed, and fully understand, prior to giving consent.
- ✓ Responds appropriately to patient (family) questions.
- ✓ Ensures patients and their families participate in decision making.
- ✓ Ensures team is informed about and understands new critical issues or changes in patient condition.
- ✓ Identifies potential areas for communication break-down and takes action to avoid problems of miscommunication.
- ✓ Works effectively with interpreters and other support staff to ensure patient understanding.

Collaboration and Teamwork

- ✓ Identify and manage fatigue within team.
- ✓ Work within team to identify and remedy errors, particularly using a systems approach.
- ✓ Able to coach or supervise juniors as required by the clinical task.
- ✓ Predict and manage conflict between members of the healthcare team.

- ✓ Perform effective handover in a structured format, e.g. team member to team member, or hospital to GP, to ensure patient safety and continuity of care.
- ✓ Identify issues that impede teamwork and suggest actions; after discussion with Unit Head, assists with implementation.
- ✓ Negotiate with other units to achieve team and patient needs. Collaborate effectively with other specialist teams involved in the patient's care.
- ✓ Encourage participation of all team members and allocate appropriate tasks to junior members.
- ✓ Able to lead a ward round: effective prioritization and communication of multiple medical conditions with varying disease severity; engage junior doctors, nursing and ancillary staff in ward rounds.
- ✓ Accept responsibility for own roles and tasks.
- ✓ Accepts accountability to maintain accurate records.
- ✓ Follows up on results of investigations.
- ✓ Documents assessment, clinical issues and planned management.
- ✓ Undertakes effective handover.
- ✓ Recognises importance of keeping family doctor informed.
- ✓ Appropriately prioritise work schedules, and coordinate straightforward elements of patient care (e.g. consultation with other teams).
- ✓ Anticipates patient care needs and communicates them to other members of the team.
- ✓ Actively collects information from other care professionals.
- ✓ Listens to opinions of nursing and ancillary staff concerns about patients.
- ✓ Able to negotiate with other units to achieve team and patient needs.
- ✓ Well prepared for ward rounds and patient management.
- ✓ Accepts assigned tasks.
- ✓ Asks for help when indicated.
- ✓ Meets reasonable deadlines.
- ✓ Accepts responsibility for own roles and tasks.
- ✓ Encourages and respects opinions of ancillary staff and nurses.
- ✓ Recognises roles and areas of expertise of others.
- ✓ Accepts criticism in a positive light.
- ✓ Takes appropriate steps to resolve simple conflicts.

Management and Leadership

- ✓ Use existing systems to manage adverse events and near misses.
- ✓ Manage patient complaints within the construct of a multi-disciplinary team; lead a team-based review into complaints and adverse outcomes.
- ✓ Demonstrate ways to handle bullying and harassment that encourage appropriate behaviour.
- ✓ Delegate appropriate tasks to junior members, ensuring supervision is maintained.
- ✓ Able to discuss the structure and function of healthcare systems as they apply to own specialty and within the country where they work.
- ✓ Participate in systemic quality process of evaluation and improvement, such as patient safety initiatives or proposed clinical service changes.
- ✓ Lead handover of patients within unit.
- ✓ Chair a clinical meeting effectively.
- ✓ Remain calm under pressure.
- ✓ Demonstrate appropriate self-confidence and insight.
- ✓ PGY3+: Accept a hospital committee role, as member of the medical team or as trainee representative.

- ✓ Observes patient care protocols e.g. hand hygiene, handover etc.
- ✓ Prioritises work time to fit time available.
- ✓ Responds positively to direction.
- ✓ Dresses and presents themselves appropriately for role.
- ✓ Is able to review ward patients and be ready for theatre on time.
- ✓ Is supportive of their peers and colleagues.
- ✓ Able to appropriately assign tasks to more junior members of the team.
- ✓ Demonstrates ability to apply medical knowledge to clinical practice.
- ✓ Shows enthusiasm and commitment for their role.
- ✓ Takes responsibility for any task delegated.
- ✓ Demonstrates appropriate self-confidence and insight.
- ✓ Takes responsibility for allocated roles.
- ✓ Gains support and trust from others.
- ✓ Remains calm under pressure.
- ✓ Engages nursing and ancillary staff in ward rounds.
- ✓ Establishes good working relationships with team members.
- ✓ Recognises team members who need support and willing to help.

Scholarship and Teaching

- ✓ Use a range of resources in educational planning; portfolio analysis; incorporate teaching into clinical work; undertake induction of medical students, peers and juniors; identify issues of stress relating to educational activities and promote strategies for positive change.
- ✓ Educate other team members about medications used within the clinical unit.
- ✓ Identify areas of improvement in teaching/learning activities and work with Unit Head/Director of Surgery to implement change.
- ✓ Use multi-disciplinary team meetings as teaching and educational opportunities.
- ✓ Provide effective supervision using recognized techniques and skills (availability, orientation, learning opportunities, role modelling, delegation).
- ✓ Adapt level of supervision to learner's competence and confidence.
- ✓ Conduct assessments of (e.g. mini-CEX, 360° assessment) and observe juniors; discuss and escalate performance issues where appropriate.
- ✓ Chair/facilitate morbidity/mortality meetings, and identify desirable changes to processes and systems of care.
- ✓ Identify personal learning objectives using a learning plan.
- ✓ Involvement with a research trial, research based on multi-disciplinary care or quality improvement activities being undertaken in the organization. Write an abstract for submission to an appropriate health/clinical meeting; write a scientific paper; present a research paper at a conference; interpret confidence intervals, levels of significance (p values), and study power when reviewing results of clinical trials.
- ✓ Understand the structure of the spiral/nautilus curriculum on p39 of the document and relate this concept to the structure of Paediatric Surgery SET.
- ✓ Demonstrates an interest and enthusiasm for learning.
- ✓ Participates in medical education sessions.
- ✓ Readily accepts educational opportunities.
- ✓ Develops own study plan.
- ✓ Identifies and uses effective strategies for study.
- ✓ Is able to reflect on performance and what can be improved.
- ✓ Able to supervise interns.
- ✓ Willing to teach basic principles and skills already acquired.

- ✓ Leads a clinical ward round.
- ✓ Demonstrates a genuine interest in ad hoc and structured teaching.
- ✓ Reads medical and clinical literature and can discuss with others.
- ✓ Consults protocols and guidelines.
- ✓ Participates in clinical audit.
- ✓ Actively asks for advice to prevent error.
- ✓ Can critically appraise a paper and present findings to others.
- ✓ Able to undertake a clinical review.
- ✓ Can consider application of new approach.

STAGES OF SET - EARLY SET

Early SET is the period, typically two years, during which trainees acquire competencies best obtained in adult surgical terms. In recent years the Board has identified and accredited general surgery posts that we “own” in a sense. This has reduced our reliance on posts allocated by the Board in General Surgery. We hope that a successful SET One year will mean that we send a high quality product – a functioning surgical registrar – to these hospitals. The trainees should therefore be in a position on day one to make best use of opportunities available. Receiving hospitals usually appreciate the premium product they receive, and are usually therefore keen to continue the arrangement of receiving our trainees and demonstrate this by providing excellent training.

The Board frequently debates the utility of this period of training for future paediatric surgeons, recognising the changes within “general surgery” that continue to occur. We need to be mindful of the competencies we expect our trainees to acquire, and monitor that they have been acquired. Surgical subspecialty exposure (Plastics, ENT, Neurosurgery etc.) which is not part of General Surgical training may in fact be beneficial and desirable for Paediatric Early SET trainees. The RACS Non-Technical Skills for Surgeons (NOTSS) and Care of the Critically Ill Surgical Patient (CCrISP) courses should be considered at this early stage of training (if not already done).

Consideration to reduce these “adult” years to one or none are frequently explored and debated. During the first two years of training the SET GSSE and the SET Clinical Examination need to be successfully completed (for those trainees who were successfully selected prior to 2016). For those trainees commencing training after 2016 the GSSE is a pre-requisite for entering training. Strong consideration should be given by trainees in Early SET to commence their study for the Paediatric Anatomy and Embryology Examination, and also the Paediatric Pathophysiology Examination. Texts trainees have found useful for this study include: Last’s Anatomy, Larsen’s Embryology, Acland’s Anatomy videos, McMinn’s Atlases (General and Human Development), and/or Rohen & Yokochi’s Anatomy Atlas.

From a paediatric surgical pathology viewpoint, consider *Essentials of Pediatric Pathology* ed Marta C Cohen and Irene Scheimberg. Cambridge University Press 2014; parts of Robbins Pathology; and the Seminars of Pediatric Surgery 2013 Volume 22 Issue 4. General journal reading: Journal of Pediatric Surgery, Paediatric Surgery International, European Journal of Pediatric Surgery, and Seminars of Paediatric Surgery. Early SET is the time to settle into a regular and efficient study and journal reading routine.

Recognition of prior experience of Surgery in General, with the aim of reducing the period of training required in Early SET, can best be assessed by the Board with two factors in mind. Firstly, does the prior experience match the standard of training required of SET? Secondly, do the initial assessments received by the Board during Early SET reflect the level of competency that would be expected to be present, given previous experience?

From the Board’s point of view, when our trainees are attached to an adult term we prefer that they be trained and assessed as if they were on the Adult General Surgery SET program. There is no requirement for them to do any paediatric surgical clinical work.

The competency descriptors listed below are from [Becoming a Competent and Proficient Surgeon RACS February 2012](#). Those chosen as a minimum standard for completion of Early SET correspond

to elements of the “Novice and Intermediate” stage of training as listed in this document. The Curriculum Modules should also be consulted.

Medical Expertise

- ✓ Is developing a knowledge of anatomy, physiology and pathology relating to the common disease processes of most common conditions.
- ✓ Able to estimate the impact of comorbidities that might affect presentation or treatment.
- ✓ Able to present a coherent clinical assessment of patients they have assessed with common conditions.
- ✓ Identifies gaps in own knowledge of the common surgical conditions treated in the unit.
- ✓ Regularly participates in departmental meetings and is able to present case reports.
- ✓ Applies their knowledge to the management of patients with the most common conditions during the pre and postoperative stages of treatment.
- ✓ Identifies clinical priorities and incorporates them into the management plan.
- ✓ Able to anticipate and avoid risks associated with common conditions and procedures.
- ✓ Applies their knowledge to the management of all patients during the pre and postoperative stages of treatment.

Judgement – Clinical Decision Making

- ✓ Capable of independently making a well-reasoned diagnosis for common problems.
- ✓ Chooses and organizes appropriate diagnostic tests and imaging.
- ✓ Utilizes investigations to eliminate alternative diagnoses for common conditions.
- ✓ Appreciates the role of active observation to assess progress.
- ✓ Recognises the need for senior input.
- ✓ Prepares an operating list.
- ✓ Obtains fully informed consent for common elective and emergency conditions.
- ✓ Undertakes review of patient progress and response to intervention at appropriate intervals.

Technical Expertise

- ✓ Seeks opportunities to learn new skills.
- ✓ Learns new skills quickly.
- ✓ Aware of positioning patient for safe surgical access. Able to position patient, gain surgical access.
- ✓ Can safely and effectively carry out parts of some common procedures under close supervision.
- ✓ Assists effectively at major or complex procedures.
- ✓ Can anticipate and effectively deal with potential complications in the most common procedures.
- ✓ Looks for comorbidities and potential problems and adapts patient management accordingly.
- ✓ Anticipates when they may need assistance.
- ✓ Maintains accurate data on all patients and analyses their own clinical performance.
- ✓ Seeks supervision when appropriate. Has an excellent understanding of inguinal herniorrhaphy for adult patients and can perform the procedure (open and/or laparoscopically) with a consultant surgeon present.

Professionalism and Ethics

- ✓ Critically reflects on own performance and makes accurate assessment of performance. Has insight into what needs to be improved.
- ✓ Accepts criticism as an opportunity to improve.

- ✓ Shows respect for colleagues and other health professionals.
- ✓ Demonstrates empathy, caring and compassion for patients (their families and carers).
- ✓ Recognises uncertainty and conflicting values.
- ✓ Demonstrates awareness of the impact of lifestyle on their ability to work.
- ✓ Monitors own health and fitness and seeks medical help when appropriate.

Health Advocacy

- ✓ Adapts patient care according to their concerns and expectations.
- ✓ Assists patients to consider options and make decisions.
- ✓ Advises patients about relevant available support services.
- ✓ Consistently deals with the challenges presented by different value systems.
- ✓ Arranges referrals and second opinions when requested.
- ✓ Keeps family and carers informed about current status and next steps.
- ✓ Advises patients (and their families) on relevant risk factors as well as ways to maintain and/or improve their health.
- ✓ Recognises the impact on families and carers of rescheduling surgery.
- ✓ Shows awareness of the costs and benefits of different investigations and management strategies.

Communication

- ✓ Effectively interprets both verbal and non-verbal forms of communication.
- ✓ Recognises and adapts communication to potential bad news situations.
- ✓ Recognises limits of own knowledge and willing to refer to other members of the health care team.
- ✓ Communicates complex/difficult information clearly.
- ✓ Can communicate bad news appropriately with patients, families and carers.

Collaboration and Teamwork

- ✓ Able to write operation notes with a good knowledge of anatomy, the surgery performed, and the patient's needs during the postoperative period.
- ✓ Provides all but the most complex patient information needs.
- ✓ Actively seeks opinions of nursing and ancillary staff about concerns for patients.
- ✓ Can brief the team for common procedures and care plans.
- ✓ Accepts the responsibility to inform the head of team about changes in patient status.
- ✓ Develops positive relationships with all team members.
- ✓ Works cooperatively with others to avoid, reduce, or resolve conflict.
- ✓ Readily assists other team members who are under pressure.

Management and Leadership

- ✓ Recognises the need to be supportive towards senior staff.
- ✓ Communicates important care issues with nursing, medical, and other staff even under pressure.
- ✓ Assists others to understand and observe guidelines, protocols, and check lists.
- ✓ Quickly learns and adapts to each new work environment.
- ✓ Can make reasoned decisions under pressure.
- ✓ Willing and able to take initiative when needed.
- ✓ Delegates appropriately and takes responsibility.
- ✓ Creates a positive team experience.

- ✓ Provides support and advice to team members when needed.
- ✓ Listens to, and incorporates the views of others.
- ✓ Recognises and acknowledges the contribution of others.

Scholarship and Teaching

- ✓ Accurately self-assesses level of own learning.
- ✓ Applies their learning to the clinical situation in most cases. Identifies what they need to learn from their clinical experience.
- ✓ Recognises performance gaps in junior medical staff.
- ✓ Recognises opportunities for, and develops effective skills for 'teaching on the run'.
- ✓ Tests ideas gained from the literature in discussion with more senior colleagues.
- ✓ Can generate and develop a research hypothesis.
- ✓ Able to collect research data and prepare a research presentation (paper or poster).

STAGES OF SET - MID SET

Mid SET heralds the return of the trainee to the paediatric surgical environment. This is on the back of the introduction to work as a registrar/ senior house officer in a tertiary paediatric surgical unit in SET One, and the development of adult learning skills required for surgical training which should have been bedded down in Early SET. The Mid SET years are a time to consolidate knowledge of the breadth of paediatric surgery and of consolidating the surgical skills required for "bread and butter" paediatric surgical procedures. The Paediatric Anatomy and Embryology Examinations and Paediatric Pathophysiology Examinations need to be passed before progression to Senior SET is allowed. The duration of Mid SET is typically two years, though as with Early and Senior SET, duration can be reduced or lengthened according to the demonstrated competency level of the individual trainee.

Consideration should be given to attending a RACS Training in Professional Skills (TIPS) course if it hasn't already been done.

By the end of Mid SET it is expected that the Paediatric Surgical trainee is comfortable and competent in the tertiary paediatric environment. They can deal with all common presentations of a paediatric surgical nature and have demonstrably sound technical operative skills. By the end of Mid SET trainees will be competent to perform the operations delineated in the Curriculum Modules – inguinal herniotomy, orchidopexy, long term vascular access, laparoscopic appendicectomy, strip rectal biopsy, etc. These trainees will have an established reading/learning routine that covers standard texts and journals with the intent of having covered most topics listed in the curriculum to some extent. Senior SET should be a time for more in-depth knowledge acquisition and higher decision making development rather than a time to acquire general paediatric surgical knowledge – this is a Mid SET competency.

[Becoming a Competent and Proficient Surgeon RACS February 2012](#) should be consulted for further information about the following descriptors.

Medical Expertise

- ✓ Has a detailed knowledge of anatomy, physiology and pathology for most surgical conditions.
- ✓ Able to present a coherent clinical assessment of patients with common or unusual presentations.
- ✓ Can recognize the potential impact of comorbidities or patient circumstances/beliefs on presentation of disease or response to treatment.
- ✓ Can anticipate patients' physiological changes during intraoperative and postoperative phases and minimize them.
- ✓ Recognises errors made by self and others.
- ✓ Applies their knowledge in the planning and performing of common procedures.

- ✓ Maintains a record of all patient outcomes.
- ✓ Takes responsibility for own errors.

Judgement – Clinical Decision Making

- ✓ Chooses the most appropriate diagnostic tools.
- ✓ Appreciates the true urgency of most clinical situations.
- ✓ Recognises when referral to another specialty is the best option.
- ✓ Formulates management plans including potential risks for the majority of surgical conditions.
- ✓ Identifies when a contingency (backup) exit plan may be required.
- ✓ Constructively contributes to multi-disciplinary meetings.
- ✓ Proposes a rational plan of management for most common problems and options.
- ✓ Recognises complications or failures and is able to project likely outcomes.
- ✓ Seeks senior assistance to devise alternative strategies in a timely manner. Has insight as to when to involve other teams or support of colleagues.

Technical Expertise

- ✓ Can safely and effectively carry out significant parts of more complex procedures under close supervision.
- ✓ Adapts their skills in the context of each patient-each procedure and continues to learn new skills.
- ✓ Routinely evaluates their own management plans.
- ✓ Recognises when further assessment, observation or investigation is preferable to immediate surgery
- ✓ Consults with peers and colleagues about complex cases and difficult judgements.
- ✓ Recognises when it is time to exercise extraordinary caution.
- ✓ Acknowledges their own limits, and when it is time to ask for assistance.
- ✓ Maintains accurate data on all patients and analyses their own clinical performance and outcomes to encourage continuous improvement.
- ✓ Undertakes surgery appropriate to their training and expertise as well as available facilities, conditions and staffing.

Professionalism and Ethics

- ✓ Can recognise colleagues in need of assistance.
- ✓ Recognises lack of insight in others.
- ✓ Responds positively to complaints and incidents.
- ✓ Can identify situations that involve medico-legal issues and manages risk.
- ✓ Capable of dealing with ethical uncertainty and conflicting values consistently, regardless of changing circumstances.
- ✓ Actively undertakes open disclosure.
- ✓ Manages their own fatigue and/or ill health
- ✓ Takes responsibility to ensure that when they are on duty, or on call, that they are at optimal level of performance.

Health Advocacy

- ✓ Communicates with patients' family, friends and other interested parties in an empathic way whilst respecting patient confidentiality.
- ✓ Organises appropriate settings to disclose confidential information.
- ✓ Recognises and has strategies to manage family/patient conflicts and different expectations and concerns.

- ✓ Minimise disruption to patients, family, and carers when lists have to be adjusted or surgery needs to be re-scheduled.
- ✓ Be able to effectively schedule and prioritise patients for surgery.
- ✓ Recognises the impact and potential outcomes for patients who are categorized for waiting lists.
- ✓ Recognises the need to balance supply and demand.
- ✓ Effectively adapts their approach to the needs, values and beliefs of all patients.

Communication

- ✓ Sensitive to, and effectively manages stressful situations.
- ✓ Maintains emotional balance.
- ✓ Recognises and adapts communication appropriately to people of differing status.
- ✓ Reflects on accuracy of information available and considers gaps or inconsistencies.
- ✓ Appropriately identifies and addresses unspoken concerns.
- ✓ Knows who to provide information to, and when.
- ✓ Can recognize and repair communication errors quickly.
- ✓ Ensures that all parties in a communication process achieve their goals.

Collaboration and Teamwork

- ✓ Can obtain appropriate informed consent for most complex cases.
- ✓ Ensures family doctor is informed of significant changes in patient status.
- ✓ Accepts responsibility for briefing and debriefing the team.
- ✓ Respects the expertise of others.
- ✓ Transfers care effectively to other relevant clinicians and non-hospital carers.
- ✓ Identifies and uses a variety of strategies to manage and resolve conflict.
- ✓ Evaluate their own and the team's performance and provides appropriate feedback to others.

Management and Leadership

- ✓ Organises surgical teams efficiently.
- ✓ Effectively manages resources and people to get things done (within the context of the unit and institution).
- ✓ Can continue to anticipate, think, and make correct decisions under pressure.
- ✓ Is able to assume leadership when the situation requires.
- ✓ Able to resolve team conflicts.
- ✓ Able to recover challenging situations.
- ✓ Provides constructive feedback to team members.
- ✓ Able to intercede on behalf of others when appropriate.
- ✓ Encourages participation by all members of the team.

Scholarship and Teaching

- ✓ Able to organize their educational resources in order to address the breadth and depth of their specialty.
- ✓ Accurately identifies own learning needs and finds resources to meet those needs.
- ✓ Recognises learning opportunities they can gain from others.
- ✓ Meets the challenge of supervision across all nine competencies – particularly collaboration. Communication and professionalism.
- ✓ Can be trusted to manage the surgical team.
- ✓ Can critically appraise a paper and present findings to an informed audience.

- ✓ Able to undertake a clinical review.
- ✓ Anticipates errors and seeks advice.

STAGES OF SET - SENIOR SET

Senior SET encompasses usually the final two years of training. During these years, trainees are expected to demonstrate that they can function as an independent paediatric surgeon. The nine core competency descriptors below are those for a trained surgeon as outlined in “Surgical Competence and Performance” RACS June 2011 and [Becoming a Competent and Proficient Surgeon RACS February 2012](#). The caseload is typically the more difficult neonatal cases, oncology cases and complex GU and GI reconstructive work, not only because the procedures themselves are more demanding technically, but also because they require a higher order of surgical decision making. Senior SET trainees will be competent in reviewing patients and their families in the outpatient environment, demonstrating the ability to act as independently practicing specialists. Once trainees have demonstrated these competencies they are recommended by their Supervisor as being ready to sit the FEX. The Board Chair, with advice from Board colleagues, can refuse permission for a trainee to sit the FEX if the Training Regulations have not been met. Common reasons can include a failure to have met Research requirements or other compulsory training assessments. If all regulations have been met, and if the Board Chair is advised by the local Supervisor of Training that the trainee is ready to sit, then clearly the trainee should be allowed to sit as per their request. Paediatric Surgery appears to have a disappointing pass rate for the FEX when compared to other specialties, it might be implied from this that we are allowing trainees to present for the Examination when they are not in fact ready to present, either because of pressure from trainees or because our methods of assessing competence are inadequate – we have no data to truly say what factors are most important. I acknowledge the significant pro-bono time and effort put in by our Examiners to conduct each Examination to the highest of standards, and as a group we do not want to show disrespect for this time and effort by allowing trainees to present when they are not ready. The Board will continue to examine this issue in concert with Supervisors and Examiners to better prepare trainees for the FEX.

It is recommended that trainees read [Clinical decision making: how surgeons do it](#)”. Wendy Crebbin, Spencer W Beasley and David A.K. Watters. ANZ Journal of Surgery Volume 83 (2013) pages 422-428. Consideration should also be given to attending the RACS Surgical Decision Making Course which expands on the material in the article. It is this higher decision making which is assessed in the FEX, as noted in the following article regarding the conduct of the FEX (reproduced from the April 2016 newsletter of ANZAPS):

What is the Fellowship Examination (FEX)

The Fellowship exam has developed a lot since many of you sat it. In the past it was used as a tool of assessing the core knowledge of paediatric surgery. However, the exam has been evolving and it might be useful for fellows to refresh their knowledge about what the exam has become.

More and more the exam is looking not just at knowledge but how that knowledge is applied when dealing with a clinical problem; how it is used to define an issue, manage it appropriately and anticipate possible future issues, all in a cohesive package. In this regard we are looking for higher order thinking.

We have also taken the curriculum and “blueprinted” it to the exam. This means any area of the curriculum is examinable and indeed all areas will be examined. Beware the examinee who doesn't study a topic because “they never ask about that”. Gone are the days when knowing just about Tofs, CDH and Hirschsprungs might get you through.

Each of the vivas has been improved too so the exam is not quite what it was when you sat it many years ago. Anatomy and pathophysiology have been taken out of the final fellowship and are now separate exams that must be sat in the Early to Mid-SET period. However, these areas are still examinable; such as the anatomy of a specific area related to an operation or the embryology of a pathological condition so they should not be ignored.

The exam consists of seven vivas, all of equal value.

These are:

Written paper one: spot questions
Written paper two: short answers
Short cases
Medium case
Neonatal Viva
Operative Viva
Clinical imaging and Management Viva.

Each viva is assessed by two examiners who produce an agree mark for the viva. Once that mark is allocated it cannot be changed.

Like all aspects of life, the exam has been touched by technology. From this year the “spot” questions can be answered directly onto a computer. The written paper two otherwise known as the short answer paper will also require typing skills in one or two years. Images are being extensively used on lap tops, allowing for not just radiology but also other modalities such as histopathology, isotope scans and urodynamics to be incorporated. It's not just a chest x-ray on a viewing box anymore.

Written paper one: spot questions

This consists of 50 questions, each with an image relating to the question. The image may come with some clinical information. The candidate is asked to provide answers to several sub questions. Each of the 50 questions is of equal value. The exam is now to be answered via computer and the total time for the exam is 2 hours and 10 minutes.

Written paper two: short answers

This consists of 8 questions, all of equal value. Each question may come with subsections to it. Candidates can answer them in a variety of methods such as bullet points, algorithms, longhand. Candidates must be aware that poor handwriting or a disorganized answer makes marking harder. It is anticipated this exam will be answered in the coming years by typing directly to computer. The paper is of two hours duration.

A repeating problem is that candidates do not answer the question posed, or only in a superficial manner like a medical student and not in depth nor in an organized like a junior consultant. The scatter gun approach scores poorly

Short Cases

This is done with patients, usually in an outpatient setting.

A pair of examiners will assess history taking and examination with an emphasis on the latter.

Typically 8-10 cases will be seen in a 25 minute period and generally will be standard paediatric outpatient cases such as hernias and undescended testis but also the occasional unusual lesion.

Medium case

This consists of a single case only with the aim to assess history, examination but then also the management of the case.

These are typically more complex cases with ongoing issues that require management. What the examiners are looking for is the ability to assess the problem, look for the salient issues, prioritize them, sort out appropriate investigations and then manage the overall problem.

The exam is over a 40 minute period, the first 20 minutes is the candidate and examiners with the child and family; the candidate's history and examination is marked. The candidate can use 3 minutes of that time away from the patient if they wish to arrange their thoughts. The candidate and examiners then leave the patient, go to another room where the candidate presents a synopsis of the problem. A full history and examination is not re-presented but rather just the relevant points. The discussion then is about management of the child's condition with the aim of looking into that in some detail. It tests the candidate's depth of knowledge as well as his ability to co-ordinate a management plan.

Neonatal Viva

This is of 25 minutes and is usually two to three clinical scenarios; including antenatal issues and urology. The candidate is examined on his ability to manage these scenarios with the good candidate able to understand the nuances of managing a difficult neonatal case.

Operative Viva

This is also a 25 minute viva with 2-3 scenarios. Whilst it does focus on the operative detail it will often revolve around clinical scenarios. Candidates may be asked which operative technique they wish to use and should be able to justify it. They should be aware of the relative issues and shortcomings of the various operations.

Clinical Imaging and Management Viva

This exam was previously the Urology Viva but now tends to encompass more.

It is a 25 minute viva which looks at the investigations we use in our normal clinical practice. It is expected that the candidate be able to understand and explain what the various investigations they use are, their limitations and benefits.

This exam is not just limited to radiology but may include other modalities such as manometry, urodynamics and impedance studies as well as histopathology. The candidates are asked question based around a clinical scenario and the candidate takes the examiners through explaining the role of investigations in the case in question. Typically there are 2-3 scenarios discussed in the twenty five minutes.

Observers are becoming more common in the various examinations. Their role is not to exam the candidate but rather may be to assess the quality and process of the exam, examine the examiner or to learn from the process.

It is hoped that local supervisors of training avail themselves of the ability to observe so that they may better understand the examination and be able to guide their trainees appropriately.

Guy Henry
Senior Examiner
March 2016

[Becoming a Competent and Proficient Surgeon RACS February 2012](#) and [Surgical Competence and Performance RACS 2nd Ed June 2011](#) should be consulted for further information about these descriptors, which outline competencies required of Fellows of RACS.

Medical Expertise

- ✓ Has extensive breadth and depth of knowledge of the majority of conditions encountered in their specialty.
- ✓ Analyses patient information, accurately identifies anatomical abnormality or pathology, and plans appropriate surgical intervention.
- ✓ Takes into account patients' comorbidities at all stages of intervention.
- ✓ Regularly reviews and evaluates clinical practice, surgical outcomes, complications, morbidity and mortality.
- ✓ Compensates or corrects for errors by others.
- ✓ Participates in root cause(s) analysis and other methods to review incidents, errors and adverse events.
- ✓ Ensures patient safety by understanding, and appropriately managing clinical risk.
- ✓ Able to intervene in a positive, cooperative, collaborative and non-judgmental way to achieve optimal outcomes for patient and team.

Consistently demonstrating the highest standards of medical knowledge, surgical skill, and professional behavior, for example:

- ✓ Provides a consistently high standard of peri-operative care.
- ✓ Ensures appropriate pain management is instituted in a timely manner.
- ✓ Consistently considers the impact of comorbidities on presentation of surgical disease or recovery from surgical intervention.
- ✓ Ensures the appropriate use of fluids, electrolytes, and blood products including their adjustment according to patient progress.

Regularly reviewing and evaluating clinical practice, surgical outcomes, complications, morbidity and mortality. For example:

- ✓ Participates actively in surgical audit and peer review.
- ✓ Compares own results with department peers, other surgeons in the community and with published material.
- ✓ Reviews and discusses 'problem' cases.
- ✓ Participates in root cause analyses or other

- ✗ Orders inappropriate or unnecessary investigations, or
- ✗ Fails to appreciate that surgical underperformance will directly impact on patient safety and health outcomes, or
- ✗ Fails to ensure that a clear post-operative plan is available, or
- ✗ Fails to respond promptly and appropriately to post-operative complications or concerns about potential complications.
- ✗ Fails to regularly attend peer review meetings or audit own results, or
- ✗ Rationalises blame to others for poor outcomes when clearly at fault, or
- ✗ Makes no comparisons of their work to others' results or agreed standards, or
- ✗ Does not evaluate and appraise changes in practice.
- ✗ Undertakes hasty clinical assessment, missing critical issues e.g. anticoagulant use, or
- ✗ Proceeds with surgery knowing that equipment or facilities are inadequate or not ready for safe use, or
- ✗ Fails to participate in hospital or operating room surgical safety checklist processes, or
- ✗ Ignores incident reporting systems.

<p>reviews of adverse events.</p> <p>Ensuring patient safety by understanding and appropriately managing clinical risk. For example:</p> <ul style="list-style-type: none"> ✓ Always undertakes an appropriate preoperative assessment of patients. ✓ Demonstrates awareness of unlikely but serious potential problems and prepares accordingly. ✓ Uses appropriate aseptic techniques, including regular hand washing, to minimize the risk of infection. ✓ Promote participation in and adherence to surgical safety checklists and other risk reduction strategies. 	
Judgement – Clinical Decision Making	
<ul style="list-style-type: none"> ✓ Conducts an effective, efficient and focused examination of patients with complex conditions. ✓ Identifies what is most important in each clinical situation. ✓ Recognises atypical situations and is sensitive to unusual/feasible alternative diagnoses, and is aware of what does not fit. ✓ Recognises the need for a second opinion. ✓ Obeys/observes rules and guidelines appropriately and effectively. ✓ Sees situations holistically rather than in terms of single components. ✓ Deals with complexity according to the patient's needs. ✓ Management plans anticipate potential problems and include options and solutions. ✓ Generates alternative possibilities of courses of action to solve a problem. ✓ Assesses hazards and weighs up threats and benefits of potential options. ✓ Predicts what may happen in the near future as a result of possible actions, interventions or non-intervention. ✓ Manages complexity and uncertainty. ✓ Adapts appropriately to changing patients' needs or circumstances. ✓ Devises alternate strategies in a timely manner. <p>Generating alternative possibilities or courses of action to solve a problem. Assessing the hazards and</p>	<ul style="list-style-type: none"> ✗ Does not consider or discuss alternative options, or ✗ Does not solicit the views of other team members, or ✗ Fails to adequately discuss and ensure documentation of the options and the basis of decision-making, or ✗ Unwilling to alter decisions as other information/alternatives become available. ✗ Does not consider or undertake preoperative preparation, or ✗ Does not involve or consider operating room or other relevant clinical staff in operative planning, or ✗ Fails to consider patient-specific comorbidities in post-operative case planning, or ✗ Neglects to inform operating room staff of the need for specific instruments, equipment or implants. ✗ Frequently fails to implement decisions, or ✗ Makes the same error repeatedly, or ✗ Inflexible when evidence is mounting that an alternative course of action is advisable, or ✗ Makes decisions in haste and does not review them, even when time

<p>weighing up the risks and benefits of potential options. For example:</p> <ul style="list-style-type: none"> ✓ Recognises and articulates problems to be addressed. ✓ Initiates a balanced discussion of options with relevant team members. ✓ Seeks a second opinion when appropriate for surgeons or patients. ✓ Respects the patient's right to self-determination. <p>Predicting what may happen in the near future as a result of possible actions, interventions or non-intervention. For example:</p> <ul style="list-style-type: none"> ✓ Plans operating lists taking into account potential delays due to surgical or anaesthetic challenges. ✓ Shows evidence of having a contingency plan e.g. by identifying and asking for equipment that may be required. ✓ Is decisive and makes decisions in a timely manner. ✓ Identifies the level of post-operative care that will be required and ensures that facilities are appropriate. <p>Undertaking the chosen course of action and continually reviewing its suitability in light of changes in the patient's condition. For example:</p> <ul style="list-style-type: none"> ✓ Implements decisions within an appropriate timeframe. ✓ Reconsiders plans in the light of changes in patient condition or when problems occur. ✓ Calls for assistance if required. ✓ Routinely follows up investigation results and surgical specimen pathology. 	<p>permits.</p>
<p>Technical Expertise</p>	
<ul style="list-style-type: none"> ✓ Can safely and effectively carry out all common and more complex procedures as primary operator. ✓ Anticipates and effectively deals with potential complications in all the procedures they carry out. ✓ Consistently demonstrates sound surgical skills. ✓ Has a professional development plan for continuing enhancement of skills. 	<ul style="list-style-type: none"> ✗ Focuses on the surgical procedure without adequate consideration of non-surgical options, or ✗ Inappropriately chooses most aggressive procedure without regard for the condition of the patient, or ✗ Performs surgery prematurely or inappropriately given the patient's diagnosis or current condition, or ✗ Will not discuss justification for any

<ul style="list-style-type: none"> ✓ Can effectively teach others to perform surgical skills and carry out procedures. ✓ Has appropriate processes for learning or introducing a new technique e.g. visiting a surgical expert or mentor. ✓ Routinely reflects on and evaluates approaches to surgical problems and all aspects of practice. ✓ Prioritises need and timing for surgery appropriately in emergency and elective situations. ✓ Always undertakes surgery with an awareness of their own expertise, defined scope of practice and the supporting organizational capability. ✓ Actively contributes to understanding and supporting the scope of practice of colleagues. <p>Demonstrating an understanding of when surgical intervention is or is not indicated. For example:</p> <ul style="list-style-type: none"> ✓ Consults with peers and colleagues about complex cases and difficult judgements. ✓ Routinely questions and justifies approaches to surgical problems and all aspects of practice. ✓ Prioritises need and time for surgery appropriately in emergency and elective situations. ✓ Recognises when further assessment, observation or investigation is preferable to immediate surgery. <p>Consistently demonstrating sound surgical skills at a level appropriate to a surgeon's experience and the nature of the patient's condition. For example:</p> <ul style="list-style-type: none"> ✓ Goes through the appropriate processes when learning a new technique e.g. visiting a surgical expert or mentoring. ✓ Participates in simulation exercises or other evaluations of technical skill where appropriate. ✓ Modifies clinical practice in response to ageing, impairment, or limitation of manual dexterity. ✓ Uses techniques that minimize the risk of needle stick injury for surgeon, assistants, and other staff. <p>Undertaking surgery appropriate to a surgeon's training and expertise as well as the available facilities, conditions and staffing. For example:</p> <ul style="list-style-type: none"> ✓ Takes into account local hospital conditions and support services in defining scope of practice. ✓ Knows own limitations and when to ask for 	<p>decisions.</p> <ul style="list-style-type: none"> ✗ Rushes through procedures with disregard for the need for care and attention to detail, or ✗ Introduces new technology or procedures without adequate prior assessment and consultation, or ✗ Denies the impact of ageing or physical impairment on manual dexterity or technical skills, or ✗ Carelessly handles surgical instruments or equipment. ✗ Continues when the help of others would clearly be of benefit, or ✗ Fails to refer appropriately or in a timely manner, or ✗ Lacks insight into own surgical capabilities, undertaking procedures better performed elsewhere, or ✗ Takes on cases beyond scope of training when other alternatives are available.
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<p>help, referring conditions outside their usual scope.</p> <ul style="list-style-type: none"> ✓ Calls on advice and help with difficult problems outside normal scope of practice. ✓ Modifies scope of practice in accordance with current experience. 	
Professionalism and Ethics	
<ul style="list-style-type: none"> ✓ Knows what to do about own shortcomings. ✓ Knows what to do to assist others. ✓ Reflects on own surgical practice and has insight into its implications for patients, colleagues, trainees and the community. ✓ Takes responsibility and is accountable for actions of self and team. ✓ Champions standards of ethics, probity, and confidentiality and respects the rights of patients, families and carers. ✓ Manages medico-legal issues and ways to minimize medical risk. ✓ Respects the rights and reputation of colleagues. ✓ Reviews the performance of others in an unbiased fashion. ✓ Maintains personal health and well-being and considers the health and safety needs of colleagues, staff and team members. ✓ Takes a pro-active approach to avoiding error and maintaining safety of self and others. ✓ Takes seriously concerns about impairment and is prepared to respond appropriately. ✓ Recognises the inherent risks of different personality types. <p>Reflecting upon one's surgical practice and having insight into its implications for patients, colleagues, trainees, and the community. For example:</p> <ul style="list-style-type: none"> ✓ Adopts a courteous approach to other staff and patients. ✓ Responds positively to questioning, suggestions and objective criticism. ✓ Admits to errors. ✓ Acknowledges poor outcomes and takes opportunities to reflect and improve. <p>Maintaining standards of ethics, probity and confidentiality and respecting the rights of patients,</p>	<ul style="list-style-type: none"> ✗ Is difficult to contact post-operatively and admonishes staff for continued attempts to make contact, or ✗ Blames registrars or others for poor outcomes, or ✗ Books inappropriately long lists or is misleading with theatre staff/ anaesthetists regarding the length of operations, or ✗ Berates or humiliates subordinates. ✗ Makes questionable claims for medical benefits, insurance, third party or workers compensation payments, or ✗ Exhibits bullying, harassing or sexist attitudes towards trainees, staff or patients, or ✗ Breaches confidentiality by discussing patient details in public areas, or ✗ Seeks to shift blame onto a patient for one's own professional transgressions. ✗ Uses alcohol indiscriminately when on call or prior to performing elective surgery, or ✗ Abuses prescription medications or uses illegal drugs, or ✗ Regularly exhibits moodiness or dispirited behavior, or ✗ 'Battles on' even when unwell or overtired without recognizing the impact on surgical performance.

<p>families and carers. For example:</p> <ul style="list-style-type: none"> ✓ Provides an ethical role model for other staff. ✓ Ensures all research projects are reviewed and approved by research and ethics committees. ✓ Seeks informed consent of the patient before carrying out sensitive or invasive examinations or treatments. ✓ Maintains appropriate personal and sexual boundaries with patients at all times. <p>Maintaining personal health and well-being and considering the health and safety needs of colleagues, staff and team members. For example:</p> <ul style="list-style-type: none"> ✓ Has a personal general practitioner and attends regularly and appropriately. ✓ Takes regular rest and holidays. ✓ Enquires after the welfare of colleagues and junior staff. ✓ Enjoys leisure activities and interests outside of surgery. 	
<p>Health Advocacy</p>	
<ul style="list-style-type: none"> ✓ Can lead an end of life discussion with patient, family and carers. ✓ Can teach others to lead an end of life discussion with patient, family and carers. ✓ Adapts practices and care of patients from diverse backgrounds according to their culture and beliefs. ✓ Appropriately keeps family and carers informed about relevant potential adverse outcomes. ✓ Is able to provide an independent opinion to colleagues about challenging family/patient expectations and concerns. ✓ Demonstrates consideration of the impact of culture, ethnicity and spirituality on patient care. ✓ Considers the broader health, social and economic needs of the community. ✓ Teaches cultural competence and health advocacy. <p>Providing optimum care while respecting patients' rights, choice, dignity, privacy, and confidentiality. For example:</p> <ul style="list-style-type: none"> ✓ Encourages patients to seek different views or opinions and to exercise choice. ✓ Treats patients courteously and compassionately, engaging them in decision- 	<ul style="list-style-type: none"> ✗ Delegates the process of informed consent to inexperienced doctors, or ✗ Lacks empathy or concern for the patient, or ✗ Disregards patients' need for self-esteem and privacy, or ✗ Spends insufficient time with a patient, particularly in an emotionally charged situation. ✗ Cancels theatre lists at short notice without adequate reason, or ✗ Inappropriately delegates tasks to junior staff in order to avoid dealing with difficult problems, or ✗ Undertakes an inadequate assessment in the context of a patient's physical or cognitive disability, or ✗ Fails to keep track of issues affecting patients waiting for surgery. ✗ Disregards community impact of decisions, or ✗ Shows no interest in community

<p>making and respecting their choices.</p> <ul style="list-style-type: none"> ✓ Exhibits concern and respect for patients' privacy. ✓ Is willing to spend further time with a distressed patient to actively listen to their concerns. <p>Engaging patients and, where appropriate, families or carers in planning and decision-making in order to best meet their needs and expectations. For example:</p> <ul style="list-style-type: none"> ✓ Plans investigations and treatment taking into account the needs of the patient and carers. ✓ Ensures appropriate communication with family members regarding plans and expectations of surgery. ✓ Follows up referred patients and seeks reports on progress. ✓ Allows sufficient time and seeks patient concerns or misgivings regarding treatment. <p>Demonstrating understanding of the impact of culture, ethnicity and spirituality on surgical care and considering the broader health, social and economic needs of the community. For example:</p> <ul style="list-style-type: none"> ✓ Strives to improve access to health care services. ✓ Recognises the wider health needs of the community in an under-resourced system. ✓ Contributes to community education and development. ✓ Addresses issues raised by people's cultural and linguistic backgrounds. 	<p>engagement, or</p> <ul style="list-style-type: none"> ✗ Insensitive to patients' differing backgrounds, social or cultural beliefs or attitudes, or ✗ Discriminates on the basis of culture, ethnicity, or religion.
<p>Communication</p>	
<ul style="list-style-type: none"> ✓ Accurately elicits and synthesizes all relevant patient information. ✓ Assists trainees and other colleagues to improve understanding of patients and their carers. ✓ Seeks timely and accurate information during the consultation, in the ward or clinic and in the operating room. ✓ Discusses options with patients (and/or other care providers) and communicates decisions and plans clearly and effectively. ✓ Informs patient, family and relevant staff about the expected clinical course for each patient. ✓ Effectively exchange information with patients, families, carers, colleagues and other staff. 	<ul style="list-style-type: none"> ✗ Fails to acquire and review information relevant to the consultation or procedure, or ✗ Does not consider results of investigations until during a consultation or procedure, or ✗ Does not discuss potential problems, or ✗ Frequently asks for information to be read from patient notes during the procedure. ✗ Fails to involve or inform patient or team of surgical plan and expectations, or ✗ Is aggressive or unresponsive if the

<ul style="list-style-type: none"> ✓ Communicates sensitively and effectively with those holding different cultural values and beliefs. <p>Seeking timely and accurate information during the consultation, in the ward or clinic and in the operating room. For example:</p> <ul style="list-style-type: none"> ✓ Ensures that all relevant documentation, including notes, results and consent, are available and have been reviewed. ✓ Reflects on and discusses significance of information. ✓ Liaises with anaesthetist regarding anaesthetic plan and asks for regular updates during surgery. ✓ Ensures patient condition is monitored throughout the procedure and that changes and challenges are responded to appropriately. <p>Discussing options with patients and communicating decisions clearly and effectively. For example:</p> <ul style="list-style-type: none"> ✓ Reaches a decision and clearly communicates it. ✓ Makes provision for and communicates other options and potential outcomes. ✓ Informs patient, family and relevant staff about the expected clinical course for each patient. ✓ Is decisive and has clear goals and plans of management. <p>Exchanging information with patients, families, carers, colleagues and other staff. For example:</p> <ul style="list-style-type: none"> ✓ Follows up test results and communicates them appropriately with the patient. ✓ Encourages the surgical team to be involved and to ask questions and makes them feel their input is valued. ✓ Demonstrates empathy and compassion when breaking bad news. ✓ Shows awareness and sensitivity to patients from different cultural backgrounds and uses interpreters appropriately. 	<p>plan is questioned, or</p> <ul style="list-style-type: none"> ✗ Fails to inform colleagues and staff of relevant issues and plans relating to on-going patient care when personally not available, or ✗ Appears to make decisions on the run and then responds to difficulties with irritation, aggression or inconsistency. ✗ Is discourteous to staff or patients, or ✗ Frequently talks in medical jargon to patients and fails to check for adequate understanding, or ✗ Routinely interrupts or dismisses the comments of patients, families, colleagues or staff, or ✗ Shows insensitivity to the impact of language, culture, or disability on communication.
<p>Collaboration and Teamwork</p>	
<ul style="list-style-type: none"> ✓ Demonstrates understanding of the complex information needs of the whole team. ✓ Championing open disclosure when things go wrong. ✓ Ensures information from medical records is appropriately and safely shared when 	<ul style="list-style-type: none"> ✗ Does not listen to views and opinions of team members or practice staff, or ✗ Demands assistance from team and staff members but does not make it clear what is required, or

<p>appropriate.</p> <ul style="list-style-type: none"> ✓ Provides leadership that ensures understanding for all patients. ✓ Actively reflects on individual and team performance. ✓ Demonstrates clear understanding of 'participatory leadership'. <p>Giving and receiving knowledge and information in a timely manner to aid establishment of a shared understanding among team members. For example:</p> <ul style="list-style-type: none"> ✓ Is collegiate and professional in dealings with members of department and practice. ✓ Listens to, discusses and appropriately acts upon concerns of team and staff members. ✓ Makes the effort to communicate directly and convey critical information to others involved in management (e.g. GP or other specialist). ✓ Records contemporaneous and legible notes regarding patient care. <p>Ensuring that the team has all necessary and relevant clinical information, understands it and that an acceptable shared 'big picture' view is held by members. For example:</p> <ul style="list-style-type: none"> ✓ Provides briefing, clarifies objectives and ensures team understands the operative plan before starting operation. ✓ Ensures that relevant staff know the projected management plan. ✓ Encourages input from members of the team including junior medical staff and nurses. ✓ Debriefs relevant team members, discussing what went well and problems that occurred. <p>Working together with other team members to gain an understanding of the clinical situation and to ensure all management issues are addressed, both for the individual patient and for the service provided. For example:</p> <ul style="list-style-type: none"> ✓ Discusses anticipated admissions with management team. ✓ Stops operating when asked to by anaesthetist or scrub nurse. ✓ Informs surgical team of changes in management. ✓ Arrives reliably on time to facilitate commencement of the operation. 	<ul style="list-style-type: none"> ✗ Actions demonstrate disregard for clinical opinions of others, or ✗ Fails to ensure provision of timely information to patients' referring doctor or general practitioner. ✗ Fails to do regular ward rounds or initiate collective discussion and review of patient progress, or ✗ Fails to keep anaesthetist informed about risks or progress of the procedure, or ✗ Does not welcome discussion or review of the post-operative management, or ✗ Does not take into account suggestions or opinions of hospital or practice staff. ✗ Proceeds with operation without ensuring that everyone is ready, or ✗ Fosters disharmony or conflict in the patient care team, or ✗ Becomes uncooperative when asked to reduce lists to fit available session time, or ✗ Doesn't tell practice staff of changed consultation availability.
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Management and Leadership

- ✓ Develops guidelines, protocols and check lists.
- ✓ Supports safety and quality by adhering to acceptable principles of surgery.
- ✓ Follows codes of good clinical practice, and adheres to hospital and theatre protocols.
- ✓ Demonstrates ability to negotiate effectively.
- ✓ Takes responsibility to identify key issues/problems.
- ✓ Responds to issues appropriately and pro-actively.
- ✓ Retains a calm demeanour and leads by example when under pressure.
- ✓ Provides critical feedback.
- ✓ Assists with the development of a remedial plan where there are performance issues.
- ✓ Provides cognitive and emotional help to team members as appropriate.
- ✓ Determines team member's abilities and tailors the style of leadership accordingly.
- ✓ Can adopt a suitably forceful manner if appropriate without undermining the role of other team members.

Ensuring quality and safety by adhering to accepted principles of surgery, complying with codes of professional conduct, and following clinical and operating room protocols. For example:

- ✓ Introduces self to new or unfamiliar members of surgical or practice team.
- ✓ Clearly follows hospital, operating theatre, ward and practice protocols.
- ✓ Requires all team members to observe standards (e.g. sterile field, professionalism of staff in clinic or practice).
- ✓ Always prepared to give a considered opinion on medical aspects of management issues.

Retaining control when under pressure by showing effective leadership and supporting team members. For example:

- ✓ Remains calm under pressure, working methodically towards effective resolution of difficult situations.
- ✓ Resolves team conflicts quickly and appropriately.
- ✓ Acts as role model to others in both technical

- ✗ Fails to observe appropriate and established standards or protocols, or
- ✗ Is disrespectful to patients or staff, or
- ✗ Disregards the opinions and concerns of colleagues from other clinical disciplines, or
- ✗ Is disorganized, unreliable, frequently uncontactable or chronically late.
- ✗ Becomes immobile and displays inability to make decisions under pressure, or
- ✗ Reluctant to seek immediate assistance when unexpected technical problem requires the expertise of another person, or
- ✗ Blames others for errors and does not take personal responsibility, or
- ✗ Becomes irrational, loses temper repeatedly or inappropriately under pressure.
- ✗ Does not provide recognition or feedback for tasks performed well, or
- ✗ Fails to recognise the needs of other team members and provide support, or
- ✗ Shows hostility or rivalry towards peers and is openly critical of colleagues, or
- ✗ Repeatedly displays a negative attitude towards junior medical staff, nurses, and other health care professionals.

<p>and non-technical areas of surgery.</p> <ul style="list-style-type: none"> ✓ Continues to provide leadership in critical situations. <p>Providing cognitive and emotional help to team members, assessing their abilities and tailoring one's style of leadership accordingly. For example:</p> <ul style="list-style-type: none"> ✓ Organises operation lists to ensure that there is time for trainees and junior staff to have supervised hands-on experience. ✓ Ensures delegation of tasks is appropriate. ✓ Encourages and facilitates briefing and debriefing procedures involving the entire team. ✓ Provides constructive criticism to team members. 	
<p>Scholarship and Teaching</p>	
<p>Evaluating or researching surgical practice, identifying opportunities for improvement and implementing change at individual, organizational and health system levels. For example:</p> <ul style="list-style-type: none"> ✓ Strives to improve surgical practice through research, innovation and audit of outcomes. ✓ Actively promotes best practice and evidence-based surgery principles. ✓ Is prepared to alter clinical practice when audit and peer review suggests performance is suboptimal or there are opportunities to improve. ✓ Always looks for better solutions to improve quality of care. <p>Facilitating education of their students, patients, trainees, colleagues, other health professionals and the community. For example:</p> <ul style="list-style-type: none"> ✓ Provides continuous constructive feedback without personalizing the issues. ✓ Provides adequate supervision to junior staff. ✓ Uses clinical encounters as an opportunity for teaching of staff. ✓ Takes education and training seriously, allocating sufficient time for teaching and tutorials. ✓ Engages in lifelong commitment to reflective learning. ✓ Organises their own continuing medical education. ✓ Seeks learning opportunities. 	<ul style="list-style-type: none"> ✗ Fails to adjust practice according to current evidence, or ✗ Demonstrates critical errors in understanding of evidence available from current literature, or ✗ Shows little interest in participating in journal clubs, grand rounds and/or clinic-pathological meetings, or ✗ Demonstrates apathy towards training and development of junior staff. ✗ Demonstrates arrogance, rudeness or disinterest in the training of junior staff or students, or ✗ Fails to delegate appropriately or support junior staff, or ✗ Avoids being involved in identifying and remediating poor performance in a trainee, or ✗ Places unreasonable expectations on or is unduly critical of junior staff. ✗ Is dismissive or uncooperative with approved surgical research projects, or ✗ Promotes a 'it works for me therefore it is right' approach despite a lack of supporting evidence, or ✗ Ignores research and ethics approval requirements when conducting clinical trials or

<ul style="list-style-type: none"> ✓ Able to assess risks and benefits of new technologies and treatments for individual patients. ✓ Introduces new technologies and treatments in an appropriate manner. ✓ Promotes learning and research opportunities for the unit. ✓ Able to plan and conduct a teaching session and prepares the necessary materials. ✓ Facilitate education of their students, patients, trainees, colleagues, other health professionals and the community. ✓ Changes or adapts surgical practice in response to new knowledge and developing best practice activities. ✓ Contributes to the development and/or dissemination of new medical knowledge and practices. <p>Engaging in lifelong reflective learning, assimilating knowledge and imparting it to others. For example:</p> <ul style="list-style-type: none"> ✓ Participates regularly in conferences, courses and other CPD activities. ✓ Willingly reconsiders current practice and embraces change when based on sound evidence. ✓ Engages with staff and encourages' their learning, development and career planning. ✓ Demonstrates awareness of the recent literature and considers implications for clinical and office practice. 	<p>evaluating new surgical techniques, or</p> <ul style="list-style-type: none"> ✗ Fails to obtain informed consent from the patient or provide appropriate follow-up when a procedure undertaken is innovative or new.
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EPILOGUE

The intent of this guide is to act as a ready reference for those intending to train as paediatric surgeons and those involved with their training. An overview of training principles has been presented together with focused attention to each stage of training.

A number of the principles of RACS were acknowledged and are reflected in our training program. These include but are not limited to principles of fairness and natural justice, recognition of the principles of adult learning and teaching, a working understanding of the overarching “nine core competencies” of RACS, implementation of a competency based (as opposed to a time-based) training program, and a natural progression within training that reflects all these areas.

At the completion of training we recognise in all new Fellows the qualities and attributes we hope will continue to be handed on by them as they become the trainers and supervisors of the future, as well as being the paediatric surgeons for our children’s children.