



M



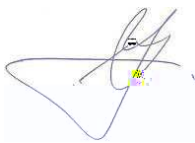
This research project is supported

Medical education has changed dramatically over the last 40 years as we have climbed Miller's pyramid. Our workplace-based assessment toolbox is now extremely well-filled with instruments, however every assessment has its limitations and there is no single assessment or method that can capture all of the competencies. Assessment has now moved from an input focus, to an output or outcome focus.

Defining how doctors are expected to perform at the end of training includes competencies that are outside the knowledge domain or the technical expertise domain. Skills that are more complex such as professionalism, team-work, dealing with uncertainty, or managing multi-morbidity are developed in a longitudinal fashion from feedback in the workplace.

Learning and performance will vary across different contexts and a robust training and assessment program utilises this fact. Regular narrative feedback, self-directed learning, the relationship of the trainer and the trainee, and programmatic assessment are the main-stay of this model. It will involve moving from a summative/formative discussion to one of low-stakes to high-stakes assessments,

esraej0i86.99e ce



Cees P.M. van der Vleuten, PhD
Professor of Education
Director School of Health Professions Education
Maastricht University

Glossary

The four essential elements that together make up the Workplace-based Assessment Framework for Australian General Practice Training (the Framework) are: WBA tools, the assessor, the registrar and the context (see Figure 2).

The advantage of embedding assessment within a real-world context is balanced by the fact that establishing individual WBA validity and reliability is difficult. Therefore, the way in which WBAs are used must be structured to maximise the benefit of the real-world context and minimise the risk of biased



2. The Framework Overview



Theoretical underpinning

Whilst multiple frameworks have been used to assess the validity, generalisability and reliability of WBAs, the general consensus is that WBAs have low reliability unless entrustment-based scales are used.

Therefore, it is recommended that entrustment scales be used within as many WBAs as possible. Low reliability is also likely explained by the various factors which disturb these psychometric properties, including users (e.g. assessors' roles or seniority, or users' attitudes); the purpose of a WBA; and the relationship between

Safety assessment (Streams: 2, 3a, 3b, 3d).

Why: Registrars typically come straight from the hospital system into general practice and so are familiar with a very different style of practice. Timed appointments, billing patients, computer software, working in a clinic-based team etc. are all new to the registrar. One of the biggest differences is that the registrar is expected to consult by themselves with no direct observation when consulting from the first week. The degree to which registrars are safe to practice, even with the supervisor available on-site, needs to be assessed as early as possible.

What: The safety assessment should include direct observation of the registrar's consulting skills with case note review, followed by entrustment scales. An MCQ test should be undertaken early in training to establish baseline knowledge. In addition, an internal MSF by colleagues should be undertaken. Feedback should be gathered from ME small group work, factoring in whether registrars need additional support. Flagging registrars who need more support at this stage is important, as tailoring the training pathway to an individual's needs means they are more likely to be successful GPs.

When: This is a once-off assessment, undertaken within weeks one to eight of commencing a community general practice placement.

Who: It is recommended that the training organisation should facilitate this with the supervisors and then support the registrar and supervisor to ensure patient and practice safety.

Supervisor direct observation of the registrar (Streams: 1, 2, 3a, 3b, 3c, 3d).

Why: This allows the supervisor to assess the initial and subsequent safety of the registrar, track progress during their placement, and develop a relationship with the registrar that results often in the registrar feeling more comfortable with the supervisor observing them. However, this also brings with it the potential for bias, as the supervisor may be either consciously or unconsciously reluctant to give critical or negative feedback due to the relationship, the patients may know the supervisor and the supervisor may not have as much training in medical education and feedback techniques compared with MEs.

What: EPAs should be used as part of the observation.

How: Supervisors should receive specific training in undertaking a DOV and in the appropriate delivery of feedback to minimise potential bias.

When: A DOV performed by the supervisor should be undertaken each six months of community training, ideally early in the term to establish the level of supervision required.

Direct observation of registrar by ME or ECT (Streams: 1, 2, 3a, 3b, 3c, 3d).

Why: An ECT or ME should observe a registrar consulting and provide feedback and education to the registrar. This is an important assessment to allow for registrar professionalism competencies to be observed.

What: EPAs should be used as part of the observation. Feedback should be given at the time of observation, in both written and verbal formats. A discussion should occur after the session with the supervisor, registrar and observer to discuss progress.

Who: ECT visitors usually do not have an established relationship with the registrar, thus are more likely to give an objective assessment and be able to benchmark the registrar against expectations and other registrars. An assigned ME does not have a day-to-day relationship with the registrar or patients, but often knows the registrar from small groups, previous visits, or training advisor contacts, thus can observe with some prior knowledge of competencies.

When: A DOV performed by a ME or trained ECT should be undertaken each six months of community training, ideally later in the term to ensure minimal overlap with supervisor DOV.

Direct observation video reviews (Streams: 3b, 3d).

Why: Video reviews can be undertaken to assess professionalism and consultation skills. These are often used as a self-reflection tool, especially in rural and remote areas. However, overall they can be unpopular due to logistics with registrars, supervisors, MEs and RTOs.

What: This includes recording of three to six patient consults, followed by playback with the supervisor or ME and registrar reflection.

Who: Video reviews are useful for remediation purposes, especially for registrars with professionalism issues. However, they are also useful for excellent registrars who want to refine their skills or for registrars in rural and remote areas where it is more difficult to have face-to-face direct observation. State-based legislation should be referred to in regards to the legality of recording patient consults prior to undertaking.

Why: These are used to map registrar progression through training, ensuring they are progressing at an expected level. This assessment is also an opportunity to discuss training concerns.

What: A supervisor mid and end of term assessment should be conducted every six months until the registrar has

Learning log (Streams: 2, 3b, 3d).

Why: The learning log is seen as an additional tool within the Framework, rather than a stand-alone WBA. It ensures a reflective and outcome-based process associated with day-to-day learning and all WBAs. A self-managed, dynamic and integrated learning log of day-to-day issues that can be discussed with the supervisor, ME or ECT, allowing for the registrar to track their learning needs is recommended. The log will include daily events that the registrar needs to learn more about, for example review menopause patches, look up mechanism of sitagliptin or talk to physiotherapist about knee braces.

What: The learning log needs to be easily updatable between consults and have the ability to be readable or accessible by others. The learning log needs to be updated after each WBA with what has been learnt and what will change in the registrar's practice. Learning plans were regarded by interviewees as ineffective and under-utilised, thus there is a need for a dynamic platform to host registrar learning needs.

When: At least six issues chosen from the learning log each semester should be presented to the assigned ME as evidence of self-directed and reflective learning.

Procedural skills log (Streams: 1, 3b and Environmental Scan).

Why: Procedural skills logs were not originally included in the list of WBAs that we requested from the training organisations. However, the interviewees identified this as an unmet need. A procedural skills log allows registrars to tick off procedural

Patient Encounter Tracking And Learning tool (PETAL) (Streams: 2,3b).



Table 3. Mapping WBAs against the RACGP domains of general practice and core skills

Domains								
<p>Domain 1 CS1.1 GPs communicate effectively & appropriately to provide quality care. CS1.2 Through effective health education, GPs promote health and wellbeing to empower patients.</p>								
<p>Domain 2 CS2.1 GPs provide the primary contact for holistic & patient-centred care. CS2.2 GPs diagnose & manage the full range of health conditions in a diverse range of patients, across the lifespan through a therapeutic relationship. CS2.3 GPs are informed & innovative. CS2.4 GPs collaborate & coordinate care.</p>								
<p>Domain 3 CS3.1 GPs make rational decisions based on the current & future health needs of the community & the Australian healthcare system. CS3.2 GPs effectively lead to address the unique health needs of the community.</p>								
<p>Domain 4 CS41 GPs are ethical & professional. CS42 GPs are self-aware CS43 GPs mentor, teach & research to improve quality of care</p>								

WBA tool delivery

This section provides recommendations as to how the WBA tools should be best delivered within the AGPT context.

WBAs should be available through a user-friendly, efficient online learning system (Streams: 1, 2, 3a, 3b, 3c, 3d).

Registrars should be clearly informed about each WBA and its purpose (Streams: 1, 3b,3c,3d).

Registrars should be clearly informed

about the processes involved in each WBA. WBA definitions should be defined as low, medium or high stakes (Streams: 1, 3b, 3d).

The training organisation should set up processes to ensure that specific,

WBAs should be spaced at regular intervals throughout training to map registrar progression (Streams: 3a, 3b, 3c).

The primary purpose of a programmatic assessment approach to WBAs should be to give feedback to encourage self-reflection and learning, a secondary purpose should

WBA tool features

This section focuses on the recommended tool features. There are a number of features which are important for integration within WBA tools to improve their effectiveness. This includes inclusion of EPAs within assessments, benchmarking, narrative and cultural feedback

The same group of assessors should reassess the registrar at regular intervals (Streams: 1,3a, 3b, 3c, 3d).

Feedback is an essential component within WBA and appropriate systems

Multiple assessors should be used to reduce bias (Streams: 1, 2, 3a, 3b, 3d).

The assessor should also receive training in the flagging process, so that when concerns do arise, they have the tools and understanding of the flagging and remediation process. In addition, assessors should be trained in how to communicate with the registrar regarding flags and notifying the registrar of whether they have been flagged, reducing failure to fail.

When assessors provide psychological support to a registrar, there should be formal pathways set up to ensure that the balance of confidentiality about the registrar's issues, their ongoing training requirements and the

safsaf8311.008(thw)9i10.1074(e)9.sues mng .982(ommed)]T.J T[(saf)T.9839(405ing r)10o.1115(e694.9943(ar)9.nis.008(t202n pr)1ort t)11ld
be ft8ninglable1.1077(o5a r)orte4.0162(e wivi pr)1whise,0857(a03)TJ T[(tha)managr)10.0T[(thaiinglani.1074)38.36. 9962(eJ Tby mef)9.99emeat20

5. High-stakes assessments

This section provides recommended principles for making high-stakes decisions such as registrar flagging and remediation.

Flagging and remediation

The training organisation should have a documented transparent process outlining how registrar flagging occurs (Streams: 2, 3a, 3b, 3c, 3d).

'Flagging' is a process whereby those registrars who are struggling with the general practice training are either 'monitored' to watch, or 'actioned' if they need more assistance in order to fulfil the requirements of the training program. If anyone at any time has a concern about a registrar, they should be 'flagged', preferably to the assigned ME. Many supervisors and practice managers are reluctant to document concerns and so would prefer to communicate the concern verbally. There are many reasons for flagging but essentially, they can be categorised into *Personal, Practice or Professionalism*.

Some will be flagged before they start training because of their knowledge or attitude, and some because of their health or social circumstances. A 'diagnostic process' investigating what is behind the concern that has been

raised will ensure that any program is tailored to the particular needs of the registrar. Templates are helpful in order to outline generic pathways that may have assisted with particular issues in the past, so that the assigned ME, who already has a relationship with the registrar can be supported to continue to monitor them. An important flag will be that of safety, including over-confident registrars who do not ask for appropriate assistance. It is essential to flag registrars as early as possible so that additional resources and strategies can be implemented to improve the registrar's chance of success.

Consequences of non-compliance with WBAs, lack of insight, or unsafe practice should be clearly documented (Streams: 2, 3a, 3b, 3c, 3d).

WBAs are an integral part of the flagging process as they can ensure closer monitoring of the registrar, tailored feedback for their needs and ascertain the resources needed.

Therefore, consequences of non-compliance with WBAs, lack of insight, or unsafe practice should be clearly documented.

Registrar flagging should take into consideration a collation of WBA feedback using a programmatic assessment approach (Streams: 3b, 3d).

A registrar who is being 'monitored' will need to have a programmatic view of what is happening. Unless it is a high risk flag, a single issue on a single WBA will not be enough to flag a registrar. An ME who has oversight of all the WBAs is best positioned to make a decision about whether this one flag is part of a bigger picture that needs 'action' or whether this registrar can continue to be 'monitored'. It may be that extra WBAs are necessary as part of the 'diagnosis' in order to clarify the position.

The assessments that feed into the flagging, monitoring and remediation processes will be multifactorial and will include review of:

- Compliance and outcomes of WBAs.
- Personal and social issues.
- Context in which the registrar is practicing.
- Registrar/supervisor relationship (it may be that this has broken down and is not conducive to learning).

These factors should be diagnosed and collated by an ME, preferably one who has a relationship with the registrar.

Flagged registrars who are deemed by an ME to require additional support require a tailored intervention plan that addresses the developmental gaps identified (Streams: 3b, 3d).

If a registrar is escalated from a 'monitoring' category to one of 'action' then a comprehensive 'diagnosis' of the registrar's difficulties will need to be made, a management or intervention plan compiled, and the registrar and ME sign an agreement articulating I 1025.4(dn)emennt or i195 3d4ME T Q 0.918 0.92;leeFT Qam68k918 0.929.911(a005s005EI 1025.4(f9(tr)215.0 Flagabeagg (,))TJ T[(('monit)11600120)-199.98ed. Cer a 2bteed rar anthe ar andsp and ta)1088008(ain78abe r)21..08ng,(o r)10.020 li2(ok)28.72elarbin relationshso be thaeo tr'monit

Flags should be recorded in an online portfolio accessible to the registrar, assessors and training organisation (Streams: 3b, 3d).

Flagged registrars should be monitored and reviewed regularly and managed by a panel of senior MEs (Streams: 1, 2, 3b, 3d).

All stakeholders should be trained in the flagging process (Streams 3c, 3d).

All stakeholders should be trained in the possible reasons for flagging, the flagging and remediation pathways and the outcomes expected from flagging and remediation. This should include professionalism and communication. Flags may result from a number of events including WBAs, conversations with stakeholders (e.g. ME, practice manager, supervisor, registrar, training coordinator). The different types of flags should be understood by training coordinators so as to ensure flags can be captured and documented across personal, practice or professional categories.

Consequences for non-completion of WBAs

Non-compliance with flagging or remediation requirements should also have clear accountability pathways and consequences documented (Streams: 2, 3b, 3d).

Following up mandatory WBAs can be an administrative burden on the training organisation. Making WBAs mandatory ensures that the training organisation can monitor a registrar's safety and progression through training, and make a valid judgement on the registrar's preparedness for independent practice. Follow-up of registrars who do not comply with WBA requirements is essential, with flagging as an outcome for those who do not meet expectations. It may be that there are personal or social issues that are the problem, but lack of compliance in training and assessment requirements is sometimes a sign of a deeper professionalism issue that needs to be addressed.

It is important to have transparent guidelines about the time-frames and quality that is expected and the consequences of non-compliance. Initial monitoring should be done by an administrative team member such as a training coordinator with a transparent process for escalation if the registrar does not comply or behaves in an unprofessional manner with the training coordinator. Non-compliance with flagging or remediation requirements should also have clear accountability pathways and the consequences spelled out in the remediation documentation.

Programmatic assessment for high-stakes decisions

The final high-stakes programmatic assessment decision should be made by a panel of senior MEs (Streams: 1, 2, 3b, 3d).

There is no single WBA that will adequately reflect the range of competencies needed to affirm that a registrar is progressing. As well as collation of the outcomes of the WBAs, collation of expert opinions is also important in order to assess a final outcome regarding successful completion of training. The final high-stakes programmatic assessment decision should be by a panel of senior MEs. Most RTOs have a panel of such experts who discuss the collated WBA outcomes along with any flags such as non-compliance, relationship with RTO staff, exam progress, and engagement with training etc., in order to affirm that the registrar is deemed to be a safe and independent GP who is a self-reflective life-long learner.

High-stakes decisions will need to be made in a standardised and reliable way by highly trained assessors who do not have a close day-to-day relationship with the registrar. MEs are well-suited to make medium-stakes assessments as they may know the registrar but are more likely to be one step removed and so more likely to be objective.

In particular, the final assessment should include written exams plus a sign-off of a programmatic portfolio of WBAs. The stakeholders who participated in the interviews and focus groups felt very strongly that WBAs and exams are testing different aspects of registrar ability – the exams mostly test knowledge and some critical thinking skills, and the WBAs assess remaining competencies.

Ensuring that several assessors have affirmed that the registrar is 'safe to practice unsupervised' in all

High-stakes assessments, where the registrar's progress is being assessed using a WBA, is best done by an external assessor and not by the supervisor. This is a strong message in the literature because of the relationship of the supervisor and registrar and the greater potential for bias. As coach, employer, role model and often confidante, the supervisor will also feel uncomfortable taking on this role. The focus group participants also emphasised that it would be detrimental for the day-to-day corridor and case-based teaching that registrars receive from their supervisors, as they would be reluctant to ask 'stupid' questions or discuss personal problems.

Often supervisors will be practice owners and there will be a potential bias, as they will also be negotiating the registrar's employment contract. On occasions, the relationship between the supervisor and the registrar is not ideal, or the supervisor is interested in the registrar becoming part of the practice, and so any high-stakes assessment is likely to be biased one way or the other.

High-stakes assessments for remediation should be collated in a programmatic manner with a variety of different assessors (Stream: 3d).

High-stakes assessments used to monitor remediation must collate a portfolio of WBAs in a programmatic way to inform decisions. It needs to be made clear to the registrar that at this stage the WBAs are high-stakes and hence there will not be timely constructive feedback given, but an assessment of whether training should continue or the registrar should be withdrawn. The programmatic assessment might include: DOV, RCA, MSF, video review, and structured learning plans. A panel of senior MEs should review the portfolio and make a decision.

However, the registrars in the focus groups universally valued feedback, and found it frustrating when all they received was a ticked box with little narrative. Training assessors to give constructive, outcome-based feedback, and empowering registrars to ask for feedback and then to

The training organisation should foster a culture of excellence, for itself, its staff, its programs and the registrars. The culture of lifelong learning extends beyond the registrars and is influenced by the supervisors, MEs, training

Training organisations need to ensure that registrars are aware of the mandatory expectations of training and that for independent and safe practice additional WBAs may be required. (Streams: 1, 3b, 3d).

Training organisations need to ensure that registrars are aware of the mandatory expectations of training and that for independent and safe practice additional WBAs may be required. (Streams: 1, 3b, 3d).

Training organisation support for WBA assessors is critical. Training coordinators are essential to provide support to assessors (Streams: 2, 3b).

There is a need for training organisations to establish early on that training in general practice is not

MEs, supervisors and practice managers will all rely on an efficient and engaged training coordinator who is able to easily negotiate the IT system in order to discuss timelines and compliance with WBAs. This is especially important for those registrars who have been flagged when the ME will usually be more closely involved.

Recognition/payment for assessor investment into WBAs is important (Streams: 1,3b).

Running a successful general practice training program with a suite of WBAs requires engaged staff who feel adequately supported and remunerated. Supervisors are busy GPs and their consulting time earns them income. Using this time to train a registrar means they are not earning for themselves and the training organisation should ensure they remunerate the supervisor to the best of their ability. Supervisors are also required to invest their time in assessor training and in giving feedback, dealing with difficult registrars etc. In order to ensure engagement of supervisors in this process, they should also be recognised and remunerated for this time. There should also be increased remuneration for supervisors who provide a higher level of supervision.

For many registrars who have come from a hospital system with maternity leave, professional development funding and long service leave entitlements, coming into general practice can mean a decrease in income. It is important that their training time is quarantined and remunerated and that they do not feel pushed to consult during this time, either by themselves, or by the practice.

Training plans allow registrars to envisage their future training timeline and assessors to better understand future requirements (Streams: 2, 3b).

Training plans created by the training coordinator and discussed with the registrar provide a visual appreciation of the training requirements. In addition, they ensure the training organisation is accountable to the RACGP and that all college requirements are incorporated into the plan. Training plans can be adapted based on WBA completion and whether flagging has occurred, allowing for additional WBAs to be added. Training plans can be viewed by the ME and supervisor so they are aware of progression and the next steps that need to be taken. Finally, training plans are important for registrars who are working part-time, allowing for WBAs to be appropriately planned based on the full-time equivalent.

Practice Context

A positive relationship between the supervisor and registrar leads to more effective WBA outcomes (Streams: 1,3a, 3b).

The relationship between the supervisor and the registrar will impact on the likelihood of the registrar integrating the supervisor's feedback into learning. A positive relationship becomes one of trust, mentoring and role-modelling the craft of general practice. The registrar is more likely to feel at ease with being observed, assessed and accepting feedback. If the registrar respects the opinion of the supervisor, they are more likely to accept and ask for their feedback.

They are also more likely to accept praise about progression, as they are aware of the longitudinal relationship and the care with which the supervisor has observed, assessed and communicated with them in the past. This is obviously also likely to be to the supervisor's advantage if they are looking for good GPs for future workforce in their practice as the collegial relationship of mutual respect, trust and open communication continues to be important in GPs who work together long-term.

How GPs are trained has changed dramatically over the last few decades. We now know that being a good GP is not just about having a great deal of knowledge or passing the exams. Becoming a 'safe and competent GP who is a self-reflective, life-long learner' is a process that can be facilitated by valid assessment tools, well-trained assessors, engaged registrars and a supportive context.

References

- Kane, M. T. (2001). Current concerns in validity theory. *Journal of educational measurement*, 38(4), 319-342.
- Magin, P., Morgan, S., Henderson, K., Tapley, A., Scott, J., Spike, N. et al. (2015). The Registrars' Clinical Encounters in Training (ReCEnT) project: Educational and research aspects of documenting general practice trainees' clinical experience. *Australian family physician*, 44(9), 681.
- Miller, G. E. (1990). The assessment of clinical skills/competence/performance. *Academic medicine*, 65 (9): S63-67.
- Norcini J., Blank L.L., Arnold G. K., Kimball, H.R. (1995). The Mini-CEX (Clinical Evaluation Exercise); A Preliminary Investigation. *Annals of internal medicine*, 1995; 123 (10): 795-9.
- Royal Australian College of General Practitioners. (2015). Competency profile of the Australian general practitioner at the point of Fellowship. Available from: <https://www.racgp.org.au/education/Registrars/fellowship-pathways/general-practice-education-framework>.
- Wenger, E. (1998): *Communities of Practice: learning, meaning and identity*, Cambridge, Cambridge University Press.

