**Competency-based Medical Education (CBME) in the SET Program**

The SET program is organised utilising the framework set by RACS including nine specialties training in 13 separate programs, some bi-national and some national. The most independent of the specialties are the orthopaedic surgeons in Australia (AOA) where the arrangements are such that the Federal Training Board of the AOA replaces the Board in Orthopaedic Surgery (Australia).

As presented at a Royal Australasian College of Surgeons Trainees' Association (RACSTA) SET 1 Induction Day about 2 years ago, CBME as a surgical education concept certainly suffers the way the word ‘competency’ is used. RACS describes nine surgical competencies (competency domains) which reflect the roles of the surgeon, trainee and IMGs-on-pathway to fellowship in the workplace. These were originally developed after the CanMEDS roles of 2005 – the recent CanMEDS 2015 version is noted.

Secondly, the word ‘competent’ is noted and for most surgeons it means that the surgeon/trainee is adequately trained and performing at a good level. There is a distinction between the competence of the trainee/surgeon and performance as demonstrated on a day-to-day basis. Competence and performance are not equivalent.

Commencing with selection with its combination of curriculum vitae, reference reports, pre-requisite terms, pre-requisite tasks and finally interview, one could certainly consider that the applicants’ competencies are assessed by this process of selection. Selection into postgraduate specialist training is complex, but there is some support in the literature for structured multiple interviews scenario and local support for genuine work-based reports/ references including those from non-surgeons. Once entering at SET 1 level, the new trainee makes a transition from being a senior resident to registrar although many incoming SET 1 trainees have had at least some experience at the service registrar/ on-accredited locum registrar level. Research has clearly demonstrated that registrars coming through such a system find the transition of being a SET 1 trainee less onerous.

The JDocs framework is a competency-based framework which attempts to provide structured and support for prevocational doctors who might wish to be surgeons and so they can work to show they are ready for commencement of SET or other specialty training. Within SET, the trainee finds that assessments are done, although frequent observation and feedback around the daily tasks of work may be less obvious. It is really here in the workplace that the opportunity for supervision, observation, feedback and structured progression across the many tasks of being a trainee should be developed. Within SET, in-training assessment which consists of mid-term or 3-monthly assessment/d 6-monthly assessment/ 12 monthly end-of-term assessments, there is an opportunity for both formative and summative feedback in these more formal recorded assessment situations. These assessments cover all nine College competencies although some specialties describe the competencies using slightly different terms. This is an opportunity for formal feedback to the trainee and for dialogue about progress but really to be authentic it needs built-in frequent observations, feedback and the opinions of the entire surgical team/ unit rather than simply being handed out as an end-of-term assessment.

Medical and surgical knowledge are accessed by the Generic Surgical Sciences Examination (GSSE) now done prior to surgical training and the specialty-specific examinations within the SET program. Development of knowledge is supported by the work done for such examinations or towards the SEAM modules required in the first couple of years of general surgical training. Such hurdle-based examinations and timely online learning assist with competency-development around medical knowledge and judgement-clinical decision making. Finally, late in the penultimate year of SET training, given satisfactory work-based assessments, the trainee commences the process of enrolment for the fellowship examination and as part of this, support or sign-off is required by the current or chief supervisor of that particular trainee. By signing-off, the supervisor is certifying that across the competencies that the trainee is performing at competent level. The fellowship exam really
only tests medical and surgical knowledge; judgement and clinical decision-making; and knowledge of technical expertise combined with some elements of communication skills and some elements of professional behaviour, depending on the specialties.

CBME as expressed particularly through the recent 2015 CanMEDS represents a construct where a medical student becomes a resident who becomes a surgical trainee and eventually a surgeon. The basic concepts of competency development across the medical continuum are accepted. Development of competencies are promoted through the JDocs framework. Within SET, the competencies are inconsistently assessed: this may relate to the fact the tools provided (DOPS, Mini-CEX, CBDs) do not really assess the true daily work tasks. Entrustable Professional Activities (EPAs) to link competencies to clinical work, thus develop CBME further, because these constructs have more face validity. Years of practice, supervision and conversations with colleagues suggest that the competences can be regarded as “abstract” in the SET Training Program at the moment.

Therefore, RACS would describe that CBME is supported prior to SET, and this early CBME is somewhat assessed by the various selection approaches. It is not particularly well-developed during the SET program although recent moves towards the stages of training should assist this. It is implicitly assessed and reported by sign-off at the fellowship examinations.

Better CBME will be supported by the recent College work towards supervisor and trainers skills (via Foundation Skills for Surgical Educators course). Better standards for surgical educators and trainers, liaison between regional supervisors as registrars move jobs (between/across hospital networks or through a national training program) will also assist.

RACS is committed to more significant medical educator training input to training boards. Some of the tools used within paediatric surgery, use of EPAs or similar and the concept of a portfolio of achievements should better document trainee progress. From the ‘Becoming a Competent and Proficient Surgeon’ guide, RACS describes the variable levels or performance across the competencies for trainees for the different stages within the surgical training program. CBME training programs requires substantial regular effort with observation and feedback that are not consistently being done in the current system. It is not certain that many of the incoming trainees have in fact a good concept of CBME.

Better definition of the outcomes in terms both the program and the graduates would assist the CBME development (after the CanMEDS 2015 approach). The SET program would then be based around preparation through JDocs, selection, regular observation and feedback informing the trainee and the end-of-term assessments and the suitable sign-off for fellowship examination. Performance in the last year of SET, as well as certification by examination, will demonstrate the graduate outcomes expected, leading into the early consultant years.