ANZCA
FPM

An evolutionary direction for accreditation of college training programs

Final report:

ANZCA FPM Accreditation and Learning Environment Project

9 July 2021

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The accreditation and learning environment project group (ALEPG) recognises that our work occurs on First Nations' lands.

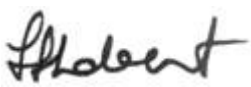
We acknowledge the traditional custodians of the countries throughout Australia and recognise their unique cultural and spiritual relationships to the land, waters and seas and their rich contribution to society. We pay our respects to ancestors and Elders, past and present.

We acknowledge and respect Māori as the Tangata Whenua of Aotearoa and are committed to upholding the principles of the Treaty of Waitangi, fostering the relationship of Te Whare Tohu o Te Hau Whakaora (the college) with Māori, supporting Māori fellows and trainees, and striving to improve the health of Māori.

We greatly benefit from the generosity of fellows and staff from other colleges in Australia and New Zealand and accrediting bodies internationally who shared their current approaches and future visions for leading practice in accreditation.

Our thanks to ANZCA and FPM fellows, trainees and staff within our communities of practice for their contributions, including feedback on our interim report. ALEPG members have provided sustained and thoughtful input to this work over several years, despite the major disruption from the pandemic. College training accreditation groups and visitors assisted in evaluating current approaches.

The International Association of Medical Regulatory Authorities defines accreditation as "the process by which a credible, independent body assesses the quality of an education program to provide assurance that it produces graduates who are competent to practise safely and effectively as specialist practitioners".[1] Accreditation is a powerful tool which, when used well, not only assures minimum standards but also supports striving for excellence with training improvements. We commend to you our recommendations (section 2). Our hope is that future work arising from this report strengthens how training sites and rotations meet the educational needs of our trainees and support their supervisors, in order to serve the Australian and New Zealand communities.[i]



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[i] The college accredits sites for training in anaesthesia, pain medicine and diving and hyperbaric medicine. The college is designing or redesigning other training programs which also require site accreditation. For anaesthesia, accredited sites are typically departments within public teaching hospitals, although some private hospitals are also accredited. For pain medicine training, accredited sites may be units within hospitals or freestanding practices. Wherever the terms "organisation", "department" or "unit" are used (interchangeably) in this report, they refer to all types of training sites, unless specifically qualified.

Acronyms

ACEM	Australasian College for Emergency Medicine
ACGME	American Council for Graduate Medical Education
AHMAC	Australian Health Ministers Advisory Committee
ALEPG	Accreditation and learning environment project group
AMC	Australian Medical Council
AMS	Accreditation management system
ANZCA	Australian and New Zealand College of Anaesthetists
BDSH	Bullying, discrimination and sexual harassment
CAI	College of Anaesthesiologists of Ireland
CanERA	Canadian excellence in residency education
CanRAC	Canadian Accreditation Consortium
CBME	Competency-based medical education
CBME PG	Competency-based medical education project group
CICM	College of Intensive Care Medicine of Australia and New Zealand
CLER	Clinical learning environment review, US
CPD	Continuing professional development
CPMC	Council of Presidents of Medical Colleges
CQI	Continuous quality improvement
DHM	Diving and hyperbaric medicine
DPA	Director of professional affairs
EDEC	ANZCA education development and evaluation committee
EEM	Educational environment measure
EEMC	ANZCA education executive management committee
EMAC	Effective management of anaesthetic crises
EO	ANZCA education officer
EPA	Entrustable professional activity
ESPG	Educator skills project group
FPM	Faculty of Pain Medicine, ANZCA
GMC	General Medical Council, United Kingdom

HOD	Head of department
HWPC	Health Workforce Principal Committee
IAMRA	International Association of Medical Regulatory Authorities
MBA	Medical Board of Australia
MCNZ	Medical Council of New Zealand
MTS	Medical Training Survey (of MBA)
NAS	Next accreditation system, US
NZ	New Zealand
PFSC	ANZCA Provisional Fellowship Sub-committee
PGME	Postgraduate medical education
QA	Quality assurance
RACMA	Royal Australasian College of Medical Administrators
RACP	Royal Australasian College of Physicians
RACS	Royal Australasian College of Surgeons
RANZCOG	Royal Australian and NZ College of Obstetricians and Gynaecologists
RANZCP	Royal Australian and NZ College of Psychiatrists
RCoA	Royal College of Anaesthetists, United Kingdom
RCPSC	Royal College of Physicians and Surgeons of Canada
RGA	Rural generalist anaesthesia/anaesthetist
ROT	ANZCA rotational supervisor
SOT	Supervisor of training
SSU	Specialised study unit
TAC	ANZCA training accreditation committee
TPS	ANZCA training portfolio system
TSA	Training site accreditation portal (anaesthesia accreditation only)
TSP	Trainee support process (formerly trainee in difficulty process)
TUAC	FPM training unit accreditation committee
VOP	Volume of practice
WBA	Workplace based assessment
WFME	World Federation for Medical Education

1. Executive summary

Overview

The college convened the accreditation and learning environment project group (ALEPG) as part of training evolution. Our aims were:

1. To benchmark the college against best practice in accreditation to set a strategic direction for evolution of accreditation, and
2. To improve evaluation of the clinical learning environment (CLE) through accreditation.

Methods

In order to define gaps between current and best practice, and to make recommendations on accreditation of college training programs, we undertook the following:

1. **An environmental scan** of relevant key developments that impact training accreditation
2. **Literature reviews** on CLE in postgraduate medical education (PGME) and PGME accreditation in an era of competency-based medical education (CBME)
3. **Consultation** with postgraduate accrediting bodies in North America, the United Kingdom and Ireland, and binational medical colleges in Australia and New Zealand on current approaches and future directions
4. **Evaluation** of current anaesthesia and pain medicine training program accreditation standards and procedures
5. **Benchmarking** of current college approaches against best practice frameworks and findings, in order to characterise gaps, support interim recommendations and guide options
6. **Stakeholder feedback** on the interim recommendations and options to allow ALEPG to refine the former and determine a preferred approach amongst each group of options.

Results

Our key outcomes are:

1. An **accreditation glossary** (section 4.2), with a CLE definition for the college:

   The clinical learning environment (CLE) is how trainees experience the curriculum in their workplaces. It includes interpersonal interactions, culture and resources.

2. An understanding that **CLE is a key driver of training outcomes** including trainee learning, assessment performance, wellbeing and graduate outcomes (section 4.3). We have developed a pictorial of **CLE domains** (figure 4) that can be used for future redesign, training support and communication purposes. We have also identified **CLE tools** that are relevant to training in anaesthesia (table 3) and pain medicine (table 4), and addressed issues of their feasibility, reliability, and mechanisms to ensure trainee safety. Accreditation is a crucial mechanism for evaluating and improving CLE.

3. **Evaluation of our current accreditation practices,** through process descriptions (appendix C) and visitor surveys (appendix D). These demonstrate the value of the

peer review aspect of accreditation and the significant contributions made by our volunteer accreditors. They also highlight areas for improvement.

4. **Summary of current PGME accreditation best practice findings**. The overarching principle is that outcomes-based education requires outcomes-based accreditation. Key findings are summarised in figure 1 and table 15. We have identified examples of leading practice at consultation (table 10) and useful accreditation tools (table 11).

5. **Gaps between our current practice and best practice** as demonstrated in mapping to the AMC/MCNZ accreditation standards (table 12), the Akdemir framework (table 13) and CLE domains (table 14). These maps highlight priority areas for accreditation evolution, guiding our project recommendations.

6. **Recommendations** This project has identified diverse opportunities for improvement across our training accreditation practices. We recommend the college convenes an accreditation renewal project, with a cross-program approach that is scalable for current and future training programs. The key components of this renewal, arising from our recommendations, are in figure 2. We have tested these recommendations in stakeholder consultation (appendix E), modified them and then applied an opportunity and risk assessment framework to each recommendation (Table 1).

7. Whilst not within scope of accreditation redesign, the project group also supports **better integration of the effective management of anaesthetic crises (EMAC) course** into college educational processes (see section 2.3).

Figure 1. Key findings on best practice in accreditation

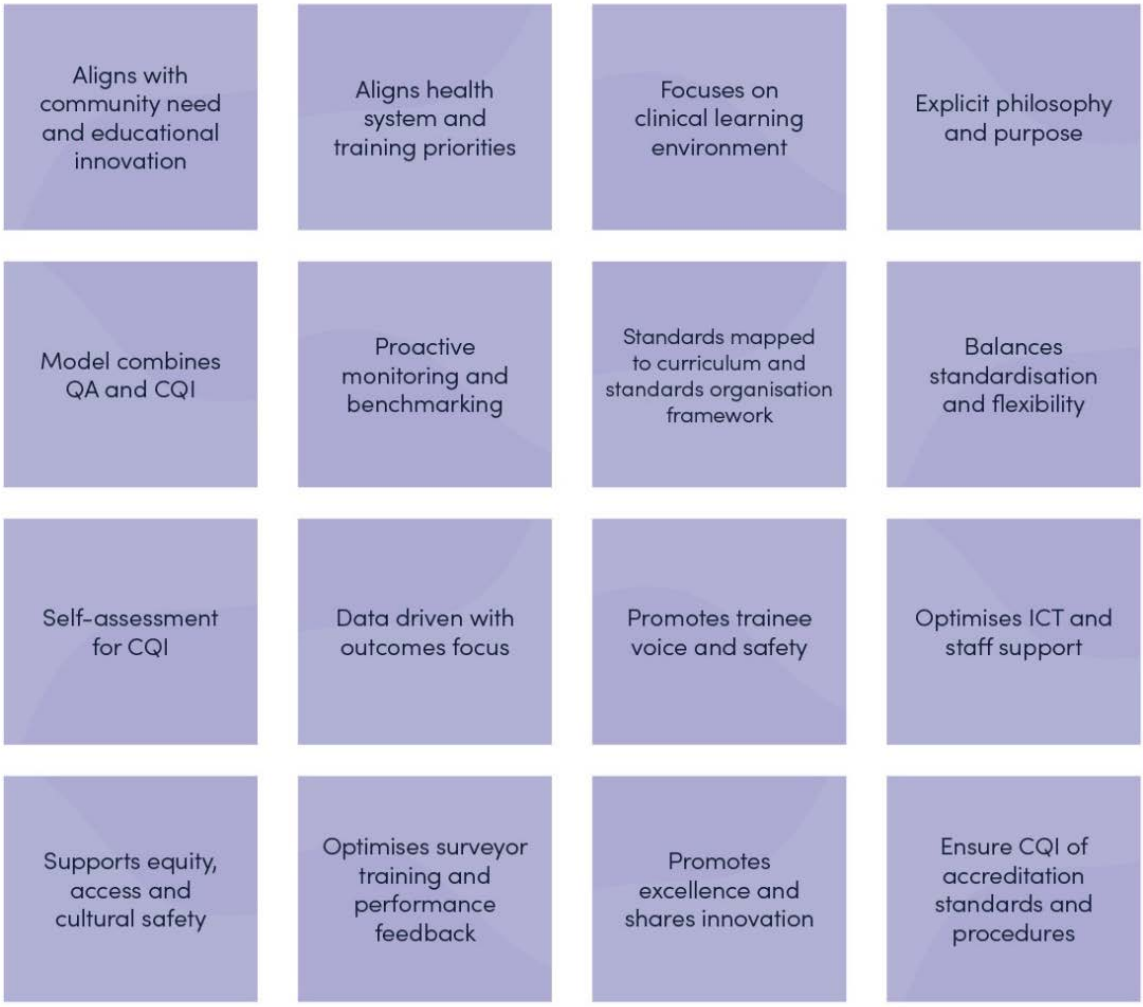
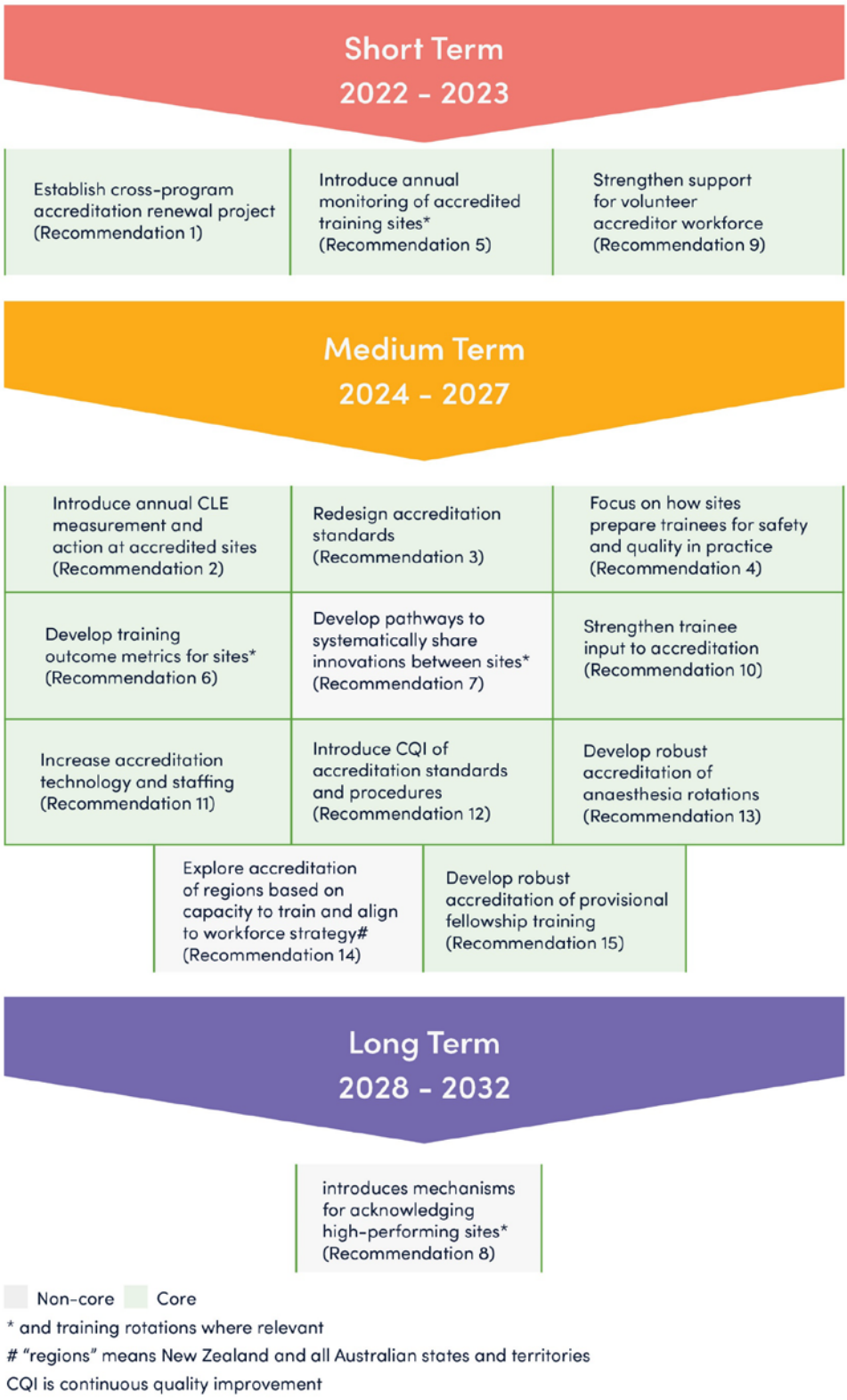


Figure 2. Key components of recommended accreditation redesign ii



[ii] Accreditation literature and practice supports the importance of accreditation supporting "systems-based care" or how trainees are prepared to understand complex systems and improve them for better patient outcomes.[2] In the ANZCA training curriculum this is part of the clinical fundamental "safety and quality in practice" and for the FPM curriculum it is in the role "Leader and manager".

Conclusions

Specialist training is a shared responsibility of the college and health services. Both should expect that accreditation is performed in a high-quality, maximally-efficient manner, avoiding excessive bureaucracy and focusing on training graduates who can deliver high quality and safe care for the Australian and New Zealand communities. Given the resource-intensiveness of training site accreditation, its reliance on volunteers and that health services are accredited by multiple organisations, it is critical that the college has effective and efficient approaches. The findings of this report have implications for those involved in training tomorrow's specialists, those who employ them and those who will be cared for by them. Our recommendations provide a map for future training accreditation evolution that addresses these considerations.

2. Recommendations

AMC and MCNZ education provider standards are crucial considerations in college accreditation evaluation and redesign. Our regulatory bodies require accreditation that links to the outcomes of each training program, promotes the interests and wellbeing of trainees (and evaluates their experiences), ensures training with appropriate supervision and in a culturally safe manner, determines access to appropriate resources, is applied consistently across sites, and involves collaboration with jurisdictions and with other education providers for common approaches and information sharing. The notes to the AMC standards emphasise value in accrediting "networks" of training sites and "flexible rather than restrictive approaches" that allow the capacity of the system to be used effectively for training specialists. These central tenets are reflected across the recommendations of this report.

Unless specified, the following recommendations apply to all college training programs, current and future.[iii] Redesign should be college-wide, establish systematic cross-program exchange, share learning and create resource efficiencies. This also future-proofs for new programs. Where there are options, these should be interpreted in the context of all recommendations being interdependent. Table 1 provides the value proposition and a risk assessment of each recommendation; this and the recommendations should be read together.

Indicative timeframes are **short** 1-2 years, **medium** 3-5 years and **long** 6-10 years. Resourcing to commence redesign (recommendation 1) is suggested for 2022 and is key to determining priorities, timeframes and implementation planning requirements. Those recommendations marked **core** are viewed as critical to redesign success, although all recommendations represent best practice. The notes and footnotes to the recommendations provide context; further details on best practice are in the body of the report. Some of the recommendations lend themselves to an iterative approach. Evidence and data management is a good example - iterative changes support increasing quality of the accreditation process over time.

2.1 Recommendations for all training programs

Accreditation Renewal

1. That the college undertakes an accreditation renewal project with cross-program representation for accreditation system redesign and implementation which
- Considers the best practice findings of this report and evolves college accreditation for both quality assurance and continuous quality improvement, and
- Promotes a shared mental model for all relevant stakeholders by including an explicit accreditation philosophy, purpose and glossary.

2022, core

[iii] While this report has focused on anaesthesia and pain medicine, other programs being developed or redesigned include DHM, PoM, retrieval medicine and RGA. As some of these programs are small, a generic approach and combined resources promote high quality best practice for all, with improved efficiency.

All college training programs can benefit from the extensive work outlined in this report. This will not only create efficiencies, but also ensures that accreditation across all programs moves towards best practice and meets binational regulatory requirements. There is an opportunity for a cross-program, collaborative approach for existing training programs (anaesthesia, pain medicine, diving and hyperbaric medicine DHM), as well as for those in development (perioperative medicine PoM, rural generalist anaesthesia RGA). The redesign project should develop frameworks and tools that are scalable for future programs. Accreditation also requires a common language (see glossary section 4.2), a shared purpose and explicit philosophy (see table 15). Redesign should consider the approaches developed by Akdemir and colleagues (see section 4.4.1 for description of framework and gamification process for accreditation redesign).

CLE Measurement and Action

2. That, at each accredited site, the college introduces annual measurement of the clinical learning environment with local review and action plans for improvement.[iv] That this includes
- Centrally developed supporting guidance, survey tools and response templates.[v]
- Trainee safety with a minimum of five responses required before results are reported to sites.[vi]
- Accreditation being conditional on sites demonstrating regular review of their results and necessary improvement actions.

Medium, **core**

The preferred approach is a centralised college process for CLE measurement with sites regularly provided with their results.

- Minimises workload for sites.
- Easier to promote trainee safety at sites with fewer than five trainees.
- Allows benchmarking of each site's results to overall results for that training program.
- For feasibility, must select a CLE measurement tool that is of reasonable length (See section 4.3, table 3 and table 4).[vii]
- For feasibility, link data collection with other processes (detail to be determined in the redesign, but needs to minimise trainee and supervisor survey fatigue; examples include linking to existing trainee surveys or six-monthly clinical placement reviews).
- Includes mechanisms to ensure a high trainee response rate, for generalisability and to meet thresholds for trainee safety at smaller sites.

[iv] The term "site" applies to all types of units, departments and rotations accredited by the college across its training programs. Note that this does not include EMAC centres, as these are out of scope.
[v] Different college training programs may elect to use different CLE tools (see Section 4.3 for those applicable to anaesthesia and pain medicine, respectively).
[vi] Trainee safety is a particular issue for some college training programs (for example pain medicine where it is common for sites to have only one trainee) and for many regional and rural sites. Feedback from these sites is no less important and trainees should feel safe to provide their comments. Specific approaches are required for sites with fewer than five trainees (examples are longitudinal data collation, targeting both recent and current trainees, combining trainee and faculty data). It is suggested that the college develops a consistent cross-college approach to safety in all surveys of trainees (within a college-wide monitoring and evaluation framework).
[vii] The redesign steering group should consider approaching CanRAC for permission to use their shorter CLE tool, currently being evaluated.

- Incorporate into the lifelong learning project to ensure efficient and effective processes of data collection and management, including linkages with training and CPD data.
- Change management strategy must manage the potential effect of this "top-down" approach on "buy-in" from sites and trainees (e.g. by involving stakeholders in the design and implementation).
- The redesign implementation plan for this aspect must consider feasibility and should consider piloting prior to widespread rollout.

The group considered the alternative of a site-driven process supported by centrally developed guidelines and resources. Whilst this has the advantage of promoting local ownership, drawbacks include the logistical challenges of implementation across a large number of sites, workload (particularly at smaller sites), and difficulties in ensuring trainee safety (given some sites especially in pain medicine and rural/regional areas have fewer than the minimum required five trainees). Additionally, a centralised process facilitates data collection, monitoring and benchmarking, and gradual evolution whilst maintaining a degree of standardisation.

Accreditation Standards

3. That the college redesigns training accreditation standards by
- Expressing them in a standards organisation framework.[viii]
- Developing generic and specialty-specific standards.[ix]
- Mapping them to the relevant training curricula, including all roles in practice and cultural safety.[x]
- Promoting alignment of health service and college training agendas.[xi]
- Balancing standardisation in how accreditation standards are applied at different sites (for assurance, equity and transparency) with sufficient flexibility to promote educational innovation.[xii]
- Applying the AHMAC and CPMC accreditation of training sites framework "Agreed domains, standards and criteria".[2,xiii]
- Considering how they support community need and the college regional and rural workforce strategy.

Medium, **core**

[viii] See table 11 the components of a standards organisation framework including mandatory and exemplary indicators.
[ix] See for example the RCPSC cross-specialty generic standards and specialty-specific standards for each discipline.[3,4] The ACGME also has this approach. For ANZCA, this approach is scalable for future training program development and thus allows some future proofing.
[x] This work links to the college Reconciliation Action Plan and requires input from First Nations members and trainees, perhaps through the ANZCA Indigenous Health Committee.
[xi] This is an aim of the CLER process in the USA. Accreditation is aligned with health system priorities by ensuring residents are involved meaningfully in systems that improve patient safety and care quality (an important focus for health services).
[xii] A key challenge in accreditation is ensuring that the accreditation standards are applied consistently to confirm a minimum level of achievement (for assurance) but in a way that is sufficiently flexible for sites to develop innovative approaches to training (for excellence).
[xiii] See section 4.4.3 for more information on this framework.

The redesign of training accreditation standards is a central and leading piece for accreditation redesign. The extent and depth of work required in the dot points of this recommendation lend themselves to an iterative approach.

Accreditation Focus

4. That, in so far as training accreditation focuses on clinical care, it is reoriented towards how each accredited site prepares trainees to practice as specialists within systems that promote safe and high quality care for the community.[xiv]
   Medium, **core**

The preferred approach is to focus on training and clinical care within a single accreditation process.

- It was agreed that it is crucial that training occurs at sites with high standards of clinical care, resulting in high-quality patient outcomes.
- Optimally this would shift the focus of accreditation beyond process and structural measures of clinical care to also include outcome metrics.[xv]
- It was noted that this is challenging for pain medicine practice, although no less important.
- Appropriate metrics could be developed in collaboration with bodies in the college that focus on clinical care standards, for example the Quality and Safety Committee.
- It is important to ensure that the college process is complementary to (rather than duplicating) existing health service accreditation. Aspects of health service accreditation could be used to inform college accreditation findings.

The group considered alternatives. The first was focusing primarily on training (as per the approach taken in Canada, the USA and some Australasian colleges), and the second was evaluating training and clinical care in two separate accreditation processes.[xvi] The group thought that the latter was too resource-intensive, particularly as it would increase the accreditation burden for sites and duplicate some aspects of health service accreditation. The recommendation is to consider healthcare standards as they impact on training and to evolve towards a greater focus on outcomes measures.

[xiv] If this recommendation is supported, whatever model is chosen, important questions include: Does the site provide safe, high-quality care? Are satisfactory patient outcomes demonstrated? Are there CQI activities that facilitate clinical care improvement? What is the minimum set of safety and quality activities the college should expect from an accredited site? How can the college acknowledge high quality performance and disseminate innovations? Are trainees trained in these CQI activities and achieving the learning goals of understanding clinical care improvement, including outcome measurement and own practice evaluation, to facilitate their lifelong professional development and function in health systems?

[xv] For example, the CICM accreditation process uses the metric of standardised mortality rates (SMR). As part of accreditation, CICM requires units to submit their data to the Australian and New Zealand Intensive Care Society Centre for Outcome Resource and Evaluation (ANZICS CORE) registry. The SMR for each unit is benchmarked against similar units and, if it is an outlier, possible reasons explored at CICM accreditation visits. In these cases, units are required to report on their plans for improvement and the college monitors the outcome (improvement in SMR).

[xvi] An example of this approach is that of the Royal College of Anaesthetists who have introduced a separate Clinical Services Review for which health services pay a fee.

Monitoring and Data Sources

5. That the college introduces annual monitoring of accredited training sites to include bidirectional data flow between the college and accredited sites, and an annual college-wide "state of accreditation" report that is available to internal and external stakeholders.[xvii]
   Short, core
6. That the college strengthens accreditation by developing training outcome metrics, in addition to structure and process measures. That these recognise the value of qualitative as well as quantitative data.
   Medium, core

This aligns with AMC and MCNZ standards on monitoring, evaluation and site accreditation.

- Accreditation, as a form of evaluation of training programs, should be **integrated into college monitoring and evaluation frameworks** and processes (AMC standard 6).[5]
- Future educational developments and projects should consider impacts on and opportunities in **training accreditation as part of general educational principles and processes**.[xviii]

Central to the proposed redesign work is an efficient data management system as part of the planned lifelong learning project (see recommendation 11 on accreditation resources).

The redesign project steering group should also collaborate with other groups at the college to develop suitable metrics, for example the planned educators academy, with its new educator skills framework and measures of supervision quality, and the safety and quality committee on clinical care metrics.[xix] This collaborative process requires mapping of stakeholders against areas where metrics are needed to ensure optimisation.

Sharing of Innovative Approaches and Acknowledging Excellence

7. That, to promote educational excellence and sharing solutions to common problems, the college develops pathways for systematically sharing innovative and leading practices between sites (and relevant rotations).
   Medium
8. That, once a proactive monitoring process is in place, the college introduces mechanisms for acknowledging high-performing sites (and rotations, as relevant), focusing resources on supporting sites facing challenges.
   Long

[xvii] It is recommended this is a publicly available annual report. Evaluating themes across sites (and rotations in the case of anaesthesia training) allows the college centrally to target areas for education development and support. Data requested from sites should be sufficient for reasonable evaluation but not too onerous for sites to collect; this requires further exploration and stakeholder consultation as part of the accreditation redesign.
[xviii] For example, the recently commenced work on group decision-making (GDM) could include within its processes systematic evaluation of the quality of documented feedback at individual training sites as this can feed into accreditation of these sites.
[xix] Note these are just a few examples. The accreditation redesign project can consider a mapping of stakeholders to determine its approach to collaboration on accreditation metrics.

The ALEPG investigation supports the value of **sharing solutions to common problems** and **disseminating innovations** to save each site/rotation/region/country "reinventing the wheel". Anticipated overall impacts include raising the minimum standard and also promoting the shared vision of striving for educational excellence.

Supporting our accreditation volunteers

> 9. That the college strengthens support for its volunteer accreditor workforce by reviewing recruitment, orientation, training and performance evaluation processes, in line with best practice.
> **Short**, **core**

AMC/MCNZ accreditation standards require that assessors are selected and trained for their work, and that they receive individual performance feedback (Standard 8.1 *Supervisory and educational roles*).[5] ALEPG evaluation of current accreditation processes supports strengthening volunteer visitor orientation, training and support (see appendix C and appendix D). This is consistent with approaches supported in the literature (see section 4.4.1 *Surveyor team*) and undertaken by other organisations (examples are in table 10).

Trainee Voice in Accreditation

> 10. That the college strengthens trainee input to accreditation, whilst ensuring trainee safety by investigating having a senior trainee or recent graduate on accreditation teams, and improving the quality of trainee information available to accreditation teams.[xx]
> **Medium**, **core**

A number of colleges now have trainees on their accreditation teams, with clearly defined roles, support and training (see table 10). In our consultation, at least one Australasian college informed ALEPG that this was raised as part of their AMC/MCNZ reaccreditation. There are opportunities for trainee leadership and also barriers in terms of resourcing and availability. It is recommended that potential approaches and options are explored as part of accreditation redesign and in consultation with relevant trainee committees and representatives. The ALEPG consultation process has detail about other organisations' practices and experiences that is not included in this report and can be provided to the redesign group for consideration of this recommendation.

Evaluation of our current accreditation procedures (appendix D, especially TAC survey results) confirms both the value that is placed on trainee survey data, and also the interpretation difficulties that result from the current low responses rates. Our literature review results emphasise the value of both trainee and faculty data for CLE evaluation as part of accreditation (appendix B shows details of tools used). The college might consider the approaches used by other organisations (table 10 and individual consultation findings) as a starting point to explore how to maximise our trainee responses.

[xx] This requires comprehensive review of current mechanisms for obtaining site-specific trainee data (including sources, response rates, and college/site responsibilities). Many accrediting bodies now include trainees on accreditation teams, reporting it enhances the process, as well as providing leadership benefits for individual trainees. This approach obviously requires appropriate orientation, training and support.

Accreditation resources

11. That the college increases support for accreditation including
- An accreditation management system (AMS) that facilitates accreditation activities for all college training programs. The system should link to other college data sources; promote bi-directional data flow between the college and training sites; allow sites and volunteer accreditors to focus on high-value activities; and include dashboards for proactive monitoring, benchmarking and streamlined decision-making.
- Increasing staff input to accreditation at site visits, to increase standardisation in accreditation,[xxi] reduce volunteer workload and increase information-sharing across sites.
- Investigating the role of distance technology in accreditation procedures.[xxii]

Medium, **core**

Data management systems are critical to future accreditation success and there are opportunities arising from the *Lifelong Learning Project*.

- For efficient and effective data management and retrieval, the future AMS should **link to or be integral to training and continuing professional development (CPD) recording systems**.[xxiii]
- The AMS should allow stakeholders at sites and rotations to update their data (rather than re-enter if from scratch each time). **Streamlined data management** is particularly important for smaller sites and for those in rural and regional areas which often don't have the same resources as larger sites.

Our recommendation to **increase staff support** for college volunteer accreditors facilitates **sustainability** of this expert group,[xxiv] allowing them to focus on the tasks that only they can do. It also supports greater standardisation of processes between sites, as well as promoting better information sharing. Many other organisations already have greater staff support for accreditation than our college does; they report that this minimises accreditation volunteer workload and promotes standardisation of the process (table 10).

ALEPG findings affirm the **value of regular peer-to-peer, face-to-face accreditation visits**, as currently occurs every five years (appendix D). It recognises also, that there may be **opportunities for greater use of distant technology in accreditation**. This could be used to investigate issues arising between site visits or, as one other Australasian college currently does, to increase trainee turnout when accrediting rotations (table 10).

[xxi] Promote standardisation for more robust process, better risk management (including volunteer recruitment and retention) and enhanced reputation.

[xxii] Other organisations interviewed use distance technology for shorter components (for example, initial team meetings leading up to a site visit, follow-up interviews) and to enhance accreditation (for example, to increase trainee input for those not able to attend the site visit). The project group recognises that some aspects of peer review are best performed face-to-face. It may be feasible to devolve some aspects of site visits to a remote process and technology could be used to involve staff and senior visitors at a distance.

[xxiii] This approach would allow stratification of training requirement completion (including assessment results) by training site, rotation, region or country. Potentially, it could allow automatic population of supervisor training and CPD outcomes (e.g. scholarly activities and CPD compliance amongst faculty) to the accreditation report for each site and rotation.

[xxiv] TAC and TUAC visitor survey results (appendix D) confirm this is a group of college fellows who are heavily committed to volunteering for the college.

Videoconference technology could be particularly useful for accreditation of rotations that are geographically dispersed, allowing equity of access for faculty and trainees at smaller, regional and rural sites.

Continuous Quality Improvement of Accreditation

12. That the college introduces regular quality improvement of its accreditation standards and procedures.
    Medium, core

Best practice is to include evaluation for improvement within all aspects of the process, which in this case includes accreditation standards and procedures and their operation across the college, sites and, where relevant, rotations. Many organisations we consulted reported a cycle of regular review of their standards and procedures, input from internal and relevant external stakeholders (particularly the community and jurisdictions), and the value of learning from other colleges (table 10). The college's approach to accreditation CQI should be informed by and conform to existing and future college quality, stakeholder engagement and evaluation frameworks (as required by AMC/MCNZ standards 1.6 *Interaction with the health sector* and 6 *Monitoring and evaluation*).

2.2 Recommendations for specific training programs

Accreditation of Anaesthesia Rotations

13. That the college develops robust accreditation of anaesthesia training rotations that
- Maps to the curriculum and considers the complete training experience in each rotation
- Measures educational outcomes of rotations
- Includes annual monitoring with benchmarking
- Evaluates capacity to train[xxv]
- Promotes rural and regional training
- Involves rotational supervisors, education officers and trainees
- Is undertaken by distance means to facilitate attendance of all stakeholders.

Medium, core

The preferred approach is a centralised process for accreditation of rotations and sites.

- All sites and rotations inspected, as relevant, by centrally-convened teams. This is similar to the current approach of central site accreditation, but with strengthened accreditation of rotations.
- It should involve national and regional committees, as relevant, given that they understand the local healthcare and employment contexts and how these impact on training. These contexts include healthcare needs of local communities, political and industrial issues, and variations in training, healthcare access and outcomes. These committees are also best placed to advocate for improvements in their countries (in

[xxv] This requires the college to develop tools that evaluate capacity to train according to curriculum requirements.

the case of New Zealand) and regions (in the case of Australian states and territories), and in how rotations can best support healthcare improvements.
- It should involve those with supervisory roles who have knowledge of individual rotations and context, including regional/national accreditation officers, education officers and rotational supervisors.
- It should be informed by site-specific and rotation-specific standards, procedures and metrics.
- This requires a greater central resource, increased scheduling requirements, and creates a greater imposition on visitors from outside the region being accredited.

The group considered alternatives. The first rejected approach was centralised site accreditation with regionally accredited rotations,[xxvi] and the second was centralised rotation accreditation and regional accreditation of sites. Concerns about governance, standardisation, potential conflicts of interest, bias and workload for national and regional committees, led ALEPG to recommend a centrally-run process for both tiers of accreditation.

In future, as accreditation standards and procedures becomes more outcomes- and data-driven, it may be feasible to devolve more aspects of accreditation to regional and national committees.

14. That the college explores accreditation of regions for training based on capacity to train and aligned with the college regional and rural workforce strategy.[xxvii]
Medium

ALEPG proposes that the college explores the explicit measurement of capacity to train to guide total anaesthesia trainee numbers (rotational and independent). While challenging to measure, understanding training capacity may help address challenges, especially those experienced by independent trainees, and address anaesthesia workforce issues.

Accreditation of Anaesthesia Provisional Fellowship Training

15. That the college develops a robust process for accreditation of provisional fellowship training with standards linked to the curriculum, regular monitoring,[xxviii] benchmarking and sharing of innovative practices.
Medium, **core**

This conforms to AMC and MCNZ standard 8.2 *Training sites and posts* which requires links to the outcomes of the training program, and ensuring appropriate supervision and opportunities to develop skills to deliver high-quality and safe patient care.

[xxvi] Regionally based in this context refers to New Zealand and each Australian state and territory.
[xxvii] Would require piloting in a "less complex" region to investigate issues such as whether this could allow ANZCA to no longer have non-rotational trainees. Obviously, this would require careful collaborative stakeholder input and development of a robust tool to measure training capacity.
[xxviii] Provisional Fellowship Training might more closely link to graduate outcomes (for example, preparedness for practice).

Future accreditation of provisional fellowship training (PFT) requires sufficient flexibility for necessary variation in these programs, as currently outlined in the curriculum. It is likely that the approach would be to evaluate whether the programs are meeting the higher level requirements of PFT in supporting transition to specialist practice, including practice readiness and overall graduate outcomes across the ANZCA roles in practice (e.g. educational and leadership outcomes). The approach should also consider how trainee experiences align with the department and individual PFT training plans approved by the DPA Assessors and PF Sub-committee. The accreditation of PFT could be developed iteratively.

2.3 Recommendations that are not about accreditation redesign

It is recommended that EEMC consider the following recommendations independently of accreditation redesign

Simulation-based learning is required as part of the anaesthesia curriculum but is not systematically evaluated by the college. In particular, it is not clear what departments and rotations are required to provide in this area, and whether or not there is equitable access of trainees to relevant learning opportunities. The college might consider greater specification of its policy on requirements of rotations and potentially departments in this area. Evaluation of curriculum components that are mandatory, such as ALS and CICO in anaesthesia training,[xxix] promotes high standards and ensures greater standardisation (for transparency, fairness and equity).

EMAC Integration

That the college explores better integration of simulation activities into the anaesthesia training program, including the future evolution of the EMAC course. **Medium**

Simulation learning environment

That the college investigates measurement of the simulation learning environment applicable to all college simulation activities (not just EMAC). **Medium**

2.4 Risk Assessment

The project group identified significant risks both of continuing and of changing the current accreditation processes. For each recommendation, we considered the opportunities arising and the risks of not proceeding (table 1).

[xxix] ALS: advanced life support; CICO: can't intubate, can't oxygenate

Table 1: Opportunity and risk assessment for each ALEPG recommendation

Recommendation	Opportunities	Risks of not proceeding
1. Accreditation renewal project	Improved trainee satisfaction and learning. Increased emphasis on good educational practice. Improved trainee wellbeing, BDSH monitoring and local action (links to work on trainee wellbeing). Cross-program design more sustainable. Promote shared understandings of accreditation purpose and terminology.	College does not achieve its vision of being a world leader in education. Limited interim monitoring allows deterioration rather than proactive support. Earlier intervention results in lower impact on trainees and others and is less resource-intensive. Ongoing siloing of sites with limited exchange of solutions and innovations. Accreditation for different college programs is siloed, risking duplication, wastefulness and fragmentation.
2. Annual CLE measurement at every site	Regular evaluation of experiences with curriculum delivery at each site. Encourages engagement with good local delivery and local solutions. Promotes culture of CQI. Upskills HODs and SOTs in evaluation for education management. Increases standardisation and transparency. Capture issues early. Allows longitudinal evaluation and benchmarking.	Missing information on how trainees experience and learn from the curriculum at each site. Missed opportunity to evaluate and improve local workplace culture and CLE (e.g. BDSH, prevalent in college trainee surveys and MBA medical training survey). Missed opportunity to encourage local excellence.
3. Redesign accreditation standards	Increases standardisation and transparency. Meet AMC and MCNZ standards.	Failure to apply generic and specialty-specific standards across all college training programs, with some programs less well evaluated, creating reputational risk for the college and faculty.
4. Reorient accreditation clinical care focus towards trainee preparation for systems-based care	Core business is to produce specialists who deliver safe and high quality care. Ensures training and trainee involvement is integral to care delivery at sites.	Missed opportunity to evaluate specialists who practice safely and well in the real world, and who learn the skills they need in for their specialist practice.

Recommendation	Opportunities	Risks of not proceeding
5. Annual monitoring and state of accredited sites report	Increased engagement of sites to monitor and investigate own performance. Improvement plans are data-driven. Increased standardisation and transparency. Allows sites to better prepare for college accreditation and health services to support them.	Problems remain undetected or their detection is delayed. Harder to fix (more resources required).
6. Develop training outcome metrics	Focuses on core business of the college.	Training efficacy largely under-evaluated. Limited measures of training quality.
7. Develop pathways for sharing innovations	Reduces effort of "re-inventing the wheel". Encourage pride in achievement and striving for further improvement.	Siloing. Slower spread of good educational practices and solutions to common problems.
8. Mechanisms to acknowledge high-performing sites	Recognition will promote continued good practice and innovation. Focus resources on sites that require assistance.	Good practices and solutions not shared across sites, reduces benefit for whole college community.
9. Review volunteer accreditor recruitment, orientation, training and performance evaluation processes	Increase standardisation, transparency and quality. Improve accreditor performance. Required by AMC/MCNZ standards.	Fatigue of accreditor workforce, potential burnout, difficulties with recruitment and retention.
10. Strengthen trainee input to accreditation	Stronger representation with better trainee satisfaction. Succession planning. Incorporates well established practice is including trainees in training evaluation.	Trainee views not adequately represented.
11. Increase support for accreditation including **a. An accreditation management system** **b. Increased staff input** **c. Investigating role of distance technology**	Introduce resource efficiencies, improve standardisation and transparency. ICT: links to other data sources, longitudinal data presentation, efficiencies (sites only validate/update rather than re-enter data), dashboards for monitoring. Part of lifelong learning project.	Inefficiencies. Errors due to failure to collect relevant data. Currently "ambush" sites with trainee survey results at site visit (avoid by more proactive data exchange). Reputational risks. Excessive workload for volunteers with disengagement

Recommendation	Opportunities	Risks of not proceeding
	Staff: supports lead and new inspectors, promotes standardisation and information sharing. Allows volunteers' focus on high value contributions. Distance: supplement and offload F2F workload, strengthen team processes (e.g. initial meeting), easier to include staff.	and difficulty recruiting and retaining visitors.
12. CQI of accreditation itself	Minimise scale of input to affect future change by promoting continuous improvements.	Reputational and other risks go undetected if process not evaluated.
13. Robust accreditation of anaesthesia training rotations	Increased transparency and standardisation. Ensures every trainee in an accredited rotation can complete training requirements.	Rotations do not receive feedback on quality of training and outcomes. Failure to detect problems with rotations. Required for our accreditation as an educational provider.
14. Accreditation of each region[xxx] for capacity to train, aligning with the college regional and rural workforce strategy	Match overall trainee numbers to training capacity. Modelling impacts and value of incorporating extended and rural/regional training sites within rotations. Identify focus for improving training capacity.	Issues of access to required training experiences ('bottlenecks").
15. Accreditation of provisional fellowship training	Required by AMC/MCNZ standards. Opportunity to share and recognise innovations (fellowship programs). Maximise the value to trainees. Increase standardisation and transparency.	Failure to evaluate this training phase (which represents one fifth of total training time) with potential impact on trainees (college "blind spot").

[xxx] In this context, "region" means New Zealand and each Australian state and territory.

3. Methods

In early 2019, the ALEPG was formed as one of four work streams in the Training Program Evolution Exploration Project. Joint terms of reference for all project groups were formally approved by the Education Executive Management Committee (EEMC) in April 2019. This section overviews the justification for the work, goals, scope, contributors, stakeholder input and detailed methodology to achieve outcomes.

3a. Why accreditation?

This project:

- Aligns with the college strategic plan 2018-2022 goal of ***growing*** the college's excellence in educational offerings. The college has undertaken to review its educational offerings to make sure content, delivery mechanisms and use of technology remain fit for purpose, world-leading and continue to meet AMC/MCNZ standards.

- Was initiated by the education and development committee (EDEC) which identified accreditation as a key activity of college training programs.[xxxi] Others are trainee selection, competency-based medical education (CBME), and educator skills.

- Is fundamentally informed by Australian Medical Council (AMC) standards for specialist accreditation and Medical Council of New Zealand (MCNZ) additional criteria.[5,6] These emphasise links between accreditation and training program outcomes, clear criteria which are consistently applied and monitored, the central role of collaboration with health services and jurisdictions, and opportunities for common approaches with other accrediting organisations. They also stress cultural safety, trainee wellbeing and stakeholder engagement, and expect that these are addressed across training programs.

- Conceptualises accreditation as a "grassroots" evaluation tool, linking to all other training activities and concerns of the college. Accreditation operates at the interface between the college (which determines the curriculum, provides learning resources and programs of assessment) and health services (which employ trainees and their supervisors, provide training experiences and benefit from the high-quality graduates that result).

3b. Goals

ALEPG developed the following goal statements:

1. To improve evaluation of the learning environment through accreditation, and
2. To benchmark the college against best practice in accreditation to set our strategic direction for accreditation evolution.

[xxxi] In 2016, EDEC proposed launch of a redesigned anaesthesia training program in 2023, a decade following launch of the current training program. This timeframe appears challenging, given delays due to the COVID-19 pandemic.

3c. Scope

While this report focuses on anaesthesia and pain medicine training,[xxxii] the principles, CLE definition and recommendations are generic for **all existing and future training programs**. The report strongly recommends alignment across all college training programs.

EMAC accreditation would benefit from greater integration and alignment with anaesthesia training program accreditation. However, ALEPG determined that there are sufficient differences to render this work out of scope. For example, technology is an integral component of the simulation learning environment and thus the approach to CLE measurement is not directly transferable. This report includes recommendations to explore CLE and its measurement for the simulation setting. Additionally, ALEPG has found that siloing reduces opportunities for iterative improvements to EMAC; thus this report also recommends greater integration of EMAC evaluation and development into wider college education processes.

3d. Contributors

ALEPG met six times in 2019, four times in 2020 and twice in 2021, all via distance means. Over time, membership was expanded for broader input. Below are all members.

Co-chairs	Lindy Roberts AM, ANZCA Director of Professional Affairs (Education) Kieran Davis, FPM Vice-Dean, Chair of Exams
Members	Dr Jeff Kim, Supervisor of Training, ANZCA TAC visitor Dr Vaughan Laurenson, DPA Assessor, former head of department Dr Cate McIntosh, Chair EMAC Sub-Committee, various simulation and education roles Dr Craig Noonan, Senior TAC member and visitor, multiple education roles Dr Bronwyn Posselt, ANZCA trainee Dr Natalie Smith, CLE expert, multiple education roles Professor Michael Veltman, Chair FPM TUAC and visitor Associate Professor Deb Wilson, ANZCA Councillor, rurally based Dr Mark Young, Chair ANZCA TAC and visitor
Invitees	Leonie Watterson, Chair EEMC Jennifer Woods, former chair EDEC and Chair Training Program Evolution Exploration Project Steering Group Jennifer Weller, chair EDEC, Professor and Head of Centre for Medical and Health Sciences Education, School of Medicine, University of Auckland
ANZCA staff	Stephenie Cook, Education Development Lead (from Jan 2021) Phoebe Navin, Strategic Education Projects Officer (from Dec 2019)

[xxxii] The college accredits sites for training in anaesthesia and pain medicine. For anaesthesia, these are typically departments within public teaching hospitals, although some private hospitals are also accredited. For pain medicine training, accredited sites may be units within hospitals or freestanding practices. Wherever the terms “organisation”, “department” or “unit” are used (interchangeably) in this report, they refer to all types of training sites, unless specifically qualified.

Ellen Webber, Learning and Innovation Manager (from Nov 2020)
Lynne Denby, Education Development Lead (from Sept to Nov 2020)
Teri Snowdon, Strategy and Quality Manager (to Oct 2020)
Stephen White, Strategic Education Projects Lead (to Jan 2020)
Christina Yee, Project Officer Learning and Development (to Dec 2019)

3d. Stakeholder input

From its inception, ALEPG has recognised that accreditation interfaces with almost all other college activities. We have mapped and sought iterative input from key internal stakeholders. In March 2021, we consulted on our interim recommendations with a range of groups and individuals (appendix E). This input was considered closely and amendments made, prior to submitting this final report and recommendations to educational decision-makers.

3.1 Environmental scan

Members used informal networks to identify relevant Australian and New Zealand developments with implications for accreditation. Broadly, the group considered community expectations, professional accountability, jurisdictions and workforce needs, accreditation in other sectors, cultural safety and Indigenous health, educational developments, data sources and intergenerational impacts. See section 4.1 for results.

3.2 Accreditation glossary

ALEPG developed a glossary of key terms, along with a CLE definition that is evidence-based, jargon free, short and applicable to all current and future college training programs. See section 4.2.

3.3 Clinical learning environment review

Given her research on CLE in anaesthesia, Dr Smith developed an overview of CLE importance, domains (figure 4), influences and measurement (section 4.3). Specific searches identified educational environment measures (EEMs) for anaesthesia (table 3) and pain medicine (table 4).

3.4 Best practice accreditation

3.4.1 Literature review

Drs Kim and Roberts undertook a structured literature review on the question: ***What is best practice accreditation in an era of competency-based education?*** (section 4.4)

OVID Medline, Embase, Psychinfo, Pubmed, CINAHL, Science Direct and Web of Science databases were searched using the terms “accreditation” AND any of “learning environment”, “educational environment”, “educational climate”, “coaching model”, “continuous quality improvement”, “quality improvement”, “best practice”, “competency based medical education”, and “good practice”. Only English language articles and those published between January 2009 and 13 January 2021 were included.

Papers were included if they were about postgraduate medical education *and* accreditation. If this was unclear from the abstract, the full-text article was obtained and searched for the term “accredit”. Articles were excluded if they were about health service accreditation or about the CLE measurement but not about how this applies to accreditation. Remaining articles were then read in full and retained if they addressed any of the following: accreditation models, accreditation in an era of CBME, accreditation and outcomes, accreditation and CLE, accreditation and excellence/best practice/leading practice, and accreditation in anaesthesia/ anesthesiology/ anaesthesiology.

3.4.2 Accreditation practices of other organisations

Desktop review

Using desktop review, ALEPG evaluated accreditation practices of most binational medical colleges in Australia and New Zealand, two Australian-only colleges and selected organisations in the United Kingdom, Ireland, Canada and the United States. Initial review was undertaken in mid-2019, with findings updated in November 2020.

Consultation interviews

Dr Roberts led a more detailed examination of PGME accreditation practices of a subset of organisations from the desktop review. International organisations were the ACGME, CAI, GMC and RCPSC (table 7). Colleges in Australia and New Zealand (table 8) were selected on the basis of

- similar training contexts, either hospital-based specialties in critical care or consultation-based practice
- training of physicians for leadership and management, and/or
- early adoption of CBME-based curricula.

Interview questions

The project group developed 21 consultation questions that addressed

1. How accreditation occurs.
2. The underlying philosophy.
3. Standards used.
4. Extent of focus on clinical care.

5. Processes for ensuring learning across all specialist practice domains.
6. Whether there is focus on CLE.
7. If and how CLE is measured.
8. Support for rural and regional communities.
9. Accreditation measures: process, outcome, continuous improvement focus.
10. Data types and collection.
11. Role of self-assessment.
12. Cycle length and interim monitoring.
13. Underperformance detection and response.
14. Extent of flexibility for innovation.
15. How the process promotes educational excellence.
16. Trainee involvement.
17. Community and jurisdictional representation.
18. Accreditation outcomes.
19. Avenues to challenge decisions.
20. Planned changes and motivation for these.
21. How the organisation determines accreditation best practice.

Following verbal commitment to the consultation process, each organisation was sent these questions, requesting a written response prior to interview. Correspondence included description of the ALEPG work; declaration of Dr Roberts's role at the Australian Medical Council, with an opportunity for organisations to request her non-involvement in the consultation interviews[xxxiii]; information about how responses would be used, including who would view them; and a request for signed permission for sharing information as part of a consolidated summary.

Exploration of written responses occurred at tele- or video-conference interviews of 60 to 90 minutes duration. Following this, interview notes were forwarded to representatives for factual correction and elaboration. Final versions of written responses and meeting notes were forwarded to the interviewed representatives for their records. Examples of practice and approaches are included in this report (table 10 and table 11).

This work was disrupted by the COVID-19 pandemic. The project group was mindful of demands on our own and other organisations' fellows and staff. As a result, the final report timeframe was extended from mid-2020 to mid-2021. Additional leeway was provided for responses.

3.5 Evaluation of existing college accreditation practices

Current accreditation standards and procedures (appendix C)
Doctors Davis, Noonan, Veltman and Young summarised current pain medicine and anaesthesia training accreditation practices from accreditation handbooks and procedural manuals[7, 8] and their experiences. This included accreditation standards and procedures, generic visit schedules, and accreditor management.

[xxxiii] One college requested her non-involvement.

Accreditation visitor surveys (appendix D)
In November 2019, a 19-question online survey was emailed to all ANZCA fellows involved in anaesthesia training accreditation visits in the prior five years. Questions sought visitor views on current accreditation processes, including CLE evaluation, and areas for improvement. Answers used Likert scales and allowed for free-text responses. The project group identified accreditation of provisional fellowship training and rotations as areas for further investigation, so several questions addressed these. Doctors Noonan and Young developed initial survey content, with iterative feedback from other ALEPG members and college staff.

In November 2020, a 15-question online survey was emailed to all FPM fellows involved in pain medicine training accreditation visits in the prior five years. The survey aimed to evaluate current practices. Doctors Davis and Veltman developed this from the ANZCA TAC visitor survey, with content modified for relevance to pain medicine training accreditation, including deleting sections on provisional fellowship and accreditation of rotations.

Mapping current practice to best practice frameworks
The project group undertook a series of mapping exercises to identify gaps between current and best practices.

Map 1: AMC/MCNZ standards (table 12)
The college is accountable under law to the standards of the bodies that accredit us to train specialists. Our first map evaluated current anaesthesia and pain medicine accreditation practices against **AMC standards and MCNZ additional criteria** on training site accreditation.[5]

Map 2: Akdemir framework (table 13)
Akdemir and her colleagues developed a framework to facilitate international comparisons of accreditation practices.[9] This uses *The Golden Circle* to address the value proposition *why, what, how and who*?[10] The model has four high-level themes: objectives of accreditation, PGME quality domains, quality management approaches, and actors' responsibilities. Using this framework, ALEPG undertook high-level evaluation of current anaesthesia and pain medicine training accreditation practices.

Map 3: CLE domains (table 14)
The project group mapped current data collection practices to the CLE domains developed by literature review (section 4.3).

3.6 Data exploration

A subgroup of ALEPG explored the principles underpinning use of college data and data systems to support training accreditation.

3.7 Recommendation development

The project group developed recommendations as follows:

1. Themes of the literature review and practices of other organisations were used to define common and leading practices (section 4.7.1 and table 15).

2. Current college accreditation practices were compared with common and leading practices to identify gaps (section 4.7.2).

3. The college's context was considered to define recommendations, most of which are generic across all training programs. In more complex areas, the group outlined multiple potential options to address gaps. Following stakeholder consultation (appendix E), the group finalised the recommendations and determined its preferred option where options were considered (section 2).

4. For each recommendation, ALEPG undertook a risk analysis for proceeding and not proceeding (table 1).

5. Recommendations were prioritised for short-, medium- and long-term timeframes (1-2, 3-5 and 6-10 years, respectively) (figure 2).

4. Results

4.1 Environmental scan

Figure 3 below highlights key themes from the environmental scan with prominent but not exhaustive examples. Supporting notes that expand some examples (alphabetical order) follow.

Figure 3: Key themes from environmental scan

Supporting notes

- The **AHMAC and HWPC** accreditation of hospital training post project aimed to streamline college accreditation processes. The key outcome was the AHMAC and CPMC framework, intended for use across all colleges.[11] It is currently used by several colleges.

- The **Australian Government Department of Health** project on *How accreditation practices impact building a non-general practice rural specialist medical workforce* (2019) is in progress.[12] At the time of finalising the ALEPG report, this work is in a consultation phase with a final report expected in the second half of 2021. Final results should be considered by the college accreditation redesign steering group.

- **The Australian Health Professions Accreditation Collaborative Forum** representing the 15 accreditation authorities functioning under the National Law commits to accreditation good practice. It produces statements including on high-level accreditation principles and accreditation tools used by members.[13]

- Professor Weller, chair of the CBME project group, has summarised current **educational developments** and implications for accreditation at appendix A.

- The work of ALEPG overlaps with that of the **ANZCA educator skills project group** (ESPG) in several areas.[xxxiv] The ESPG was tasked with defining best practice for educator competencies and development. The group has produced a draft educator competency framework, mapping educator roles to relevant competencies. The ESPG has recommended that, for each educator role, the college develops a position description, selection criteria and process, and support for professional development. They have proposed also that all educators undergo performance appraisal, with the college facilitating this process.

  This is in line with AMC/MCNZ standards (standard 8.1 "Supervisory and educational roles") which require supervisors have well defined roles, necessary competencies, training and professional development, and individual performance feedback. It also aligns with best practice in accreditor management (see "Surveyor team" section 4.4 and table 6).

- **The FPM curriculum and assessment review** may evolve training to incorporate programmatic assessment and an entrustment model incorporating entrustable professional activities (EPAs), along with further evolution of workplace based assessments. This requires trained supervisors, creating opportunities to strengthen the CLE.

- The **Independent review of accreditation systems** within the Australian National Registration and Accreditation Scheme for Health Professions (2017) emphasised

[xxxiv] Consultation with N Sidhu, Chair ESPG, for this section. Note that site-based supervisors contribute to CLE quality through supervision and constructive feedback (figure 4). Accreditation visitors are college educators.

outcome-based accreditation approaches, cultural safety, the value of diverse placement settings consistent with workforce priorities, and the importance of innovation.[14]

- **Intergenerational differences** Trainee expectations are changing. While generalisations require cautious interpretation, there is a significant literature on the "**medical millennial" (generation Y)**, born 1982 to 2000.[15] Critical features include that they are more diverse, more tolerant, excellent multi-taskers, interested in extrinsic life goals, and masters of self-expression. As "digital natives" they demand education is delivered with more feedback, recognition and peer learning, and with "high expectations" of their own and their supervisors' performance,[15] with fewer gender distinctions.[16] CBME with milestones and EPAs is a constructive way to serve this new generation of learners by providing structure, transparency, personalised learning and a more outcomes-based system.[17] Public accountability aligns with their motivations of self-interest and "profound" altruism.[15]

  With generation Y now starting early specialist careers, recent medical education literature recognises that **generation Z** is entering medical school. In general, the latter would rather face-to-face rather than digital interactions, wants to design their courses; prefers intuitively laid out spaces that facilitate collaboration, mentoring and small group work; and favour hybrid learning approaches, combining on-line and in-person activities with greater use of external resources.[18]

- The **New Zealand Simpson Report** has four main themes – consumers, whanau and communities at the system's heart; culture change and focused leadership; more effective te Tiriti based partnerships so the system is more effective for Māori, and an integrated system with longer-term focus.[19] Planned healthcare reforms address these themes, although precise outcomes are not clear at the time of finalising this report.

- **NSW Health Education and Training** (HETI)[20] undertakes prevocational accreditation, using thirteen standards.[xxxv] Site visit teams include a doctor-in-training. Teams are supported by an interview guide for teams, with surveyors undergoing mandatory on-line training every two years.

- The ongoing focus of the **NSW Health and Specialist Medical Colleges Project** is early identification and sharing of training site concerns, escalation procedures, and information sharing.[21]

[xxxv] Governance; program management; workload and safe working with patients; facilities and infrastructure for education and training; program coordination and integration; education and training program; orientation; handover; clinical supervision; term training, supervision and trainee learning experiences; assessment, feedback and remediation; training program monitoring and evaluation; trainee advocacy, welfare and support. Each assessed as low achievement (not met), moderate achievement (met) or extensive achievement (leader). Site evidence includes meeting minutes, rate of online training completion, orientation programs, communication mechanisms, wellbeing supports, mid- and end-of-term assessments, and evidence of support for doctors who request specific learning opportunities.

- The **Postgraduate Medical Council of Victoria (PMCV)** undertakes prevocational accreditation; their standards are appropriate clinical supervision, robust feedback, appropriate clinical learning opportunities, educational programs (attendance supported by departments), and wellbeing support. Surveyors undergo mandatory scenario-based training and regular retraining is required.[22]

- The Australian **Specialist Training Program (STP)** supports broader training exposure and improved workforce distribution. A challenge for colleges is how accreditation practices allow sufficient flexibility for expanded settings, focussing on community-relevant training outcomes.[23]

- **Trainee and faculty wellbeing:** The 2015 Australian Four Corners report on bullying and harassment in surgical training alerted all colleges to the need to monitor and support trainee wellbeing.[24] Focus on trainee wellbeing was increased when the AMC accreditation standards last were revised in 2015.[5] The COVID pandemic impacted doctors' health and wellbeing, as well as creating opportunities for improvement (for example, reduced presenteeism). Both systemic and individual responses are required. Accreditation is an important systemic tool to promote appropriate culture and behaviours in all training environments.[25]

- **Trainee selection:** Currently, the college does not select trainees, but rather provides selection guidelines for accredited sites to use.[7,xxxvi] Accreditation could better evaluate consistency of selection across sites and regions (required by AMC standard 8.2.1[5]), and processes to recruit and select Indigenous trainees (required by AMC/MCNZ under standard 7.1 "Admission policy and selection"). Future evolutionary changes in trainee selection at our college should link to training accreditation standards and processes.

4.2 Accreditation glossary

The ALEPG recommends adoption of standard accreditation terminology, within a comprehensive college educational glossary. Relevant terms and definitions are listed below.

Accreditation: "The process by which a credible, independent body assesses the quality of an education program to provide assurance that it produces graduates that are competent to practise safely and effectively as specialist practitioners".
International Association of Medical Regulatory Authorities[1]

[xxxvi] Currently, evaluation of anaesthesia trainee selection would best sit within accreditation of rotations rather than sites, as, in most regions, trainees are recommended to sites (often by rotational supervisors) after a centralised selection process. There are exceptions and the redesign process should account for these and for any changes proposed by the selection group within training evolution, once underway.

Clinical Learning Environment (CLE): The CLE is how trainees experience the curriculum in their workplaces. It includes interpersonal interactions, culture and resources.[xxxvii]

This CLE definition should be interpreted using a broad definition of curriculum (below).

Curriculum: "A statement of the intended aims and objectives, content, assessment, experiences, outcomes and processes of a program, including a description of the structure and expected methods of learning, teaching, feedback and supervision. The curriculum should set out the knowledge, skills and professional qualities the trainee is to achieve. This is distinguished from a syllabus which is a statement of content to be taught and learnt."
Australian Medical Council[5]

CLE tools or Educational Environment Measures (EEMs): Self-report measures used for CLE evaluation. In PGME, some EEMs have a general focus; others are specialty-specific.

Cultural safety: "The need for doctors to examine themselves and the potential impact of their own culture on clinical interactions and health service delivery. The commitment by individual doctors to acknowledge and address their own biases, attitudes, assumptions, stereotypes, prejudices, structures and characteristics that may affect the quality of care provided. The awareness that cultural safety encompasses a critical consciousness where healthcare professionals and healthcare organisations engage in ongoing self-reflection and self-awareness and hold themselves accountable for providing culturally safe care, as defined by the patient and their communities."
Medical Council of New Zealand[26]

Faculty: All clinical educators of trainees, including more senior trainees.

Quality management in accreditation: "all activities to achieve and sustain high-quality output. It includes both the internal quality management of the organisation and external evaluation in the accreditation system".[9]

Quality assurance in accreditation: "mechanisms ensuring compliance with minimum standards. Mechanisms are focused on prevention and the process of quality (prevention-driven)".[9]

Quality improvement in accreditation: "mechanisms encouraging excellent performance".[9]

Quality control in accreditation: "mechanisms measuring or inspecting the quality of the output. Mechanisms are focused on the detection of defects (inspection-driven)".[9]

[xxxvii] Definition approved by ANZCA EDEC and EEMC; to be presented to TAEC and the FPM Board with this report in 2021.

4.3 Clinical learning environment literature review

To develop a college-wide CLE definition (section 4.2), the project group considered a range of definitions in the international literature, including those of the American Medical Association,[xxxviii] the glossary of educational reform,[xxxix] and the Josiah Macey Foundation.[xl] For all college trainees, the CLE is their perception of how the relevant curriculum is experienced in their clinical workplaces, that is, the operationalisation the curriculum.[30] CLE describes a *dynamic* interaction between the learner and their learning environment, influenced by learner and environmental factors including culture, resources and faculty characteristics. Other terms that have been used include learning or educational "climate", "atmosphere", "ambience", "tone" or "ethos".[31,32,30,33]

Environment means "that which surrounds", so learning environment is literally that which surrounds learning.[29] The CLE is a socio-cultural system involving the learner and individuals they interact with in the workplace.[27] A holistic, "*subtle concept, encompassing physical, interpersonal and organizational elements*",[34] CLE includes all the "*diverse physical locations, contexts, and cultures in which students learn*".[35,xli]

The CLE includes psychosocial (personal, social, organisational) and material elements (physical and virtual spaces).[36] Positive influences on the personal component include a community of peers, good quality of life, high resilience, wellbeing and trust in the system; negative influences are those associated with burnout.[36] The social dimension covers quality of interactions with others in the space (peers, faculty, patients); positive influences are teacher training, diversity and teamwork training. The organisational component includes wider culture and practices, including training orientation, resources, and policies.

Teaching hospitals are "particularly complex psychosocial setting[s] for learning as [they are] simultaneously … workplace[s] for a diverse range of health workers, a treatment centre for patients and …educational setting[s]. The relative importance of these functions is perceived differently according to the prevailing organizational, and professional role norms, expectations, arrangements, procedures and resources".[34]

Culture is a critical part of the CLE.[35] The CLE is influenced by how individuals treat each other,[35] and the formal and informal rules/policies/norms governing those dealings.[27] Genn emphasises the "richness, subtlety and diversity of the tapestry of the medical education experience".[30] Additionally, expert opinion favours not only individual qualities but also "practice environment" as an important enabler of excellence in clinical practice, for both trainees and specialists.[37]

[xxxviii] "At any point in time…a social system that includes the learner (including the external relationships and other factors affecting the learner), the individuals with whom the learner interacts, the setting(s) and purpose(s) of the interaction, and the formal and informal rules/policies/norms governing the interaction."[27]

[xxxix] **"**refers to the diverse physical locations, contexts, and cultures in which students learn."[28]

[xl] "the social interactions, organisational cultures, and structures, and physical and virtual spaces that surround and shape participants' experiences, perceptions and learning."[29]

[xli] Bates defines culture, in this context, as "the dominant values and beliefs that influence decision-making".[35]

Each clinical workplace has its own unique CLE, varying with the strengths and weaknesses of that department or practice. Different departments within a hospital can have different CLEs.[34] Additionally, each CLE is not fixed, but changes over time. Department leaders and clinical teachers create and influence CLE,[34] by what is prioritised, what behaviours are encouraged or discouraged, and where resources are invested.[34] Good CLE is not just about greater resource allocation but rather is heavily influenced by organisational people, teams and culture.[34] Importantly, it is not expected that all CLE should be the same.[34]

An "enabling or liberating structure" has a clear framework for learning, including directions and boundaries for learners taking initiative and seeking assistance. It sets the rules, expectations, and requirements of how learning occurs.[34] This aligns with the concept of a "learning organisation" that is continually seeking to improve and views training as part of the continuum of professional development within its focus on patient care.[33,34] This emphasises continuous quality improvement in accreditation practices (not just quality assurance/compliance) and increasing focus on outcomes (in additional to more traditional process- and structure-based measures).[9,38,39]

Why is CLE important?

Trainee learning is affected by many factors. Extrinsic influences include both the formal curriculum, the "informal curriculum" [xlii] and, most importantly, the "hidden curriculum".[40,xliii] To address obstacles to optimal CLE and trainee learning, Hafferty suggests exploring the hidden curriculum (at a departmental and college level) by examining formal statements, what is assessed (including by accreditation), how resources are allocated and commonly-used terminology ("slang" or idiom).[40]

A goal of assessing local delivery of a curriculum is ensuring it is implemented as planned.[31] While some variation is inherent, there is no point in having a thorough, carefully constructed curriculum produced by experts using high quality educational approaches if it is not experienced as such by trainees. Hafferty goes further by stating that "*there is much work left to be done, including the critical step of framing change in terms of reframing learning environments rather than in terms of modified curricula."* [40] Genn notes the central role of educational "climate" in linking curriculum, environment, quality and change in medical education.[30]

Learning environment and outcomes

Good CLE is associated with **better trainee learning, satisfaction and examination performance**.[33,34,41] Both the educational climate and culture are important determinants of behaviour[5]; they can be motivating or demotivating.[42] The UK Standing Committee on Postgraduate Medical Education emphasised the importance of educational climate as follows: "a working environment that is conducive to learning is critically important to successful training".[xliv]

[xlii] The informal curriculum is "an unscripted, predominantly ad hoc, and highly interpersonal form of teaching and learning that takes place among and between faculty and [trainees]".[12]

[xliii] The hidden curriculum in medical education is "a set of influences that function at the level of organisational structure and culture".[12]

[xliv] SCOPME released this report in 1991. The ALEPG has been unable to locate a current reference for it, but believe it is of sufficient importance to include in the report.

Poor CLE is linked to **adverse consequences on doctors' wellbeing**.[43] A study of Belgian residents (multiple specialities, single centre) found an inverse association between learning environment quality (as assessed by the D-RECT[xlv]) and burnout risk, suggesting a role for CLE in trainee wellbeing.[43] Important influences were supervisor support (for trainees) and quality of coaching and assessment.

There is emerging evidence that training location influences **graduate outcomes**. Patient outcomes[44,xlvi] and approaches to healthcare spending are linked to where specialists trained.[45,xlvii] In recently-graduated specialists, self-reported "preparedness for practice" correlates with CLE quality.[46]

What factors influence the CLE?

The CLE is influenced by trainee characteristics (motivation, mental model, prior experience, mood, fatigue); content and skills of those teaching; learning resources; support for learners; and assessment approaches.[35] Supervisors influence trainees' experiences of the curriculum, through their values, engagement with the organisation, teaching approach, and access to clinical support time.[30] Regular feedback to supervisors from trainees and their peers enhances the CLE.[47] Departmental CLE is also influenced by external factors, including wider institutional culture and external accreditation requirements and conditions.[35] Learning environments can be considered from both supervisor and trainee perspectives, although, in adult learning, the latter is most crucial.[35]

CLE domains (figure 4) include trainee autonomy (appropriate matching of supervision with trainee expectations, needs and capabilities), learning and teaching approaches (formal and informal), the extent and quality of supervision (including accessibility), workload management (including role clarity), assessment and feedback, social atmosphere, social support, and the orientation of the department towards training and professional development.[34] The CLE is also linked to cultural biases such as age and gender discrimination, and racism.[42] Importantly, the needs of trainees and hence their perception of CLE varies with their stage of training, gender and diversity.[42]

[xlv] Dutch Residency Educational Climate Test (D-RECT). Multivariate analysis.
[xlvi] Obstetric complications (risk-standardised) were associated with where the specialist undertook their residency training program, even when adjusted for medical licensing scores. Specialists in the programs in the lowest quintile for complications had complications rates approximately one third higher than those trained in programs in the highest quintile.
[xlvii] In the US, where residents trained affected their Medicare spending patterns as specialists (multivariate analysis) with the increment as great as 29 per cent in the first seven years after graduation, declining over time.

Figure 4. Clinical learning environment domains

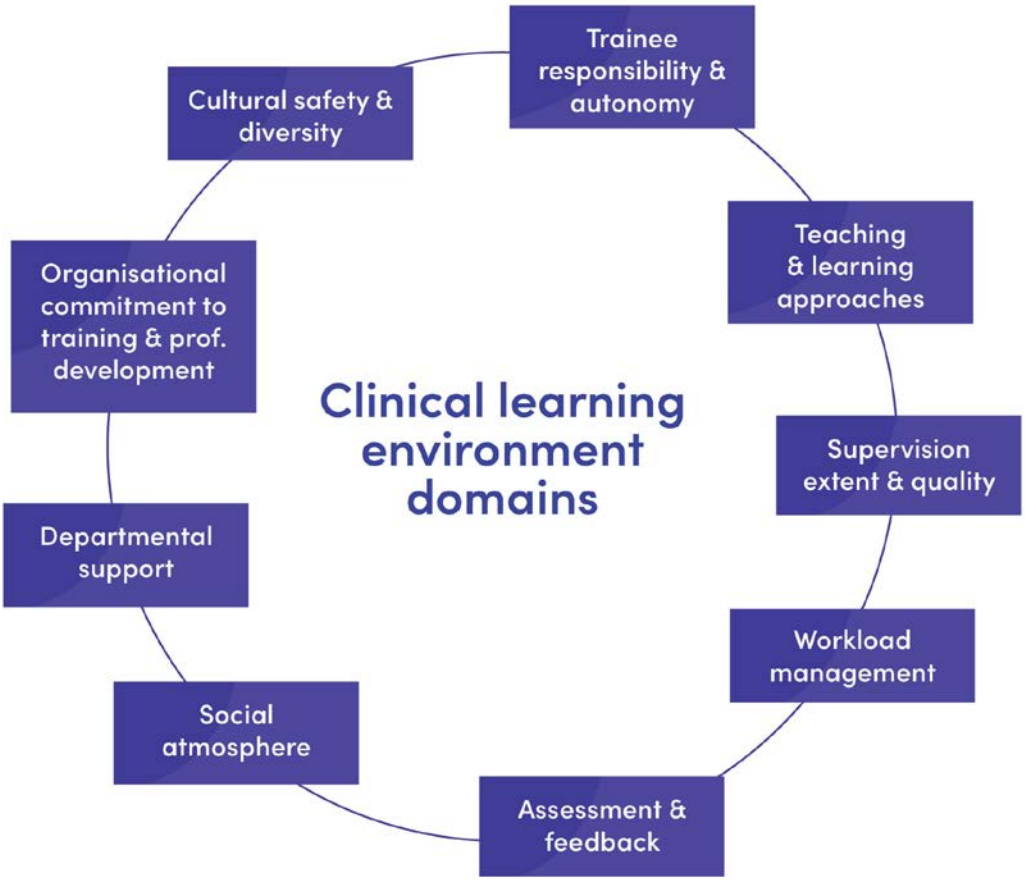


Table 2 shows factors that influence the CLE.

Table 2. Influences on the CLE in anaesthesia and pain medicine

Influencers	Examples (note these are not exhaustive)
Institutional culture and work practices	Policies and practices on teacher-learner relationships and learner mistreatment (e.g. BDSH) Optimal balance between workload and learning Faculty values[48], diversity, development and reward systems[34] Safe rostering and fatigue management Access to leave and external courses (e.g. EMAC, exam preparation)
Curriculum delivery	Teaching and learning goals Formal teaching including explicit learning experiences (e.g. simulation access) Exposure to required content (e.g. SSU allocations for required anaesthesia VOP) “Hidden curriculum” (unofficial “rules”)

	Role modelling Interprofessional learning[xlviii] Support for anaesthesia training rotations (managing independent trainees and new sites, especially rural and regional) Teaching and supervision of other trainees, other health professionals and students
Resources	Technology and facilities Faculty staffing sufficient, experience and expertise for all curriculum requirements (all ANZCA and FPM roles in practice) Quality of accommodation when on secondment
Assessment program	Balance of formative and summative assessment, including direct observation (WBA implementation) Faculty training in assessment and providing feedback
Characteristics of learners	Trainee selection processes, including diversity and diversity support Learner goals Learning contexts Learning styles, behaviours, attitudes and values
Support for learners	Counselling, mentoring and wellbeing support Feedback processes including feedback literacy[xlix] Communities of learners, peer support[34] Management of trainees through the trainee support process (formerly TDP)
Approach to patient safety	Incident / morbidity and mortality reporting and management culture Access to critical incident debriefing and support Opportunities for quality improvement participation and learning
Approach to professionalism	Role modelling and assessment
Approach to scholarship	Support for and access to research, audit, publication, journal clubs, teaching and supervision opportunities
External processes and factors	Timing of exams Influence of overall accreditation standards and processes on CLE Organisation of rotations and placement durations

Why measure the CLE?

Measurement of CLE within accredited sites:

- Increases the emphasis on education and sets clear expectations.
- Provides a framework for regularly monitoring curriculum delivery, aiming for improved educational quality.[31]
- Allows units to self-assess practical strengths, areas for improvement and impact of changes made.[32,33,51]

[xlviii] Interprofessional education "occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes".[49]
[xlix] Feedback literacy is "the understandings, capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies".[50]

- Identifies ways to improves trainee (and potentially supervisor) learning, satisfaction and engagement.
- Identifies opportunities to improve departmental culture.
- Supports units that are not performing as well by identifying specific areas for improvement.[31]
- Strengthens opportunities for educational excellence, leadership and innovation.
- Supports a longer accreditation cycle for high-performing departments.

CLE measures for anaesthesia training

The project group identified three anaesthesia-specific EEMs (table 3). All are similar and quite lengthy. See appendix B for full questionnaires.

Table 3. Education Environment Measures for anaesthesia training

Tool	Development	Characteristics	Weaknesses
Anaesthetic Theatre Educational Environment Measure (ATEEM)[32,I]	Literature review, focus groups, Delphi process, trainee and supervisors, factor analysis. Pilot 271 trainees (80% response).	40 items in 5 domains: autonomy, perceptions of atmosphere, workload, supervision, support, perceptions of teaching and teachers, learning opportunities, orientation to learning.	Limited and only small studies beyond initial development.[52,53]
Measure for the Anaesthesia Theatre Educational Environment (MATE)[54]	Modified Delphi process with 24 anaesthesia education experts. Successfully piloted in 7 countries.	33 items in 4 domains: teaching preparation and practice; assessment and feedback; procedures and responsibility; overall atmosphere. Psychometrically reasonable (construct validity, internal reliability).	Length. No studies beyond initial development work. Yet to validate evaluation score structure and minimum sample size per department.
Anaesthesia clinical learning environment instrument (ACLEI) [31,51,*Ii*]	Authors chose the items after literature review, local pilot, focus group of NSW SOTs refined, random sample ANZCA trainees pilot (low response rate).[31] Reliability study: 172 ANZCA trainees in 25 NSW departments (59% response rate).[51]	38 items in 4 domains: social atmosphere, supervision, workplace-based learning, formal teaching program. Internal structure validity, acceptable reliability. Feasible in small departments (acceptable precision of total score down to 8 trainees).	Length. No studies beyond initial two studies. Yet to validate evaluation score structure, predictive validity.

[I] Developed by collaboration between Roff who developed the Dundee Ready Education Environment Measure (DREEM) and Miles Holt from Whangarei, New Zealand. Supervisors and trainees were UK-based. The Surgical Theatre Educational Environment Measure (STEEM) is a similar measure for surgery.
[Ii] This tool does not have a specific name or acronym.

CLE measures for pain medicine training

The project group was unable to identify any pain-medicine specific CLE measures. As the pain medicine educational setting is primarily an outpatient and interdisciplinary one, tools applied to other specialties with a similar practice context are relevant.[55] The project group excluded measures that are more appropriate for medical students (for example, The Dundee Ready Education Environmental Measure DREEM, the most studied EEM in the literature).[56]

Suitable PGME measures for pain medicine are in table 4. Full questionnaires are in appendix B. Bennett and colleagues used the D-RECT for trainees of the Royal College of Physicians of Ireland with benchmarking against a similar cohort from The Netherlands.[57] They concluded the measure was feasible at a national level, including for longitudinal site profiles. More senior trainees experienced improved training quality than did more junior ones. Given that trainee expectations were unaffected by seniority, they hypothesised that supervisors concentrated more efforts on their senior trainees.

Pinnock and colleagues used the PHEEM questionnaire to survey paediatric trainees in New Zealand, finding it was "practical to use, showed good internal consistency, and was acceptable to trainees".[58]

Table 4. Education Environment Measures applicable to pain medicine training

Tool	Development	Characteristics	Weaknesses
Dutch Residency Educational Climate Test (D-RECT)[59]	Modified Delphi. Piloted with 1278 residents, 26 specialties. Valid and reliable.	50 items in 11 subscales: supervision, coaching and assessment.	Length. American language (requires modification for Australian and New Zealand trainees).
Postgraduate Hospital Educational Environment Measure (PHEEM)[60]	Cronbach alpha >0.90 in several studies.[60] Subscales useful.[58] Has been used in postgraduate paediatric trainees in New Zealand.[58]	40 items in 3 subscales (5 point Likert scale from 0 strongly disagree to 4 strongly agree): autonomy, teaching, social.	Length. May be measuring a one-dimensional construct.[61]
ACGME resident survey content areas[62]	Part of standardised performance measures in the Next Accreditation System.[63] Collected annually, promoting trend analysis.	Unclear from published data: 9 areas and many subareas suggests may be long.	Developed by ACGME for their context.

Challenges in CLE measurement

Feasibility

All EEMs developed for anaesthesia (table 3) and applicable to pain medicine (table 4) are lengthy (30-50 questions). These longer questionnaires comprehensively cover CLE domains. Shorter surveys have been developed, but they are limited by often focusing on

fewer or single domains (Dr Natalie Smith *personal communication*). For example, the 11-item Learning Environment for Professionalism (LEP) survey focuses on professional behaviours.[64,lii]

There might be appropriate shorter alternatives. In their redesigned CanERA accreditation system, The Royal College of Physicians and Surgeons of Canada has developed a 13-question survey and currently is studying its characteristics (*ALEPG consultation with RCPSC*).[liii] Alternatively, the 15-item Job Evaluation Survey Tool (JEST) developed in the United Kingdom to measure GMC standards includes many CLE domains (appendix B); early investigation of reliability, generalizability and correlation with the more widely-studied tool PHEEM is promising.[65]

Validity and reliability

Systematic review of EEM psychometrics, performed prior to publication of the MATE and ACLEI, identified 13 tools used for PGME training (including ATEEM).[55] There was limited evidence for validity; 61 per cent had some content validity evidence, with less focus on other aspects of validity (response process, internal structure, relationship to other variables).[liv] The authors recommended more robust testing, particularly in different institutions and with trainees of varying seniority. However, their methods and conclusions have been criticised by the original authors of the Dundee Ready Education Environment Measure (DREEM).[66]

Anaesthesia-specific tools (table 3) have not yet been widely studied. For validity, Sidhu and Clisshold estimate at least 10 responses are required for the MATE instrument[54]; Castanelli and Smith recommend at least eight for the ACLEI.[51] Early investigation of reliability, generalizability and correlation with the better studied tool PHEEM is promising.[65]

Trainee safety

Trainees must feel and be safe when providing feedback about their training experiences.[5] One CLE study found ANZCA trainees in smaller New South Wales departments did not respond, even when anonymity was promised.[51] This is a pervasive issue for pain medicine training where trainees typically train in small numbers or individually.

Potential approaches to trainee safety in smaller units include

1. **Longitudinal data collation** for both validity and respondent safety. A minimum response number is required before data are reported back to training sites.
2. **Ownership by our trainee bodies** for increased safety (*feedback from ANZCA binational trainee committee, September 2020*). This approach would require robust mechanisms of data management.

[lii] Questions cover observations of role modelling, patient education, valuing human contact and patient wellbeing, placing patients' needs over own needs, derogatory comments about patients or colleagues, withholding information from patients, disrespect for non-physician health workers, discrimination against patients and discussion of confidential information in inappropriate settings.
[liii] ANZCA has received a copy of this questionnaire from CanRAC and would require formal permission to adapt or use it for accreditation.
[liv] This paper defines each of these variables. It is available online through the ANZCA library.

4.4 Best practice accreditation in an era of competency-based education

4.4.1 Accreditation literature review findings

General comments

There is limited evidence for the validity of PGME accreditation. This area is beset by methodological challenges including contamination (multifactorial influences on training outcomes), lack of control conditions (in many systems all programs must be accredited under law), more capable students attending higher quality programs, difficulty unbundling the impact of individual components (given accreditation is delivered as a package) and a paucity of valid outcome measures.[67] None-the-less, the ALEPG literature review identified major themes, primarily based on expert opinion. These are summarised under the headings "best evidence accreditation principles" and "best evidence accreditation practices".

Best evidence accreditation principles

Key themes include public accountability, aligning health service and training priorities, quality assurance versus continuous quality improvement, outcomes focus and emphasis on learning environments.

Public accountability

Accreditation as a *"a societal enterprise that is fundamental for both effective healthcare education and effective healthcare"*.[68] Public interest means specialists who can deliver high quality care, but also broader responsiveness includes optimal workforce numbers, distribution and diversity.[69] Accreditation is a lever to achieve the public's interests in these areas. This requires clear, defensible standards, transparency and means to challenge outcomes.[5] Community representatives should be involved in standards design, accreditation decisions and have access to outcomes.[70]

Aligning health service and training priorities

Historically these have been divergent. Despite the strength of the patient safety movement, trainees are often not involved meaningfully in processes to improve care.[71] This occurs despite the community and health services requiring these skills in graduating specialists. This is one motivation for more purposeful alignment of training and clinical care goals.[72]

The ACGME Next Accreditation System (NAS) aims to prepare graduates for 21st century practice, promote outcomes-based accreditation, and reduce the accreditation burden of a process-driven system.[73] Allied to the NAS is the CLER process which evaluates trainee involvement in "systems-based practice" for patient care improvement.[74] Seeking to bring together the priorities of training and the organisations in which it happens, the CLER process focuses on six main areas – patient safety, quality, care transitions, fatigue management, supervision and professionalism.[75]

Quality assurance versus continuous quality improvement

All accreditation systems include QA, assurance that minimum standards are met. In our region, binational colleges are accredited by the AMC under the Australian national law to ensure that education providers produce suitably-trained specialists who can serve the

Australian commuity.[5] The MCNZ works closely with the AMC on accreditation and has additional accreditation criteria which are specific to the interests and contexts of the New Zealand community.[6]

Increasingly accreditation processes are being redesigned to also include CQI elements. These aim for constant enhancement of training and education beyond minimum standards. They require more continuous measurement, review and improvement planning.[68] This moves away from the episodic "biopsy" model associated with high-stakes site visits followed by limited attention for the remainder of the accreditation period, to more continuous measurement and improvement.[68]

Frank and colleagues contrast QA and CQI approaches as shown in table 5. The CQI approach focuses on actionable feedback and coaching for improvement. Akdemir notes the future PGME accreditation system in the Netherlands is likely to place greater emphasis on a coaching model.[9]

Table 5. Comparison of QA and CQI accreditation approaches (adapted from Frank et al 2020[68])

	QA	CQI
Goal	Ensure minimum standards achieved	Promote excellence and innovation
Focus	Areas below standard	Areas for improvement
Characteristics	Summative Quality judgements Measurement against predefined requirements and thresholds Preventing harm to trainees and patients Culture of episodic, high-stakes evaluation Audit model	Formative Actionable feedback Feedback on strengths and areas to improve Dissemination of innovations, leading practices, "next practices" Culture of continuous enhancement Coaching model

"The true impact of accreditation may well rest with its ability to promote continuous quality improvement within medical education programs".[38] CQI in accreditation is the educational equivalent of the patient safety movement for improving healthcare delivery. Important features include quality indicators with monitoring and benchmarking against similar organisations.[38] Tools that measure the clinical learning environment and supervisor performance can guide training improvement plans.[76]

By promoting CQI orientation at accredited sites along with a data-driven monitoring process, accrediting bodies can take a "lighter touch", ideally promoting greater trust in the institution being accredited, as well as allowing sufficient flexibility for sites to take ownership and innovate. This contrasts with "*rigid application of standards leads to an unresponsive*

process which can undermine the intrinsic motivation of the accredited party". [70,77] However, while a CQI model, at best, uses data to drive action, allows benchmarking and empowers departments, applied poorly it can be resource intensive and increase bureaucracy.[78] Good design and efficient data management are required.

CBME and outcomes-based accreditation

Accreditation has traditionally focused on structural and process measures.[79] Increasingly there is recognition that outcomes-based education (CBME) requires outcomes-based accreditation.[9,39] Examples include the Milestones Project in the US,[80] and the Canadian Excellence in Residency Accreditation (CanERA) project.[81] Important features of an outcomes approach are key quality indicators, monitoring and benchmarking against similar sites.[38]

The "holy grail" of outcomes measurement in PGME is graduate outcomes, showing that training programs produce graduates with excellent patient outcomes, who can reflect on and improve safety and care quality for those they serve. Health services benefit through improved population health, access and cost-effective care. However, no accreditation system has yet been able to achieve this, given the challenges of what to measure, how to measure it, and how to interpret it, given multifactorial influences. Typically, where outcome measures have been adopted, they are intermediate or surrogate measures like exam pass rates, graduate satisfaction with their programs, preparedness for practice and employer surveys.[82]

Importance of clinical learning environment

Given the implications of CLE for trainee learning, exam performance, wellbeing and specialist practice, most PGME accreditation systems are increasing their focus on the CLE, its measurement and improvement. See section 4.3 for more details.

Best evidence accreditation practices

Accreditation system design/redesign

Fishbain and colleagues in comparing PGME accreditation in the US, Canada, Germany and Israel noted there was broad agreement that accreditation was required but no consensus on how it should be done.[83]

Taber and colleagues discuss accreditation systems redesign noting that there is "no single set of best practices" but rather "a set of design decisions" tailored to local context.[84] For each of the 10 components listed below they discusse variation in terms of being fit for purpose in local context, including changing accreditation needs over time. This starts a far more nuanced conversation about what is required by an organisation at a particular point in time, given things such as rates of change within the environment, organisational evolution and practical constraints such as resources.

The Akdemir framework is not only a tool for benchmarking our processes (see table 13), but is also useful for accreditation system redesign.[9] Akdemir has further developed this framework into a gamification process for those designing or redesigning PGME accreditation systems.[85] Questions are posed to allow the user to make choices about what is important in their particular context.

Accreditation components

An international consensus group identified 10 key components of PGME accreditation[68]:

1. Mandate
2. Standards
3. Application
4. Self-assessment
5. External assessment of standards
6. Reports
7. Decision
8. Cycle
9. Site review model
10. System administration.

The evidence for some of these components is discussed in further detail below.

Accreditation standards

Optimally, PGME standards are **vertically integrated with the medical education continuum**, aligned with those for medical schools, prevocational training and specialist practice.[86] Best practice is to express them using a standards organisation framework, as detailed in table 11.[87,88] Many studies confirm the perceived content validity of accreditation standards.[38] Given accreditation's aim to show that the curriculum is being implemented as planned, standards should be mapped to the relevant curriculum. For example, the scholar role standard can be evaluated by longitudinally tracking trainee and supervisor scholarly activity such as publications, presentations, grants and teaching activities.[89]

As the "product" of PGME is a competent graduate who can serve the community, the **standards should build on graduate outcome statement**s.[90] This is demonstrated by the CoBaTrICE collaboration which used an iterative consensus-building technique to develop 29 standards for intensive care medicine training in Europe, starting from a description of what a graduating intensivist can do.[90] Thematic review of existing standards can identify gaps.[91] For example, the College of Family Physicians of Canada analysed their accreditation standards against patient safety principles and were able to demonstrate gaps in complex systems, culture and accountability.[91]

There are a number of challenges with standards, including that most accrediting organisations experience greatly increasing numbers of standards over time.[9] **Specificity is important**. Standards that are too broad don't provide enough guidance, while those that are over-specified are also unhelpful as they may lead to focus only on compliance[92] with limited flexibility for educational innovation.[70]

Other potential issues include **"rule ritualism"**, focusing on the rules rather on solving problems, **"legal ritualism"**, applying the letter rather than the spirit of the standard, and **"protocol ritualism"**, following rigidly defined steps even if the outcomes are worse.[70] All these have the unintended consequence of driving down excellence due to reducing achievement to a minimum threshold.[86] Solutions to these problems include **evaluating**

topical issues rather than adding new standards.[70] Examples are the ACGME CLER program with its focus on six key areas, and the GMC's risk-based spot checks.[70]

Stakeholder input

Trainees

Given trainees are integral consumers of educational programs, their **involvement at all levels of accreditation practice** is supported by the literature.[9],[93] This includes providing data on training experiences (qualitative and quantitative), representation on accreditation teams at site visits, and in accreditation decision-making.

Faculty

CBME requires skilled faculty who are capable of providing constructive feedback within programs of assessment. Accreditation best practice thus places **greater emphasis on faculty development**.[39] **Many organisations run faculty surveys** during their accreditation processes (for example, the ACGME, RCPSC, AMC/MCNZ). Comparison of trainee and faculty opinions, looking for commonality and divergence, is an important element of triangulation.[94]

Other stakeholders

Other important stakeholders are the **community and jurisdictions**. Accreditation bodies must define how to ensure both have input to standards development, accreditation procedures and decision-making.

Self-assessment and planning

Whilst accreditation has long included an element of self-assessment (also called "self-study"), in recent years this has become an even more crucial component.[68] Internationally, there is an increased emphasis on moving **beyond demonstrating compliance to also improving training** through regular data collection, action plans and documenting outcomes (i.e. **self-assessment combined with continuous improvement improvement**).[68]

As the majority of units being accredited will be compliant with most standards and thus have few conditions on their accreditation, this also **reframes accreditation as an opportunity for aspiring to educational excellence**.[95] It also allows the external accreditation process to become a validation of the self-assessment.[9] For example, the ACGME next accreditation system (NAS) has introduced self-study as a key aspect of accreditation; it goes beyond compliance to demonstration of program improvement with regular data collection, action plans, and documenting improvements achieved. In the NAS, the self-study process occurs 12 to 18 months prior to a site visit, allowing action plans to be underway by the time of the inspection.[96]

Philibert and colleagues describe **five dimensions for promoting effective educational improvements through self-evaluation**:

1. Linking in with local aims and context (including community needs);
2. Incorporating the PDSA cycle;
3. Data management;
4. Involving key stakeholders; and
5. Coordination of training and health service priorities.[96]

The ACGME process requires programs to undertake **annual evaluation** with self-study every 10 years. The annual evaluations provide longitudinal data, becoming the "basic building blocks" of the self-study process.[97,98] The ACGME supports this with a list of **"high value data"**.[96] This can include generic metrics for all programs and specialty-specific ones.

The self-study includes looking at the prior five years as well as forward to the next five; it includes an environmental scan to detect barriers to and enablers of future success.[98] Programs are required to report only their strengths to the ACGME, with areas for improvement retained for their own use.[98] It is expected that this self-assessment process will identify areas of standards non-compliance which will then be addressed by the time of the site visit.[98]

Internally-organised mock reviews can identify areas for improvement and aspects that are likely to be identified at the formal accreditation visit.[99] Some programs have developed and published their processes, timelines and templates for self-assessment.[100] Accrediting organisations often provide centrally-developed tools, for example the **ACGME Program Improvement Assessment Tool (PIAT)**.[96] Wiemers and colleagues demonstrate how the actions generated from using the **Annual Program Review of Educational Effectiveness (APREE)** have improved their exam pass rates.[101] The tools also promote a "shared mental model" for everyone involved in self-assessment and accreditation as to what is expected, as well as promoting "intentional design" of improvements.[98]

Regular monitoring and cycle length

Rose and Long described a **"report-card" and traffic light system approach for anesthesiology** programs; annual metrics included selection metrics, exam performance (five-year results), mock exam performance, scholarly activities (publications, presentations), exit interviews (prior to graduation or if exiting the program), clinical experience (case and procedure numbers), diversity data, trainee and faculty evaluation, results of accreditation and internal reviews, and graduate surveys (e.g. "preparedness for practice").[102]

Examples include ACGME annual evaluations of resident performance, faculty development, graduate performance and program quality[lv,97] and the GMC national training survey.[70]

Support for innovation and excellence

Approaches here include providing sufficient **balance between standardisation and flexibility** to allow programs to develop innovative approaches, ensuring that accreditation is more than just compliance with minimum standards, and devising **mechanisms to share good practices**. Prior to the implementation of the Next Accreditation System in the US, the Preparing the Personal Physician for Practice (4P) Project encouraged innovation through educational "experimentation" over a seven-year period, demonstrating that innovation was possible with no additional accreditation citations (conditions) or shortening of cycle length.[103]

[lv] Detailed measures include faculty and resident surveys, graduate feedback, board certification, procedure logs, resident performance, research and scholarly activity, duty hours; annual program update uploaded to ACGME website.

Andolsek describes the following components of excellence[104]:

1. Evidence of public accountability.
2. A graduate composition that reflects the community being served (in terms of ethnic and racial diversity, rurality and so on).
3. High value education, including the ability of faculty to "speak the truth" about trainee performance, with shared mental models of what is expected.
4. Embedded in the right CLE.

An important mechanism for promoting excellence is also having mechanisms to share it between accredited sites and programs. For example, the ACGME funds programs to participate in **The Pursuing Excellence Initiative**, funding innovation and providing systems for sharing initiatives.[105] This connects "leaders" and "innovators with those who participate primarily to learn from those who are leading innovation.

Resource utilisation and efficiencies

Accreditation is widely recognised as being resource-intensive, with frequent mention in the literature of the importance of ensuring efficient use of resources and focusing on value.

Surveyor Team

Teams are commonly volunteer peer (clinician) surveyors, although some organisations use paid staff.[106] A qualitative study of accreditation surveyors found common themes including:

- The burden of documentation and time (cost, stress, unnecessarily time consuming).
- Efficiency and efficacy (insufficient qualitative data, not enough data on quality, emphasis on process rather than outcomes, discrepancy between information provided and reality, view that could remove some components without compromise).
- Training and experience (value of these, advantages of being on both sides of the process).
- The importance and challenges of being a peer (understanding of contemporary issues in the specialty and hospitals).
- Professional skills and recognition (lack of "survey" skills, challenges with volunteer model, lack of financial benefit, potential for some aspects to be done by professional surveyors).[79]

The "Accreditation balance model" promotes a better balance between the use of human resources (training, skills, recognition) and the accreditation structure and process (amount of documentation, time, effort).[79]

Key aspects of surveyor management include[106]:

- **Selection and recruitment:** good interpersonal skills, relevant expertise and experience, commitment to confidentiality, and independence.
- **Initial training and orientation:** typically mandatory training for role, standards and their application surveying techniques, initial mentoring.
- **Certification:** typically time-limited, requiring performance assessment and relevant continuing professional development (CPD), sometimes minimum visit number to maintain certification.

The role of surveyors can be understood in terms of volunteerism.[106] Volunteers tend to have certain psychological characteristics. Organisational commitment is important to them, as is organisational support. For accreditation surveyors, certain personal characteristics may be preferable; examples include open mindedness, diplomacy, being observant, perceptiveness, adaptability, tenacity, decisiveness and integrity.

The Greenfield model of accreditation surveyors styles (table 6) has implications for training and professional development. It may be helpful for surveyors to identify their style and perhaps to be paired with someone of a differing style to expand the skills of the team. The assessor style might also be considered in the context of the site under review; for example, it might be prudent to use a discusser or explorer if there is apprehension amongst those at the site being accredited.[107,lvi]

Table 6. Greenfield model of accreditation surveyor styles

		Questioning dimension	
		Structured	**Opportunistic**
Recording dimension	Explicit/written	**Interrogator** engages explicitly in educator role	**Explorer** less inclined to engage in educator role
	Implicit/memory	**Questioner**	**Discusser** interview is a discussion with assessment and education built into it

4.4.2 Accreditation practices of other organisations

International organisations and binational colleges evaluated by desktop review and interview are listed in table 7 and table 8, respectively. Table 9 shows those evaluated by desktop review only. The project group notes that some organisations may have updated their policies and procedures since the time that their websites were reviewed.

Table 7. International organisations evaluated by desktop review and interview

Organisation	Key documents in public domain
Accreditation Council for Graduate Medical Education (ACGME), US	ACGME program requirements for graduate medical education in anesthesiology (effective Jul 2020).[108] ACGME resident/fellow survey content areas (2019).[62] ACGME faculty survey content areas (2019).[109]
College of Anaesthesiologists of Ireland, Ireland	Curriculum for the National Specialist Anaesthesiology Training Programme, appendix 4 hospital accreditation.[110]

[lvi] Although this paper is outside the time limits of the literature review, its findings are of sufficient and unique interest to warrant inclusion here.

General Medical Council, UK[lvii]	Promoting excellence: standards for medical education and training (2015).[112]
Royal College of Physicians and Surgeons of Canada, Canada	CanERA: general standards of accreditation for residency programs (Jul 2020).[88] Standards of accreditation for residency programs in anesthesiology (2020).[113]

Table 8. Colleges in Australia and New evaluated by desktop review and interview

Organisation	Key documents in public domain
Australasian College for Emergency Medicine (ACEM)	FACEM training program site accreditation, AC549 (Jan 2020).[87]
College of Intensive Care Medicine of Australia and New Zealand (CICM)	Guide for hospitals seeking accreditation for intensive care training (2014).[114] IC-3 Minimum standards for intensive care units seeking accreditation for training in intensive care medicine (2015).[115] IC-33 Minimum criteria for hospitals seeking accreditation for foundation training in intensive care medicine (2020).[116]
Royal Australasian College of Medical Administrators (RACMA)	RACMA Regulation - Accreditation of Training Posts (approved 2016).[117]
Royal Australasian College of Physicians (RACP)	Training provider accreditation program (2018).[118] Training provider standards for clinical training programs (2020).[119] Training network principles (2018)[120]
Royal Australasian College of Surgeons (RACS)	Accreditation of hospitals and posts for surgical education and training: process and criteria for accreditation (2016).[121]
Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)	Accreditation standards and guidelines for hospitals in the FRANZCOG training program (Jul 2016).[122]
Royal Australian and New Zealand College of Psychiatrists (RANZCP)	Accreditation of training programs: training program accreditation standards (Nov 2019).[123]

[lvii] The Royal College of Anaesthetists, UK, was not formally approached. The project group reviewed The Anaesthesia Clinical Services Accreditation (ACSA) handbook: a guide for departments (Mar 2019).[111]

Table 9. Colleges in Australia and New Zealand evaluated by desktop review only

Organisation	Key documents in public domain
Australasian College of Dermatologists (ACD)	Accreditation standards for training positions (2017).[124] Accreditation reviews and outcomes. Guidelines (not dated).[125]
Australian College of Rural and Remote Medicine (ACRRM)	Training organisations standards (Jan 2016).[126]
Royal Australian College of General Practitioners (RACGP)	Standards for general practice training (updated 2017).[127]
Royal Australian and New Zealand College of Ophthalmologists (RANZCO)	RANZCO training post accreditation policy (Nov 2019).[128]
Royal Australian and New Zealand College of Radiologists (RANZCR)	Accreditation standards for education, training and supervision of clinical radiology trainees (Dec 2018).[129] Radiation oncology accreditation standards and criteria for training networks and sites (Jul 2017).[130]
Royal College of Pathologists of Australasia (RCPA)	Accreditation of sites for training programs (2017).[131]

Table 10 lists selected examples of leading practice identified at consultation. Notably some of the international organisations, for example, the GMC, are operating at a higher level by accrediting educational providers. This makes them more like the AMC and MCNZ in Australia and New Zealand, respectively. However, general principles are relevant. During the consultation process, **many organisations indicated they were in the process of reviewing their accreditation processes to accommodate recent educational changes, especially CBME, and increasing their focus on the CLE**.

Table 10 Examples of leading practice identified at consultation

Finding	Selected examples[lviii]
Aligns with community need and educational innovation	ACGME: aim to realise quadruple aim.[lix,lx] Considering whether accreditation should be linked to environments with high quality patient outcomes. RCPSC: all CanMEDS roles embedded in accreditation.
Aligns health system and training priorities	Almost exclusive focus on education and training found at many organisations. Jurisdictional representatives on teams: RCPSC. ACGME: CLER process evaluates involvement of residents[lxi] in systems that improve patient safety and care quality. GMC: research program on how education is accounted for in planning health services. RACP: jurisdictions individually approached for feedback on proposed standards; ran forum for jurisdictions as part of implementation.
Focuses on clinical learning environment	ACGME: clinical learning environment review (CLER) process with six focus areas.[lxii] CAI: includes ratio of supervisors to trainees and protected teaching time. GMC: national training survey includes CLE domains; trainees must respond to this survey to progress in training.[lxiii] RACP: specific standards on learning environment, and trainee support and wellbeing.[119] RCPSC: annual resident survey (13 questions[lxiv]) and faculty surveys.
Explicit philosophy and purpose	Most organisations reported mission alignment. A majority focus primarily on education and training. In the main, clinical care standards are considered only in so far as they affect training. Some base accreditation decisions on how trainees are involved in learning to deliver safe and high quality care and to understand systems-based practice to prepare them to work as specialists. Some mentioned monitoring health service accreditation so that the college can focus primarily on training. Some have separate pathways for raising concerns relating to clinical care that are identified during accreditation visits.

[lviii] Note that a small number of examples are listed. This does not imply that other organisations do not also undertake the practice. Readers should also note that the accreditation systems of the organisations outside Australia and New Zealand often operate at a different level than those undertaken by Australasian colleges.
[lix] Improved "patient experience of care, population health, and health care provider work life, while lowering per capita cost" (quote from ACGME website, in ACGME response to this project).
[lx] ACGME CLER and accreditation processes are voluntary.
[lxi] In North America, "residents" are trainees.
[lxii] Patient safety, health care quality, care transitions, supervision, wellbeing, professionalism. Separately run from accreditation process. Required to maintain accreditation.
[lxiii] Includes wellbeing, burnout, supervision quality, rosters, fatigue management. Response rate 97%.
[lxiv] Survey developed using a modified Delphi process. "Would you recommend the program to others?" used by RCPSC and also GMC; also used in the JEST tool (appendix B).

Mixed model of CQI and QA	Most organisations aspire to CQI, with some implementing processes for this within accreditation. Most have conditions, quality improvement recommendations and many have commendations.
Proactive monitoring and benchmarking	Annual site census reporting: ACEM, ACRRM, RACP. Defined quality indicators: ACGME. ACGME: Annual resident and faculty surveys. Programs submit annual data. Annual review and accreditation decision. More continuous process allows a longer cycle (increased from five to 10 years). GMC: risk framework with tiered approach; "enhanced monitoring" if issues can't be managed locally. RACP: 4-year cycle, annual or biennial status report submitted by training providers (includes affirmation of compliance, action plan for recommendations and quality initiatives), annual trainee and supervisor surveys. RANZCP: regional/NZ branches monitor posts (via training monitoring subcommittees, which they find are more likely to detect local issues), central college monitors programs. Mid-cycle paper-based monitoring (at 2-3 years in 5 year cycle). RCPSC: better monitoring allowed increase to eight-year cycle.
Standards mapped to curriculum, expressed in standards organisation framework	Standards organisation framework: ACEM, RCPSC. ACEM: use AHMAC and CPMC standards.[11] Mapped to curriculum. ACGME: common program requirements and specialty-specific ones. CAI: accreditation standards are those of the Medical Council of Ireland (which also determines the 8 curriculum domains), curriculum document includes map of accredited sites and which training experiences ("competencies") they provide.[110] CanRAC[lxv]: general standards plus specialty-specific standards, combined visits. RACP: common standards across training programs - include 4 themes (outcome, responsibility), 9 standards (with network criteria and setting criteria[lxvi]); plus program-specific requirements.[119],[lxvii]
Balances standardisation and flexibility	ACEM: documentation includes different ways standards can be met.
Self-assessment for CQI	Most binational colleges include self-assessment prior to accreditation visits. ACEM requires post-visit QI plan. ACGME: self-study with SWOT analysis 24-36 months prior to site visit every 10 years.[lxviii]

[lxv] CanRAC involves the RCPSC, the College of Family Physicians of Canada and the College des Médecins du Quebec.
[lxvi] "Settings" are individual health services and "networks" are collections of training settings. Under each standard, it is made clear whether the criteria are for the setting, the network or both.
[lxvii] Themes (standards): environment and culture (1 safety and quality, 2 learning environment), training oversight (3 governance, 4 training management), training support (5 educator leadership, support and wellbeing, 6 trainee support and wellbeing), curriculum implementation (7 curriculum delivery, 8 supervision, 9 feedback and assessment).[119]
[lxviii] SWOT: strengths, weaknesses, opportunities and threats.

	GMC: at the start of the accreditation cycle, providers sign a declaration that they meet or are working towards meeting standards; annual self-assessment. RCPSC: self-study tool with action plans (in development).
Data driven with outcomes focus	All recognise the value of data, both quantitative and qualitative, to drive accreditation. **Most aspire to develop and use outcomes data**, noting associated challenges. Current metrics are primarily process-related. Examination results used: ACEM, ACGME, RANZCP. ACEM: sites provide evidence for every accreditation requirement, data must be complete prior to visit. Annual site census, annual trainee and supervisor surveys. Training review panel (group decision-making process) evaluates quality of documented feedback (might include in accreditation in future). ACGME: use "milestones" (resident performance assessments used for progression decisions) but don't link them to accreditation decisions; accreditation citation (condition) only if don't submit the milestones data.[lxix] Aggregate 3-year exam pass rates (requirement is at least 80% pass rate). CICM: must contribute to national database (ANZICS CORE). Casemix and standardised mortality ratio (SMR) available for all units. Investigate SMR outliers. Biennial trainee survey. GMC: working towards training progression and completion measures. RANZCP: CBME program since 2012 – note this increases opportunities to examine outcomes (facilitated by training management system). RCPSC: mix of process and outcome measures.
Promotes trainee voice and safety	**Trainees involved in decision-making:** most organisations. **Trainee meetings at site visits:** all organisations. Many binational colleges are investigating how to **link existing trainee survey results to accreditation**.[lxx] **Trainees on teams:** AMC/MCNZ (from outside specialty being accredited), ACEM (local), CICM (local), RACS (some surgical specialties), RANZCOG (outside region), RANZCP, RCPSC. ACEM: on teams (encouraged, local, EOI with CV,[lxxi] same training as other surveyors). ACGME: annual trainee and faculty surveys. Training coordinators must send reminders. Results to programs only if response rate at least 70% and minimum 4 responses. Accreditation citation (condition) if poor response rate. CAI: 6-monthly trainee surveys at end of rotations, ask at progression interviews, 5-year data available at site visits (5-year cycle). CICM: on teams (following AMC/MCNZ accreditation). Local trainee, approved by regional/national committee.

[lxix] Concerned that using assessments on workplace performance for accreditation might promote "straight-lining" of assessments to meet accreditation requirements.
[lxx] Most Australian and New Zealand colleges surveyed undertake at least annual trainee surveys often linked to clinical placements. Several are six-monthly. Many are working to link these with accreditation practices.
[lxxi] EOI: expression of interest; CV: curriculum vitae.

	GMC: require minimum 3 responses. Concerned longitudinal collation may reduce relevance. RACP: annual trainee and supervisor surveys, aggregate data for minimum number 5, put accreditors in touch with recent trainees. RACS: longitudinal collation at smaller sites. RANZCOG: trainees provide feedback every 6 months, collated prior to accreditation visits. Longitudinal collation over 3 years. RANZCP: each program must have processes to collect, evaluate and act on trainee feedback. RCPSC: don't release if fewer than 5 responses, may combine resident and faculty results or undertake longitudinal collation.
Optimises ICT and staff support	ACEM: senior staff member at visits since 2017 (for standardisation, sharing good practice between sites, initial report draft for volunteer review). CAI: staff at site visits for administrative support including note taking. CICM: custom-built accreditation management system (AMS) with dashboard. GMC: quality reporting system to track improvements. RACMA: during the pandemic has moved to video conferencing instead of face to face site visits. This approach is well supported by volunteers as there is less travel involved. RACP: building ICT system that combines training and accreditation, so training data can be used for accreditation; staff involved in some but not all visits. RANZCOG: staff member at visits. RANZCP: use videoconference to increase participation of trainees from diverse geographical sites (for accreditation of regions). Training management system supports greater outcomes focus over time. Staff on teams for accrediting programs[lxxii], draft report. Staff not usually involved in accreditation of individual posts (which is a regional process, national for NZ). RCPSC CanAMS: **sites validate rather than re-enter data from prior reviews**, allows focus on high-value activities.[lxxiii]
Supports equity, access and cultural safety	ACEM: Linked EDs, non-ED special skills placements (including 3 months for rural site).[lxxiv] Workforce committee involved. Cultural safety in curriculum, modules compulsory for trainees and fellows, investigate cultural safety training at accreditation visits. ACGME: working on PGME advancing health and healthcare for underserved populations. Advisory committee and initial framework with high-priority actions. Exploring attracting residents, coaching for success, adapting approaches for resource-poor areas, access via partnerships with larger centres. Community representative on decision-making and curriculum/standards development groups. ACRRM: cultural safety in standards. CICM: guidelines for rural training.

[lxxii] Analogous to ANZCA anaesthesia rotations.
[lxxiii] CanAMS: digital accreditation management system
[lxxiv] ED: emergency departments.

	RACMA: standards include training in First Nations health. RACP: cultural safety in standards. RACS: “Building Respect” project addressing BDSH, resulted in new accreditation standard addressing culture of respect for patient safety. RANZCOG: mandatory 6-month rural rotation. Rurality embedded in selection processes. RANZCP: networks, standards can be met by rural and regional sites, flexible supervision standards (e.g. at a distance). RCPSC: generic standards address full population needs. RCPSC: standards are being developed with input from Indigenous groups and doctors’ wellbeing groups.
Optimises surveyor training and performance feedback	ACEM: sample site visit questions. RANZCOG: bank of questions. RCPSC: online training modules for each player in the process with self-assessment MCQ.
Promotes excellence and shares innovation	Many organisations include commendations in their accreditation process. A number have processes for sharing innovations and others are working towards this. ACGME: advancing innovation in residency education (AIRE).[132] Back to bedside initiative funding resident-led projects for finding meaning and joy in work. GMC: good practice portal, annual meetings with presentations to peers, annual regulatory assessment of notable practice. RCPSC: promotes mandatory and exemplary indicators in its standards organisation framework. Longer accreditation duration for high quality programs with strong CQI. Formal “Leading and/or Innovative Practice” system.
Ensure CQI of accreditation standards and procedures	A number of colleges mentioned the value of cross-college sharing of approaches. ACEM: piloted new process across 6 sites in 2017, rollout in 2018. Review of standards every 2 years. ACGME: standards reviewed every 10 years. Stakeholder input prior. Canadian CanERA project: piloting with evaluation and modification prior to full rollout. Old and new systems ran in parallel. RCPSC: noted not much published literature on accreditation; developed standards and procedures using environmental scan, expert opinion, examining other organisations’ practices and with input from community stakeholders.

4.4.3 Accreditation tools

The literature review and examination of other organisations identified examples of useful tools that support accreditation efficacy, efficiency and standardisation (table 11).

Table 11. Accreditation tools

Tools	Details
Standards organisation framework	Domain (common organisational terms, link to curriculum). Standard (overarching outcome/goal). Element (category of requirements). Requirement (measurable, used to evaluate compliance). Mandatory and exemplary indicators (meet former for compliance, latter are beyond minimum requirement and are encouraged rather than enforced).
Specific guides for each role in the process (e.g. RCPSC)	Guides for sites, surveyors, decision-making committees (linked to short online self-knowledge test).[133]
Standardised questions for site visits (e.g. AMC/MCNZ, ACEM, HETI,[lxxv] RCPSC)	Designed for each stakeholder group interviewed, used flexibility depending on gaps identified in submitted documentation and evidence (pre-visit).
Measures used to assess training sites and rotation performance	Process, structure and outcome-based.
Accreditation platform (e.g. CanRAC Digital Accreditation Management System, CanAMS)[81]	Allows sites and accreditors to easily access information Promotes focus on high value activities (e.g. sites don't need to re-enter data but rather just update). Dashboards for trend analysis. Traffic light systems for enhanced monitoring.

The AHMAC and CPMC developed a national accreditation guide for medical specialty training, published as ***Agreed domains, standards and criteria*** **(2016)**.[11] This framework was developed by the AHMAC and HWPC Accreditation of Specialist Medical Training Sites Project (2010-2014). It represents consensus based on best practice at the time and was developed with the intention that it would be a common approach for college accreditation practices. Despite consensus and this intent, this framework is currently used only by a couple of colleges.

The framework is underpinned by three overarching domains:

1. Promotes the health, welfare and interests of trainees;

[lxxv] Examples from HETI for hospital executive: changes since last survey, planned changes that will impact on trainees, how training fits into hospital governance, how hospital communicates with trainees, how trainees communicate with you, how trainees can influence change within the hospital, any issues you'd like to comment on.[20]

2. Ensures trainees have the appropriate knowledge, skills and supervision to deliver quality patient care;
3. Supports a wide range of educational and training opportunities aligned to the curriculum requirements.

4.5 Evaluation of current college training accreditation

4.5.1 Current practice

Current anaesthesia and pain medicine accreditation practices are summarised in appendix C. Evaluation of these process by visitor surveys are summarised below, with full results in appendix D.

ANZCA TAC visitor survey

Survey response rate was 68 per cent supporting generalisability of findings.

- Respondents were widely involved in other college activities.
- Accreditation experience was variable, with four in 10 having led a visit, one in 10 having accreditation experience with other organisations, and nearly six in 10 having done fewer than five TAC visits.
- Triangulation of perspectives was supported, with particular importance placed on views of trainees (pre-visit survey, interviews), supervisors of training and heads of department.
- Perceived areas for improvement included:
    - assessment of some CLE domains;
    - training outcomes measurement;
    - accreditation of provisional fellowship training;
    - promoting continuous quality improvement of education and training;
    - evaluation of cultural safety practices;
    - promoting educational excellence and sharing best practices; and
    - structured monitoring between site visits.

TUAC inspector survey

The response rate was 37 per cent.

- Respondents were widely involved in other college activities.
- Most were experienced TUAC visitors.
- They viewed the datasheet and trainee opinions as the most important pre-visit information.
- While most visit meetings were viewed as important and given appropriate time, those with the hospital administration were less highly regarded.
- Areas to strengthen included evaluation of quality patient care, several CLE domains, training outcome measurement and evaluation of cultural safety.

4.5.2 Mapping current practice to best practice frameworks

Mapping 1: AMC and MCNZ standards

Table 12 shows how current college accreditation practices align with key AMC specialist accreditation standards and the MCNZ additional criterion for standard 8 on accreditation.[5, 6]

As the college must meet these standards and additional criteria for accreditation as an educational provider, it is crucial that the college addresses issues identified.

Table 12. Current college accreditation practices mapped to AMC and MCNZ standards

Relevant AMC/MCNZ standard	Current college accreditation practices
8.2.1 The education provider has clear process and criteria to assess, accredit and monitor facilities and posts at training sites. The education provider: • **applies its published accreditation criteria when assessing, accrediting and monitoring training sites** • **makes publicly available the accreditation criteria and the accreditation procedures** • **is transparent and consistent in applying the accreditation process.**	The standard includes a systematic monitoring process; further development work to be done to ensure robust and systematic monitoring between site visits. The college could improve its quality control processes around the consistency of application of accreditation standards across sites.
8.2.2 The education provider's criteria for accreditation of training sites link to the outcomes of the specialist medical program and: • **promote the health, welfare and interests of trainees** • **ensure trainees receive the supervision and opportunities to develop the appropriate knowledge and skills to deliver high-quality and safe patient care, in a culturally safe manner** • **support training and education opportunities in diverse settings aligned to the curriculum requirements including rural and regional locations, and settings which provide experience of the provision of health care to Aboriginal and Torres Strait Islander peoples in Australia and/or Māori in New Zealand ensure trainees have access to educational resources, including information technology applications, required to facilitate their learning in the clinical environment.**	The college can improve links between the various training curricula and the training outcomes evaluated at accreditation. Current focus is primarily on processes rather than on quality and outcomes of required learning supports. Pain medicine: Training and education about cultural awareness is embedded as part of training assessments. Anaesthesia: Requirement to facilitate learning in relation to the health of First Nations peoples is neither explicit nor evaluated. Require a more systematic approach to alignment with workforce strategy, particularly for rural and regional communities.
8.2.3 The education providers works with jurisdictions, as well as the private health system, to effectively use the capacity of the health system for work-based training, and to give trainees experience of the breadth of the discipline.	Anaesthesia: This occurs to an extent through the STP program. There may be opportunities in relation to recent reviews of accreditation facilitating graduates willing to serve in areas of workforce shortage. Consider models used by other organisations. Pain medicine: the faculty does this to an extent, accepting training in both private and public units as long as they meet the accreditation standards.

8.2.4 The education provider actively engages with other education providers to support common accreditation approaches and sharing of relevant information.	There are opportunities for collaboration in accreditation. For anaesthesia, this is with other disciplines that accredit for training in the perioperative context. For pain medicine, it is with others in interdisciplinary pain teams (whose specific composition is mandated by the FPM accreditation standards).
7.4.1 The education provider promotes strategies to enable a supportive learning environment.	Opportunities for CLE measurement and CQI approach to promote action plans that promote progressive improvements. See recommendations section 2.
MCNZ additional criterion to 8.2: The education provider is required to inform the MCNZ with reasonable notice of any intention to limit or withdraw the accreditation of any training site.	Addressed by current processes.

Mapping 2: Akdemir framework

This mapping (table 13) shows common themes across anaesthesia and pain medicine accreditation practices, with areas for improvement in all domains. The recommendations of this report focus on key components to evolve (section 2). These include:

- **Metrics:** the need to develop outcome measures and quality indicators, in addition to process metrics. These could provide value through trends and benchmarking against similar sites.
- **Clinical care focus:** accreditation could be improved by including quality of care (outcome) measures, as well as by focusing on how trainees learn to work within systems that improve care quality and safety (to prepare them for this as part of their specialist practice); note this would require upskilling of some supervisors also.
- **Linking** accreditation to workforce strategy for rural and regional communities.
- **Quality management:** moving beyond compliance with minimum standards and intermittent high-stakes evaluation to better data systems, benchmarking, CQI and innovation/solution sharing.
- **Monitoring:** ensure this is systematic, proactive and robust for earlier detection and more proactive guidance to sites that are experiencing challenges, and to identify and acknowledge high-performing sites.
- **Strengthening stakeholder input** to accreditation.
- **CQI of college accreditation standards and procedures:** to ensure continuous improvement and alignment with evolving practice and evidence.

Table 13. Current college accreditation practices mapped to Akdemir framework[9]

Domain	Components	Detail	Anaesthesia and pain medicine accreditation
Why	Primary objectives	Quality of PGME	Primarily process metrics rather than measures of quality or outcomes.
		Quality of healthcare	Measurement against professional documents, does not measure quality of care provided or preparedness of trainees to contribute to that care.
	Secondary objectives	Standardisation	Promotes this, although no specific benchmarking for units to compare their performance with similar units. May need to reconceptualise this as improving quality (not just ticking boxes).
		Coaching	Peer review: process doesn't define the need for or focus of any coaching, rather this is determined ad hoc by the inspectors/visitors.[lxxvi] Could adopt focus areas.
		Self-evaluation	Pre-visit report completion. Primary focus is compliance with process, rather than striving for excellence.
		Accountability	Accountability to AMC, MCNZ, the community, trainees and to our fellowship. Limited links to community need (e.g. rural and regional workforce strategy).
What	PGME quality domains	Quality of education	Mostly at the level of inputs, that is, whether things happen, rather than quality and outputs.
		Trainee performance	Limited evaluation.
		Quality of graduate practice	No link to graduate outcomes[lxxvii] (e.g. preparedness for practice, quality of care provided as a specialist).
How		Quality assurance	Main focus is compliance with standards (above-the-line conditions).

[lxxvi] A pertinent example is the CLER process's focus on six areas (themes) that the ACGME determined are important for future 21st century specialists – resident participation in patient safety programs, meaningful involvement in quality of care and reducing disparity programs, supervision practices, effectiveness of care transitions, duty hours and fatigue mitigation, and activities addressing professionalism.[74]

[lxxvii] AMC glossary defines **graduate outcomes** as "The minimum learning outcomes in terms of discipline-specific knowledge, discipline-specific skills including generic skills as applied in the specialty discipline, and discipline-specific capabilities that the graduate of any given specialist medical program must achieve".[5]

	Quality management approach	Quality improvement	Some focus (below-the-line recommendations[lxxviii]).
		Quality control	Limited formal evaluation of accreditation process by sites. Could strengthen regular standards review including stakeholder input.
Who	Actors' responsibilities	Trainees	Anaesthesia: Survey (often unrepresentative as poor response rates) and site visit meeting. Represented in decision-making (TAC). Not on teams. Pain medicine: Survey (usually 90% respond) and site visit meeting. New fellow on TUAC is a proxy in decision-making. Not on teams.
		Supervisors	Qualitative (meetings with SOTs and senior staff). No systematic input mechanisms (e.g. surveys).
		Hospital	Qualitative meetings. No systematic input mechanisms to other aspects of process.
		College	5-year review cycle. Limited interim monitoring, could be more proactive and systematic.

Map 3: CLE domains

Table 14 maps currently-collected college accreditation data to CLE domains. Note this mapping occurred before the college CLE domains were finalised, so the domains differ slightly from those in figure 4. This mapping shows broad coverage of most domains. There is a strong reliance on the trainee opinion survey which in anaesthesia has a poor response rate. Anaesthesia has access to electronic data in the trainee portfolio system (TPS) whereas pain medicine relies on paper-based training data collection. Our literature review shows there are more robust validated and systematic measures of the CLE.

Table 14. Current accreditation measures mapped to CLE domains

CLE domain	***Current anaesthesia (A) and pain medicine (PM) training accreditation measures***	
	Quantitative	***Qualitative***
Trainee responsibility and autonomy	Supervision levels (A: logged in TPS; PM: no TPS,	Interviews with HOD, SOT and trainees (A, PM)

[lxxviii] College accreditation has two categories of accreditation recommendations to sites, above-the-line which are conditions that must be addressed for ongoing accreditation, and below-the-line which are QI suggestions.

	measured via accreditation data sheet) Trainee opinion survey (A, PM)	Weekly roster review (A, PM)
Teaching and learning approaches (formal and informal)	Trainee opinion survey (A, PM)	Interviews with HOD, SOT and trainees (A, PM)
Role clarity	Interviews with HOD, SOT and trainees (A, PM)	Interviews with HOD, SOT and trainees (A, PM)
Supervision extent and quality	Trainee opinion survey (A, PM) Volume of practice (A: logged in TPS in SSU and elective vs. emergency cases)	Interviews with HOD, SOT and trainees (A, PM)
Workload management	Trainee opinion survey (A, PM)	Trainee opinion survey (A) Interviews with HOD, SOT and trainees (A, PM)
Assessment and feedback	Trainee opinion survey (A, PM) WBA completed (A: TPS by training level, quarterly "run rates")	Trainee opinion survey (A, PM) Interviews with SOT, senior staff and trainees (A, PM)
Cultural safety and inclusion	FPM standards require organisational statement (PM)	Measures of BDSH: trainee interview (A, PM)

4.6 Data exploration findings

To date, the project group has identified general approaches (see sections 4.4.1, 4.4.2 and 4.7) and potential data sources. Further work is required to fully elucidate accreditation data requirements and design data management systems. Principles to optimise data collection include linking results to training sites and rotations, minimising duplication, avoiding survey fatigue, and ensuring trainee safety.

Potential data sources

- **Australian Medical Training Survey (MTS):** In 2019, The Medical Board of Australia commenced an annual survey of all Australian doctors in training, with results reported by college, region and other factors (for example, Aboriginal and Torres Strait Islander doctors in training).[134] Questions address many CLE domains including supervision, access to teaching, workplace environment and culture, and wellbeing. Results are presented to allow benchmarking against other colleges. A dashboard shows longitudinal trends. The AMC expects colleges to demonstrate how they will use the MTS results for monitoring and evaluation. The college should explore how MTS results can be used for accreditation, noting these survey Australian trainees only.

- **College trainee surveys**[lxxix]**:** surveys of anaesthesia and pain medicine trainees were undertaken annually from 2015 to 2018 and bi-annually since, with the latest survey in late 2020. In these surveys, trainee safety is promoted by distribution and analysis by an external agency and sites only receive data if at least 8 trainees have been there in the past year and at least 3 of those trainees have responded. Response rates are good (49% in 2018, 42% in 2020).

  The latest survey includes information on the hospital training environment including assessment value, rapport with consultants, levels of support after-hours, access to clinical experience to meet training requirements, day-to-day teaching, leave for courses and recreation, feedback quality, orientation, formal teaching quality, rosters, flexible training options and access to mentoring. New Zealand and the Australian regions add specific questions for their local trainees.

- **College new fellow surveys**: the "holy grail" of training accreditation is that it measures graduate outcomes and links these to where the graduate trained. Obviously this can be contaminated by training at multiple sites and other factors that influence training outcomes. In the case of anaesthesia, linking to rotations and to provisional fellowship training might address some of this contamination.

- **ANZCA Trainee Portfolio System (TPS)**: this is a rich data source, although not a complete one as it does not include logging of all anaesthesia training experiences. The college must explore how to better use these data for accreditation purposes. Similarly, exploration for pain medicine accreditation and other programs should look at how to integrate training recording systems into accreditation practices.

4.7 Gap analysis

4.7.1 Best practice findings

Thematic synthesis

The project group combined results of the literature review (section 4.4.1), accreditation practices of other organisations (section 4.4.2) and the best practice frameworks outlined in section 4.5.2 to develop a summary of current best practice in PGME accreditation (table 15).

[lxxix] Dr Posselt led exploration of the trainee survey as a data source for site and rotation accreditation. Feedback was also sought at the ANZCA binational trainee committee meeting in September 2020.

Table 15. Summary of current best practice in PGME accreditation

Finding	Notes
Aligns with community need and educational innovation	Aligns with organisational mission ("to serve the community") and educational strategy. Considers access and equity for underserved populations. Accredited sites reflect the settings where graduates will practice as specialists. Redesign of standards and procedures includes mapping to all specialist roles in practice (not just medical expert). Community input to accreditation standards development and evaluation frameworks, and accreditation decision-making.
Aligns health system and training priorities	Align the priorities of health care services for good patient outcomes with the capacity of graduates to contribute via safety and quality systems training. Most training accreditation systems have education as their focus, to differentiate them from health service accreditation. Those that examine clinical care do so in the context of ensuring graduate have the skills to contribute to safe and high quality care as specialists. If examining clinical care quality and safety, use outcome measures (not just process metrics). Some colleges have or are developing separate clinical service delivery review processes. Health jurisdictions provide input to standards development (as they are important stakeholders in employing graduates and to minimise duplication with health service accreditation), and some organisations invite them onto teams.
Focuses on clinical learning environment	Internationally recognised as key to PGME accreditation. Validated tools available (table 3 and table 4). Some countries have separate, more intensive and primarily formative CLE review processes. Wellbeing strongly linked to CLE; accreditation measures and promotes trainee and faculty wellbeing.
Explicit philosophy and purpose	Ensure minimum standards while also promoting best practice through information sharing and allowing sufficient flexibility in how standards are met to encourage innovation. Having philosophy and purpose explicit promotes a shared mental model for all stakeholders.
Mixed model of CQI and QA	CQI model to support striving for educational excellence. Retains QA element for compliance.
Proactive monitoring and benchmarking	Regular proactive monitoring allows early detection of issues and may allow a lighter touch (greater trust) for programs, extending accreditation cycles and reducing accreditation burden on sites and accrediting organisations. Extended cycle for high-performing sites (resource efficiencies, focus volunteer and staff efforts where required, acknowledge good practice, promote trust). Interim issues: triggers and graded responses, including site visits, in case of deviation from required standard, optimally before situation deteriorates significantly.

Finding	Notes
Standards mapped to curriculum and expressed in standards organisation framework	Mapped to the curriculum and training requirements. Expressed in a standards organisation framework with exemplars of evidence the site requires to demonstrate compliance. Developed through Delphi review and then iterative evaluation with broad stakeholder feedback. Expressed in ways that promote efficiency and collaboration (e.g. common frameworks, generic plus specialty-specific standards).
Balances standardisation and flexibility	Standardisation: staff members on teams. High quality metrics, triggers for action. Quality control processes to evaluate. Flexibility built into standards and decision-making processes to allow innovation, especially for high-performing sites and rotations.
Self-assessment for CQI	Promote self-reflection and empower sites for self-improvement. Essential component of a CQI-based system, not just prior to site visits, but as part of ongoing improvement of educational approaches within sites.
Data driven with outcomes focus	Most organisations recognise that accreditation needs to be data-driven. Most use (historical) process measures but recognise the need for more outcome measures (outcomes-based accreditation to align with outcomes-based medical education). The “holy grail” of outcome measures is the demonstration that graduates are able to provide safe and high quality care. For most organisations this outcome measurement is a work in evolution (significant challenges). Linked-up data creates efficiencies and avoid problems (e.g. survey fatigue). Move beyond just measures of the medical expert role to all specialist roles and measures of progression. Not linked to WBA or progression outcomes as could inadvertently drive “sanitisation” or “straight-lining”.
Promotes trainee voice and safety	Trainees provide crucial perspectives on teams, in surveys, at site visits, and on decision-making bodies. Trainees on teams promote authentic trainee feedback at sites. Trainee safety is an essential consideration at sites with small numbers of trainees. Common minimum response number is five. Addressed by longitudinal data collation or other combination methods.
Optimises ICT and staff support	Single ICT system: accessible to all stakeholders (college and sites), reduces burden of reporting (updating/verification for reaccreditation rather than entering from scratch), includes dashboards to display longitudinal trends to facilitate monitoring and detection of issues. Optimally, staff support at site visits reduces volunteer workload, as well as promoting standardisation and mechanisms for sharing innovations and solutions to common problems.
Supports equity, access and cultural safety	Accredited sites reflect the full range of settings where specialists practice and address areas of shortage. Cultural safety included in all aspects of curriculum and evaluated at accreditation. Support for diversity an important aspect of CLE.

Finding	Notes
Optimises surveyor training and performance feedback	Peer review is central to all PGME accreditation. Peers involved in standards development, site visits, and accreditation decisions. Mandatory orientation, training and regular training updates. Mentoring of new members who have initial observer status. Feedback on individual performance. Calibration of decision-making.
Promotes excellence and shares innovation	Staff member on teams. Provide incentives for excellence. Provide pathways for sharing best practice (regionally, binationally).
Ensure CQI of accreditation standards and procedures	Conform to an organisational monitoring and evaluation framework,[lxxx] continuous and promotes accreditation CQI culture. Includes a regular process of review. Determining best practice: limited published evidence, reliance on approaches by other organisations and expert opinion, a research opportunity? Redesign: piloting with evaluation prior to full rollout, with old and new systems run in parallel.

4.7.2 Current position and gaps

Comparing best practice findings (table 15) with our evaluation of current college processes in anaesthesia and pain medicine training accreditation (appendix C and appendix D) shows that our strengths include peer review by credible leaders in each specialty, mentoring and support for new visitors, training packages, triangulation at site visits, and involvement of trainees in evaluation and decision-making.

Key areas for improvement include:

- A more systematic **focus on CLE** with adoption of formal measures.
- **Explicit philosophy and purpose** linked to community need, with greater alignment between health service and training priorities.
- Increased emphasis beyond compliance to **incorporate CQI**, with introduction of robust **interim monitoring and benchmarking** against similar training sites, rather than the current five-yearly snapshot (“biopsy”) approach and limited ability to assess longitudinal trends.
- **Redesign of standards** to incorporate greater detail and express them in a standards organisation framework. For efficiency, this should include cross-program generic standards and specialty-specific ones, with the latter mapped to the relevant curriculum.
- **Accredit all training components**, including anaesthesia provisional fellowship training, anaesthesia rotations, and specific components of other training programs.
- Ensure that **EMAC accreditation and integration** also benefits from the outcomes of this project.
- **Review and strengthen college staff roles** in accreditation to promote standardisation and support our volunteer workforce.

[lxxx] In development at ANZCA.

- Introduce more **CQI-focused self-assessment**.
- Develop more effective **metrics and data management**, especially developing outcomes measures, benchmarking and regular state of accreditation summaries.
- Given their crucial perspectives, **review trainee input and roles** in accreditation. Despite the high value visitors place on the trainee survey results, current response rates in anaesthesia are poor. Trainees respond in greater numbers to the trainee-committee owned trainee survey. **Mechanisms to collect useful and safe data** at smaller sites, universal in pain medicine, diving and hyperbaric medicine and common in regional, rural, subspecialist and anaesthesia provisional fellowship training, should be developed.
- Given the resources required, the benefits of cross-program collaboration, the recommendation on generic standards, and the need for high quality accreditation even for smaller programs, a **single accreditation management system (AMS)**, linked to other training and educational data, is recommended.
- Accreditation models should support community access and equity by supporting accreditation of diverse training sites and **embedding diversity and cultural safety** across our standards and procedures.
- **Strengthen visitor recruitment, orientation and training** for sustainability, necessary standardisation and better support. Introduce **performance feedback systems** as required by AMC/MCNZ standards and best practice. There are high demands on this volunteer workforce who as a group are strong contributors to broader college activities. Lead visitors and accreditation committee members in particular have heavy responsibilities around individual visit preparation, visits, and report writing. They visit a large number of sites annually and support less experienced members of teams. Sustainability of this volunteer workforce can be improved through better staff support.
- **Develop systems for sharing solutions to challenges and innovative approaches** across training sites. Consider how best to reward high performing sites by robust monitoring and longer accreditation duration.
- Introduce systematic systems to **ensure CQI of college accreditation standards and procedures**, of which this project is a one-off example.

4.8 Stakeholder consultation on recommendations

The ALEPG interim report was distributed to ANZCA and FPM stakeholders including major committees and those holding relevant supervisory roles. Results of this consultation are in appendix E. In May 2021, ALEPG discussed the feedback, and made the following decisions:

- Selection of preferred approaches under recommendations where options had been put out for consultation.
- Amendments to recommendations around scope and timeframes.
- Adding notes to each recommendation, providing greater detail on considerations for accreditation redesign and implementation.
- Moving the matrix of risk assessment of each recommendation to the front of the final report.

5. Discussion

Motivation and findings

Using a process of triangulation, ALEPG has evaluated current college accreditation practices (for our two largest training programs) against best and common practices. We have identified gaps and interpreted these in light of our external environment and internal activities. The outcome is a series of recommendations to change our accreditation standards and procedures over the next decade. What is proposed is a redesigned accreditation system that is generically applied across all college training programs. This requires appropriate governance, stakeholder input and business support.

Findings demonstrate the interconnectedness of accreditation with the broader objects and activities of the college. Project recommendations are underpinned by ensuring best outcomes for our trainees, their senior colleagues, health services and the communities they serve, but also that accreditation is efficient for all involved. The last thing we need is a redesigned process that is overly bureaucratic or onerous. ALEPG recommendations should not be interpreted as just adding more things onto the process; rather they are framed with an understanding that a redesigned process must include benefits for all relevant stakeholders. Our expectation is increased efficiency rather than the reverse.

For more complex areas, the project group generated options, sought stakeholder feedback on these and determined our preferred approach. In the area of clinical quality and safety for example, these options propose a greater focus on involving trainees in systems-based practice and monitoring how trainees are more meaningfully trained to ensure quality and safety in care delivery.

Limitations of findings

Although the evidence base for accreditation best practice is modest, it is notable that multiple sources confirm themes recognised in this report. Fundamental to these is evolving to a more continuous process that supports sites and those who accredit them to focus on high-value activities, supported by college staff and systems. As in other areas like clinical care and competency-based education, the college should aspire to accreditation that is more outcomes-focused.

Although there are anaesthetists on the project group with management experience, we haven’t directly consulted with health services and jurisdictions. The interim report was forwarded to the leadership and management special interest group executive and to national and regional committees for their input. It is recommended that the accreditation redesign includes broad stakeholder representation and consultation, including with jurisdictions and heads of department.

Justification for change and risk assessment

Project challenges include the (sometimes competing) issues of community expectations, educational best practice, resource constraints, and balancing the need and appetite for change. Disruption from the COVID-19 pandemic has not only affected the project timelines but may have lasting impacts due to widespread change fatigue. The project group is

compelled to justify the need for investment in change. We have done this by investigating options and providing a risk assessment of each recommendation (table 1).

What should follow

This project projects a commitment by the college to training evolution over a 10-year timeframe. We recommend cross-program accreditation redesign with appropriate resourcing and staged evolution. Our timeframes are rough and additional business planning is required to support scope and timeframes.

6. Conclusions

This project has defined a need to evolve college accreditation standards and practices to keep pace with educational and health sector developments, and leading practices in other organisations. Given the resource-intensiveness of accreditation, it is timely for the college to review its approaches to ensure that they both optimally effective but also efficient for all involved.

Appendices

Appendix A. Current opinions on medical education relevant to learning environment accreditation

Over the past 5-10 years, a number of themes dominate at conferences, in journals and in scholarly discussions.

Outcomes-based clinical education
First and foremost is the emphasis on outcomes-based clinical education. It is no longer sufficient for students to pass a knowledge test. Training programs must be accountable for their graduates, and trainees must demonstrate that, in addition to knowledge, they can do the work required of them safely, effectively and efficiently. This naturally leads to workplace-based assessments, competency-based medical education and the concept of entrustable professional activities. Workplace based assessment tools have multiplied in efforts to support decisions on trainee ability and progression. The US has adopted a milestones approach, with high frequency assessments providing multiple data points on trainees. The UK, Canada, Europe, Australia, New Zealand and Ireland have adopted less frequent but more granular tools, such as the Mini-CEX. There has been a move away from numbers and traditional normative standards to more narrative descriptions, criterion-based standards and widespread adoption of judgments based on entrustment scales, or the extent to which trainees can safely do the task independently. With the new weighting on trainee ability, summative decisions need to be robust. Comparability of standards between sites, and defensible decisions on progression and graduation have generated a large body of literature on how progression committees should be structured, the information they should use for decisions, who should be on them and how they should function.

To drive trainee learning and performance, accreditation standards could usefully include the need to demonstrate that processes around trainee assessment through formal examinations and through workplace performance are equally robust, and that workplace assessment also enhances trainee learning through feedback and, where necessary, additional support or remediation.

Faculty development
Programmatic assessment and the use of workplace-based assessments to promote learning have inevitably required enhanced supervisor skills in feedback. There is much published work on faculty development, particularly in the ability to assess (or diagnose) the learner, promote clinical reasoning and provide constructive and actionable feedback. Approaches generally include online training, short courses, interactive workshops, trainee evaluation of supervisors and peer review of teaching. Accreditation could incentivise clinical supervisor development through development of communities of practice, organisational support, and high-quality accessible resources for continuing professional development.

Approaches to learning
Approaches to learning have increasingly embraced active learner participation, simulation, technology enhanced learning, and online learning. Novices should learn new procedures and management of clinical emergencies in a safe, simulated environment, where patients are not at risk. Clinical skills acquisition is coming under scrutiny, with developing evidence on attaining expertise in procedural skills through repetitive, deliberate practice, mental imagery, just in time learning and simulation. These new approaches require educational expertise in the theoretical underpinning of skills acquisition, debriefing skills and development of online teaching materials. Digital technology, artificial intelligence (AI) and telehealth will all be important components of future healthcare delivery. Access to simulation laboratories, digital technologies and online learning resources could be a feature of future accreditation.

The socio-cultural environment in healthcare
Diversity, equity and inclusion are seen as key elements in educating health professionals. Structural racism, unconscious bias, gender or ethnic profiling or limited support for learners with disabilities can deny learners opportunities to become part of the expert community of practice from the point of selection to the point of graduation. A socially accountable training program should proactively address diversity in its workforce to reflect the patient population. Cultural safety is a fundamental requirement for a training program, in order to begin to address health inequity for the Indigenous population. The learning environment should reflect proactive measures to achieve diversity, equity and inclusion.

Wellbeing and burnout

The outpouring of literature and interventions around wellbeing and burnout reflect rising recognition of the effects of bullying and harassment, fatigue and the absence of joy in work. Interventions include programs to promote resilience and wellbeing, reduce bullying and other bad behaviour, and those aimed at improving team interactions. Feeling valued, being included, acknowledged and thanked make for a “good day at work”; and, at the same time, optimises team function through better communication and member engagement.

Interprofessional learning

After languishing on the sidelines since the last century, interprofessional learning has become a mainstream doctrine now in health professionals education. Healthcare is delivered by teams, and teams that work together should train together to optimise their function. Opportunities for interprofessional collaboration and team training are a priority for optimising patient care and should be incorporated into the curriculum. Simulation can provide interprofessional learning and team training, when inclusive of all members of the team. Access to opportunities to develop skills in team leadership, collaboration and communication could usefully be incorporated into accreditation standards.

In closing

Advancing to best practice, evidence-based health professionals education is multi-faceted, takes time and is often met with resistance by funders, clinicians and learners. Anxiety about additional workload, lack of educational expertise, and resistance to change are to be expected. Accreditation can be a key driver for progress towards the goal of improving the clinical environment to best support learners, and ultimately to improve patient care.

Personal statement

While this opinion piece represents my personal views, it is based on my academic credentials, leadership roles in medical education, and active participation in the global and Australasian community of clinical educators. Participating in major international conferences in medical education, reviewing for the leading education journals keeps me abreast of global developments in health professionals education, while teaching and committee work for the University of Auckland and the college keeps me grounded in reality.

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Appendix B. Educational Environment Measures for anaesthesia and pain medicine

ATEEM: Anaesthetic Theatre Educational Environment Measure [32]

Score each of the following as it applies to your perceptions in your present position at your hospital: strongly agree (SA), agree (A), unsure (U), disagree (D), strongly disagree (SD)
Autonomy (5, 10, 15, 20, 25, 29, 33, 36) maximum 32
Perceptions of atmosphere (4, 9,14, 19, 24, 28, 32, 35, 38, 40) maximum 40
Workload/supervision/support (3, 8, 13, 18, 23, 27, 31) maximum 28
Perception of teachers and teaching (2, 7, 12, 17, 22) maximum 20
Learning opportunities and orientation to learning (1, 6, 11, 16, 21, 26, 30, 34, 37, 39) maximum 40

1. There are opportunities for learning all desired clinical skills
2. The teaching helps to develop my confidence
3. I receive effective supervision from the clinical teachers
4. Surgeons do not like the noise of theatre teaching*
5. Teaching is done at appropriate times not affecting vigilance
6. I receive theatre teaching in anaesthetic speciality areas targeted at my learning needs
7. The teacher helps to develop my competence
8. My clinical teachers are accessible for advice
9. I experience friendly relations with my teachers in theatre
10. I am aware of my anaesthetic role in theatre
11. I have opportunities to learn and practise a variety of clinical procedures
12. The clinical teachers in this hospital interact well with trainees
13. There is an informative anaesthetic trainee handbook
14. The people I work with are friendly
15. I feel responsible and accountable for the care given to my patients
16. I am able to acquire adequate technical skills in this post
17. My clinical teachers are fair in their evaluations
18. At this hospital I have access to help from more experienced colleagues
19. My clinical teachers promote an atmosphere of mutual respect
20. I have an appropriate level of clinical responsibility
21. There are good opportunities for trainees who fail to complete their training satisfactorily
22. My clinical teachers are clear in their teaching
23. Whenever I should participate in formal educational programmes I get relief from theatre duties
24. There is sex discrimination in this post* (reverse scored)
25. I am clear about the learning objectives of the theatre teaching session
26. The clinical training program here that allows me to get 1st-hand experience in a range of procedures
27. I receive the necessary clinical supervision
28. I feel part of a team working here
29. I discuss the anaesthetic plan of cases with the theatre teacher
30. I have the opportunity to acquire the appropriate practical procedures for my level of training (e.g. fibreoptic intubation/subtenons nerve block)
31. My workload in this job is fine
32. I have good collaboration with theatre staff
33. I am encouraged to visit patients pre-operatively
34. I have the opportunity for on the job learning
35. My clinical teachers have established good rapport with me
36. I am encouraged to participate in the theatre setting
37. There is a systematic clinical training programme
38. I feel able to ask the questions I want
39. Much of what I learn seems relevant to my career
40. I feel comfortable in theatre socially

MATE: Measure for the Anaesthesia Theatre Educational Environment (UK version) [54]

Please rate the following statements as they apply to your perception of teaching in the operating theatres of this department (applies to any site where anesthesia is delivered, including endoscopy or interventional suites). Provide a rating from 0 to 6, with 0 = strongly disagree and 6 = strongly agree.

Teaching preparation and practice

1. I have clear learning goals for theatre teaching sessions
2. The learning goals formulated for a theatre session are relevant
3. My clinical teachers engage with me when determining learning goals for the theatre session
4. My clinical teachers demonstrate an active effort to teach in the operating theatre
5. The teaching is appropriate for my level of training
6. Teaching is delivered in a clear manner
7. I am able to achieve my learning goals in the operating theatre
8. I have opportunities to learn about appropriate non-technical skills in the operating theatre
9. My clinical teachers seek to identify my current level of knowledge, if it is not already known to them

Assessment and feedback

10. Feedback is delivered soon after my work is observed
11. I receive feedback that provides me with an opportunity to improve
12. Feedback is provided based on direct observation of my work
13. I receive honest feedback
14. Corrective feedback is provided when indicated
15. I receive feedback on specific performance issues
16. Feedback is provided on tasks that I perform under direct supervision
17. I receive feedback that is appropriate for my level of training
18. Positive feedback is readily provided when indicated
19. Assessment of my performance in the operating theatre occurs regularly
20. I have sufficient opportunities to reflect on my learning
21. My clinical teachers are fair in their assessment of my performance

Procedures and responsibility

22. The clinical training program allows me to get first-hand experience in a range of procedures
23. I have an appropriate level of clinical responsibility
24. I am aware of my duties and responsibilities in theatre
25. I have the opportunity to acquire the practical skills appropriate to my level of training
26. My clinical teachers provide appropriate support when I perform a procedure for the first time

Overall atmosphere

27. My clinical teachers are accessible for advice
28. My clinical teachers promote an atmosphere of mutual respect
29. My clinical teachers create a trusting and open learning climate
30. I feel able to ask the questions I want to
31. I view the clinical teachers in this department as positive role models
32. I have a good sense of rapport with my clinical teachers
33. I am aware to whom I should report, in a variety of circumstances

ACLEI: Anaesthesia clinical learning environment instrument[31,lxxxi]

Each rated on 4-point Likert scale (strongly disagree, disagree, agree, strongly agree)

Social atmosphere

1. I feel comfortable at work socially
2. I feel able to ask the questions that I want to
3. I have good collaboration with theatre staff
4. I feel part of a team working here
5. There is no discrimination in this post
6. I have a good sense of rapport with senior people in the department
7. I am aware to whom I should report, in a variety of circumstances
8. There is a sense of cooperation and mutual respect in the department
9. I understand clearly my duties and responsibilities at work

Supervision

10. I have freedom to set my own learning objectives
11. I discuss the anaesthetic plan of cases with my clinical supervisor
12. I am clear about the learning objectives of a clinical teaching session (e.g. in theatre, clinic, pain rounds etc.)
13. My clinical teachers are fair in their evaluations
14. My clinical teachers help to develop my confidence
15. Advice and feedback from more experienced colleagues is readily available to me at all times
16. I receive direct supervision and feedback from an experienced colleague when doing a task for the first time
17. I receive direct supervision and feedback that is appropriate for my level of training
18. I receive feedback that is specific and based on observation of my work
19. I receive feedback that is delivered soon after my work is observed
20. I receive realistic feedback that provides me with an opportunity to improve
21. My workload in this job is fair
22. I have sufficient opportunities to reflect on my learning

Workplace-based learning

23. My time at work is utilised productively
24. I have opportunities to acquire the practical skills appropriate to my level of training
25. I have opportunities to learn about and acquire appropriate non-technical skills at work
26. My work environment allows me to achieve my learning objectives
27. I have an appropriate level of clinical responsibility
28. I feel responsible and accountable for the care given to my patients
29. Much of what I learn seems relevant to my career
30. My clinical teachers help to develop my competence
31. My work is interesting with sufficient variety

Teaching program

32. I have access to up to date learning resources at work
33. There is a systematic clinical training program
34. I receive workplace teaching in anaesthetic specialty areas targeted at my learning needs
35. I am given relief from duties to participate in formal educational program
36. The formal educational program are targeted to my learning needs
37. There is an informative anaesthesia trainee handbook
38. Teaching and training are emphasised in this department

[lxxxi] This tool does not have a specific name or acronym.

D-RECT: Dutch residency educational climate test[59]

Each item is rated on a 5-point Likert scale from 1 = totally disagree to 5 = totally agree

Supervision
1. The guideline clearly outline when to request input from a supervisor
2. The amount of supervision I receive is appropriate for my level of experience
3. It is clear which attending supervises me

Coaching and assessment
4. I am asked on a regular basis to provide rationale for my management decisions and actions
5. My attendings coach me on how to communicate with difficult patients
6. My attendings take the initiative to explain their actions
7. My attendings take the initiative to evaluate my performance
8. My attendings take the initiative to evaluate difficult situations I have been involved in
9. My attendings evaluate whether my performance in patient care is commensurate with my level of training
10. My attendings occasionally observe me taking a history
11. My attendings assess not only my medical expertise but also other skills such as teamwork, organisation or professional behaviour

Feedback
12. My attendings give regular feedback on my strengths and weaknesses
13. Observation forms (e.g. mini-CEX) are used to structure feedback
14. Observation forms (e.g. mini-CEX) are used periodically to monitor my progress

Teamwork
15. Attendings, nursing staff, other allied health professionals and residents work together as a team
16. Nursing staff and other allied health professionals make a positive contribution to my training
17. Nursing staff and other allied health professionals are willing to reflect with me on the delivery of patient care
18. Teamwork is an integral part of my training

Peer collaboration
19. Residents work well together
20. Residents, as a group, make sure the day's work gets done
21. Within our group of residents it is easy to find someone to cover or exchange a call

Professional relations between attendings
22. Continuity of care is not affected by differences of opinion between attendings
23. Differences of opinion between attendings about pain management are discussed in such a manner that is instructive to others present
24. Differences of opinion are not such that they have a negative impact on the work climate

Work is adapted to residents' competence
25. The work I am doing is commensurate with my level of experience
26. The work I am doing suits my learning objectives at this stage of my training
27. It is possible to do follow-up with patients
28. There is enough time in the schedule for me to learn new skills

Attendings' role
29. My attendings take time to explain things when asked for advice
30. My attendings are happy to discuss patient care
31. There is (are) NO attending physician(s) who have a negative impact on the educational climate
32. My attendings treat me as an individual
33. My attendings treat me with respect
34. My attendings are all in their own way positive role models
35. When I need an attending I can always contact one
36. When I need to consult an attending, they are readily available

Formal education

37. Residents are generally able to attend scheduled educational activities
38. Educational activities take place as scheduled
39. Attendings contribute actively to the delivery of high-quality formal education
40. Formal education and training activities are appropriate to my needs

Role of the subspecialty tutor

41. The specialty tutor monitors the progress of my training
42. The specialty tutor provides guidance to other attendings when needed
43. The specialty tutor is actively involved in improving the quality of education and training
44. In this rotation evaluations are useful discussions about my performance
45. My plans for the future are part of the discussion
46. During evaluations, input from several attendings is considered

Patient sign out

47. When there is criticism of a management plan I have developed in consultation with my attending physician, I know the attending physician will back me up
48. Sign out takes place in a safe climate
49. Sign out is used as a teaching opportunity
50. Attendings encourage residents to join in the discussion during sign out.

PHEEM: Postgraduate hospital educational environment measure[60]

Each item rated on a Likert-type scale from 0 (not at all important) to 4 (highly important)
Maximum score 160 and minimum score 0

I. Perceptions of role autonomy
14 items, maximum score 56 for this subscale: 0-14 very poor, 15-28 a negative view of one's role, 29-42 a more positive perception of one's job, 43-56 excellent perception of one's job
1. I have a contract of employment that provides information about hours of work
4. I had an informative induction programme
5. I have the appropriate level of responsibility in this post
8. I have to perform inappropriate tasks
9. There is an informative Junior Doctors Handbook
11. I am bleeped inappropriately
14. There are clear clinical protocols in this post
17. My hours conform to the New Deal
18. I have the opportunity to provide continuity of care
29. I feel part of a team working here
30. I have opportunities to acquire the appropriate practical procedures for my grade
32. My workload in this job is fine
34. The training in this post makes me feel ready to be an SpR/Consultant
40. My clinical teachers promote an atmosphere of mutual respect

II. Perceptions of teaching
15 items, maximum score 60 for this subscale: *0-15 very poor quality, 16-30 in need of some retraining, 31-45 moving in the right direction, 46-60 model teachers*
2. My clinical teachers set clear expectations
3. I have protected educational time in this post
6. I have good clinical supervision at all times
10. My clinical teachers have good communication skills
12. I am able to participate actively in educational events
15. My clinical teachers are enthusiastic
21. There is access to an educational programme relevant to my needs
22. I get regular feedback from seniors
23. My clinical teachers are well organized
27. I have enough clinical learning opportunities for my needs
28. My clinical teachers have good teaching skills
31. My clinical teachers are accessible
33. Senior staff utilize learning opportunities effectively
37. My clinical teachers encourage me to be an independent learner
39. The clinical teachers provide me with good feedback on my strengths and weaknesses

III. Perceptions of social support
11 items, maximum score 44 for this subscale: *0-11 non-existent, 12-22 not a pleasant place, 23-33 more pros than cons, 34-55 a good supportive environment*
7. There is racism in this post
13. There is sex discrimination in this post
16. I have good collaboration with other doctors in my grade
19. I have suitable access to careers advice
20. This hospital has good quality accommodation for junior doctors, especially when on call
24. I feel physically safe within the hospital environment
25. There is a no-blame culture in this post
26. There are adequate catering facilities when I am on call
35. My clinical teachers have good mentoring skills
36. I get a lot of enjoyment out of my present job
38. There are good counselling opportunities for junior doctors who fail to complete their training satisfactorily

ACGME resident survey areas[62]

Clinical experience and education

- 80 hours per week
- 4 or more days free in any 28 day period
- Taken in-hospital call
- <14 hour free after 24 hours work
- More than 28 consecutive hours work
- Adequately manage patient care within 80 hours
- Pressured to work more than 80 hours
- Additional responsibilities after 24 consecutive hours of work

Faculty teaching and supervision

- Faculty members interested in education
- Faculty effectively creates environment of enquiry
- Appropriate levels of supervision
- Appropriate amount of teaching
- Quality of teaching received
- Extent increasing responsibility granted

Evaluation (Australasian term is “assessment”)

- Able to access evaluations
- Opportunity to evaluate faculty members
- Opportunity to evaluate program
- Satisfied with faculty members’ feedback

Educational content

- Instruction on scientific enquiry principles
- Opportunities for research participation
- Taught about health care disparities
- Education in assessing patient goals
- Instruction on maintaining physical and emotional wellbeing
- Instruction on minimising effects of sleep deprivation
- Program instruction in when to seek care regarding fatigue and sleep deprivation, depression, burnout, substance abuse

Diversity and inclusion

- Preparation for interaction with diverse individuals
- Program fosters inclusive work environment
- Diverse resident/fellow recruitment and retention

Resources

- Education compromised by non-physician obligations
- Impact of other learners on education
- Provided direct clinical patient care
- Time to interact with patients
- Appropriate balance between education and patient care
- Time to participate in structured learning activities
- Able to attend personal appointments
- Access to mental health counselling or treatment
- Satisfied with safety and health conditions
- Faculty members discuss cost awareness in patient care decisions

Patient safety and teamwork

- Culture emphasises patient safety
- Know how to report patient safety events
- Information not lost during shift changes or patient transfers
- Interprofessional teamwork skills modelled or taught
- Participate in adverse event analysis
- Process to transition care when fatigued

Professionalism

- Faculty members act professionally when teaching
- Faculty members act professionally when providing care
- Residents/fellows comfortable calling supervisor with questions
- Able to raise concerns without fear or intimidation
- Satisfied with process for problems and concerns
- Experienced or witnessed abuse
- Process in place for confidential reporting of unprofessional behaviour

Overall

- Overall evaluation of the program
- Overall opinion of the program

JEST: Job evaluation survey tool[65]

Each domain scored as:

5	Excellent	Cannot be bettered
4	Good	Very impressed
3	Acceptable	Everything expected without being outstanding
2	Needs attention	Less than satisfactory
1	Unsatisfactory	Serious problems

GMC domain	**Score**	**Comments and suggestions**
1. Patient safety		
2. Programme director's planning		
3. Induction to this post		
4. Appraisal and assessment		
5. Feedback on your work		
6. Protected teaching – bleep free		
7. Service based teaching		
8. Senior doctor cover		
9. Clinical workload		
10. EBM and audit		
11. Inappropriate tasks		
12. Rota compliance		
13. Accommodation and catering		
14. Leave		
15. Junior doctors' forum		

Would you recommend this post to one of your friends? Yes / No

Any other comments?

Appendix C. ANZCA and FPM accreditation processes

Table 16. Current anaesthesia and pain medicine accreditation

	Anaesthesia training accreditation	Pain medicine training accreditation
Aim	Assist departments meet ANZCA training standards so that they can best train vocational trainees, as well as confirming that clinical and professional standards are met	Build partnerships with accredited units to deliver a structured training program in pain medicine
Cycle	Routinely 5 years, entire rotation inspected at same time where possible	Routinely 5 years, shorter if issues found 1 yr. for newly accredited units, follow-up at 1 yr. and 2 yr. extension
Standards	1. Quality patient care (assessed against ANZCA prof. documents) 2. Clinical experience 3. Supervision 4. Supervisory roles and assessment 5. Education and teaching 6. Facilities 7. Clinical governance	1. Quality patient care (socio-psycho-biomedical approach to PM is key) 2. Clinical experience 3. Supervision 4. Supervisory roles and assessment 5. Education and teaching 6. Facilities 7. Clinical governance
Duration	Accredited for 26-156 wks., based on clinical and non-clinical educational opportunities. Usually for IT, BT, AT. Separate approval for PFT[lxxxii]	Accredited for 6-12 months as: • Level 1 unit (typically 12 mths) • Level 2 unit (typically 6 mths satellite) • Professional development (6-12 mths)
Rotations	A regionally-based rotational arrangement involving a group of approved departments which together provide trainees with a comprehensive and integrated training experience covering all essential requirements of ANZCA training. All accredited sites must be in a rotation.	No formal requirement for rotations Satellite units can be accredited as a rotation
Self-study	Required for accreditation/ reaccreditation application, assess in TSA as compliant or partially compliant	Required as part of accreditation, prior to visit.
Other accreditation activities	Additional campuses: anaesthesia services provided by same dept/staff under same governance structure (e.g. private hospital theatre with public work), part of same approval.	Additional areas of training: • Procedural pain medicine • Paediatric pain medicine

[lxxxii] The ANZCA Provisional Fellowship Program Sub-committee (PFPSC) assesses applications for preapproved positions (from departments) and individualised plans (from trainees) which must be of 26 or 52 weeks duration. Preapproved positions are only possible for ANZCA-accredited sites and are approved for a study plan for a position rather than a trainee (approval valid for five years). The position must have at least 20 per cent clinical time and be in clinical anaesthesia. Individual applications can be for both Australasian and international placements. Applications include an indicative session plan, a JDF and a letter of offer. The DPA assessors assess any PFT plan that has less than 20 per cent clinical anaesthesia time. PFPSC chair contacts applicant to explain any application that is not approved.

	Satellites: trainee allocation by block or list-by-list, part of maximum allowable time at partner hospital which provides some requirements for the 7 standards.	
Documentation	ANZCA training site accreditation (TSA) portal.	Paper-based
Measures	TPS: SSU, WBA, supervision levels, more detailed case-specific data available on request.[lxxxiii] Trainee survey (response rate <50%) linked from ANZCA, current and prior hospital employment year. Site: rosters (staffing), teaching programs, hospital and department metrics (case load, theatre numbers, trainee numbers, SOT, SSU roles, case details); no guidance provide for case numbers.	WBAs completed (outcomes not available to reviewers) Supervision levels Trainee survey with accreditation visits Rosters Clinical case load Focus is on staffing, MDT structure and dynamics; FTE – FPM, non-FPM specialists, allied health FTE (nursing/physio/clinical psychology); MDT meetings and integrated teams Tutorials occur (content not assessed) QA and educational meetings occur
Team	Senior: current/former ANZCA councillors or TAC members (trained), at least one/team. Full team (4) inspect main hospital in rotation and then split for smaller depts over several days.	Senior: TUAC committee members Other assessors (FFPM with experience)
Report	Narrative overview of context and major findings (1-2 pages). Recommendations: mandatory (linked to professional documents, training regulations and handbooks) or suggestions (for department use). Draft to HOD for correction factual inaccuracies. Final report uploaded to TSA. Letter with recommendations and date for compliance sent to hospital.	Datasheet listing: sites inspected, staff interviewed, compliance with standards Feedback given verbally at end of accreditation visit. Formal letter to unit documenting requirements and recommendations. Timelines for requirements as part of letter to unit.
Decisions	TAC decides 1. Unqualified: all standards and criteria met. 5 yrs. from date of inspection. Certificate issued. 2. Conditional: subject to corrective actions within a specified timeframe. Sometimes reinspection. Usually up to 1 HEY only. Progress updates to each TAC meeting. Attaining unqualified accreditation depends on achieving full compliance. If struggling to meet standards, TAC may	TUAC decides 1. Duration of accreditation 2. Level of accreditation 3. Mandatory requirements and timelines for implementation 4. Recommendations for unit 5. Suspension of training 6. Recommendation to board for removal of training status.

[lxxxiii] On request, visitors and TAC can receive detailed case-specific data, as entered into the TPS. This is used for assessment of accreditation duration (i.e. SSU completion by not only case numbers but also range and type) and if level 1 and 2 supervision levels are outside acceptable ranges (e.g. to evaluate what cases and procedures are logged at level 4 supervision).

	reduce accreditation duration or withdraw accreditation. 3. Withdrawal: hospital unable to comply with significant impact on training and professional standards. Require ANZCA Council decision.	
Monitoring	Via accreditation officers (one per NZ and Australian regions). Via trainee committees and national/regional committees. May result in an out-of-cycle visit.	Via TUAC, from site or trainee feedback May result in out-of-cycle visit
Challenges	Monitoring between visits PF training not formally assessed Rotations not assessed Trainee survey response rates Variable individual meeting content High workload for lead visitors (at each visit, number of sites visited annually)	Limited professional documents

Table 17. Generic schedule for anaesthesia training accreditation visits

Activity (duration)	Aspects covered
Pre-visit meeting (variable)	Not structured or formalised. In weeks prior and after TSA data available online, usually emails discussion between team members (concerns, visit focus areas, further information required, visit schedule confirmation). Arrange own meeting prior, usually face to face on evening prior to visit, includes role allocation
1. Initial HOD meeting (60 mins)	Length of time in role. Overview of services provided. Relationship with administration and other departments. Staffing levels. Registrar selection. Preadmission clinic, acute pain service, quality assurance. Rosters and fatigue management. Welfare, BDSH. Clinical support time. Research. Duty anaesthetist role. Assistance to the anaesthetist. Potential issues
2. Meet with administration (30 mins)	Relationship with department. How department contributes to hospital governance and safety/quality systems. Service versus training. Strengths, challenges. Anaesthetic assistant training. Staffing. Future plans. BDSH management.
3. Trainee meeting (up to 60 mins depending on number)	Formal and informal teaching. Workload, rosters, fatigue. Time for study, time off for leave/exams/courses. WBAs, SSUs, PAC, APS. QA involvement and research. Supervision quality. BDSH (not reported to visitors in large group meetings). Provisional fellows: transition to specialist
4. Meet with SoT(s) (30-60 mins)	Thank you. Length of time in role. Supervision. Registrar selection. WBAs, SSU completion. Formal teaching programs. Facilities
5. Inspect facilities (60-90 mins depending on size)	Visit all anaesthetizing areas (theatres, PACU, day surgery/admission area, external areas e.g. radiology, delivery suites, cardiac cath lab) to assess compliance against professional documents
6. Meet with senior staff (30 mins)	General experience. Staffing levels and portfolios. Supervision. Rostering. Support. Facilities. Clinical support time. Welfare, fatigue, BDSH. QA. Access to CPD and leave
7. Accreditation team confidential meeting (30 mins)	Team discuss and agree on issues Preparation for final meetings with HOD, SOT and administration to discuss issues
8. Meet HOD and SoT (30 mins)	Led by the team leader, documented by the scribe Outline assessment and recommendations so far Invite comment Clarify issues Outline timetable for report to TAC and letter to hospital CEO
9. Review recommendations with senior management (30 mins)	Led by team leader Thank organisation and department for supporting training Outline assessment and recommendations so far Invite comment, clarify issues Outline timetable for receiving report from TAC

Table 18: Generic schedule for pain medicine training accreditation visits

Activity (duration)	Aspects covered
Pre-visit: obtain information	Datasheet covering staffing (FPM, non-FPM specialist, Allied health) Response to seven standards applied to pain medicine training (table 16) Trainee Survey
Pre-visit: review past requirements and recommendations	Identify issues
1. Initial HOD meeting (30 mins)	Length of time in role. Overview of services provided. Relationship with administration and other departments. Staffing levels. Registrar selection. Rosters and fatigue management. Welfare, BDSH. Clinical support time. Research. Potential issues
2. Meet with administration (30 mins)	Relationship with department. How department contributes to hospital function, role of pain unit. Interactions with various clinical specialities. Staffing. Future plans. BDSH management.
3. Trainee meeting (30 mins)	Formal/informal teaching. Workload, rosters, fatigue. Time for study, time off for leave/exams/courses. WBAs, APS. QA involvement and research. Quality of supervision. Quality of clinical exposure
4. SOT meeting (30 mins)	Length of time in role. Administration time for SOT role. Training for SOT role (FPM workshops). Supervision. Registrar selection. WBAs. Formal teaching programs. Facilities
5. Facility inspection (30-60 mins)	Medical record systems. Administrative staff. Clinical spaces Space and facilities for trainees including computers, non-clinical space
6. Senior staff meeting (30 mins)	General experience. Staffing levels and portfolios. Supervision. Support. Facilities. Clinical support time. Access to CPD and leave
7. Allied health meeting (30 mins)	General experience and staffing levels. Exposure to trainees. Role of trainees in the service. Any issues
8. Meet with head of department and SOT	Led by the team leader Outline assessment and recommendations so far Invite comment Clarify issues Outline report coming from TUAC and letter to hospital

Table 19. Current anaesthesia and pain management accreditor management

Accreditors	Anaesthesia training accreditation	Pain medicine training accreditation
Selection	Self-nomination form, CV, 2 referees (both FANZCAs, 1 current/past TAC visitor). Selection criteria in Terms of Reference.[lxxxiv] Assessment by Chair of TAC, TAC approves	Self-nomination form, CV and consideration request letter. TUAC chair invites unit directors and supervisors to become reviewers during telephone and videoconference accreditation reviews.
Appointment term, maximum duration	3 year appointment, maximum 12 years	12 year maximum appointment
Provisional appointments	Initial appointment as "junior" member	NA
Reappointment process	Automatic	
Orientation	Welcome letter sent on appointment	1 visit as an observer of 2 senior reviewers
Initial training	Introduction videos and guides on Networks – Training Accreditation visitor resources (requires authorisation) Application notes all new visitors must undertake training	Introduction video and guides are not currently on Networks. Currently resources include the accreditation datasheet, accreditation handbook and by-law 19. New reviewers can also be provided guidance by a senior reviewer during on-site reviews.
Ongoing training	Annual TAC workshop at the ASM	Annual TUAC workshop at the ASM
Mentorship or supervision for new accreditors	New/junior visitors always attend visits with a senior visitor – mostly observe initial visits then increasingly involved FPM assessors are attached as supernumerary observers prior to becoming assessors.	
Performance evaluation	Feedback from training site after visit. No individual performance evaluation.	Feedback survey mailed after each visit. No individual performance evaluation.
Team lead selection	From pool of senior visitors (experienced visitors, TAC members, Councillors). Visitors self-nominate based on planned visit schedule and availability.	NA
Minimum visit number required?	No defined "learning curve" or minimum number of annual visits to maintain currency	
Team composition considerations	At least 1 senior visitor Ideally 1 visitor from same region as site (but not within same rotation) Attempts made to balance gender and experience	At least 1 senior reviewer Team size 2 (3 if an observer) TUAC chair (1 reviewer) attends telephone/zoom review after initial 1 yr. accreditation period

[lxxxiv] Work as part of accreditation team, undertake professional development for role (training workshops, keeping up to date with ANZCA policy and processes), prepare pre-inspection, undertake inspections as per policy and processes and under lead's direction, contribute to report within two weeks of visit, abide by confidentiality, BDSH and other policies. Appointment considers: commitment, training, knowledge of and experience with ANZCA training program, ability to recognise and manage bias and conflicts of interest, advanced communication skills, specific expertise as relevant.

	Team size 2-4 people depending on size of training site Visits anticipated to be challenging are usually all senior visitors and directly appointed by TAC	Units that may have issues may be visited by a reviewer who has visited them at their past review (for consistency) TUAC visitor pool is still small, so can be difficult to have 1 visitor from the same region in attendance

Notes:

Anaesthesia training program

TAC seeks feedback from the sites about the accreditation process and performance of visit team following every visit, including asking if they would like to speak directly to the TAC chair to discuss any concerns. Feedback from sites is routinely tabled at TAC meetings. Formal complaints are rare, with only one received in the distant past. Currently complaints would be managed in the first instance by the TAC chair. Training videos and ASM workshops are strongly recommended but not mandatory.

The post-visit survey questions are: (all Yes/No except for last one which includes a Likert scale)

- Do you feel ANZCA provided timely and adequate information to assist in the preparation of you accreditation visit?
- Did you find using the online Training Site Accreditation (TSA) system easy and accessible?
- Did you receive adequate guidance and expertise from the visitors regarding ANZCA processes, professional documents and accreditation?
- Were the visiting team professional and courteous?
- Do you have any further suggestions or feedback?
- Would you like the Chair of the Training Accreditation Committee to contact you to discuss your feedback?
- Overall my level of satisfaction with the accreditation process was <likert scale>

Pain medicine training program:

The TUAC chair is unaware of any negative feedback about TUAC reviewers, and, if there were, this would likely fall to the TUAC chair to manage. TUAC would like training videos and other resources to be created in the near future to support reviewers. The TUAC reviewer workshop at the ASM is strongly recommended but not mandatory.

Appendix D. TAC and TUAC visitor survey results

TAC visitor survey

In November 2019, a **19-question online survey** was sent to 69 fellows who had undertaken anaesthesia training accreditation visits in the prior five years, with 47 responses received (response rate 68%). Our **aims** were to evaluate the current TAC process including how the CLE is assessed currently, what is working well and where improvements can be made. Questions were developed to address these aims, with various question styles, including tick-box, Likert-type and free text responses.

Respondents were widely involved in college activities, as current or former national or regional committee members (52), supervisors of training (43%), heads of department (41%), TAC members (39%), specialised study unit supervisors (30%), ANZCA councillors (17%) and education officers (11%). Fifty-seven per cent had undertaken fewer than five TAC visits, 26 per cent more than 10 visits, and 39 per cent had led a visit. Eleven per cent had accreditation experience with other organisations.

Pre-visit data from all sources was rated as "somewhat important" or "very important" by respondents, particularly the trainee survey (87%) and previous accreditation letters and reports (82%) viewed as very important. Ninety-three per cent somewhat or strongly agreed that the quantity and quality of information received was adequate. Free text comments highlight the importance of trainee surveys, current issues with low response rates and suggestions to improve with more longitudinal data collection (for example, survey trainees who have been in the department in the prior 12 months).

In general, all visit components are rated as at least "somewhat important", with more than 90 per cent of respondents rating as "very important" the supervisor of training meeting, the meeting with trainees, and the initial and follow-up meetings with the head of department. Although a lower percentage of respondents rated as very or somewhat important the facilities inspection, initial and follow-up meetings with administration, and senior staff meetings, less than 10 per cent rated them as unimportant in each case. A majority of respondents rated the duration of each meeting as "about right". The duration of the SOT meeting was thought to be too short by 36 per cent of respondents, and the senior staff meeting too long by 24 per cent. Free text improvement suggestions included training prior to first visit, pre-visit role allocation, and tools for process efficiency and standardisation (for example, checklists).

Most respondents felt that the process assesses ANZCA standards somewhat or very effectively (range from 87% to 98% for each standard). No respondents reported that any standard is assessed "not at all effectively". The standard relating to education and teaching was rated highest, with 60 per cent rating this as being assessed very effectively, and 38 per cent as somewhat effectively. Thirteen per cent felt that assessment of the clinical governance standard was somewhat ineffective.

Respondents viewed the current process as measuring some CLE domains – orientation to learning (91% somewhat or very effectively assessed), extent and quality of supervision (89%), and workload (89%). There were more disparate views on the domains of trainee autonomy (36% "somewhat ineffectively" or "not at all effectively" assessed), role clarity (31%), and assessment and feedback (33%). Social support and atmosphere was thought to be effectively measured by 84 per cent. Free text suggestions include that much of this hinges on data quality, change the trainee survey to better measure these domains and have standardised interview questions about these domains.

Other accreditation issues:

- Eighty-nine per cent thought the quality of trainees' learning experiences is captured well (75% somewhat agreed, 14% strongly agreed).
- Seventy-nine per cent felt the trainees' overall experiences in each department are captured well (70% somewhat agreed, 9% strongly agreed).
- Seventy-three per cent felt that the process promotes continuous improvement in training quality in departments (50% somewhat agreed, 23% strongly agreed).
- Sixty-one per cent thought the accreditation process measures how training rotations provide an overall training experience (50% somewhat agreed, 11% strongly agreed).

- Fifty-six per cent felt that the process promotes educational excellence (49% somewhat agreed, 7% strongly agreed), although this indicates 44 per cent disagreed.

However:

- ***More than half of respondents disagreed with the statement that the monitoring process between the five-yearly visits is robust*** (12% strongly disagree, 42% somewhat disagree).
- ***Fifty-seven per cent of respondents disagreed that the process promotes sharing of best practice between training departments*** (9%, 48%).
- ***Sixty-nine per cent disagreed that the process promotes trainees' cultural competence*** (21%, 48%).
- ***Seventy-three per cent disagreed that the process measures training outcomes*** (14%, 59%).

Regarding provisional fellowship training, 84 per cent of respondents view assessment of PFT at each training site as important (36% somewhat, 48% very important)**.** Fifty-nine per cent view the current process for such assessment as somewhat ineffective (50%) or not at all effective (9%)**.** Free text comments support a process for assessment of PFT at site visits, noting currently inconsistent approaches. Suggestions included exit audit, suitability for transition to consultant practice, separate interviews/surveys, and clear guidance to accredit.

Free text suggestions for additional data included

- WBA completion rates per trainee, trainee view of usefulness, feedback quality;
- Exam performance
- Supervision levels and quality
- Numbers of trainees in difficulty
- "Training roadblocks" and capacity, difficulty signing off SSUs, caseload data (VOP logged, low numbers)
- Workload data (for example, in hours versus after-hours, indicators of service versus training, duty hours, caseload)
- Trend data (for example, SSUs, WBAs, exam pass rates, trainees joined/left rotation, more comprehensive trainee survey data including longitudinal results)
- College data about a site (for example, complaints, known difficulties, prior out of cycle issues)
- Trainee satisfaction with each hospital in a rotation
- Exit interview/resignation data/staff turnover
- How sites seek feedback from trainees
- Teaching and learning: orientation materials, yearly teaching schedule with attendance
- Anaesthesia and surgical KPIs (patient-reported outcome data, alerts and anaesthesia incidents)
- Fatigue data
- Require evidence of compliance with standards during self-assessment
- SOT and HOD survey (for example, SOT views on issues affecting delivery of effective training)
- Information from non-anaesthesia staff.

Other suggestions included team training, pre-visit allocation of team roles, checklists for interviews, staff support for heads of department to ensure all information available pre-visit, broadening the focus to be more interprofessional, and the need to promote quality as well as compliance.

TUAC visitor survey

In December 2020, a 15-question online survey was sent to 30 fellows who had undertaken pain medicine training accreditation visits in the prior five years, with responses received from 11 (37%). Items were adapted from those used for the TAC visitor survey, with removal of reference to provisional fellowship training and rotations.

Respondents were long-standing faculty fellows (91% more than six years), with nine anaesthetists and two psychiatrists. They were significant faculty contributors, as current or former examiners (73%), heads of units (64%), national/regional committee members (55%), TUAC members (55%), supervisors of training (36%) and/or FPM board members (27%). Most had undertaken three or more TUAC visits (55% more than six) with two (18%) fewer than three. Three (27%) had been TUAC reviewers for less than three years, with six (55%) for more than six years. One was also an accreditor for anaesthesia and intensive care medicine.

All aspects of the pre-visit information were rated as important, especially the accreditation data sheet and the trainee opinion surveys (rated “very important” by 82%), with somewhat lesser importance placed on prior accreditation letters and reports and the review schedule template.

Most meetings held at the visit were rated as “very important” or “somewhat important”, with the exception of the two meetings with hospital administration where opinions were more mixed. Generally the timing of these meetings was viewed as “about right”, the exceptions being the meetings with administration and the meeting with rehabilitation which about half the respondents thought were too long.

There was a spread of opinions about how well the accreditation standards are evaluated, particularly quality patient care. Similarly, views on how the CLE domains were evaluated varied, especially for role clarity, workload and social support and atmosphere, noting that respondent numbers are small. Specific suggestions included reviewing in-training assessments and feedback forms, logbooks, clinic letters, and documented multidisciplinary meeting outcomes. Concern was raised about the bias of evaluation on a single day every few years, and the need to increase staff and trainee awareness of CLE domains.

Regarding other aspects of best practice, most respondents agreed that the monitoring between visits was robust, that the process promotes excellence and sharing between training units. There was less support that the process measured training outcomes. More than half the respondents disagreed with the statement that the process promotes cultural “competence” (safety). Several respondents raised the need for regular data reporting between visits.

Free text suggestions for improvements included:

- Pre-visit: a phone call with the unit head, consulting with previous visitors to the unit, and that data provided are accurate and complete (perhaps no visit until data complete).
- Teams: training for visitors, emphasis on an external reviewer to reduce bias.
- Visit: informal pre-visit coffee with head, more time to assess acute pain, expedite meetings other than with trainee, head and supervisor of training, specify multiple senior staff rather than specifying specialties, include satellite service evaluation.
- Concerns: variance between surveyors (although same respondent noted system seems in general to work well).

Appendix E. Results of consultation survey on interim report

Background

The interim report was distributed to stakeholders across ANZCA FPM on 1 March 2021 via an electronic direct mail (EDM) and included an invitation to provide feedback until 26 March via an online survey. Stakeholders invited to provide feedback include:

- ANZCA Indigenous Health Committee
- Scholar Role Sub Committee
- Provisional Fellowship Program Sub Committee
- Safety and Quality Committee
- Effective Management of Anaesthetic Crisis (EMAC) Sub Committee
- Education Executive Management Committee (EEMC)
- Education Development & Evaluation Committee (EDEC)
- ANZCA Trainee Committee
- Training Accreditation Committee (TAC)
- FPM Board
- FPM Learning & Development Committee
- FPM Training Unit Accreditation Committee (TUAC)
- FPM Training and Assessment Executive Committee (TAEC)
- NZ National Committee
- ACT Regional Committee
- NSW Regional Committee
- Qld Regional Committee
- SA/NT Regional Committee
- Tas Regional Committee
- Vic Regional Committee
- WA Regional Committee
- Leadership and Management SIG Executive
- Wellbeing SIG Executive
- Education Officers
- TUAC Reviewers (FPM)
- Rotational Supervisors
- TAC Senior Visitors

Methodology

An online survey was developed using the web-based tool, Survey Monkey and distributed to key stakeholders via a link using the electronic digital mail (EDM) tool, Informz.

Demographic information included the role or position the respondent was primarily responding from in giving their feedback on the interim report. Respondents could select only one option from the following list:

- ANZCA/FPM Committee member (if this option was selected respondents were asked to select their committee from a list of twenty options)
- Education Officer
- Leadership and Management SIG Executive member
- Rotational Supervisor
- Senior accreditation visitor
- Wellbeing SIG Executive member
- Other (please specify).

The survey questions were designed to gauge respondents' agreement with each of the 17 recommendations and to rate the level of support for options proposed for three of the recommendations. Respondents had the option of selecting *Yes, No or Unsure* when asked if they agreed with the recommendation. For each recommendation, respondents were also given the opportunity to include a paragraph of text for each recommendation (8 lines, 70 Characters per line). Where options were provided, respondents were asked to rate their level of support for each of the proposed options. Levels of support included *Fully support*, *Partially support*, *Do not support* and *Unsure*. For each option, there was an opportunity to include a free text comment (3 lines, 70 characters).

All questions were mandatory, except the final question that asked if there were any additional comments regarding the report recommendations. ***A copy of the full consultation survey is available upon request.***

Results

Twenty-four stakeholders completed the consultation survey; 3 representing FPM and 21 representing ANZCA and from the following role or position:

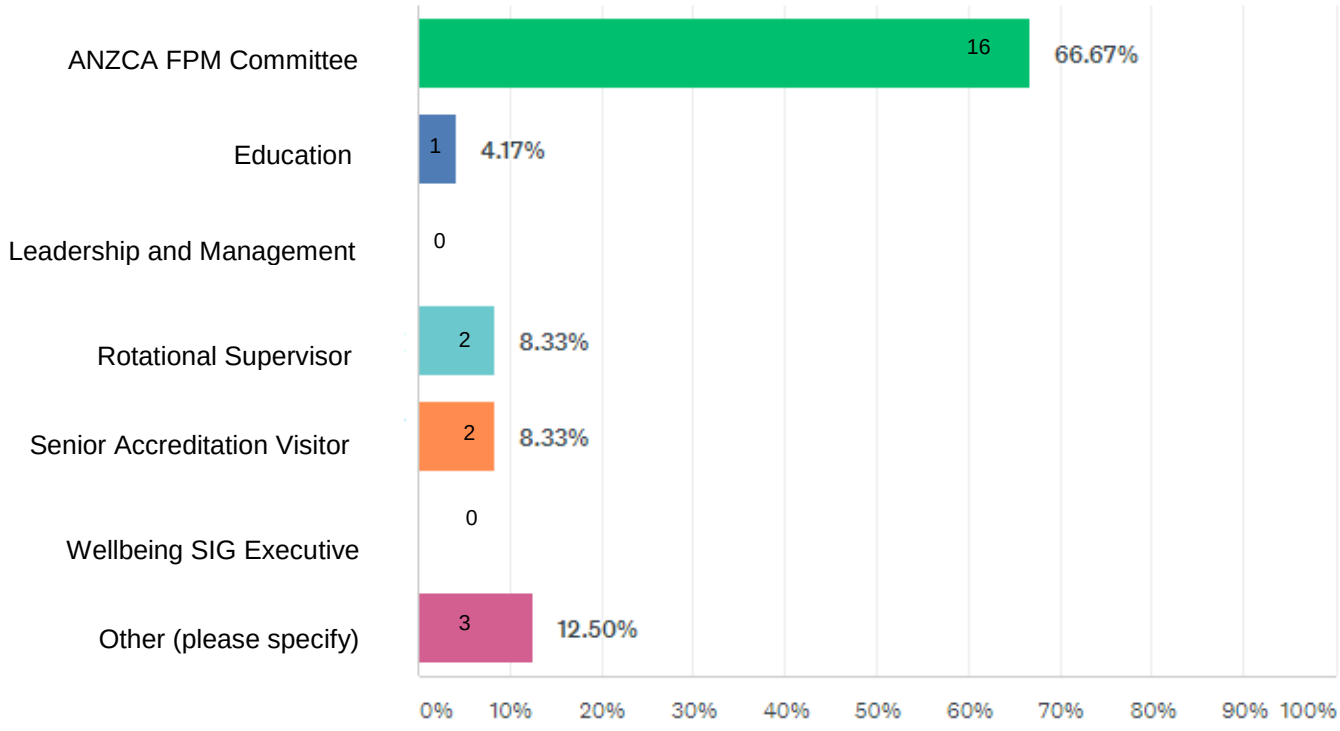
- 1 x Education Officer
- 2 x Rotational Supervisor
- 2 x Senior Accreditation Visitor
- 1 × EDPA
- 1 × FPM board member
- 1 × SOT/ ANZCA regional committee member
- 4 × Education Development & Evaluation Committee (EDEC) Member
- 1 × Education Executive Management Committee (EEMC) Member
- 1 × FPM Learning & Development Committee Member
- 1 × FPM Training Unit Accreditation Committee (TUAC) Member
- 2 × Provisional Fellowship Program Sub Committee Member
- 1 × Qld Regional Committee Member
- 4 × Scholar Role Sub Committee Member
- 2 × Training Accreditation Committee (TAC) Member

The majority of respondents agreed with all recommendations and where options were provided, one tended to stand out as being preferred (or fully supported) by most respondents. The exception to this is the options for the proposed models for CLE Measurement where both options were partially supported by most respondents.

The pages following present each survey question and responses, in graph and table format with the number and percentage of responses and associated comments.

Please note: *The recommendations and final report were revised on the basis of the consultation feedback. As a result, the recommendation numbering and options lettering in the consultation survey are different from what appears in the final report.*

Please tell us the role or position from which you are primarily responding to the interim report.

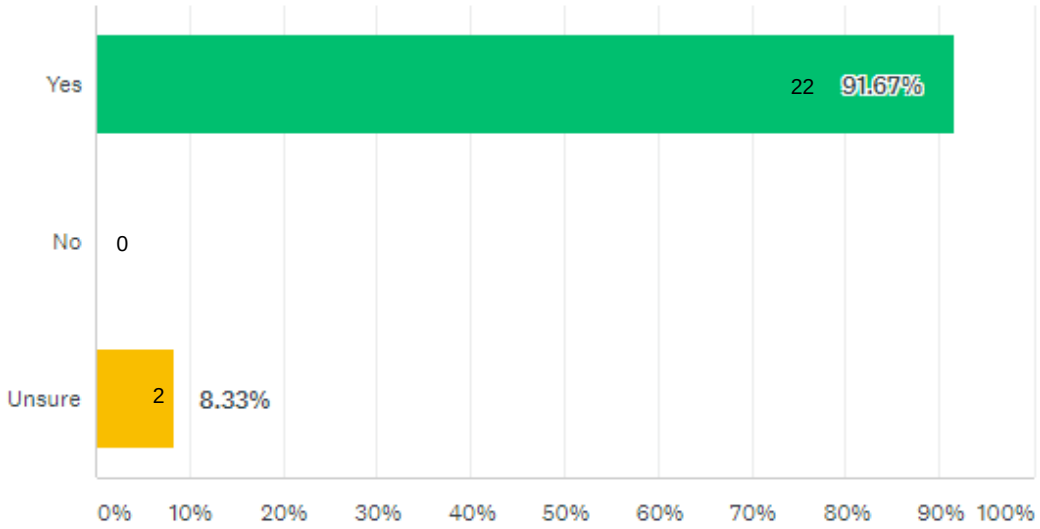


Other (please specify):
1 × EDPA
1 × FPM board member
1 × SOT/ ANZCA regional committee member

My feedback is being provided primarily as a member of the following committee (please select one committee only):
0 × ACT Regional Committee Member
0 × ANZCA Indigenous Health Committee Member
0 × ANZCA Trainee Committee Member
4 × Education Development & Evaluation Committee (EDEC) Member
1 × Education Executive Management Committee (EEMC) Member
0 × Effective Management of Anaesthetic Crisis (EMAC) Sub Committee Member
1 × FPM Learning & Development Committee Member
0 × FPM Training and Assessment Executive Committee (TAEC) Member
1 × FPM Training Unit Accreditation Committee (TUAC) Member
0 × NSW Regional Committee Member
0 × NZ National Committee Member
2 × Provisional Fellowship Program Sub Committee Member
1 × Qld Regional Committee Member
0 × SA/NT Regional Committee member
0 × Safety and Quality Committee Member
4 × Scholar Role Sub Committee Member
0 × Tas Regional Committee Member
2 × Training Accreditation Committee (TAC) Member
0 × Vic Regional Committee Member
0 × WA Regional Committee Member

Numbers of FPM responders	3	**Number of ANZCA responders**	21

Do you agree with recommendation 1: That the college undertakes an accreditation renewal project with cross-program representation for accreditation system redesign and implementation?

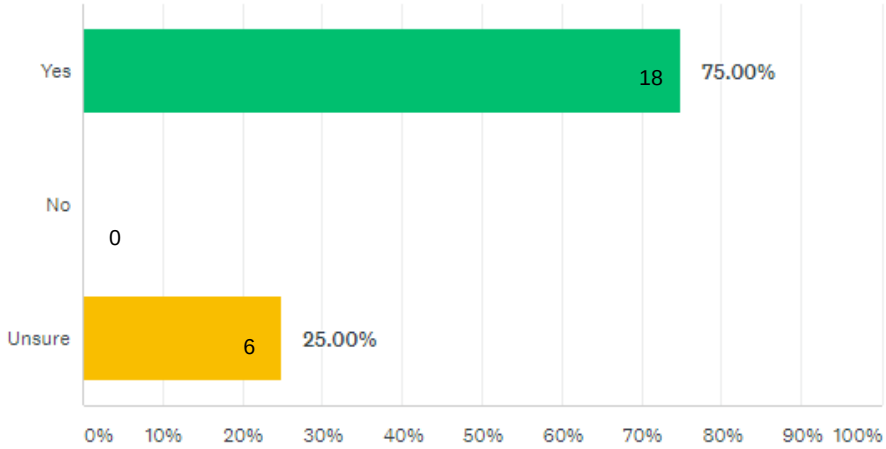


Comments:

This is because I am aware of the potential large scope if the review is carried out as intended in the consultation document, the limited resources there are within the college to support such a project and the other competing projects.
I would support a slimmed down version, after consideration alongside other projects. My main concern about our accreditation processes is that the TAC process is heavy on the minutiae of the physical setting the

anaesthesia trainees train in (accreditation of physical facilities), while having very few recommendations (or focus) on the training culture, educational program or achievements, which is clearly outlined in the report. However, I'd also note that the focus on physical facilities may reflect the lack of enforcement of ANZCA standards by hospital licencing/accrediting processes, so that ANZCA is effectively filling a gap. I agree for all programs – often the anaesthesia TAC process is used as a template for the other program processes, so it is likely that the gaps in the anaesthesia training program accreditation will be replicated in the others.
Very compelling risks of not proceeding particularly with respect to benchmarking.
I agree with the aim to follow best practice findings from the report have an explicit philosophy to help with transparency of process
One cannot disagree with this, as the project is already under way, as evidenced by this interim report. In my view, this recommendation is redundant.
Current training programs varies quite considerably between units and need to be standardised
Strongly support
This is vital to make accreditation more trainee and education focused
The impossible task is to make the process easier and yet more robust / more responsive to or sensitive to changes.

Do you agree with recommendation 2: That the college introduces annual measurement of the clinical learning environment?

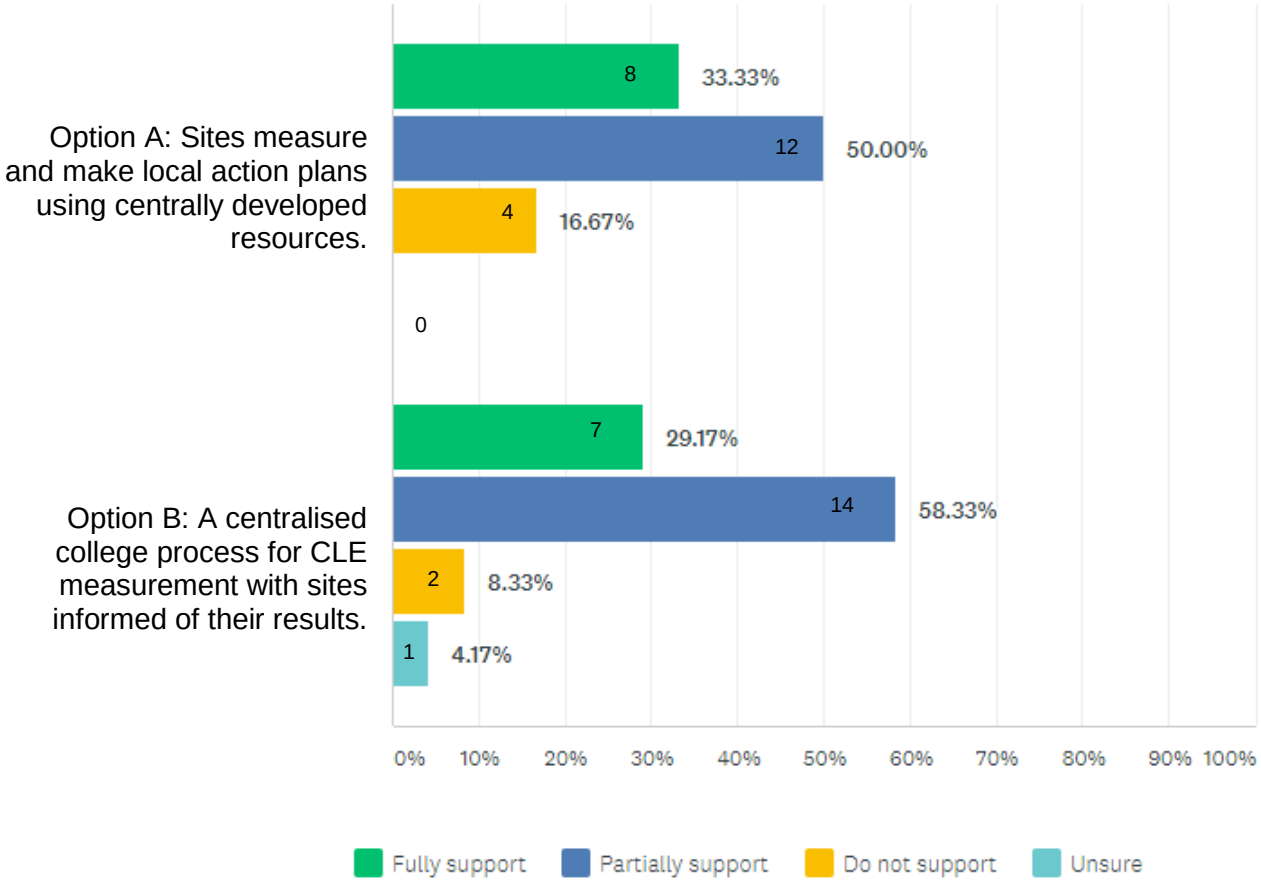


Comments:

The real question is which measurements, what detail etc (first question is really 'motherhood and apple pie" type)
This could potentially be burdensome for SOTs who have a lot of jobs already. In addition, failure to 'pass' the CLE assessment may result in trainees having less training than anticipated if the department response is not to engage in education for fear of 'doing it wrong'.
I do not disagree with this in principle. However it cannot be considered separately from other aspects of "measurement" such as Recommendations 6, 5 and possibly 13. "Measurement" usually implies quantitative assessment; qualitative assessment may be more relevant in this context.
This may be too much work for some units, depends on what is required.
May be too much work for units
I think that an explicit measurement of the clinical learning environment will be very helpful in terms of highlighting the important issues that impact on trainees. I think that a formalised annual measurement is a great idea. It makes more sense to do it regularly, which I suspect will actually lessen the workload for training sites around accreditation unless they're underperforming! The accreditation process should reflect the true state of a training site rather than a buffed up version for the occasional accreditation. I hope this will happen with general hospital accreditation as well!
Effective interim monitoring important. May be difficult to measure as many elements are qualitative rather than quantitative.

Exactly what to measure that is relevant to learning outcomes and is not onerous and promotes "department" improvement in the CLE is not very clear but the principle of more continuous improvement is.
The different measures are validated as a whole measure so any partial applications of these measures will need to be taken in context. CLM measures are a broad tool used to identify potential issues and are just one aspect of accreditation.
Depending on the metrics chosen this could be an onerous task on both sides.
I am not sure annual is feasible - Biennial? Every 2 years.
I do agree with this, however, we much recognise that this does significantly increase the burden on departmental members, and already many members are not adequately remunerated for the nonclinical work that they do. Likely it will be the same staff members who do other College/training/admin things in their respective departments.

Under CLE Measurement (recommendation 2): Please rate your level of support for the proposed models.



Option A comments:

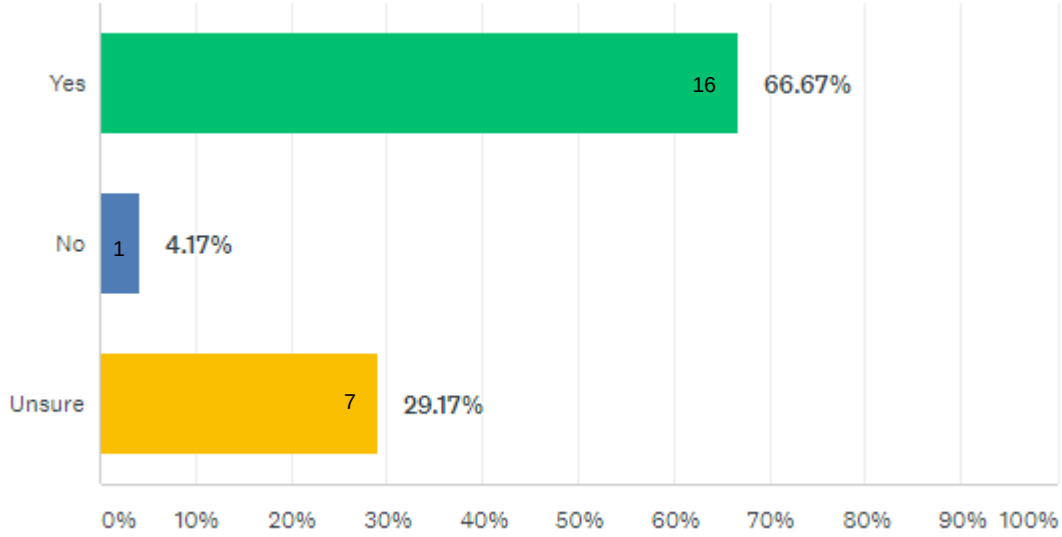
Do not support	I believe it would be difficult to assure trainees of anonymity if sites are measuring their own CLE and there would be reluctance for trainees to respond honestly.
	While most will do the right thing, there is potential that 'problem' sites will game this process.
	Risk of sub-standard conditions and practices being normalised and entrenched. Fresh eyes often needed.
	Most FPM sites have 1-2 trainees so safety could not be ensured to enable annual reporting. Waiting to measure >5 trainees' feedback would mean that CLE improvement would not be sufficiently timely (3-4 years between improvement cycles)
Fully support	Option A may give individual units more flexibility
	A more localised process would be my preferred option, mostly to improve the effectiveness of the response to any identified issues and ensure that local staff preserve

	ownership of the process. The only concern that I have is the potential for bias or inaccurate reporting with sites measuring the performance. I presume that trainees being involved will help in this respect. Presumably there will be mechanisms for independent verification of how sites are measuring their performance i.e. ensuring the validity of data?
Partially support	Centrally developed principles (and resources), translated locally
	Will need cultural sensitivity in these resources
	Site engagement is good but resource intensive, especially in smaller places and there is a potential opportunity to bias perception, information and direction
	Self-regulation can allow gaming but fits with a continuous improvement model
	for this one you have to clarify point 2b - trainee safety - i know what you mean but to remain anonymous is what you mean - and the fact you think this has to be done calls into question culture etc.... we are trying to get rid of anonymous feedback form students in uni as it is biased to intersectional groups.... that is only reason for partial support
	Allowing sites flexibility to assess CLE inputs that are more relevant and important to them may increase utility of the accreditation to them.
	I do endorse support for this model, where each centre can administer their own compliance with College resources, however the seeming divorce from Clinical Executive in the hospital may make it difficult to justify the nonclinical time required to implement this.

Option B comments:

Do not support	I would be less keen on this approach, mostly because it will be more resource intensive and less likely to be done frequently. I think the advantage of going through this process frequently (i.e. annually) with scope to measure and intervene in a timely manner, will provide the biggest benefit over current approaches.
	can see the advantaged for benchmarking... however think you can still does this in option 1 with templates...
Fully support	More standardised and easier to monitor cultural sensitivity
	Stronger governance in this model
	A centralized process for measurement would be more likely to measure accurately, with more trainees feeling comfortable to give honest feedback. There would still be scope for individual sites to receive their assessment and devise their own individualized action plans for improvement.
	The college should take ownership of this issue, and act like the education provider they claim to be.
Partially support	Option A give sites more local flexibility
	There is a place for two-way traffic between the centre and the periphery (see Recommendation 5)
	Need site engagement
	Somewhere in between would be ideal, maybe yearly local assessment with less frequent central involvement.
	There are some measures which are probably better assessed and reported directly by the college to allow for greater trainee privacy
	This will make requirements clearer for sites, with external oversight. May increase buy-in from Clinical Executive if an official body can provide evidence that a centre is noncompliant.
	Using the data to make local action plans? Option B my preference.
Unsure	Same concern as for A. Any feedback will obviously be based on the report of current trainee(s) who will be too few in number for anonymity

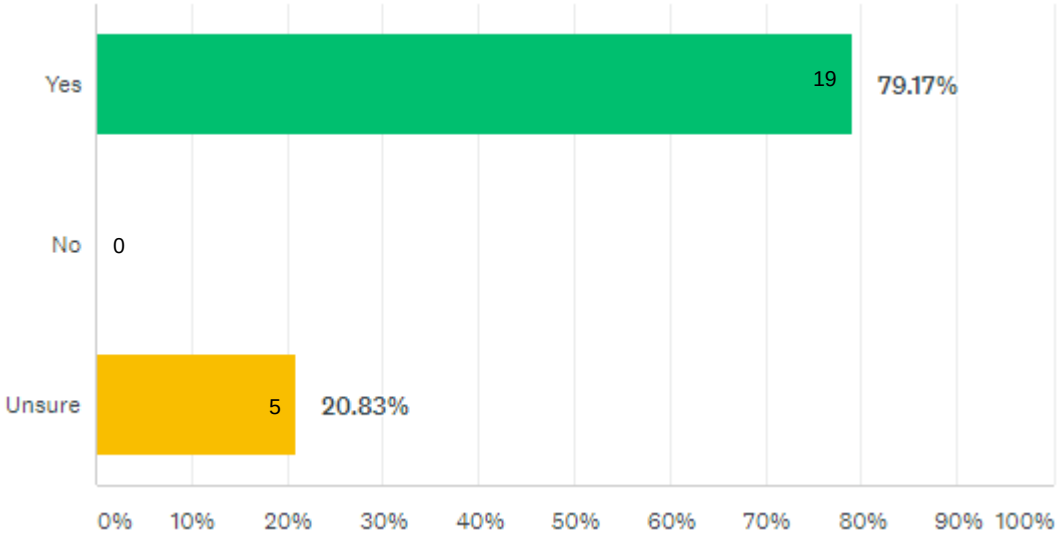
Do you agree with recommendation 3: That the college investigates measurement of the simulation learning environment applicable to all college simulation activities (not just EMAC)?



Comments:

Not as part of this project This should be undertaken by the EMAC committee, in consultation with the committee overseeing each of the training programs. Use of and the role of simulation training within the training program is a larger question, and one that should be separated out. Once the aims etc are developed, then the outcome measures and accreditation process should flow naturally.
Essential for advanced airway skills and UGRA. Multidisciplinary teamwork training increasingly recognised as essential to improving team effectiveness, patient safety and team culture.
I think this should also be applied to courses for CPD including emergency activities
Simulation is an essential part of trainee education
Applicability of simulation to Pain Medicine training is unclear.
I would advocate doing this in a supportive manner. My personal experience, which I strongly suspect is not unusual, is that educators at most training sites would be very happy to do significantly more simulation based education than they currently do, but are limited by resources. I think in 2021 that core training sites need to have the capacity to provide effective simulation based education, particularly team based training and crisis management training. It's not a nicety or an add-on anymore.
Sim-based learning is becoming major teaching and learning method. Often not supported by hospital executive as time and dollars expensive. This would help.
Quality assurance of simulation activities is important and having an overall positive learning environment is necessary in the area of simulation so that participants feel comfortable to learn and engage in the process of simulation. The simulation learning environment is potentially difficult to measure but it would be worthwhile investigating its measurement.
This really depends on how much any new or future curriculum incorporates simulation-based learning in the workplace. Many centres run simulation to varying degrees and standards. What is the consequence of a centre not meeting the standards?
I support the use of simulation throughout training but I have concerns about it moving from something measured to something required particularly in smaller centres where it may be difficult given small numbers of specialist staff and expense of the equipment involved.
This language is difficult to follow. I am not sure what this refers to.
I see these as education activities and therefore should follow a common education framework - if this then why not conference venues/workshops etc i can see why from mandatory nature.....
This seems sensible but SIM not my area of expertise.

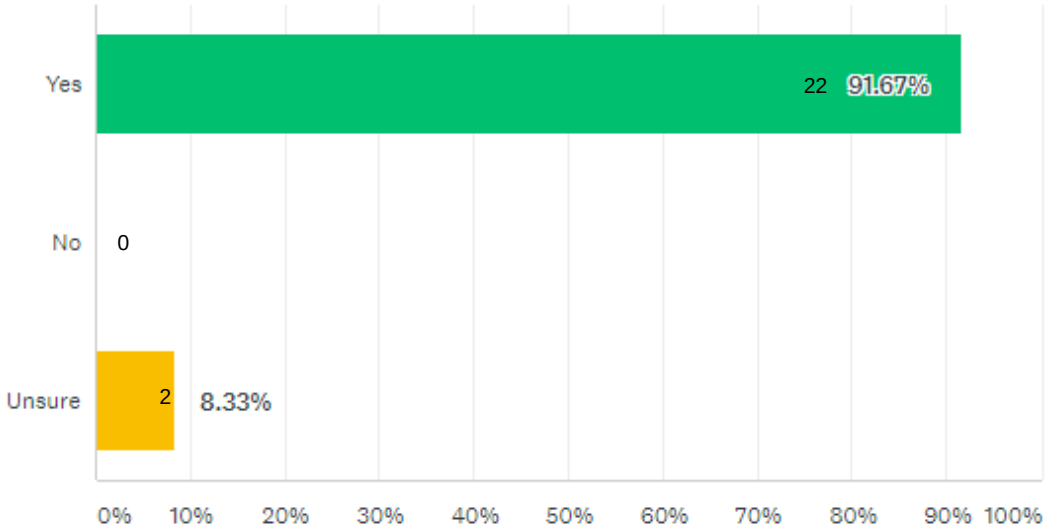
Under Accreditation Standards (recommendation 4), do you agree That the college redesigns training accreditation standards by addressing the seven actions identified in points "a" through "g"?



Comments:

With proviso that NZ standards are also referenced
In addition to regional and rural workforce responsiveness, site should also demonstrate how it develops and supports a diverse trainee workforce to achieve the gender and ethnicity equity strategic goals of ANZCA. (This may come later in the survey)
Again, hard to disagree with this, as many of these stem from first principles.
Item g may be difficult given the current shortage of manpower and problems recruiting even for metropolitan areas. It can be hard for some units to support a regional or rural workforce program.
Item g is very difficult. We now already have great difficulty recruiting in regional centres with generic manpower shortages. It will be very hard for many centres to implement a regional or rural support strategy
I think it's healthy to recognise that training and service provision are intertwined, and that quality in one improves quality in the other.
C- mapping standards to the relevant curriculum is important. Must ensure that training sites are accredited to facilitate achieving the learning outcomes described in the curriculum. E- Balancing standardization with flexibility and innovation are important because training sites are individual and have different strengths and weaknesses. One cannot expect to get the same training experience from a metropolitan vs a regional hospital, but both can provide a valuable training experience and assist the trainee in achieving the learning outcomes in the curriculum. D- Promoting alignment of health service and training agendas can be difficult and several options for accreditation focus are described in recommendation 5. I feel that training agenda should be the primary focus of accreditation and health service delivery should be addressed through a different process.
Item G around the rural workforce is important and I would rate as core
While I agree that point "e" sounds good I am not sure how it fits into accreditation or is assessable.
It's just an 'aim ' list though.....

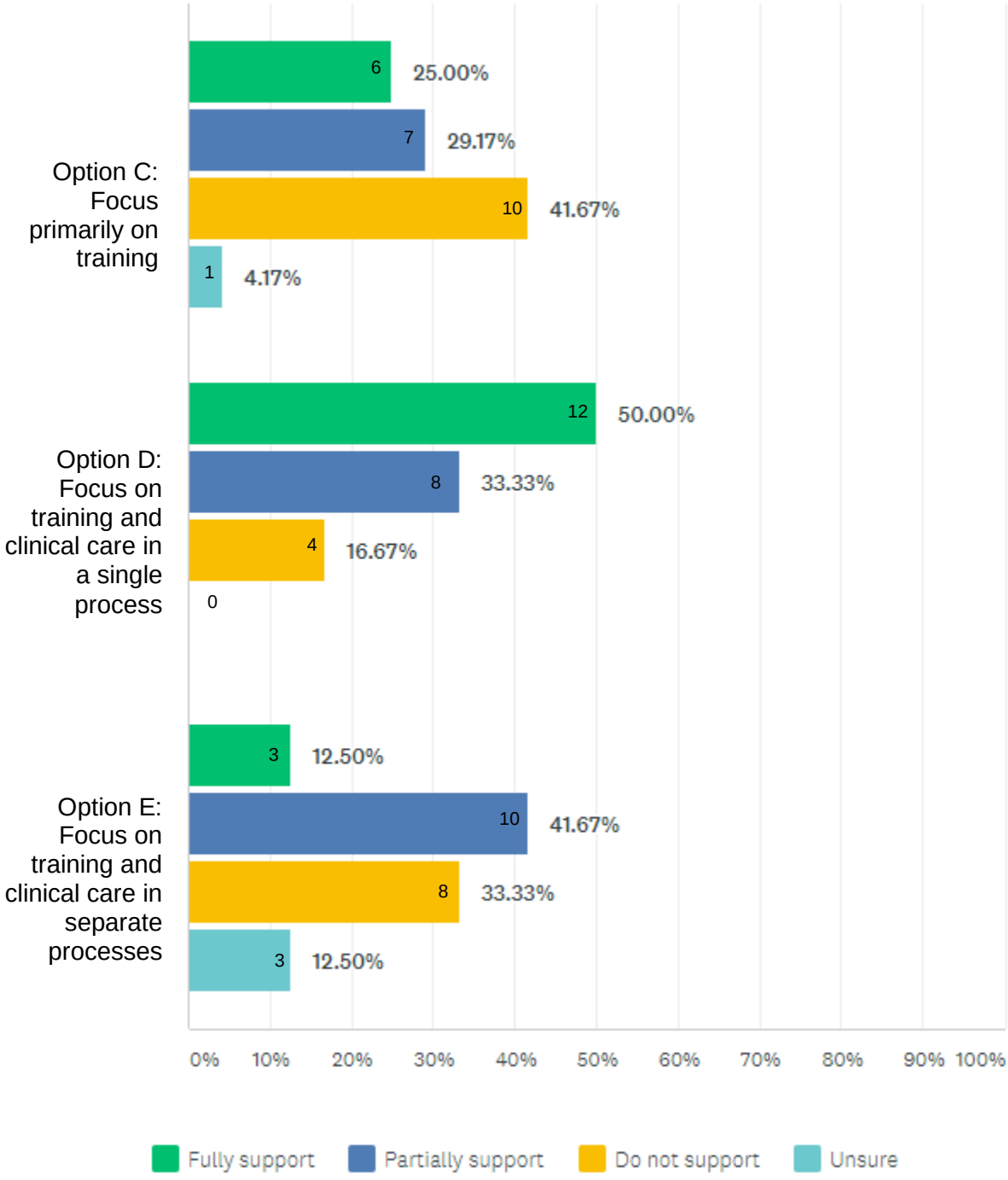
Under Accreditation Focus, do you agree with recommendation 5: That, in so far as training accreditation focuses on clinical care, it is reoriented towards how each accredited site prepares trainees to practice as specialists within systems that promote safe and high quality care for the community?



Comments:

Frankly, I would have thought that "to practise as specialists within systems that promote safe and high quality care for the community" was a given in the current climate. What other principle(s) could inform accreditation? On p. 60, this Recommendation appears as #7.
That's the endgame, and hopefully we're all doing this to at least some degree already. It's good to make it explicit that it's not just about exam performance and getting research published!
I think it is difficult to separate the training environment from clinical care and would like to see both addressed in accreditation
Can't disagree with this statement but wonder which community?
Yes. Primary focus should be on education rather than clinical care.
While I think there should be a difference between the two I am not sure this is reflected in the "important questions" as they still seem to focus on clinical care.
Plain language needs to be applied to much of this document to ensure accessibility.
The crux
This makes sense, but how can it be done within reasonable resources?

Under Accreditation Focus (recommendation 5): Please rate your level of support for the proposed options.



Option C comments:

Do not support	Training is more valuable delivered in the context of clinical care. Furthermore, it may be hard to fund trainee positions if the trainee does not provide sufficient clinical support for the unit
	Training is better delivered through clinical care- an essential element for the trainee. Furthermore, funding the trainee positon will be difficult if the trainee is not seen to provide adequate support for clinical care in the unit
	This would be antithetical to the purpose of the project.
	I don't believe you can have high quality training in an environment with "poor" clinical care so you have to look at this

Fully support	I think accreditation of training sites should focus primarily on training. While it is important that trainees learn in environments where high quality clinical care is provided, it is complex to assess both things simultaneous and the relationship between clinical care and training is complex and non-linear. I think the College accreditation process should focus on training and clinical care should be addressed separately.
	As a college we should be assessing hospitals on their suitability for training.
Partially support	Presumably this is comparable to the way we currently run accreditation. Agree that expanding the clinical care aspects of accreditation would give a more complete overview of the training benefits of working at a particular institution.

Option D comments:

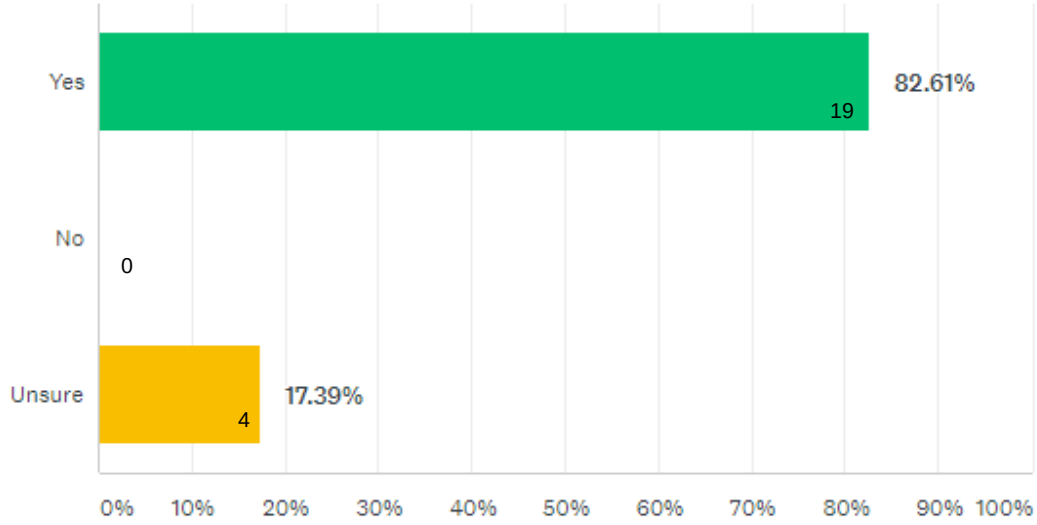
Do not support	The college does not currently accredit private centres (that do not have trainees) with regards to clinical care standards, so an argument could be made that it need not do so for public hospitals either. If the college was to consider accreditation for both training and clinical care, these need to be separated.
Fully support	I must say that I do not understand how "training" can ever be separate from clinical care" in an holistic program..
	Seems like the ideal approach the way it's presented in the background document. Presumably this is about looking at clinical outcomes at the relevant training site and ensuring that a particular institution isn't outside the bell-curve with regards to clinical outcomes for patients. Hopefully this would replace other aspects of Departmental accreditation processes?
	The CLE is just that an environment so I don't believe they can be separated
	So much overlap with these two processes, makes sense to join them.
Partially support	Need to consider training and professional standards Unsure if single or separate process better. I lean towards a single one as less frequency for the site
	There are certainly overlaps between the two and I think we should include clinical care as it relates to training.
	The focus of the accreditation process should primarily be on training aspects and some measure of standards of best practice clinical care should probably be part of this.
	This makes the most sense - just not sure how the duplication of health service accreditation will sit with administrators

Option E comments:

Do not support	See above (Training is better delivered through clinical care- an essential element for the trainee. Furthermore, funding the trainee positon will be difficult if the trainee is not seen to provide adequate support for clinical care in the unit)
	I would have thought that if the College is going to take over accreditation of facilities for provision of clinical care, it would be important to streamline the process so as to avoid an excessive accreditation burden on Departments.
	I am not sure of the benefit to ANZCA becoming involved in accrediting clinical care in hospitals separately to training and this seems like a lot of extra work.
	This seems to be the most burdensome option, and will also seem to be the most costly for the long-term.
	This option does not get away from duplication of accrediting clinical care via two separate processes. Work for services may be spread out but may increase as a result.
Fully support	Though somewhat related, these are two separate issues. The number of PACU beds per OR has no real implication on standards of training, but it can be broadly acknowledged that a safe patient environment is conducive for a good CLE. These two processes should be considered separately but the college should address the issue of why it doesn't accredit private centres with regards to clinical care standards.
Partially support	I wonder if this is going to be difficult to do across all sites in NZ and Australia-it may be best to have a flexible process that can be adapted to different sites
	Seems more cumbersome

Unsure	Because one would think that departmental standards re provision of good clinical care would be an important QA metric in an optimal training environment hence it would be difficult to completely dissociate the two.

Do you agree with recommendations 6 and 7 on monitoring and data sources?



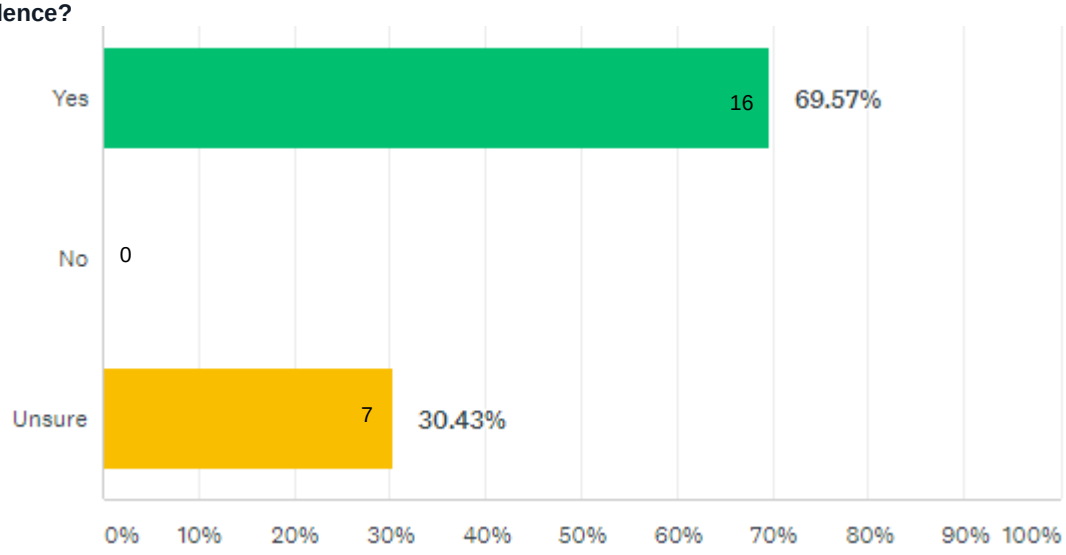
One person did not respond to this question

Comments

Yes as long as they are not overwhelming in resourcing needs Also see the answer to Q 4. Training outcome metrics would be desirable, and developing them succinctly will be a challenge.
I agree in principle with these Recommendations as found on p. 11. However it is confusing that they do not quite correspond with the recapitulation on p. 60 d on p. 11. On page 60, #6 is Develop outcome metrics", while #7 is "Reorient clinical care focus towards trainee preparation for systems based care" which looks more like #5 on p. 10. #6 on p. 11 recalls #2 on p 60. #7 on p. 11 may correspond to #6 on p 60.
It depends on the type and quantity of data that is captured. I fear it may be a lot of work for the units.
The method of data collection would obviously need to be carefully considered, balancing quality of data vs the time commitment required from trainees and supervisors to generate the data. Ideally the data collection would be incorporated into current processes as much as possible (i.e. TPS for trainees). It would also be ideal for this process to be credited towards the Practice Review component of a practitioners CPD requirements.
I agree with both as long as the annual process isn't too burdensome and the metrics have real outcome validity
It is important to collect data on training outcomes and make these available to trainees and specialists. This may be averaged out over a period of time if necessary, and pooled according to training rotation/region instead of individual hospitals. Examples include CLE measures, examination pass rates, % in extended training, % SOTs who have completed educator competency requirements, % trainees who end up with a specialist post within 1 year of fellowship, equity metrics according relating to gender and ethnicity (for specialists and trainees), etc. TAC could work with a future Educators Academy when measuring metrics for educators/specialists.
This seems very important, not sure about making this information public but it depends on what is asked.
As before wonder if yearly is too frequent - or why not continual data and interpretation ....like dashboards....
Note that depending on the mix of trainees, geographical location, and length of accreditation at each site, sites will be ranked in terms of trainee outcomes that are visible to all. This may become a problem and result in self-fulfilling cycles where 'best' centres attract 'best' candidates/trainees during trainee selection, and may unfairly advantage those centres. An example is that some higher-demand centres do not renew employment contracts for those trainees who fail the primary or final exam. Other centres may choose to renew contracts and support those trainees having difficulty with the exam over the term of their next contract. These trainees who failed their examinations may be

more likely to repeatedly fail the exam. On assessment of examination results it will look as though the centre with the highest degree of trainee support and mentoring/dedication to trainee welfare (who renewed the trainee contract) has the lowest exam success rate, and the centre that did not renew contracts for the exam-unsuccessful trainee (and so who takes on another trainee who passes the exam) has a better examination pass rate. The latter centre will continue to attract the best trainees, thereby in the future having the best exam pass rate, etc etc
I agree that inclusion of qualitative data will value-add
These make sense, if they can be achieved without significant increases on FPM or unit workloads.

Do you agree with recommendations 8 and 9 on sharing of innovative approaches and rewarding excellence?

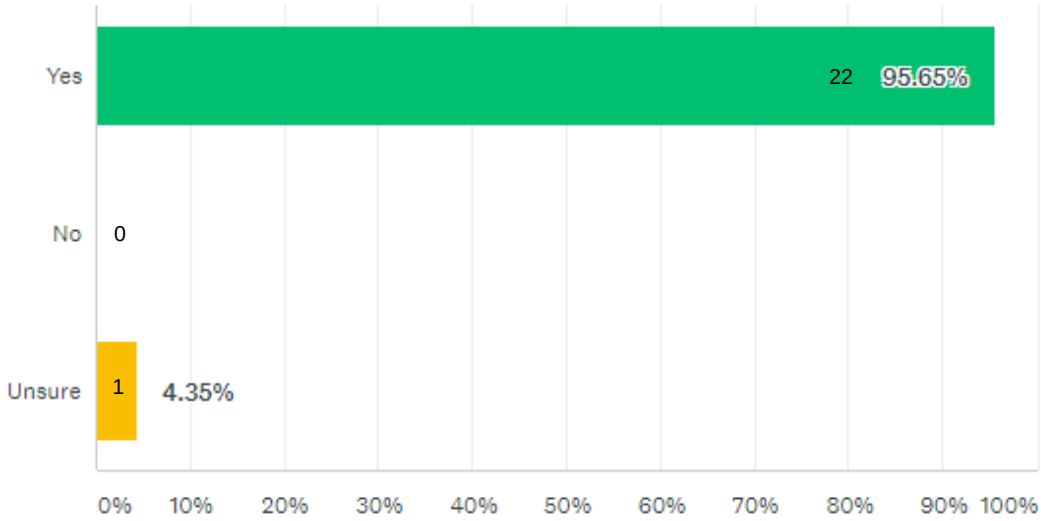


One person did not respond to this question

Comments

Ideal rather than essential, and for later after initial stages completed
I agree with sharing solutions to common problems. Creating league tables can have unintended consequences, such as a league table competition rather than collaboration or incentives to cover up areas in need of improvement. What resources can ANZCA offer struggling sites apart perhaps from training (low effectiveness as a QI approach). It would be interesting to explore just what can be done to effectively resolve the variety of challenges to training programs.
Terrific ideas.
How would sites be rewarded?
Certainly with respect to #8. With respect to #9, I would prefer mechanisms to remediate poorly performing sites to reward for high-performing ones.
I was a bit uncertain about how this could work practically, but it's a good idea.
Absolutely Reward promotes excellence and improvement
I strongly agree with the recommendations for sharing innovative approaches.
Too often we work in silos, but there is also an element of parochialism at play here. For example, the Part 0 course in NZ is separated into 4 sites instead of the single site like every other Australian state/territory - because some centres don't want their trainees to receive advice from specialists in other centres.
Sounds good in theory but I am cautious about what would be shared and what that means for other facilities.
What are leading and next practices?
Little at odds - rewarding high performing sites and focussing resources for supporting those with challenges - suggest the rewards will not be resources....

Do you agree with recommendation 10: That the college strengthens support for its volunteer accreditor workforce by reviewing recruitment, orientation, training and performance evaluation processes, in line with best practice?

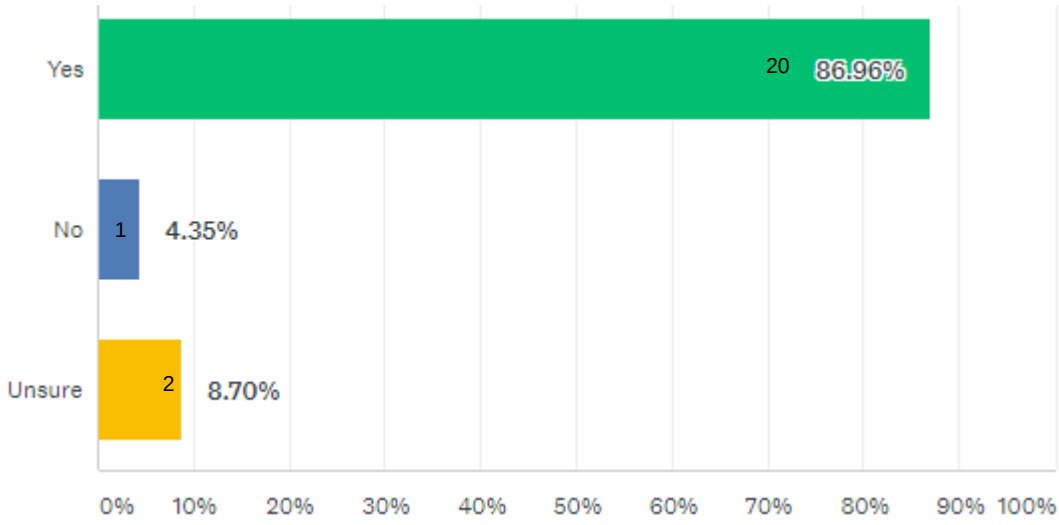


Comments

One person did not respond to this question

Has been used on and off over the years, depending on available money and resources, when these processes were run face to face. If delivered regularly regionally, then less expensive, could cover more volunteers, and will foster involvement in the colleges (as well as the obvious aim of improving accreditation processes)
Very much so
Perhaps also consider using a paid workforce. Funded by training sites. AMC pays assessors.
This is fundamental. (I note that the recapitulation on p 61 uses the term "visitor" for "volunteer accreditor workforce": the latter is preferable.)
I admit I don't have much perspective on these processes, as I have only dealt with accreditors in the context of my own training sites being accredited. It seems like a logical quality improvement strategy.
Within development of volunteer workforce, need to ensure representation - gender, region (all states and NZ) and metro/rural
Absolutely!
This ties in with the future proposed work of the ANZCA Educators Academy - TAC could be an example for other educator groups in the college.
Best practice?
Absolutely

Do you agree with recommendation 11: That the college strengthens trainee input to accreditation while ensuring trainee safety by investigating having a senior trainee or recent graduate on accreditation teams and improving the quality of trainee information available to teams?

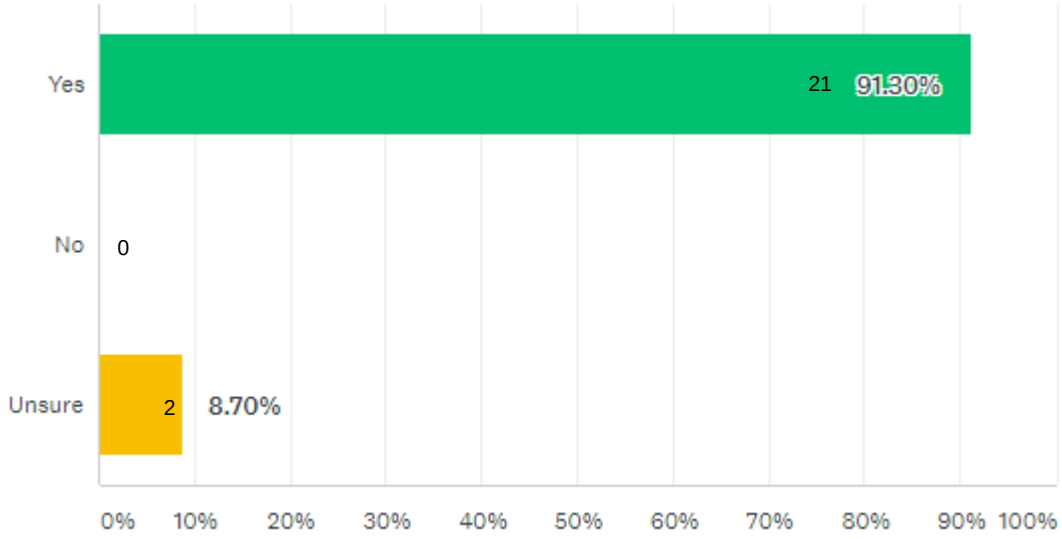


One person did not respond to this question

Comments:

Absolutely agree, a 'no brainer', could be done immediately or prior to the project being fully finished
Excellent to have a trainee voice, must be sure to have these diverse. For example if no p/t trainees why is that?
Trainees may feel threatened in such a situation. They also don't have enough exposure to a wide enough variety of training environments to give a valid response.
I would argue for a recent graduate to be involved, they're likely to have more perspective than a senior trainee but still have recent enough experience of the training environment to have a valid viewpoint. I was wondering about the wisdom or otherwise of having trainees who are familiar with the hospital being accredited on the accreditation team. I suspect there would be a lot of scope for bias in any assessments made by either a former trainee of a site or someone who is currently working at the site (or aspires to). Having said that, they would have valuable insights into the reality of working at a site.
Very important trainee committees are a great conduit between ANZCA and the trainees. this is an extension
I think having a senior trainee or recent graduate on accreditation teams would be extremely useful. They would be able to engage better with the trainees at the sites being visited and encourage feedback from the trainees as someone who is closer to a peer. They would also be able to help the other members of the accreditation team to understand the issues facing trainees and have a more recent familiarity with the training program.
Yes , the trainees perspective is very important
With the caveat that the trainees themselves choose the senior trainee. This prevents local chieftains selecting puppets to represent the trainees.
I don't see a huge benefit to having senior trainees on the team but I definitely support improving the quality of trainee information available.
Trainee or new fellow representative on TUAC?

Do you agree with recommendation 12 on accreditation resources?

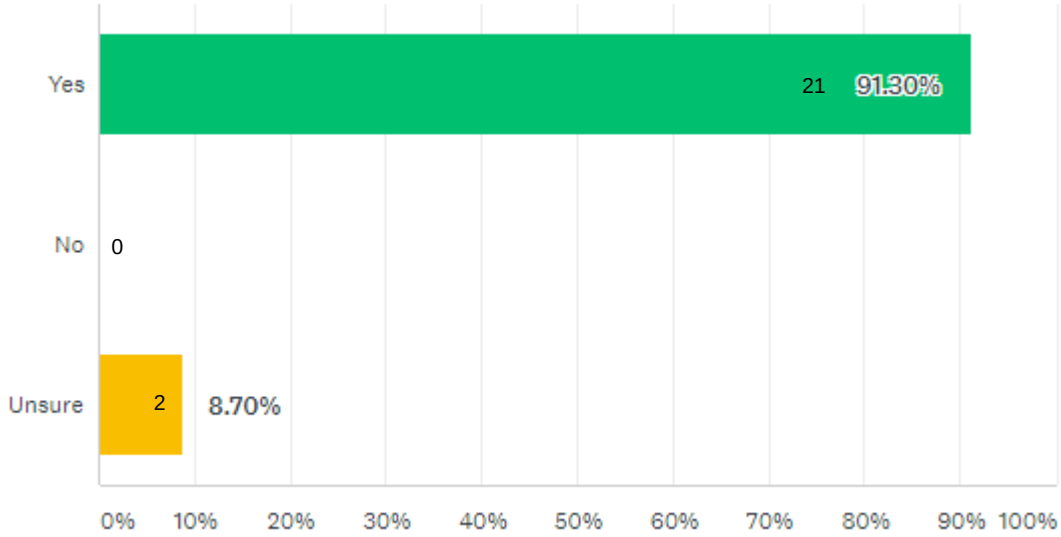


Comments

One person did not respond to this question

Agree with the team that face to face is still required for part of the process (harder to hide stuff). The current TAC TSA system is basic, an improvement on what was present previously, but is ripe for refresh (I think each visit we've commented on its deficiencies, especially with formatting of recommendations).
There should be ways for consultant staff to provide confidential input to accreditation teams - increasing use of digital technologies could provide some useful mechanisms.
I suppose resources are always tight. The process obviously needs to be made as supported and efficient as possible.
It is core business of the college!
All very sensible, but more detail might be needed for implementation
Agree with "a". I think visiting is very important so while "b" was necessary during the last 12 months I don't support it as the norm. Unsure what is intended in point "c" but assuming staff refers to having ANZCA staff to do some of the organisation and paperwork then I would support this.
Yes thinking a management system - dashboard like ps typo in 12 'provides increases' should be 'provides increasing'?
But there is a typo - 'provides increases'
Absolutely - a clever spend here on new technologies could save us all time and money in the long term.

Do you agree with recommendation 13: That the college introduces regular quality improvement of its accreditation standards and procedures?

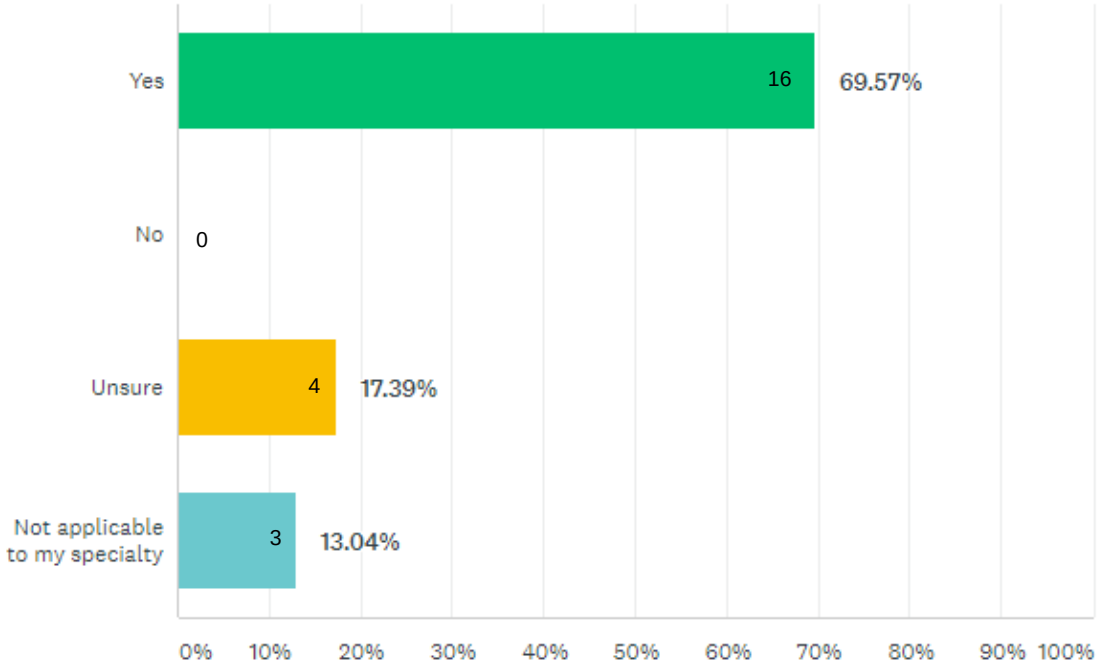


Comments

One person did not respond to this question

It's a good idea but do we have the manpower to do this? Depends on what "regular" means.
Ideally we would do this for all our activities.
Again can't argue with the philosophy of CQI.
This should be in place for all its processes.
As with any change process.

Do you agree with recommendation 14: That the college develops robust accreditation of anaesthesia training rotations that includes the seven activities listed in sub points "a" through "g"?

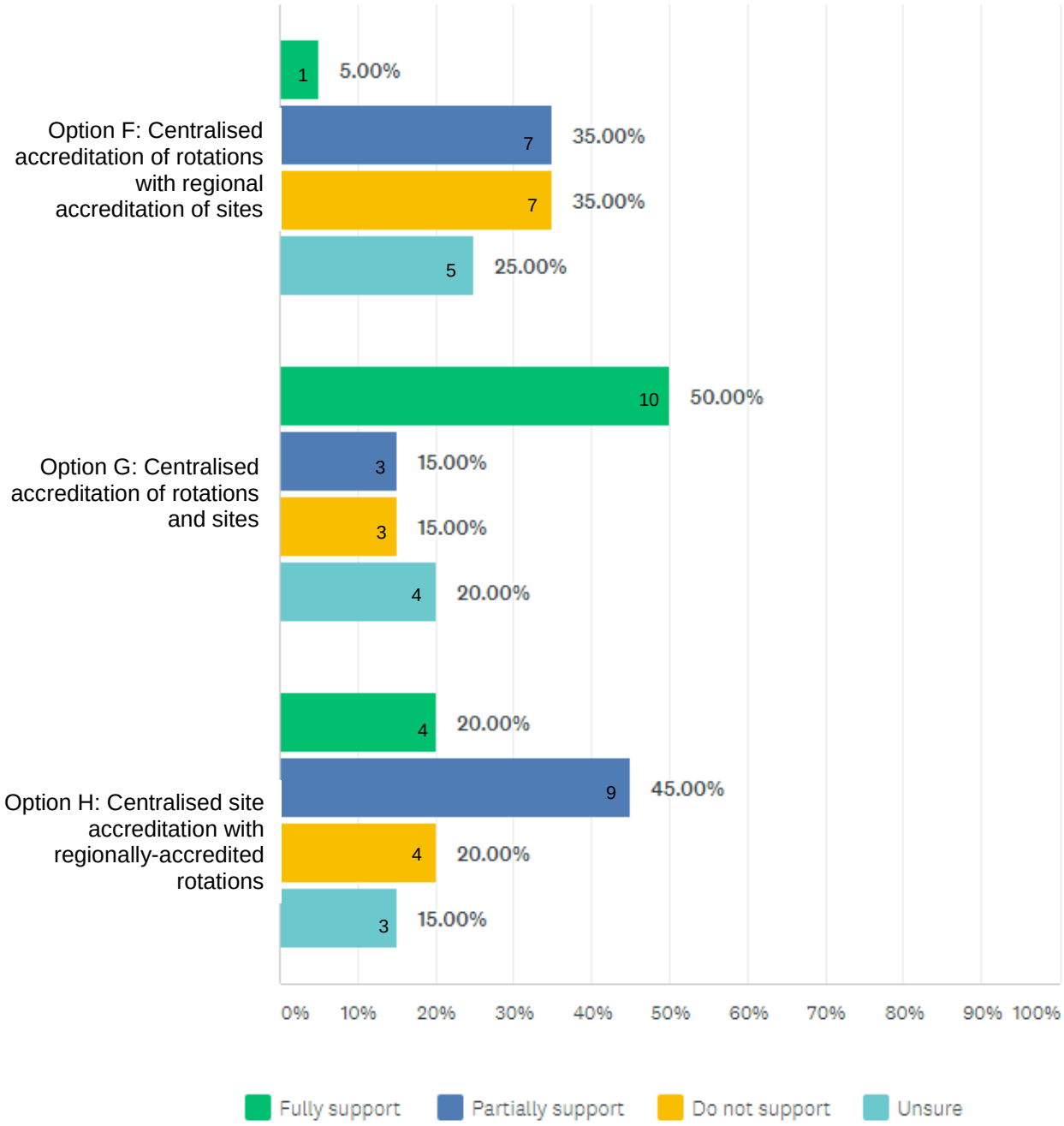


One person did not respond to this question

Comments

There is considerable variation in trainees remaining in one rotation as opposed to moving rotations. In NZ movement is more marked, so that any accreditation of the rotation would depend on this. At a minimum, it could include the structure, ensuring that it is structured to offer all the components of training.
Agree with options other than G - I suspect you may get more from a face to face focus group with trainees than a distance meeting.
I think this is a really important recommendation. I'm very keen on more coordinated evaluation of training rotations and their educational outcomes. I agree with the parameters a through g, and would hope that these are already considered routinely. I think the biggest benefit of a more robust accreditation system for training rotations would be to ensure that the primary focus of trainee allocation is to promote effective training opportunities rather than covering service needs. I recognise that there is an inherent service component to any training position, but this can be managed in a way that is beneficial to trainees (although they may not recognise this!). I am also very keen to see that trainees participate in coordinated schemes as much as possible, to ensure that the coordination of their training is optimised.
I think this is very important we need a broad consideration of the complete training pathway for every trainee in a rotation to determine training capacity of both individual sites and whole rotations regards quality and quantity of available training this has been an issue in my state
To assess an overall rotation as an entity should give a better picture the overall training experience of registrars in each rotation.
I think this is very important and helpful but is complex and should start with information about training capacity in rotations. Alterations to rotations is a difficult process that requires a lot of input from people in all the rotations involved and could benefit from some oversight. What happens to the trainees in a rotation if it is not accredited?
Concerned about rotation focus taking away from trainee focus... this is where bullying and harassment can be mentioned explicitly
Yes, but it would be better if this could be done easily. Looks potentially very complicated.

Under Accreditation of Anaesthesia Rotations (recommendation 14): Please rate your level of support for the proposed options.



Four people did not respond to this question

Option F comments:

Do not support	Too many conflicts of interest to manage regionally would make this impractical. The accreditation process should be as unbiased as possible to make it worthwhile and this requires centralized accreditation.
	This could maintain differences in standards between sites. For regions to do this properly it will shift the work from the centre to regions, not reduce the work. There is less likelihood of consistent training and standards for accreditation teams if run by regions.
	Seems to have too large a potential for conflict of interest.

Partially support	I would have thought that local/regional knowledge is more important for determining how training is organised and coordinated between sites, and that centralised coordination of this is likely to be inefficient. I do worry about the conflict of interest in allocation of trainees that can arise from smaller rotations having a dominant health service that effectively controls the rotation. I think this is a particularly troubling issue for regional health services. I understand that central accreditation of rotations would offset this conflict of interest, but I think that this would be at the cost of a more robust perspective on training opportunities and effective coordination of training between sites.
	need centralised input for independence of assessment and decisions and to avoid conflict of interest, particularly given service delivery demands need to ensure workload on regional committees, especially those in small states with small fellowships and limited human resources is considered/protected
	Can see how this would work it still means you need to visit each site
	These models all look good / have merit. Hard to pick a favourite. Devil in the detail.
Unsure	Only if external reps are present. It is possible that 'bad' sites within a rotation help to cover each other's poor practices (e.g. bullying, "this is how we do things here", etc)

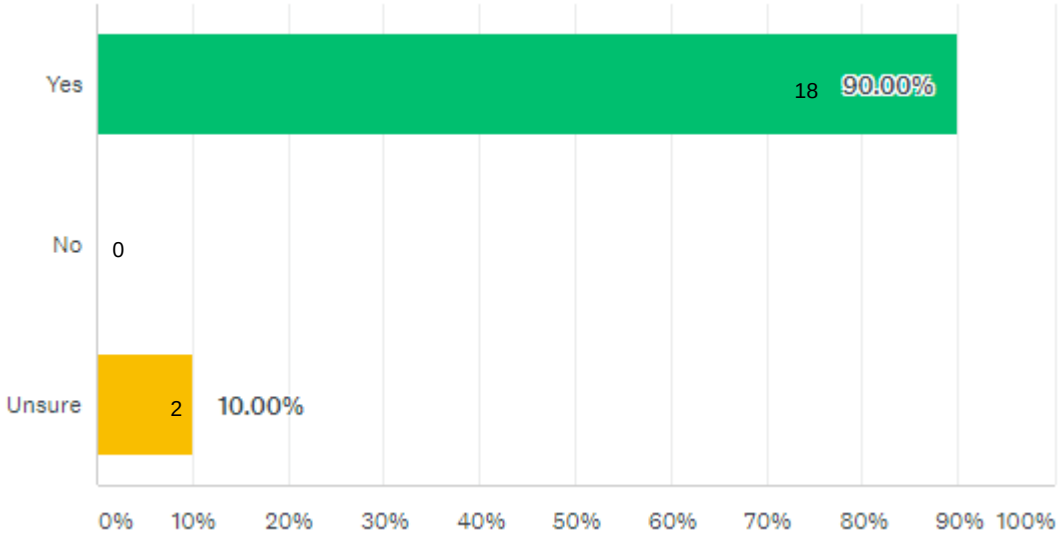
Option G comments:

Do not support	I think a completely centralised system would lack the responsiveness to deal with local issues in a timely or efficient manner, and would lose perspective on the training opportunities available in a particular region.
Fully support	Some regional centres would benefit more from an independent group performing the accreditation, rather than delegation to the main centre with which they report to (e.g Invercargill reporting to Dunedin)
	The outside view is always appreciated by all sites
	Will have to be resourced to do this, and be innovative to decrease workforce impact

Option H comments:

Do not support	Integration of training opportunities within the rotation, and continuity of training between sites could be lost in this model. A focus on the learner would suggest the entire training program should be considered as a whole, and needs to be determined without bias or service / financial workload factors that don't have the trainee learning at the centre of decisions on the rotation. The concept of CBME will require a joined up approach between different training sites, for example to look at the trainee's performance over the whole of BT or AT when making decisions on competence to progress to the next level of training. Rotations should be more joined up, not less.
Partially support	This would be my preferred option. I think that having central accreditation of sites is logical from a quality control perspective, particularly with reference to quality of clinical care and measured outcomes. As stated above, I do worry about the conflict of interest in allocation of trainees that can arise from smaller rotations having a dominant health service that effectively controls the rotation. The clinical learning environment at regional/rural and more general metropolitan sites is inherently different (not inferior) to major metropolitan health services, and I think this needs to be considered more in the design of rotations and allocation of trainees. With regionally accredited rotations, there is a risk that the influence of major metropolitan centres can be perpetuated, but I think this risk can be managed by having a diversity of training sites represented on the bodies accrediting rotations and appointing trainees.
	Again I can see how this would work but site need to be visited
	This could work, but would need to be fleshed out further. What are the criteria for accrediting rotations?
	All three options have benefits and issues. I would need to see some actual plans of how each would work to make a more informed opinion.

Do you agree with recommendation 15: That the college explores accreditation of regions for training based on capacity to train and aligned with the college regional and rural workforce strategy?

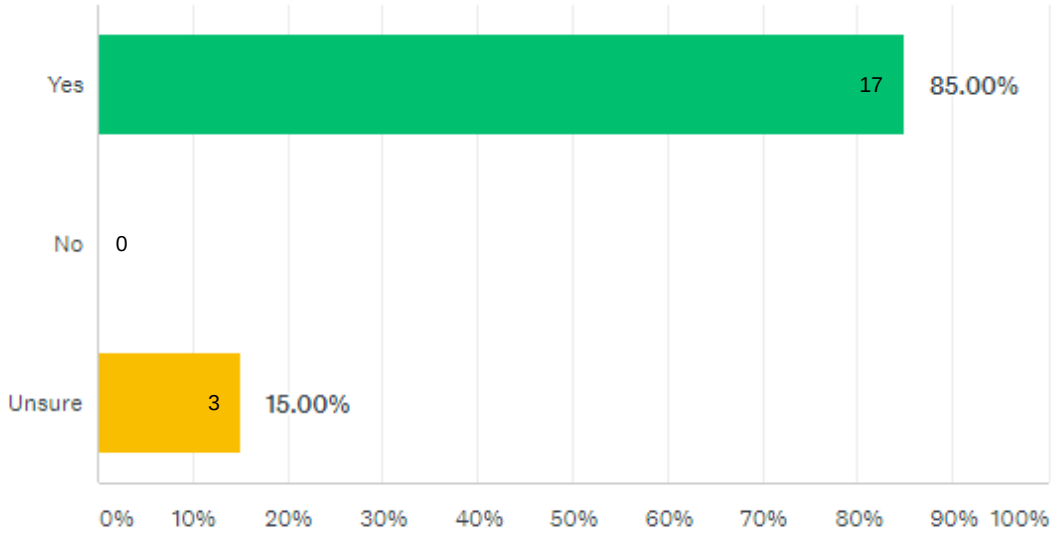


Comments

Four people did not respond to this question

Hoping I understand this recommendation – the presence of 'independent' trainees is challenging for the College, and arises from department directors abuse of training post accreditation in the past (pre 2004). It arises from the fact that the night cover in non-tertiary hospitals needs more registrars than can be accommodated in the SSUs within the rotation. Dealing with this thorny issue may be beyond the scope of the accreditation project, but should receive attention from the college.
Non-training positions should be historic for many reasons - fairness (different rewards for same work); career progression (shouldn't have 'dead-end' jobs for junior doctors; inability if ANZCA to have any influence over these positions e.g. quality of learning environment, workplace assessments; opportunity for more specified objectives for trainees in posts who don't want to progress to specialist anaesthetists (rural hospital doctors e.g. NZ College of Rural and Remote Medicine , GP anaesthesia program, or component of other training programs)
It makes sense from a resource allocation and quality assurance perspective. The challenge is obviously to ensure that we get the numbers right! Presumably this would result in a recommended number of trainees to be appointed in a particular region, independent of the number of job positions that are actually available? So, going back to accrediting specific training positions? I assume this would need to be considered in the context of competition regulations?
Challenge is the to link the training strategy to the workforce strategy to the actual decisions of trainees when training completed Despite our best efforts trainees who complete rural/regional training may still not settle there long term as specialists Need to support these trainees/anaesthetists in the regional/rural location to maintain them long term in these sites
This is especially important if the college / faculty are serious about improving regional and rural sites / consumers' access to services.

Do you agree with recommendation 16: That the college develops a robust process for accreditation of provisional fellowship training with standards linked to the curriculum, regular monitoring, benchmarking and sharing of innovative practices?

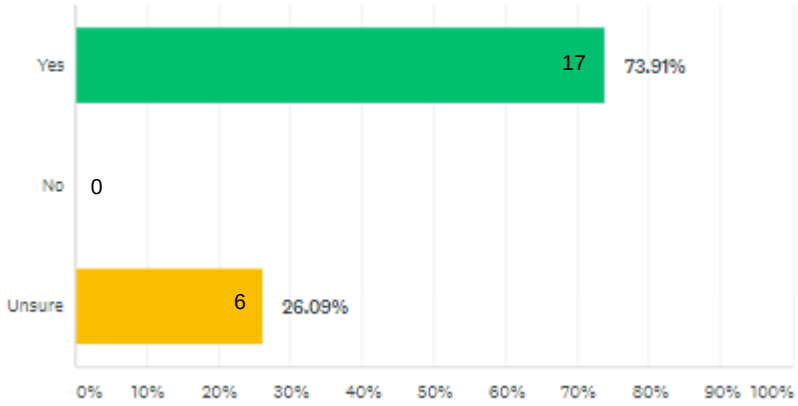


Four people did not respond to this question

Comments

While this is desirable, given the wide variation in individual trainee's PF programs, this would mean decreasing the ability of PFs to have individual programs aligned to their particular interests and needs for their final year of consolidation of training prior to independent specialist practice.
With allowance for increased latitude depending on clinical interests and to a certain extent non training imperatives
I definitely agree, but often the objectives of these fellowships take trainees beyond the ANZCA Curriculum, which is aimed at the generalist anaesthetist level expected of all graduates. Requirements for fellowships, and thus for their accreditation, would be relatively easy to develop for paediatrics (SPANZA may already have them), obstetrics, regional, or other clinical fellowships - they could use an Entrustable Professional Activity Framework. Simulation and Research Fellowships could do with some more thought - it would be great if there were clear pathways leading to a PhD. For simulation fellowships, the expectation could be quite clear that the Fellow should be competent to lead a program of simulation in their hospital, incorporating a defined range of skills and knowledge. We don't really know what to expect of someone who has done a simulation fellowship. This could be quite transformative for ANZCA - a real capstone project to top off the training program.
Not sure how this can be followed through with overseas PFY training.
but trickier given small numbers and variability of position descriptions / content
This needs to be improved as there is variability in how PF jobs are run in a spectrum from almost the same as a registrar through to almost complete independent practice
The PF subcommittee currently accredits sites based on a paper review. It is not sufficient to accredit purely for 'PF' year - the college should scrutinise subspecialty fellowships for their educational structure. For example, there is a college-accredited PF post in the east coast of Aus that markets itself a 'regional fellowship' but offers only upper limb regional anaesthesia. Similarly, there is a accredited PF post in NZ in 'perioperative medicine' where the only difference with other PF posts is additional duties in preoperative clinic. TAC should work with the relevant ANZCA committees, subspecialty SIGs, or societies to set minimum criteria for subspecialty fellowships.
As long as considerable flexibility with these jobs continues.

Do you agree with the recommendation arising that is not about accreditation: That the college explores better integration of simulation activities into the anaesthesia training program, including the future role and evolution of the EMAC course?



Comments

One person did not respond to this question

But not as part of this project I already have concerns about the size of this project, and given other competing projects such as “trainee selection’, would put it on the ‘consider’ list. Other comment: I see that the current chair of TAC has said no complaints about TAC visitors – I’m aware of 3, two in mid 2000s, and one in mid 2010s, there may be more.
EMAC is a very useful course, which is integrated to some extent because most anaesthetists have done it, so it is reinforced during in-theatre teaching. As examiners have also done it, the main approaches to crisis management taught in EMAC (and constantly revised as guidelines evolve) the EMAC course principles do often come up in exams, as well, of course, in actual clinical crises. There is scope for extending EMAC, as originally intended, into paediatrics, obstetrics or or other clinical areas. Further developments suggest we should be looking to interprofessional learning - training for crisis responses is very odd if the rest of the team aren't included. Responding to a crisis, or just efficient routine care, requires effective teamwork. Advanced VR approaches to enhancing skills acquisition is changing the face of technical skills training- we are a procedural speciality, this needs to be part of training in every rotation.
Particularly note the inequity of access to high quality simulation with trained facilitators is a factor in training across Australia even in major centres.
Not all hospitals have the simulation facilities and resources.
I note that the recapitulation of Recommendation 16 on p. 62 is "Accreditation of provisional fellowship training".
Embedding these training activities within the program would ensure equity of access.
absolutely 100% 1000%, sim and EMAC needs to be regionally supported and available, core and effective learning technique, application also extends beyond trainees to fellows and maintenance of standards, sim capacity benefits all
Simulation is underutilised in our training curriculum. We have led the way with EMAC but have fallen behind with things like in-situ simulation. In addition, we have not utilised simulation for assessment - while somewhat controversial, other centres (e.g. Israel, UK) have done this for years in high-stakes assessment with good robust data supporting its use. Our most glaring omission in this respect is the assessment of clinical crisis management. Currently, trainees are assessed on this in their written papers and viva, when the ideal setting for this would be in a simulated environment. Traditional WBAs are not possible (because we can't plan a crisis) but a hybrid in-situ simulation/workplace based assessment might be the way forward.
I agree with the recommendation and think you should maintain that this is not about accreditation so this recommendation should be forwarded to a relevant group. Simulation is an important part of training and is likely to continue to increase but at this stage I think it should be removed from this document about accreditation.
Not my place to say / my area of expertise

Any additional comments you'd like to make regarding the report recommendations?

Congratulations to the ALEPG on the comprehensive report. This is a very important piece of work and I look forward to seeing this progress through the college.
Very impressive report. Makes me feel quite hopeful. The old and worn saying that assessment drives learning is also true for accreditation - accreditation drives the quality of the learning environment.
Accreditation can be seen as a punitive process, and departments may bring out a group of people who are less likely to find areas for improvement. I think the recommendations around involving trainees is excellent. Is survey data (such as the People Matter survey) available to accreditors? Additionally hearing from VMOs and part time trainees particularly if diverse representation may improve the yield of the accreditation and therefore improvement of the learning environment.
Our subcommittee members feel that we need more specific details before we could provide more constructive feedback.
I acknowledge the enormous amount of work that has gone into this very comprehensive report. It is certainly a sound basis for progressing the project. However, it can be difficult to see the forest for the trees. In particular, I would like to see the Recommendations presented under themes and some of them consolidated, so as to provide more clarity and direction. For what it is worth, I can identify three main themes, under which I would group different Recommendations, using the numbering and content as found on pp. 60-62: A. Principles: 4, 7, 11, 3, 16 B. Process - central: 6, 5, 10, 8, 12, 13 C. Process - devolved: 2, 15, 9, 14
Thank you for all the work!
I couldn't see much in the report about a strategic direction for how "struggling" sites are supported. It might be that this report is too high level or perhaps it has not been considered or falls into one the existing areas of the report. As an ROT at a site where accreditation was threatened there were seemingly no centralised processes or support mechanisms for assisting departments. It was as if the response was made up on the fly. I think there should be a specific section of this report about development of processes and pathways for assisting departments and trainees in the event of accreditation being withdrawn or threatened.
Valuable work, thank you I'm from Tassie and my responses are as EO, senior accreditation visitor and rotational supervisor I would be very happy to be involved in this work going forward if needed
Good luck its big job!
The college should refocus itself as an education provider and as an educational institution, as its primary role. This includes the training of new specialists and CPD of fellows. All other college functions such as research, advocacy, etc are important but seemed to have taken precedence over education. One can perform anaesthesia research without college involvement and the societies exist to advocate for the craft group - but it is only ANZCA/FPM that can provide education for trainees and specialists. Due to this historical lack of focus, the college has, broadly speaking, continued to limit itself to being a syllabus generator and examination administrator. This may have been ok 30 years ago, but the world has moved on. Community and medical councils expect more robust educational standards. This is an opportunity to be a leader in accreditation and education. Great work Lindy, Kieran, and team.
A huge amount of work has gone into this document. I know this is a document created by experts, but non-experts will need to use it, refer to it.
The word safety recommendation 2 - needs explanation- also in option a 'provided it is done safely' - explain or plainer speech - safety is usually a term associated with patient care - here I think you mean - without fear of repercussions? Also I think it needs something more pointy at the front why are we doing this - what challenge/problem are we addressing? ie why bother..... for me its about how do we know we provide the best high quality training experience - i think we do but we can't evidence it (and also provide ways to improve for those who don't...)
So well researched - a pleasure to read.
Important piece of work - good luck.

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