# Becoming a competent and proficient surgeon:

## Training Standards for the Nine RACS Competencies

## Introduction

Surgical training involves a progression in levels of competency from being a doctor with at least two years of postgraduate experience to becoming a practising specialist.

This document outlines a framework to describe progress during training for each of the nine RACS Competencies. It has been developed to provide a guide for trainees and their supervisors as to the stage a trainee has reached for any one of the competencies. The framework is structured around each of the RACS competencies:

- Medical Expertise
- Judgement – Clinical Decision Making
- Technical Expertise
- Professionalism and Ethics
- Health Advocacy
- Communication
- Collaboration and Teamwork
- Management and Leadership
- Scholarship and Teaching

RACS created its competency framework in 2003, work which was inspired by the CanMeds competency framework[1]. It should be noted that each of the nine competencies are regarded as equally important, and that there is some overlap between them. In fact, RACS strongly advocates a view that in a competent and proficient surgeon competence is demonstrated holistically. Even during training, as indicated in the vignettes, aspects of the different competencies impact on each other.

This 'becoming competent and proficient' framework aims to describe stages in the acquisition of each competency and the minimum acceptable standards at each stage and within each competency. Characteristic behaviours which are observable and assessable are described. Each of the characteristic behaviours (behavioural markers) is positive. They represent 'entrustable professional activities' that can readily be assessed by supervisors.

Progressive development through five stages of increasing complexity (from pre-vocational to proficient) has been described for each of the nine RACS competencies. The stages have been identified as:

➢ Pre-vocational — the behavioural markers that describe a level of performance which would be expected of a doctor applying for selection into surgical training.

➢ Novice — the behavioural markers that describe a trainee who has commenced surgical training and who has an aptitude for their surgical specialty.

➢ Intermediate — the behavioural markers that describe the performance of a surgical trainee who is clearly progressing but who still needs a reasonable amount of supervision, has some way to go before being regarded as competent, and thus ready for more independent surgical practice.

➢ Competent — the behavioural markers that describe the performance of a trainee nearing the end of their training program and who can be trusted to perform with a minimum of supervision unless the situation is complex.

➢ Proficient — the behavioural markers that describe the performance expected of a Fellow. They represent a maturity beyond the previous stage and a consolidation of the competencies that have been acquired during training, together with an increasing inventory of experience.

In this standards framework each of the nine competencies is subdivided into three descriptive *'patterns of behaviour'* reflecting the structure of the RACS Surgical Competence and Performance guide for

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[1] Developed by the Royal College of Physicians and Surgeons of Canada in the 1990's and revised in the mid 2000's. http://www.collaborativecurriculum.ca/en/modules/CanMEDS/CanMEDS-intro-background-01.jsp

Fellows which is now in its second edition (October 2011). This guide was designed to provide a framework to assess the performance of practising surgeons[2].

The '*characteristic behaviours'* or 'behavioural markers' described at the various stages of "becoming competent and proficient" are also aligned with the good behaviours defined in the RACS 2011 *Surgical Competence and Performance Guide*. However, many of the good behaviours described may quite reasonably be expected to be acquired early in training. For example, qualities such as honesty and integrity are as critical to the practice and performance of a trainee as they are to a surgeon.

By the completion of training, a trainee is expected to be able to consistently perform at or beyond the competent stage across all nine competencies.

**The structure of the RACS Competency Standards for Training**

Based on Miller's Pyramid for assessing clinical competence (Knows; Knows how; Shows how, Does) the framework recognises the importance of assessing a trainee's performance in the workplace. The behaviour markers describe how knowledge, skills and attitudes are translated into action or performance (what one does in practice) [3].

Within each competency three major patterns of behaviour (corresponding with those used in the RACS 2011 *Surgical Competence and Performance Guide*) have been used as the organisational framework in which a small number of key behavioural markers have been identified. In this document behavioural markers describe specific observable behaviours (of individuals or teams) that contribute to the performance of trainees within a work environment.

It is not intended that the behavioural markers represent a comprehensive analysis of trainees' performance and behaviour, nor are the identified behaviours expected to be observable in all work-based situations. Rather they have been selected because they represent observable behaviours which are sufficiently important to be considered as key indicators of each trainee's progression towards being judged as a competent and safe practitioner.

Those responsible for supervision of a trainee can use the behavioural markers to:

- highlight examples of progression towards competent performance
- provide a shared framework of steps towards the next or future stages of 'becoming competent and proficient'
- provide a common vocabulary for training, briefing and debriefing, providing feedback, and communication between trainees, supervisors, and training boards about each trainee's performance
- clearly identify when a trainee is performing at, above, or below, the expected standard
- provide a framework for establishing shared meanings between safety and quality, training, and assessment

The working party determined that these behavioural markers help assess the stages a trainee has reached for any particular competency. For example, consider a trainee who is in the fourth year of training but when assessing their performance you find that, for some competencies, they are only performing at an intermediate level. Therefore, they will need longer before they will be considered ready to sit an exit examination, and may need to address specific issues for the competencies in which they are not progressing at the expected rate. When underperformance is identified at any stage of training, there is a need to address the reasons for it. Progress will be slower, and, depending on the circumstances, consideration will need to be given to a period of remediation or probation.

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[2] RACS Surgical Competence and Performance: A guide to aid the assessment and development of surgeons (2nd ed.) (weblink)

[3] Norcini J. ABC of learning and teaching in medicine: Work based assessment. *BMJ.* 2003 April 5; 326 (7392): 753-755. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1125657/

## Information for Users

The framework describing standards for competency acquisition is intended for use:

- by **supervisors** as a guide to assist them in more clearly identifying the strengths and weakness of their trainees and their progress
- by **trainees** as a self-assessment guide in monitoring their own progress and identifying any area (or areas) in which they need to improve
- by **training boards** as a guide to assist them in their decision making about the progress of each individual trainee in their training program, and
- as a framework around which assessment processes and tools can be evaluated and/or designed to ensure closer alignment between assessment processes and program requirements.

The framework for each competency enables a trainee and their supervisor to assess progress through the stages from pre-vocational to proficient. It is not assumed that the five stages (Pre-vocational; Novice; Intermediate; Competent and Proficient) correspond to any specific time-frame or period during training, or that progression from 'Novice' to 'Competent' will be linear either within, or across, the competencies. Rather the assumptions on which these standards are based are that:

- In some competencies, for example Medical Expertise, Technical Expertise, and Judgement – Clinical Decision Making, the observed level of a trainee's knowledge and skills may be lower than previously recorded, as they move from one clinical environment (or unit) to another. This will be especially true if they have not had previous experience in the range of conditions and procedures which they encounter in the new setting. An example would be their ability to obtain informed consent, as the trainee would need to learn the range of options, risks and benefits for different procedures in the new subspecialty to which they may not have been previously exposed.

- For some of the competencies, a more experienced trainee may be expected to move fairly rapidly through some of the early stages and to attain the 'competent' level before they move to a different clinical environment.

- In other competencies, for example Professionalism, Scholarship and Teaching, Health Advocacy and Communication, a trainee would generally be expected to be able to demonstrate their experience and application of acquired competency from rotation to rotation, and from hospital to hospital. However, trainees and supervisors should still recognise the ability to communicate options or risks of planned management, and the ability to obtain informed consent may also be limited by progress in other competencies based on the knowledge and skills required for Medical Expertise, Technical Expertise and Clinical Decision Making.

- Research in behaviours relating to Professionalism and Ethics[4] indicate that working under high levels of stress may sometimes have a negative impact on the standard of ethical behaviour. If this deterioration in behaviour is observed, or a mis-match between what is said and what is done is noted, then this needs to be identified and acted upon.

- Identifying that trainees are performing at a certain stage depends on their performance over a period of time, rather than one specific instance. However, poor performance due to a lack of honesty, professional standards, integrity, or respect for others, is likely to reflect a serious deficiency that needs to be promptly addressed.

### The vignettes

Each of the competencies is introduced by a vignette that describes the performance of a trainee (or trainees) and some of the opportunities for supervision and direction by the consultant supervisor. As competencies overlap, most of the vignettes describe situations in which the level reached relates to more than one competency. The vignettes do not cover every situation or pattern of behaviour, but rather seek to create a familiar scenario that faces trainees and supervisors from time to time, and is recognisable within the competency which it introduces.

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[4] Patenaude J. Niyonsenga T. Fafard D. Changes in students' moral development during medical school: a cohort study. *CMAJ*. 2003 April 1; 168(7): 840–844. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC151989/

The vignettes describe scenarios in the clinic, on the ward, or managing behaviours. They are included as an illustration of behaviours all experienced supervisors have seen and encountered from time to time. They were contributed by a broad range of specialties.

Any training board that would like to write a series of vignettes with specific examples from their specialty would be welcome to do so for a future edition or an on-line update. This could add relevance for the individual trainees and supervisors. In this first edition, we have collected vignettes that are easily understood across the nine specialties.

It is accepted that once the vignettes have been read and considered once, that experienced supervisors will choose to focus on the descriptors of performance against each of the levels that chart progress within the competencies and patterns of behaviours. For surgical units and supervisors that are not familiar with the concept of assigning a standard, or a level, it may help supervisors to discuss the vignettes and attempt to assign a level to the sort of trainee described in the scenario, including various "what ifs" that might be added or subtracted by the discussants. The vignettes are not to be used to grade a trainee but rather to help supervisors to understand the process of assigning a level of progress to a trainee within a competency and a pattern of behaviour.

## The approach used to establish the RACS Competency Standards for Training

A small working group developed the *RACS Competency Standards for Training.* This working party was a subcommittee of the Performance Assessment Steering Committee, reporting to Council through the Professional Standards Committee and the Board of Professional Development and Standards.

The working party was comprised of:

- Prof. David Watters, Chair, Performance Assessment Committee
- Mr. Simon Williams, Chair, Board of Surgical Education and Training
- Mr. Phil Truskett, Chair, Skills Education Committee
- Prof. Bruce Barraclough, Dean of Education, and
- Dr. Wendy Crebbin, Manager, Education Development and Research Department

Further revisions and the clinical vignettes were contributed by other members of the Performance Assessment Steering Committee.

- Mr. Pat Alley
- Mr. Allan Panting
- Dr. John Quinn
- Mr. John Batten
- Ass. Prof. Peter Woodruff
- Dr. Patrick Lockie
- Dr. Grant Phelps
- Dr. David Hillis
- Dr. Pam Montgomery
- Dr. Ian Graham
- Ass. Prof. John Graham
- Ms. Kathleen Hickey

The working party also acknowledges the constructive input from:

- Dr. John North, Past-President of the Australian Orthopaedic Association
- Prof. Rufus Clarke, Honorary Professor, Australian School of Advanced Medicine, Macquarie University, Sydney

**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 65 year old female attends the Outpatients. She requires a major operation for her condition. The patient has several significant co- morbidities being a smoker, a BMI of 35, a family history of Osteoporosis and Osteoarthritis, and was a type 2 Diabetic on maximal oral hypoglycaemic medication. She is seen by the SET 1 trainee who contacts you, as the senior consultant, because the patient insists on a new procedure as seen on TV, and because a friend in another state has had one recently.
The SET1 trainee succinctly outlines the patient's history and physical examination findings, the radiological findings and her desires and reasons for her request, and indicates that they felt that the patient's desired choice was not the most appropriate in her circumstances
As you are at a planning meeting for the department, which is due to conclude in 20 minutes, you suggest the newly appointed senior SET 4 trainee, who is also at the clinic, review the case and present it to you in the clinic after the meeting.
When you arrive at the clinic you suggest that the SET 4 trainee presents the case to you in front of the patient. You do the introductions and a brief explanation and ask the trainee to proceed. The presentation is vague, disorganised and non-directed. Two of the co-morbidities are not mentioned and the trainee concludes that the patient's request is reasonable.
You tactfully conclude the meeting at the bedside, indicating that the team will return when you have had the opportunity to "review the radiology"!
Your discussion with the SET4 trainee indicates that they have little understanding of the contra-indications of the procedure they have recommended and the patient desires, or the published data on the outcomes of this type of procedure. A discussion on basic principles of management ensues, and it is clear that there are major knowledge gaps.

## Medical Expertise: Patterns of Behaviour and Behavioural Markers

### Demonstrate medical skills and expertise

| Pre-vocational | - Can perform an effective clinical assessment of a patient for most common conditions and presentations<br>- Able to estimate the impact of comorbidities that might affect presentation or treatment |
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| Novice | - Is developing a knowledge of anatomy, physiology and pathology relating to the common disease processes of most common conditions<br>- Able to present a coherent clinical assessment of patients they have assessed with common conditions |
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| Intermediate | - Has a detailed knowledge of anatomy, physiology and pathology for most surgical conditions<br>- Able to present a coherent clinical assessment of patients with common or unusual presentations<br>- Can recognise the potential impact of comorbidities or patient circumstances/beliefs on presentation of disease or response to treatment. |
| Competent | - Has extensive breadth and depth of knowledge of the majority of conditions encountered in their specialty |
| Proficient | - Consistently able to utilise medical knowledge to resource, refine and develop their area of specialisation and scope of practice |

## Monitor and evaluate care

| Pre-vocational | - Identifies gaps in own knowledge relevant to the most common medical conditions<br>- Seeks advice when unsure of appropriate management |
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| Novice | - Identifies gaps in own knowledge of the common surgical conditions treated in the unit<br>- Regularly participates in department meetings and is able to present case reports<br>- Applies their knowledge to the management of patients with the most common conditions during the pre and post-operative stages of treatment |
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| Intermediate | - Identifies clinical priorities and incorporates them into the management plan<br>- Can anticipate patients' physiological changes during intra-operative and post-operative phases and minimise them |
| Competent | - Analyses patient information, accurately identifies anatomical abnormality or pathology, and plans appropriate surgical intervention<br>- Takes into account patients' co-morbidities at all stages of intervention<br>- Recognises errors made by self and others |
| Proficient | - Regularly reviews and evaluates clinical practice, surgical outcomes, complications, morbidity and mortality<br>- Notices when someone is in trouble even when others may be slow to recognise the severity of the situation<br>- Leads department meetings |

## Manage safety and risk

| Pre-vocational | - Considers the potential for error<br>- Willing to involve themselves in an audit process<br>- Willing to report incidents utilising available systems |
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| Novice | - Able to audit own and team's performance<br>- Able to recognise critical events or areas of concern<br>- Able to anticipate and avoid risks associated with common conditions and procedures |
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| Intermediate | - Applies their knowledge to the management of all patients during the pre and post-operative stages of treatment<br>- Applies their knowledge in the planning and performing of common procedures |
| Competent | - Maintains a record of all patient outcomes<br>- Takes responsibility for own errors<br>- Compensates or corrects for errors by others<br>- Participates in root cause(s) analysis and other methods to review incidents, errors and adverse events |
| Proficient | - Ensures patient safety by understanding, and appropriately managing clinical risk<br>- Able to intervene in a positive, cooperative, collaborative and non-judgemental way to achieve optimal outcomes for patient and team<br>- Leads root cause(s) analysis and other methods to review incidents, errors and adverse events |

## Resources and Support

Doctor C is in their third year of training and is taking the consultant on a ward round. There are some complex cases with complications of surgery that require decisions to be made.

In the corridor, reviewing a patient's postoperative scans the consultant asks Dr C what the options are and what are the benefits and risk of each choice. C appears flustered and unable to settle on any sort of decision for the patient. There seems to be a lack of knowledge about the possible approaches and what the likely outcomes might be. The discussion moves from the specific case to the theoretical possibilities. Here C responds with more confidence but still does not consider certain possibilities.

## Judgement – Clinical Decision Making: Patterns of Behaviour and Behavioural Markers

### Consider options

| Pre-vocational | - Identifies the significant clinical issues from history and examination <br> - Aware of which investigations are available and their risks <br> - Aware of the need to make timely decisions |
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| Novice | - Capable of independently making a well-reasoned diagnosis for common problems <br> - Chooses and organises appropriate diagnostic tests and imaging, and <br> - Utilises investigations to eliminate alternative diagnoses for common conditions. |
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| Intermediate | - Chooses the most appropriate diagnostic tools <br> - Appreciates the role of active observation to assess progress <br> - Appreciates the true urgency of most clinical situations <br> - Recognises the need for senior input <br> - Recognises when referral to another specialty is the best option |
| Competent | - Conducts an effective, efficient and focused examination of patients with complex conditions <br> - Identifies what is most important in each clinical situation <br> - Recognises atypical situations and is sensitive to unusual/ feasible alternative diagnoses, and is aware of what does not fit. <br> - Recognises the need for a second opinion |
| Proficient | - Has amassed a considerable volume of experience <br> - Uses intuition, insight and creative approaches to solve problems not previously encountered (when required) <br> - Obeys/observes rules and guidelines appropriately, and effectively <br> - Functions from a deep understanding of the total situation and potential complexities <br> - Makes good decisions implicitly <br> - Recognises exceptional circumstances and varies decisions accordingly |

## Plan ahead

| Pre-vocational | - Manages common problems utilising basic algorithms and decision trees<br>- Readily seeks advice and guidance for management plans |
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| Novice | - Prepares an operating list<br>- Obtains fully informed consent for common elective and emergency conditions |
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| Intermediate | - Formulates management plans including potential risks for the majority of surgical conditions<br>- Identifies when a contingency (backup) exit plan may be required<br>- Constructively contributes to multi-disciple meetings<br>- Propose a rational plan of management for most common problems and options |
| Competent | - Sees situations holistically rather than in terms of single components<br>- Deals with complexity according to the patient's needs<br>- Management plans anticipate potential problems and include options and solutions |
| Proficient | - Generates alternative possibilities or courses of action to solve a problem<br>- Assesses hazards and weighs up the threats and benefits of potential options<br>- Predicts what may happen in the near future as a result of possible actions, interventions or non-intervention |

## Implement and review decisions

| Pre-vocational | - Reviews decisions and recognises their own limitations<br>- Recognises when they do not know what is going on |
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| Novice | - Recognises when a plan of management is failing and seeks senior input to devise an alternative plan<br>- Appreciates the need for continued timely review of patient progress |
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| Intermediate | - Undertakes review of patient progress and response to intervention at appropriate intervals<br>- Recognises complications or failures and is able to project likely outcomes<br>- Seeks senior assistance to devise alternative strategies in a timely manner |
| Competent | - Manages complexity and uncertainty<br>- Adapts appropriately to changing patient needs or circumstances<br>- Devises alternative strategies in a timely manner.<br>- Has insight as to when to involve other teams or support of colleagues |
| Proficient | - Undertakes the chosen course of action and continually reviews its suitability in light of changes in the patient's condition<br>- Shows flexibility and changes plans if required to ensure management goals are met<br>- Has the ability, insight, commitment and leadership skills to engage system and organisation issues |

## Resources and Support

## Technical Expertise: Technical expertise relates to safely and effectively performing surgical procedures conducted in the unit in which they are training.

Your trainee has been on the unit for the past five months. During this time he/she has assisted you for the major procedures and performed minor ones either with your assistance or with you observing and advising unscrubbed. Last week you realized it was time to give him/her some further responsibility and so you allowed him/her to perform the exposure for a major case independently whilst you saw some patients in the ward.

When you arrived in theatre you found that the patient was in a good position on the operating table for the procedure to be carried out, but that the exposure was compromised by too short an incision. Having scrubbed and extended the incision, and with yourself being an additional assistant, the exposure was then adequate. Your trainee then proceeded to mobilize the organ for resection, remain in the correct tissue planes and ligate the key vessels. The ligatures were applied snug and firm, without too much distraction despite the depth of the wound. After checking carefully for haemostasis you delegated the wound closure to the trainee and retired to your laptop to answer some of your backlog of urgent emails.

## Technical Expertise: Patterns of Behaviour and Behavioural Markers

### Develop and maintain dexterity and technical skills

| Pre-vocational | - Can perform basic clinical skills such as resuscitation., suturing simple superficial wounds, knot tying, maintaining sterile field, Pain management<br>Refer to *Elementary Surgical Skills* Document |
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| Novice | - Seeks opportunities to learn new skills<br>- Learns new skills quickly<br>- Aware of the importance of positioning patient for safe surgical access<br>- Can safely and effectively carry out parts of some common procedures under close supervision<br>- Able to perform basic surgical skills and tasks relating to surgical specialty<br>- Demonstrates basic use of common surgical tools such as diathermy, suction, retractors.<br>- Demonstrates understanding of the importance of gentle handling of soft tissue and of wound care<br>- Aware of how to use surgical instruments and use of local anaesthetic |
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| Intermediate | - Assists effectively at major or complex procedures<br>- Able to position patient, gain surgical access<br>- Can safely and effectively carry out most common procedures or individual components of major procedures with supervisor in theatre<br>- Can safely and effectively carry out significant parts of more complex procedures under close supervision<br>- Can anticipate and effectively deal with potential complications in the most common procedures |
| Competent | - Adapts their skills in the context of each patient-each procedure and continues to learn new skills<br>- Can safely and effectively carry out all common and more complex procedures as primary operator<br>- Anticipates and effectively deals with potential complications in all the procedures they carry out |
| Proficient | - Consistently demonstrates sound surgical skills<br>- Has a professional development plan for continuing enhancement of skills<br>- Can effectively teach others to perform surgical skills and carry out procedures<br>- Has appropriate processes for learning or introducing a new technique e.g. visiting a surgical expert or mentor |

## Recognise conditions for which surgery may be necessary

| Pre-vocational | - Identifies key indications and contraindications for the management of common conditions in surgical patients |
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| Novice | - Discusses the advantages of operative versus non-operative management of common surgical conditions |
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| Intermediate | - Looks for co-morbidities and potential problems and adapts patient management accordingly |
| Competent | - Routinely evaluates their own management plans |
| Proficient | - Recognises when further assessment, observation or investigation is preferable to immediate surgery<br>- Consults with peers and colleagues about complex cases and difficult judgements<br>- Routinely reflects on and evaluates approaches to surgical problems and all aspects of practice<br>- Prioritises need and timing for surgery appropriately in emergency and elective situations |

## Defined scope of practice - Recognise their own limitations

| Pre-vocational | - Acknowledges limits of experience and knowledge and always seeks assistance where this is required. |
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| Novice | - Asks for assistance when appropriate<br>- Maintains accurate data on all procedures in which they are involved<br>- Seeks and/or readily accepts supervision for all procedures |
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| Intermediate | - Anticipates when they may need assistance<br>- Maintains accurate data on all patients and analyses their own clinical performance.<br>- seeks supervision when appropriate |
| Competent | - Recognises when it is time to exercise extraordinary caution<br>- Acknowledges their own limits, and when it is time to ask for assistance<br>- Maintains accurate data on all patients and analyses their own clinical performance and outcomes to encourage continuous improvement<br>- Undertakes surgery appropriate to their training and expertise as well as available facilities, conditions and staffing |
| Proficient | - Always undertakes surgery with an awareness of their own expertise,  defined scope of practice and the supporting organisational capability<br>- Actively contributes to understanding and supporting the scope of practice of colleagues. |

## Resources and Support

10.30pm    Consultant A's patient has just crashed on the ward. The operation seemed to go without complication earlier in the day and everyone felt good about it at the debrief. And now … the patient is in shock, there is a need to return to theatre and control the situation – whatever is the matter. The situation is urgent. Talk with the theatre desk, explain to the surgeon who is about to be bumped by this case, call the family, who just went home at 8pm thinking everything was alright. Trying to sound calm and in control on the telephone is difficult as the patient is being wheeled out of the ward towards theatre. Mrs Smith … I am sorry something has happened to your husband … yes, I know he was alright earlier, and we are still not sure what the problem is … we just know it is not a heart attack and doesn't appear to be an infection … we think he is bleeding internally… Yes, it is possible he might not make it but it is to give him the best chance we are rushing him to theatre right now …. I am very sorry you don't have a chance to talk to him before he goes in but I don't think it is safe to wait. We will do everything we can, would you like me to call you when we finish, or would you rather come in and I will speak to you in the waiting room after the procedure?.

The trainee is due to go off duty but elects to stay as he/she participated in the original procedure earlier in the day.

The patient has their unplanned reoperation urgently and the source of the bleeding was a slipped ligature. There was a sustained period of hypotension and the patient has not made any urine during the procedure. It transpires the patient suffers ARDS and renal failure.

2am      The trainee calls the patient's wife and explains that one of the ligatures came off and that the bleeding is now stopped. The patient is being transfused. Will he be alright the wife asks? The trainee says "everything possible is being done to support Mr Smith but it is too early to say what will happen as there is a need to continue resuscitating and to get his kidneys working again. He needs support for his lungs as they are swollen and so needs to be ventilated on a machine." Mrs Smith is very stressed….

The trainee offers to meet the wife the next morning and give her an update ……

2.30am      The trainee goes to bed - they are due to start a ward round in the morning.

7.30am      There is a full day's operating arranged and the trainee has had just over 4 hour's sleep. The registrar informs consultant B who is responsible for the day's list that there was a take back the previous evening and that he/she only had 4 hours sleep. He/she reassures consultant B that he/she will be alright and the list proceeds …..

## Professionalism and Ethics: Patterns of Behaviour and Behavioural Markers
## Have awareness and insight

| Pre-vocational | - Able to learn from mistakes |
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| **Novice** | - Able to analyse and critically reflect on own performance<br>- Acknowledges error<br>- Responds positively to suggestions on how to improve |
| **Intermediate** | - Critically reflects on own performance and makes an accurate assessment of performance<br>- Has insight on what needs to be improved<br>- Accepts criticism as an opportunity to improve |
| **Competent** | - Can recognise colleagues in need of assistance<br>- Recognises lack of insight in others<br>- Responds positively to complaints and incidents |
| **Proficient** | - Knows what to do about own shortcomings<br>- Knows what to do to assist others<br>- Reflects on own surgical practice and has insight into its implications for patients, colleagues, trainees and the community |

## Observe ethics, probity and confidentiality

| Pre-vocational | - Is honest, respects patient rights and confidentiality<br>- Considers the Code of Conduct of the AMC and MCNZ and its implications for medical practice |
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| Novice | - Understands the RACS Code of conduct and its implications for surgical practice<br>- Gives primacy to patient welfare<br>- Is honest in the presentation of clinical assessments<br>- Respects doctor patient relationship |
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| Intermediate | - Shows respect for colleagues and other health professionals<br>- Demonstrates empathy, caring, and compassion for patients (their families and carers)<br>- Recognises uncertainty and conflicting values |
| Competent | - Can identify situations that involve medico-legal issues and manage risk<br>- Capable of dealing with ethical uncertainty and conflicting values consistently, regardless of changing circumstances<br>- Actively undertakes open disclosure |
| Proficient | - Takes responsibility and is accountable for actions of self and team<br>- Champions standards of ethics, probity and confidentiality and respects the rights of patients, families and carers<br>- Manages medico-legal issues and ways to minimise medical risk<br>- Respects the rights and reputation of colleagues<br>- Reviews the performance of others in an unbiased fashion |

## Maintain health and well-being

| Pre-vocational | - Maintains fitness for work<br>- Aware of the need to balance the demands of life and work. |
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| Novice | - Recognises that it is inappropriate to practice when impaired by fatigue, alcohol or drugs<br>- Recognises when their own health issues need addressing |
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| Intermediate | - Demonstrates awareness of the impact of life-style on their ability to work<br>- Monitors own health and fitness and seeks medical help when appropriate |
| Competent | - Manages their own fatigue and/or ill health<br>- Takes responsibility to ensure that when they are on duty, or on call, that they are at optimal level of performance |
| Proficient | - Maintains personal health and well-being and considers the health and safety needs of colleagues, staff and team-members<br>- Takes a pro-active approach to avoiding error and maintaining safety of self and others<br>- Takes seriously, concerns about impairment and is prepared to respond appropriately<br>- Recognises the inherent risks of different personality types |

## Resources and Support

Professionalism … "involves putting patients first, managing conflicts of interest, honesty and confidentiality, disclosing errors, self-regulation and advocacy" Gruen R, Watters D, Hollands M. Surgical Wisdom, BJS; 2012; 99:1: 3-5 http://onlinelibrary.wiley.com/doi/10.1002/bjs.7688/full

The patient is a 76 year old Maori man from a distinguished local family. He has mild dementia, hypertension, type II diabetes, chronic obstructive airways disease and mild chronic renal failure. He continues to smoke and uses alcohol inappropriately at times. He has a critically ischaemic left leg with rest pain and ischaemic ulcers. He comes to the clinic with his family. They include a daughter who is a leading expert on health law and a grand daughter who is in third year at medical school. MRA has disclosed a segment of his popliteal artery that is stenosed although run off is satisfactory.

When you arrive your Set1 Trainee (Dr. A) has introduced himself with the Set 4 Trainee (Dr. B.) watching proceedings. A does well, putting the patient at ease and ensuring that the consultation will proceed at a comfortable pace for the patient and his family. He has already calmed the anxiety of the granddaughter by telling her that no definite decision about ongoing management has been made and that it his role to explain the clinical situation in as much detail as they wish.

He proceeds to discuss treatment options with the patient and family. He covers the possibilities of arterial reconstruction and its attendant risks, the distinct chance of limb loss and the need for carefully managed medical and anaesthetic input into his care before any surgical intervention is carried out.

He senses the families anxiety when the possibility of amputation is raised and quickly assures them that he is well aware of traditional Maori beliefs on this point (that the limb should returned to the place where it is likely the patient will eventually die and be buried).

Dr B recognises the uncomplaining nature of the patient and correctly determines that he is suffering considerable rest pain but is not letting on to his family. B arranges effective pain relief for him, sets up appointments for a medical consult and anaesthetic appraisal and gives them a firm outpatient appointment in two days to allow them time to consider all the options that have been presented to them.

Both A and B demonstrate care and sensitivity with the patient's reduced cognitive function but they also note that the daughter and granddaughter seem quite unaware of this deficit in their father/ grandfather.

### Health Advocacy: Patterns of Behaviour and Behavioural Markers
### Provide care with compassion and respect for patient rights

| Pre-vocational | - Sensitive to the private and confidential issues of information provided in a clinical setting<br>- Is courteous and compassionate to all patients without discrimination<br>- Recognises that culture and beliefs affect patients and their expectations |
|---|---|

| Novice | - Recognises the limits of patient information that is able to be divulged in a clinical setting<br>- Informs patients as to their options<br>- Copes with the challenges presented by different value systems |
|---|---|
| Intermediate | - Adapts patient care according to their concerns and expectations<br>- Assists patients to consider options and make decisions<br>- Advises patients about relevant available support services<br>- Consistently deals with the challenges presented by different value systems |
| Competent | - Communicates with patient's family, friends and other interested parties in an empathic way whilst respecting patient confidentiality<br>- Can lead an end of life discussion with patient, family and carers<br>- Organises appropriate settings to disclose confidential information<br>- Arranges referrals and second opinions when requested |
| Proficient | - Can teach others to lead an end of life discussion with patient, family and carers<br>- Adapts practices and care of patients from diverse backgrounds according to their culture and beliefs |

## Meet patient, carer and family needs

| Pre-vocational | - Identifies the need for families and carers to have information updates<br>- Recognises health needs of an individual patient beyond their immediate condition |
|---|---|

| Novice | - Understands importance of keeping family and carers informed – may need prompting at times to do it<br>- Is aware of, and reports to, the team regarding the health needs of an individual patient beyond their immediate condition<br>- Recognises differing individual patient rights and needs<br>- Identifies gaps between management plan and patient wishes |
|---|---|
| Intermediate | - Keeps family and carers informed about current status and next steps<br>- Advises patients (and their families) on relevant risk factors as well as ways to maintain and/or improve their health<br>- Recognises the impact on families and carers of rescheduling surgery |
| Competent | - Appropriately keeps family and carers informed about relevant potential adverse outcomes<br>- Recognises and has strategies to manage family /patient conflicts and different expectations and concerns<br>- Minimise disruption to patients, family and carers when lists have to be adjusted or surgery needs to be rescheduled |
| Proficient | - Is able to provide an independent opinion to colleagues about challenging family / patient expectations and concerns |

## Respond to cultural and community needs

| Pre-vocational | - Identifies key differences in culture and expression within the community they serve<br>- Recognises key health issues arising from the different cultural values<br>- Identifies vulnerable or marginalised populations that may have limited access to health care resources |
|---|---|

| Novice | - Is aware of the potential impact of cultural differences on the acceptance of treatment for common conditions<br>- Recognises the need to engage the extended family in the consent process in some cultures |
|---|---|
| Intermediate | - Shows awareness of the costs and benefits of different investigations and management strategies<br>- Able to effectively schedule and prioritise patients for surgery<br>- Recognises the impact and potential outcomes for patients who are categorised for waiting lists |
| Competent | - Recognises the need to balance demand and supply<br>- Effectively adapts their approach to the needs, values and beliefs of all patients |
| Proficient | - Demonstrates consideration of the impact of culture, ethnicity and spirituality on patient care<br>- Considers the broader health, social and economic needs of the community<br>- Teaches cultural competence and health advocacy |

## Resources and Support

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

With the beginning of the new year you have just had a change of registrars on your busy acute surgical unit. You have a highly recommended final year trainee who rotates from another centre.

On the post-acute morning ward round they inform you of a 56 year lady who had been admitted late in the afternoon with condition A. As there was theatre time available they had proceeded, as was the custom in the previous unit, to take the patient to theatre and complete operation X. Unfortunately she was slow to recover from her anaesthetic and has been in the HDU overnight.

The next morning your registrar takes you on a ward round. On meeting your new patient you recognise the name as being the same as that of a Board member of your hospital – closer inspection of the clinical notes reveals that the Board member, a former nurse, is her daughter and next of kin. When you review the patient's preoperative x-rays and the pre-morbid level of activity you form the opinion that the preferred management in your hands would have been quite different.

The highly recommended trainee did not discuss their plan of management with you. On inspection of the notes, you find there is no documentation of options, just a brief statement accurately describing diagnosis A and the planned operation X.

### Communication: Patterns of Behaviour and Behavioural Markers

### Discuss and communicate options

| Pre-vocational | - Provides accurate and concise information when communicating with patients, their relatives, and the team<br>- Ensures hand-over takes place and that the information provided is relevant and up to date |
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| Novice | - Ensures patients are fully informed, and fully understand, prior to giving consent<br>- Responds appropriately to patient (family) questions |
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| Intermediate | - Recognises and adapts communication to potential bad news situations<br>- Recognizes limits of own knowledge and willing to refer to other members of the health care team |
| Competent | - Appropriately identifies and addresses un-spoken concerns.<br>- Knows who to provide information to, and when |
| Proficient | - Discusses options with patients (and/or other care providers) and communicates decisions and plans clearly and effectively<br>- Informs patient, family and relevant staff about the expected clinical course for each patient |

## Gather and understand information

| Pre-vocational | - Attentively listens to patients (and their families), peers and colleagues<br>- Respects patient diversity and adapts communication to the context using appropriate language, patterns and levels<br>- Respects patient confidentiality, privacy and autonomy<br>- Gathers information from a variety of sources including the patient, their families, other team members, referral letters, case records, results, and information available electronically |
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| Novice | - Sets an appropriate 'tone' for any communication with patients (their families), peers and colleagues<br>- Elicits information from patients with a combination of open and closed questions<br>- Collects relevant information from other team members or specialist teams pertinent to decision making or patient management |
|---|---|
| Intermediate | - Recognises and adapt communication appropriately to people of differing status<br>- Effectively interprets both verbal and non-verbal forms of communication<br>- Reflects on accuracy of information available and considers gaps or inconsistencies |
| Competent | - Sensitive to, and effectively manages stressful situations<br>- Maintains emotional balance |
| Proficient | - Accurately elicits and synthesises all relevant patient information<br>- Assists trainees and other colleagues to improve understanding of patients and their carers<br>- Seeks timely and accurate information during the consultation, in the ward or clinic and in the operating room. |

## Communicate effectively

| Pre-vocational | - Ensures patients (and their families) participate in decision making<br>- Ensures team is informed about and understands new critical issues or changes in patient condition |
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| Novice | - Identifies potential areas for communication break-down and takes action to avoid problems of mis-communication |
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| Intermediate | - Works effectively with interpreters and other support staff to ensure patient understanding<br>- Communicates complex / difficult information clearly<br>- Can communicate bad news appropriately with patients, families and carers |
| Competent | - Can recognise and repair communication errors quickly<br>- Ensures that all parties in a communication process achieve their goals |
| Proficient | - Effectively exchange information with patients, families, carers, colleagues and other staff<br>- Communicates sensitively and effectively with those holding different cultural values and beliefs |

## Resources and Support

**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.

Your unit was on-call last night. It is the lead up to a public holiday and long weekend. You decide to review all the unit patients with the registrar and intern on Friday morning before handing over to the covering consultant. Your registrar, who is due to sit the Fellowship in a month's time, conducts the ward round introducing you to the patients you have not met and bringing you up to date on progress for those you do know. The intern and registrar already rounded at 7.30am this morning so as to be ready for your arrival. The first patient came in overnight and clearly needs surgery. The patient is comorbid, such that the choice of treatment is to be varied to minimize risk. After a brief discussion with the patient you realize the team has dealt with these issues effectively and the patient is aware of the options and possible outcomes. The registrar asks for confirmation that the planned management is appropriate and does this in a way that defers to your right to make the final decision. The second patient has suffered a postoperative arrhythmia that only developed yesterday and is miserable because they cannot go home for the long weekend and is still waiting for a cardiology review. Your registrar has personally spoken to the cardiology registrar, advised the patient when they are likely to be seen and agreed an interim approach to investigation and treatment with them. The third patient is due to be discharged to a nursing home but there are a number of potential issues to consider and so the registrar is planning to phone the GP responsible for care at the home to brief them as to current status, likely events, and what to do if they occur. The fourth patient has a complaint about the nursing staff but the registrar has discussed this with the nurse-in-charge, and an apology and explanation have already been given .....The ward round goes on like this until you reach the last patient, temporarily located on a medical ward, and suffering from an irresectable malignancy. This patient has a demanding and challenging family and has been harassing the nursing staff ever since admission. The registrar admits that because the patient is an outlier, it has been hard to keep the family as well informed as he/she would have liked, but also that they feel personally challenged by the individual demands of different family members. There have been 3 separate and difficult family meetings in the past 3 days, with limits of care set. You open the case record and find the discussions are well documented but some family members still seem at odds with the staff. The registrar asks if you would like to talk with the patient's daughter and son ....

## Collaboration and Teamwork: Patterns of Behaviour and Behavioural Markers

### Provide timely documentation and exchange of information

| Pre-vocational | - Accepts accountability to maintain accurate records<br>- Follows up on results of investigations<br>- Documents assessment, clinical issues and planned management |
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| **Novice** | - Undertakes effective handover<br>- Recognises the importance of keeping family doctor informed<br>- Appropriately prioritise work schedules, and coordinate straightforward elements of patient care (e.g. consultation with other teams |
| **Intermediate** | - Able to write operation notes with a good knowledge of anatomy, the surgery performed and the patient's needs during the post op. period.<br>- Provides all but the most complex patient information needs |
| **Competent** | - Can obtain appropriate informed consent for most complex cases<br>- Ensures family doctor is informed of significant changes in patient status |
| **Proficient** | - Demonstrates understanding of the complex information needs of the whole team<br>- Championing open disclosure when things go wrong<br>- Ensures information from medical records is appropriately and safely shared when appropriate |

## Establish a shared understanding

| Pre-vocational | - Anticipates patient care needs and communicates them to other members of the team<br>- Actively collects information from other care professionals |
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| Novice | - Listens to opinions of nursing and ancillary staff concerns about patients<br>- Able to negotiate with other units to achieve team and patient needs |
|---|---|
| Intermediate | - Actively seeks opinions of nursing and ancillary staff about concerns for patients<br>- Can brief the team for common procedures and care plans<br>- Accepts the responsibility to inform the head of team about changes in patient status |
| Competent | - Accepts responsibility for briefing and debriefing the team<br>- Respects the expertise of others<br>- Transfers care effectively to other relevant clinicians and non-hospital carers |
| Proficient | - Provides leadership that ensures understanding for all patients |

## Play an active role as a member of a clinical team

| Pre-vocational | - Well prepared for ward rounds and patient management<br>- Accepts assigned tasks<br>- Asks for help when needed |
|---|---|

| Novice | - Meets reasonable deadlines<br>- Accepts responsibility for own roles and tasks<br>- Encourages & respects opinions of ancillary staff and nurses<br>- Recognises roles and areas of expertise of others<br>- Accepts criticism in a positive light<br>- Takes appropriate steps to resolve simple conflicts |
|---|---|
| Intermediate | - Develops positive relationships with all team members<br>- Works cooperatively with others to avoid, reduce, avoid and resolve conflict.<br>- Readily assists other team members who are under pressure |
| Competent | - Identifies and uses a variety of strategies to manage and resolve conflict<br>- Evaluates their own and the team's performance and provides appropriate feedback to others |
| Proficient | - Actively reflects on individual and team performance<br>- Demonstrates clear understanding of 'participatory leadership' |

## Resources and Support

Your surgical unit has had a challenging start to the week. This followed a weekend on-call and a couple of major cases developing complications. A new intern joined the unit yesterday, and although a pleasant individual, you sense a tendency to be indecisive.

Your registrar, a SET trainee, began the morning ward round at 7am instead of 7.30am in anticipation of the extra time that would be required. At 8.15 you are rung on your way into the hospital to be told the registrar will be late for theatre but expects to be there by 9am. The medical student can be assigned to theatre to assist at the start of the case. Is this OK? The registrar suggests he/she should complete the rounds, rather than abandoning the indecisive intern before all tasks have been assigned. You feel a little taken aback at the registrar calling the shots, but on reflection you are delighted to note that the registrar is admirably coping with competing demands, is aware of what needs to be done by whom and when, and is seeking your permission to continue with their plan for the next three quarters of an hour.

Later in the week it is clear the new intern is struggling. A couple of key investigations were not only not ordered, but when asked, the intern implied the results were awaited when clearly the bloods had not been sent in one case and the scan had not been ordered in the other. The registrar knocks on the door of your office to discuss the matter. You have a teleconference in quarter of an hour followed by a meeting of the health executive. The registrar has been to the radiology department, expedited the non-ordered scan and had the intern take the missing bloods. The unit is too busy for this intern and so the registrar has arranged for another intern to provide support to the outlying patients for the next couple of days. Your advice is sought as to how to address the possible dishonesty/evasiveness of the intern. The registrar has counselled the intern as to the importance of being open about forgetting or overlooking something rather than trying to cover it up. The intern seems to have taken the counsel seriously. You are relieved, that for now there is little more to be done, you have been kept well informed, you can watch the intern like a hawk, but the registrar has been proactively dealt with the situation. It is time for that teleconference....

### Management and Leadership: Patterns of Behaviour and Behavioural Markers

#### Setting and maintaining standards

| Pre-vocational | - Observes patient care protocols e.g. hand hygiene, hand over, and VTE prophylaxis<br>- Prioritises work to fit time available<br>- Responds positively to direction<br>- Dresses and presents themselves appropriately for role |
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| Novice | - Is able to review ward patients and be ready for theatre on time<br>- Is supportive of their peers and colleagues<br>- Able to appropriately assign tasks to more junior members of the team |
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| Intermediate | - Recognises the need to be supportive towards senior staff<br>- Communicates important care issues with nursing, medical, and other staff even under pressure<br>- Assists others to understand and observe guidelines, protocols and check lists<br>- Quickly learns and adapts to each new work environment |
| Competent | - Organises surgical teams efficiently<br>- Develops guidelines, protocols and check lists<br>- Effectively manages resources and people to get things done (within the context of the unit and institution) |
| Proficient | - Supports safety and quality by adhering to acceptable principles of surgery<br>- Follows codes of good clinical practice, and adheres to hospital and theatre protocols |

## Leading and inspiring others

| Pre-vocational | - Demonstrates ability to apply medical knowledge to clinical practice<br>- Shows commitment and enthusiasm for their role<br>- Takes responsibility for any task delegated |
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| Novice | - Demonstrates appropriate self confidence and insight<br>- Takes responsibility for allocated roles<br>- Gains trust and support from others<br>- Remains calm under pressure<br>- Engages nursing and ancillary staff in ward rounds |
|---|---|
| Intermediate | - Can make reasoned decisions under pressure<br>- Willing and able to take initiative when needed<br>- Delegates appropriately and takes responsibility<br>- Creates a positive team experience |
| Competent | - Can continue to anticipate, think, and make correct decisions under pressure<br>- Is able to assume leadership when the situation requires<br>- Able to resolve team conflicts<br>- Able to recover challenging situations |
| Proficient | - Demonstrates ability to negotiate effectively<br>- Takes responsibility to identify key issues / problems,<br>- Responds to issues appropriately and proactively<br>- Retains a calm demeanour and leads by example when under pressure. |

## Supporting others

| Pre-vocational | - Establishes good working relationships with team members |
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| Novice | - Recognise team members who need support and willing to help |
|---|---|
| Intermediate | - Provides support and advice to team members when needed<br>- Listens to, and incorporates the views others<br>- Recognises and acknowledges the contribution of others |
| Competent | - Provides constructive feedback to team members<br>- Able to intercede on behalf of others when appropriate<br>- Encourages participation by all members of the team |
| Proficient | - Provides critical feedback<br>- Assists with the development of a remedial plan where there are performance issues<br>- Provides cognitive and emotional help to team members as appropriate<br>- Determines team member's abilities and tailors the style of leadership accordingly<br>- Can adopt a suitably forceful manner if appropriate without undermining the role of other team members |

## Resources and Support

Dr Y is an excellent registrar whom patients and staff appreciate and give positive feedback on. He/She is popular with peers, the ED are impressed with his/her communication and responsiveness. He/she is well prepared for ward rounds and addresses patient issues effectively and with empathy. You have been pleased with their acquisition of operative skills. Dr Y also has a vibrant social life and his/her days off are characterized by taking the opportunities to attend many major sporting and entertainment events. The unit is running well and it is time for Dr Y's interim assessment. "When are you planning to sit your exam and how is your studying progressing", you ask innocently? The response given indicates Dr Y is not studying much other than to achieve the requested unit presentations and assigned tasks. Dr Y has apparently no immediate plans to sit the examination but is aware that he/she needs to get down to it. You realize Dr Y has not asked for any conference leave and has none planned. He/she is not even attending the forthcoming specialty annual meeting, on the grounds that he/she thought the unit would be compromised. In addressing the challenges of study and assessment, Dr Y is in full agreement that he/she needs to be more disciplined and work harder …. but what will happen if he/she doesn't get round to doing the necessary study to succeed at the next level of examination?

## Scholar and Teacher: Patterns of Behaviour and Behavioural Markers

### Show commitment to lifelong learning

| Pre-vocational | - Demonstrates an interest and enthusiasm for learning<br>- Participates in medical education sessions |
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| Novice | - Readily accepts educational opportunities<br>- Develops own study plan<br>- Identifies and uses effective strategies for study<br>- Is able to reflect on performance and what can be improved |
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| Intermediate | - Accurately self-assesses level of own learning<br>- Applies their learning to the clinical situation in most cases<br>- Identifies what they need to learn from their clinical experience |
| Competent | - Able to organise their educational resources in order to address the breadth and depth of their specialty<br>- Accurately identifies own learning needs and finds resources to meet those needs<br>- Recognises learning opportunities they can gain from others |
| Proficient | - Engages in lifelong commitment to reflective learning<br>- Organises their own continuing medical education<br>- Seeks learning opportunities<br>- Able to assess risks and benefits of new technologies and treatments for individual patients<br>- Introduces new technologies and treatments in an appropriate manner. |

## Teach, supervise and assess

| Pre-vocational | - Able to supervise interns<br>- Willing to teach basic principles and skills already acquired |
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| Novice | - Leads a clinical ward round<br>- Demonstrates a genuine interest in ad hoc and structured teaching |
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| Intermediate | - Recognises performance gaps in junior medical staff<br>- Recognises opportunities for, and develops effective skills for "teaching-on-the-run" |
| Competent | - Meets the challenge of supervision across all nine competencies – particularly collaboration, communication and professionalism<br>- Can be trusted to manage the surgical team |
| Proficient | - Promotes learning and research opportunities for the unit<br>- Able to plan and conduct a teaching session and prepares the necessary materials<br>- Facilitate education of their students, patients, trainees, colleagues, other health professionals and the community |

## Improving surgical practice

| Pre-vocational | - Reads medical and clinical literature and can discuss with others<br>- Consults protocols and guidelines<br>- Participates in clinical audit<br>- Actively asks for advice to prevent error |
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| Novice | - Can critically appraise a paper and present findings to others<br>- Able to undertake a clinical review<br>- Anticipates errors and seeks advice |
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| Intermediate | - Tests ideas gained from the literature in discussion with more senior colleagues<br>- Can generate and develop a research hypothesis<br>- Able to collect research data and prepare a research presentation (paper or poster) |
| Competent | - Can critically appraise a paper and present findings to an informed audience.<br>- Able to undertake a clinical review<br>- Anticipates errors and seeks advice |
| Proficient | - Changes or adapts surgical practice in response to new knowledge and developing best practice activities.<br>- Contributes to the development and/or dissemination of new medical knowledge and practices |

## Resources and Support