

# REVIEW OF MEDICAL INTERN TRAINING

FINAL REPORT

**This Final Report has been prepared as part of the Review of Medical Intern Training, which has been commissioned by the Australian Health Ministers' Advisory Council (AHMAC). The Review was led by Independent Reviewers Professor Andrew Wilson and Dr Anne Marie Feyer.**

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## Foreword

The transition to practice is a critical stage for graduates as they embark upon their professional careers. The step up from relative freedom to paid employment brings common challenges: getting used to a greater level of responsibility, adapting to the culture and expectations of the workplace, learning to work in teams and managing sometimes stressful, demanding situations.

Employers around the world pay great attention to selecting, nurturing and developing their graduate workforce as an important element of good human resources practice. Many use structured programs to rotate new recruits through different parts of the organisation and match them to longer term roles, for the benefit of both the individual and the organisation.

The medical internship has many similar attributes, with important outcomes at stake. The community has an expectation that individuals are safe to practice and that the medical workforce is configured to meet long term health needs. The public investment is large and growing. It is important to consider, therefore, whether the investment is paying off – is our current model the right one?

Almost a decade ago, Australian Governments made the decision to expand domestic workforce supply. The system response has been significant, with a dramatic increase in clinical training at both university and postgraduate levels.

To maximise the benefits of this increase, it is essential that all parts of the training system work in collective alignment to shape and distribute the workforce in line with future need. While this includes expanding capacity, it also requires examining how and where we train our medical workforce and importantly, whether we have the right training models in place.

Medical schools have responded to the growth by expanding training settings beyond the traditional teaching hospital, with innovative models of community experience and increasing use of the private and not for profit health sector. Vocational training has also increased training in these settings and made some progress towards better geographic distribution of the trainee workforce..

These developments are in line with modern health service provision and an increasing focus on primary, preventative and chronic care. The internship however, has been slower to adapt; perhaps due to a structure based on historical origins rather than present day needs.

This report sets out our proposals for tangible reform to the internship so that it better prepares our future medical workforce to practise in a complex and changing healthcare environment and to better meet the health needs of our community in the decades ahead.

It has been a privilege to undertake this Review. We are grateful to the many people who took the time to participate in consultation sessions and provide submissions. We are thankful to the doctors in training who shared their day-to-day experiences with us. We have also been assisted throughout by an Expert Advisory Panel and a project team and we thank them both.



A handwritten signature in black ink that reads "Andrew Wilson".

Professor Andrew Wilson



A handwritten signature in black ink that reads "Anne Marie Feyer".

Dr Anne Marie Feyer

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# Executive Summary

This review was established to examine the purpose of the internship in today's health system and its effectiveness in equipping medical graduates to practise in a complex and changing healthcare environment. It also sought to examine the role of the internship in supporting graduates' career choices and to identify mechanisms to expand intern training settings.

The rationale for the review is strong. The internship has not been subject to major review in almost three decades<sup>1</sup> and significant change has occurred since then in medical education, the medical workforce and the organisation of health services. By contrast, other countries have, during this period, restructured their equivalent of the internship or moved away from it entirely.

The public investment in the internship is substantial, estimated to exceed \$300 million per annum nationally. It is therefore prudent to examine whether the investment is resulting in safe, capable practitioners and in a medical workforce appropriately configured to meet changing community needs.

A decade ago, Governments decided to increase local medical workforce supply, with impressive results. Australia now has more doctors per 1,000 population and graduates per 100,000 population than Canada, New Zealand, the United Kingdom and the United States.<sup>2</sup>

The substantial increase in graduates has, however, created system pressures on the internship, leading to some overcapacity concerns and a need to ensure the increase is aligned with the planned growth trajectory of services, particularly as service models are changing.

Our review combined analysis of available research and evidence with a detailed national consultation process involving doctors in training, education providers, public and private health services, regulators, jurisdictional policy makers and

consumers. We received an impressive range and depth of input, highlighting the strengths of the current system and scope to improve it.

## Observations on the current model

Our consultation reinforced the value of a structured, supervised transition to practice that enables medical graduates to assume increasing responsibility for patient care as their capability matures. It also underlined the importance placed on doctors having a broad foundation of general capabilities and experience. We found many positive attributes of the experiential model.

However, while stakeholders generally do not consider the internship to be totally broken, it is clearly not performing as well as it should. A number of important health system changes, together with structural deficiencies in the current model, mean it no longer fits the purpose of meeting the long term health needs of the community.

The internship for the majority of graduates remains almost exclusively focused on the public hospital, acute care system. While important, health care is increasingly provided in other settings. Not only does this mean that the experience doesn't reflect modern health care, it impacts negatively on the quality of the learning experience. The combined effect of incremental changes in the hospital environment, such as new models of care, shorter lengths of stay, improved governance of patient safety and shorter working hours, has unintentionally diluted the learning experience in many settings.

The recent rapid increase in medical graduate numbers has added to this issue, with hospitals adapting to the larger number of students and doctors in training in the workplace by adopting rational administrative measures that have little to do with learning but significant consequences for it.

The pathway from medical school to internship and vocational training is neither integrated nor efficient. Medical graduates enter the system highly qualified from a variety of university medical programs but with often limited experience in actual patient care and no baseline of work-ready capabilities they are expected to meet, leading to gaps in training and/or potential duplication which serve neither the individual nor the system well. It is difficult to

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1 Committee of Inquiry into Medical Education and Medical Workforce, *Australian medical education and workforce into the 21st century 1988*

2 OECD Health Data 2015. Australia had 3.31 practising physicians per 1,000 population in 2012 compared to Canada (2.48), New Zealand (2.7), UK (2.75) and US (2.5). It had 15.45 graduates per 100,00 population in 2013 compared to Canada (7.54), New Zealand (8.47), UK (13.18) and US (7.26).

envisage employers in other industries taking such a passive approach to their new graduate workforce, though we note that they also do not guarantee every domestic graduate a job.

The progression to vocational training, meanwhile, has variable entry points and performance expectations which are poorly aligned, if at all, with the current, one-year internship. In addition, graduates' career choices are arguably imperfectly shaped by the acute care focus of internship, lack of clear information on future workforce needs and counter-intuitive signals on future employment prospects. It is common to hear of doctors waiting around several years to get into their preferred specialty, while training places in other specialties or locations remain unfilled by local graduates.

The internship is structured around mandatory, time-based periods in clinical areas as the basis of a general experience. However whether this delivers, by some osmotic process, the capabilities and experience sought by the Medical Board of Australia, or other outcomes seen as important for future health care, is unclear, particularly as they are not defined in any great detail. What we can definitely say is that it provides limited exposure to the full patient journey and range of patient care needs, which are important in developing well-rounded doctors.

The quality and nature of supervision varies widely, from over-protective to inappropriately lacking. The assessment process is largely focussed on identifying the very few instances of serious underperformance and provides little meaningful feedback for the majority. Interns are largely not treated as adult learners, with the required elements of a clear set of learning objectives, flexibility in how they are obtained and meaningful evaluation they have been met, either limited or absent.

We recognise that the internship has not stood still – it has acquired increasing formality and structure, including through accreditation processes and standardised assessment. A curriculum framework<sup>3</sup> has been developed, notably to cover the first two postgraduate years, though never fully implemented as such. A number of innovative models have evolved to address local needs, indicating a desire and readiness for change. However the structural bias of the model remains.

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3 Confederation of Postgraduate Medical Education Councils *Australian Curriculum Framework for Junior Doctors Version 3.1, 2012*

## The case for change

*“The intern year ... is spent entirely within the acute hospital system with no effective exposure to the skills required to care effectively for the functional, social and mental health requirements of the majority of patients who have more than a simple short hospital stay due to an acute reversible illness in one organ system.”<sup>4</sup>*

This comment from a 1988 review of internship highlights a longstanding concern that, almost three decades on, is still applicable today. This and the matters just outlined have consequences for the development of competent, confident doctors who understand modern health care practice, have appropriate control over their learning and recognise the full range and value of career paths available in today's health system.

In the absence of meaningful structural changes, the internship will become further out of touch with modern health care practice and the quality of the learning experience further diminished, with implications for capability development, overall length of training and return on investment.

It is also essential that the growth in workforce is aligned with, and responsive to, service delivery needs. The current growth trajectory of health services is being outstripped by workforce growth. While the system has been playing catch-up for a number of years, this is arguably no longer the case. However, distribution of workforce in relation to need remains a problem. In addition, service delivery models are changing, with new technology, team-based and out-of-hospital models of care all factors that will determine the quantum and nature of medical workforce needs into the future.

## What changes are needed?

Our view is that provision of a general experience should remain a requirement for general registration. While there are valid arguments to separate the transition to practice and registration processes, given the vast majority of doctors do not practice independently upon registration, we do not consider there are sufficient benefits to be gained from doing so. Neither are there significant benefits in moving to a model of direct entry to vocational training from university and the notion has almost no support among stakeholders.

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4 Submission from Australian Geriatrics Society to the Committee of Inquiry into Medical Education and Medical Workforce, quoted in *Australian medical education and workforce into the 21st century 1988*

We have taken two broad approaches to addressing the issues. Firstly, we recommend some immediate changes to the system that can occur within the parameters of the current model. These are to make the training experience more holistic, improve supervision and assessment, ensure that graduates are work ready and that models of care better support the intern experience.

We then outline a series of incremental and more fundamental changes to the structure of the internship to align it with societal needs, provide better integration of training and improve the learning experience. These initially apply to the current one-year model, progressing over time to a two year transition to practice period of which a year of provisional registration forms part.

Consistent with the current curriculum framework, we believe a two year timeframe is more realistic to provide diverse experience, build a strong general foundation and more adequately prepare graduates for vocational training. The vast majority of doctors currently complete a second general year, though it is unstructured and poorly aligned with the next stage of training.

We have recommended a model based on the first two postgraduate years. However, we have also suggested that the option of the two year period being the final year of medical school and the first postgraduate year should be further tested. The latter is a more profound step which would take time and effort to achieve, though with benefits of reducing the overall length of training, maximising the value of the final year of medical school and ensuring graduates are able to perform at higher levels on entry. We recommend this be trialled across different medical programs and health service settings.

In each of the models, we have kept the current registration milestones as they are, i.e. provisional registration at the end of medical school and general registration or equivalent, at the end of the first postgraduate year. We do not want changing to a two-year model to further delay medical graduates entering vocational training or being given appropriate responsibilities consistent with their training.

We have used the term transition to practice to emphasise that this new model is not a repeat of the current internship over a two year period. Rather, we envisage a flexible model based on graded autonomy, diverse exposure and clearly articulated capabilities and performance, and a model that continues to accommodate entry into vocational training from the second postgraduate year.

We have considered the options for organisations to auspice and certify the two-year model and believe that the Australian Medical Council would be best placed to manage this process.

The structural changes we have recommended will require moving the basis of assessment to demonstration of capabilities and performance and ensuring that clinical experience is gained across a range of patient care settings. This will involve change to the registration standard, including consideration of which elements should be mandatory. While the importance of diverse experience in developing well-rounded doctors should be recognised, the emphasis of the current standard on time-based terms is unnecessarily inflexible and is not supported by the evidence.

Alongside these initial steps, a number of research and development activities should occur to prepare the system for moving to a two year model, including discussion with specialist medical Colleges about how to maximise the transition to practice period in preparing graduates for vocational training.

A notable finding of this review has been the lack of objective, accessible and current data, for example, on the level of graduate preparedness; the quality of the intern learning experience and the extent to which learning outcomes are being achieved. We therefore recommend systematic data collection to provide ongoing performance feedback and to monitor the impact of changes.

Governance of the implementation process will require strong collaboration and partnerships at national, state and local levels, as well as recognition of systemic constraints including finite resources, differing funding sources and inertia to change in some settings. We have either nominated an organisation or group of organisations to lead implementation of specific recommendations or identified the need to resolve this.

The internship has provided an important function, over many decades, in transitioning medical graduates to practice. We are confident that the changes outlined in this report will make the internship more robust, more reflective of the modern health system, and responsive to the changing needs of our community in the decades ahead.

## Summary of Recommendations

Ministers should note the following for each Term of Reference:

### **1. The purpose of internship and whether the current model remains valid and fit for purpose**

While the concept of a general internship remains valid, in light of major changes in the health system and in medical education, the weaknesses of the current internship model significantly undermine its longer-term fitness for purpose.

### **2. Effectiveness of the intern year in producing doctors with appropriate skills and competencies to meet national health care needs including generalist practice**

The internship is currently not aligned with societal health care needs, plays a limited role in supporting generalist practice and has variability in the quality of the learning experience.

### **3. The role of internship in supporting career decision-making by doctors**

While the internship has a role in career planning, a more holistic approach to planning is needed than the current reliance on clinical exposure.

### **4. Models to support expansion of intern training settings**

There is a need for expansion in intern training settings for educational and capacity reasons and to align the internship with modern health care delivery.

To address these matters we recommend:

#### **RECOMMENDATION 1**

That the internship be changed to:

- Provide clinical experience in the full patient journey and exposure to a variety of patient care settings, with at least some time outside of a single care setting.
- Require demonstration of specific capabilities and performance, within a time-based model.
- Ensure robust assessment of capabilities and feedback on performance.
- Ensure doctors in training have sufficient responsibility, under supervision, to develop competence and confidence while maintaining patient safety.
- Enable and require a philosophy of individual accountability for learning.

#### **RECOMMENDATION 2**

That the internship should have entry requirements that reflect agreed and defined expectations of work-readiness that graduates must meet before commencing. Specification of the expectations and certification of work-readiness should be undertaken collaboratively by employers, universities and the Australian Medical Council within 1-2 years.

#### **RECOMMENDATION 3**

That the current model of internship move to an integrated, two-year transition to practice model, with the first postgraduate year continuing as a prerequisite for general registration and with a certificate of completion, auspiced by the Australian Medical Council, to confirm a set of agreed outcomes aligned to vocational training. This should occur within 2-5 years.

We recommend a model based on the first two postgraduate years and which maintains the current flexibility to enter into vocational training from the second postgraduate year. We also recommend testing the option of the two-year period being the final year of university and first postgraduate year.

#### **RECOMMENDATION 4**

That the following occur to support the change process and further investigate aspects of the models:

- a. Revision of the intern registration standard to emphasise capabilities and performance and experience in the full patient journey and de-emphasise time-based elements – to be undertaken by the Medical Board of Australia in close consultation with jurisdictions, employers and others, within 1-2 years.

- b. Development of a detailed and measurable two-year capability and performance framework, that builds on existing curriculum frameworks - to be undertaken through a national process involving jurisdictions, the Australian Medical Council, employers, colleges, postgraduate medical councils, universities and others, within 1-2 years.
- c. Development of a certification process for the two-year transition to practice model, to be undertaken by the Australian Medical Council in conjunction with postgraduate medical councils, jurisdictions and others, within 1-2 years.
- d. Evaluation of different models of capability assessment, including resource requirements – to be undertaken across a number of jurisdictions and patient care settings within 2-5 years.
- e. Evaluation of options for an e-portfolio to provide greater individual accountability for learning and support the assessment process – to be undertaken within 2-5 years.
- f. Identification of accreditation arrangements for a two-year transition to practice model – to be undertaken by the Australian Medical Council in collaboration with jurisdictions, universities, postgraduate medical councils and others, within 2-5 years.
- g. Examination of the capacity to assess and certify the capabilities and performance required for general registration within university programs – to be undertaken across different medical programs and health service settings within 2-5 years.

#### **RECOMMENDATION 5**

That career planning across the medical education continuum is better aligned with societal health and medical workforce needs. Specifically, that:

- a. Universities provide targeted career information to medical students, within 1-2 years.
- b. Colleges make available information on entry requirements and success rates for selection into vocational training programs, within 1-2 years.
- c. Employers provide formal, structured career planning during the transition to practice period, including assisted self-appraisal and self-reflection, within 2-5 years.
- d. Jurisdictions provide best available data on projected workforce demand at regular intervals, such as every 3-5 years, within 2-5 years.

#### **RECOMMENDATION 6**

That expansion of training settings is further supported through:

- a. Jurisdictions and the private and not for profit sector identifying and, where feasible and affordable, implementing opportunities to expand suitable placements in private, not for profit and community settings, within 1-2 years.
- b. The Commonwealth Government providing targeted access to Medicare billing arrangements for PGY2 doctors placed in general practice settings, within 1-2 years.
- c. Analysis of interns' service contribution in different settings to inform discussion on their role and help define benchmarks for private sector contribution to their training, within 1-2 years.

#### **RECOMMENDATION 7**

That the following research and development activities occur to support the change process:

- a. Identification of requirements for, and possible approaches to a national training survey to capture ongoing performance data, within 1-2 years.
- b. Identification of other relevant data indicators, and implementation of these, to support ongoing monitoring and evaluation of the change process, within 1-2 years.
- c. Provision of dedicated, time-limited support for local innovation initiatives that have the potential to create sustainable improvements in the training experience, within 2-5 years.

## Glossary

ACFJD	Australian Curriculum Framework for Junior Doctors
ACLS	Advanced Cardiac Life Support
AHMAC	Australian Health Ministers' Advisory Council
AMC	Australian Medical Council
BTBC	Better Training Better Care
COAG	Council of Australian Governments
CPMEC	Confederation of Postgraduate Medical Education Councils
EPA	Entrustable Professional Activity
GMC	General Medical Council (UK)
HOOT	Hospital Out of Hours Team
HWPC	Health Workforce Principal Committee
MBA	Medical Board of Australia
MBS	Medicare Benefits Schedule
MSOD	Medical Schools Outcomes Database
NUM	Nursing Unit Manager
NZCF	New Zealand Curriculum Framework for Prevocational Training
PGPPP	Prevocational General Practice Placement Program
PGY1	Post Graduate Year One
PGY2	Post Graduate Year Two
PIERCE	Prevocational Integrated Extended Rural Clinical Experience
PMC	Postgraduate Medical Council
RAT+	Rapid Assessment and Treatment
RGP	Rural Generalist Pathway
RPL	Recognition of Prior Learning
WBA	Workplace Based Assessment

## Background

In April 2014, the COAG Health Council commissioned an independent review of medical intern training (the Review) to examine the current medical internship model and consider potential reforms to support medical graduate transition into practice and further training.

The Review was commissioned against a background of increasing medical graduate numbers and some concern about the system's capacity to absorb them, particularly given the constraints of the current model. It was also considered timely to review the internship in light of the significant changes that have occurred over recent decades to the organisation and practice of healthcare services as well as changes in the medical workforce and in medical education and training. The Terms of Reference for the Review are provided at Appendix A.

### 1.1 The Review process

The Australian Health Ministers' Advisory Council (AHMAC) appointed us as independent reviewers, with a project team established and based in New South Wales. An Expert Advisory Panel was appointed and this panel met at key points in the process to provide input to the Review team.

The Review project plan is provided at Appendix B. The Review commenced with background research and examination of the key issues surrounding internship, which were outlined in a discussion paper that was used to support a national consultation process. This consultation included:

- Forums in every State and Territory, organised by each jurisdiction that brought together medical students and junior doctors; public and private health services, universities and other education providers and workforce policy representatives.
- Meetings with key stakeholders and stakeholder groups – a list is provided at Appendix D.
- A written submissions process open to all interested parties. 70 organisations and individuals provided a submission. A list of submissions is provided at Appendix D.
- Examination of transition to practice models in other jurisdictions, primarily the United Kingdom, Canada and New Zealand, and consultation with contacts in those countries.
- Hospital visits to meet interns and other junior doctors, as well as those involved in their training, to understand the current role of interns, their day to day experiences and concerns.

The results of the consultation, combined with further research, were used to develop an options paper that set out alternative pathways for reform to the current system. This was released in May 2015 and was used to support targeted consultation with key stakeholders (Appendix D) on the merits of various options and issues to consider in pursuing any of them. A number of stakeholders provided written submissions on the options paper, also listed at Appendix D.

Feedback on the options paper, combined with the aggregated feedback throughout the process and consideration of other models including those in place overseas, led to the development of this final report.

Throughout the Review process, we provided updates to the HWPC and kept wider stakeholders informed through the Review web page, newsletters and social media.

### 1.2 Structure of this report

This report firstly responds to each of the Review Terms of Reference, presenting feedback from our consultation processes and our assessment of these matters as Independent Reviewers.

It then outlines our proposals to improve the training system and modernise the internship through a set of incremental changes to the model. It discusses matters of governance and provides recommendations for preparing for change through evidence, research and development activities and the development of common tools. Finally, it discusses potential timeframes for change and the possible approach to Phase Two of the Review, including those recommendations with specific implications for other parts of the training system.

### 1.3 Scope

The Terms of Reference for this Review focus its formal scope on the internship rather than the broader continuum of training from medical school to vocational training. However, in considering changes to the internship, it is essential to envisage upstream and downstream effects, given the pathway from university to vocational training. Where issues or concerns have been raised relating to matters outside our scope, we have commented on them as appropriate but have not made recommendations.

## The purpose of internship and whether the current model remains valid and fit for purpose

The last major review of the internship occurred in 1988, when the Committee of Inquiry into Medical Education and Medical Workforce examined it as part of a more holistic review of medical education in Australia.

Since then, the internship has undergone a series of changes. The establishment of the first Postgraduate Medical Council (PMC) in NSW in 1988 marked the beginning of similar developments across the country. The PMCs introduced accreditation of facilities for intern training to ensure an appropriate balance between service and learning and to safeguard against inexperienced graduates being placed in situations beyond their capability.

The Confederation of Postgraduate Medical Education Councils (CPMEC) developed the Australian Curriculum Framework for Junior Doctors (ACFJD) which covers the first two years of postgraduate practice, though has not been implemented as such.

The introduction of the National Registration and Accreditation Scheme in 2010 brought nationally consistent requirements for general registration and led to the Australian Medical Council having a more substantive role in the internship, through accreditation of the state-based postgraduate medical councils and the development of resources supporting the experience, including intern outcome statements and standardised assessment forms. These developments have positively contributed to the evolution of the internship over time.

Nevertheless, there is good reason to examine the transition to practice, given the significant changes in the landscape that have occurred in recent decades and that are rapidly overtaking the current internship model. Many of the issues identified in the 1988 review are also evident today, underlining the need for a holistic examination of the model.

### 2.1 What is the purpose of Internship?

#### KEY POINTS FROM CONSULTATION

- The primary purpose of internship today is to provide a transition to clinical work and further training.
- As one of many elements of a safe system, the internship is also important to assess doctors' ability to apply knowledge and skills in the clinical environment.
- The internship provides a broad-based, general foundation prior to specialisation.
- The internship has an important but secondary role in career choice.

There are valid reasons to ask why the transition to practice for medical graduates should continue to be linked to a registration process.

The context in which junior doctors practise has changed significantly – the vast majority do not practise independently after general registration and a range of safety mechanisms are in place to protect the community, of which individual safety to practise is but one element.

Truly independent practice arguably occurs only at the point of specialist registration; therefore what does general registration mean in today's health system? Is there value in continuing a model of internship linked to it?

The majority view is that assessment of performance in the workplace remains an important threshold in the progression to becoming a registered practitioner and there is little confidence among stakeholders that this can be adequately achieved in current university medical programs.

While the internship no longer prepares graduates for independent practice, it prepares them for what is expected at the point of general registration, which for the vast majority means slightly more autonomous practice under continued support and supervision. A very small proportion may work in non-Medicare billed services after general registration, with variable supervision.

The internship is argued to provide a necessary screening function for the very small number of graduates who need significant support to reach

the standard, or who don't reach it at all. There is also strong attachment to a model of broad, general training prior to specialisation, both from a capability perspective and from the standpoint of career planning.

Our view is that provision of a general internship experience should remain a requirement for general registration. While we recognise the arguments to separate the transition to practice and registration processes, we do not consider there are sufficient benefits to be gained from doing so.

The main alternative to the current model is early streaming, i.e. the direct entry into vocational training at the point of graduation. While this offers some benefits, they are not sufficiently great to justify abandoning the current model, particularly in the face of logistical challenges and strong opposition from most stakeholders.

We therefore conclude that the main purposes of internship are to provide a transition to practice, an opportunity to safely apply and consolidate skills and to gain general capabilities and experience. We agree that the internship has some role in career decisions, though not as a primary objective. We therefore recommend a threefold purpose of the internship:

1. *To provide a transition to practice into the medical workforce in a system that is safe for patients and for graduates.*
2. *To enable medical graduates to apply, consolidate and demonstrate capabilities and performance in the work environment as part of their progression towards independent practice.*
3. *To provide exposure to different care settings and career paths as a guide to future practice and career choice.*

### 2.1.1 Streaming

#### KEY POINTS FROM CONSULTATION

- Very little support for streaming from stakeholders
- Considered inconsistent with concept and aims of 'generalism'
- Concern it would reduce flexibility and increase subspecialisation trends.
- Performance expectations of commencing vocational trainees are higher – internship bridges this gap
- Concern about bringing forward career decisions

The purpose of the internship outlined above could be achieved in other models of transition to practice, such as early streaming. In a streaming model, there would be no prevocational period as currently happens. There is no direct equivalent in Australia; though a number of structured pathways into rural general practice training exist that incorporate the internship requirements.

There is little support for streaming among stakeholders, with the main concerns being that such a model would create a more subspecialist and less flexible workforce.

There are varying approaches across the country to the second postgraduate year, with some jurisdictions maintaining a general year while others enable more formal streaming into vocational pathways.

We have considered the matter of streaming carefully, as we believe that the primary concerns it gives rise to are solvable and the other matters could be addressed.

Within a streaming model, there could be a common curriculum covering the initial period of training to provide the necessary general capabilities and experience desired in all doctors. This could involve time outside the streamed specialty and in different settings. A structured, common approach would also facilitate recognition of prior learning for doctors wishing to switch careers.

This initial period of training could also bridge the gap in proficiency between the performance expectations of new graduates and those of beginning vocational trainees.

Placing the training under the governance of the specialist medical colleges could make the overall length of training more certain and yield potential efficiency in aligning the initial transition to practice with requirements for further training.

However, it is not clear this would deliver substantial benefits over the current situation. A number of Colleges allow entry into vocational training from the second postgraduate year, while others recognise that year in their training. Therefore the potential to shorten the training pipeline, in the absence of substantial modifications to university training, is limited.

For specialties with an entry point after the second postgraduate year, there may be more potential to shorten training time, particularly where supply, rather than educational reasons, is driving the trend towards later and later entry points.

Some pointed out that it doesn't have to be all or nothing. We could move to a model where those graduates certain of their career preference are streamed and the others provided a more general experience. They argue there shouldn't be just one pathway to general registration. The ability to switch would need to be facilitated, however, particularly through agreement by Colleges on recognition of prior learning.

While there are potential benefits in this approach, there are also many potential complications, such as guarding against any real or perceived disadvantage in the selection process for graduates who enter college training later and the need for health services to carve up available intern terms to cater for different cohorts of graduates.

There are other matters to consider about streaming too, such as the need to match vocational training numbers with workforce need at the point of graduation and the fact that a small but important segment of the workforce remains non-specialist, pursuing Hospitalist or Career Medical Officer pathways, for example, rather than vocational training.

Our conclusion, therefore, is that there is little rationale at this point in time for moving away from the model of a general internship. There is little support for the idea, and the benefits to the system of a direct streaming alternative are not considered sufficiently great – or achievable – to justify such a move. If the changes proposed by this Review are implemented, however, this assessment may change over time.

It should be noted that the current model enables some alignment of terms to career preference, though this is necessarily limited by the requirement for mandatory terms and subject to service needs. We recommend this should continue.

## 2.2 Is the internship fit for purpose?

### KEY POINTS FROM CONSULTATION

#### Strengths

- Integration of service and training
- Governance ensures appropriate mix of education and service provision
- General nature of the experience

#### Weaknesses

- Assumption that certain skills are acquired through mandatory terms
- Model is no longer in line with health service delivery and community needs
- Reduced clinical exposure has diluted the learning experience

The experiential model of the internship has many positive attributes essential for transition to practice. However it also has features that make it no longer fit for purpose, some of which we discuss here and others under our subsequent terms of reference.

Input to our consultation more frequently focused on the positives of the current model. While stakeholders also cited its weaknesses, their full impact on the overall intern experience was in many cases less well recognised until prompted by a whole of system viewpoint.

In our view, it is clear that the internship is an underperforming part of the medical education continuum which could work much better.

### 2.2.1 Clinical Exposure

*“The fact is that you don't get to practice a lot of medicine as an intern. The flow on effect is that PGY2/3/4 doctors need to catch up on practical experience missed as an intern, which in turn takes away opportunities from interns” Discussion paper submission*

Our consultation identified a significant narrowing of interns' clinical exposure in many settings, which raises concerns about the quality of the learning experience, potential impacts on length of training and on the value for money gained from the substantial investment in the internship.

This dilution of clinical exposure has occurred from subtle and incremental changes in the health system that, on their own, may have had limited visible effects but, taken together, have a significant impact on the nature of the internship experience.

The evolution of quality and safety systems and changes to models of care, while necessary and understandable from a patient care perspective, have had consequences for the type of work that interns are entrusted to undertake.

Shorter lengths of stay and correspondingly higher patient turnover have generated a greater volume of administrative tasks for interns to perform, aided or hampered by the availability or not of electronic health information systems.

At the same time, the formal working hours for interns have reduced, while the number of interns competing for clinical exposure has increased dramatically. The result of these factors has, in many settings at least, led to interns performing a very limited scope of clinical duties and consequently not being permitted or trusted to do any more.

## THE INTERNSHIP APPRENTICESHIP MAY HAVE FUNDAMENTALLY CHANGED

In conversation, Professor Wilson and a group of doctors in training (interns, residents and registrars) compared and contrasted experiences of internships some 30 years apart. Some things clearly haven't changed; the excitement of the first job as a doctor, the scariness of patients in your care being really sick and some dying, the challenge of working with other health professionals some of whom are supportive but some who make your life hell, and consultants who may or may not talk to you.

There was a similar experience of drabness of some roles like ordering tests and chasing results. But one thing stood out as different. In Professor Wilson's internship, just about every patient's full admission was initially documented by the intern, along with a proposed management plan. This was then reviewed by the registrar or more senior resident and even sometimes during rounds by the consultant. While direct feedback varied, it was always evident how well your findings, conclusions and plan matched that of the registrar. Indeed, it was there in the chart for all clinical staff to see then and for the life of that medical record!

The others reported that their experience was very different. In their experience interns infrequently did such a full admission initially if at all. So there was no basis for the feedback. Indeed some claim to rarely be documenting in the case notes patient progress or consultant orders. Perhaps jokingly it was commented that the only time they fully documented a patient's experience was in writing discharge summaries sometimes for patients they had never seen. Now this may not be a universal change. Even in this group, those who had worked outside tertiary hospitals reported more frequently experiences more like Professor Wilson. But if it is widespread even in tertiary hospitals, then clearly the experience of the apprenticeship model, and particularly the feedback, needs closer examination.

These changes at the internship are occurring alongside changes at university, with an ever-increasing body of medical knowledge to be covered in curricula; a move to shorter, graduate medical programs and the introduction of new research elements which compete for clinical time.

Narrowing and diluting of the learning experience has consequences all the way through the training pipeline. A comparison made between now and the past was that interns now do the work of medical students, residents do the work of interns and registrars do the work of residents.

As well as diluting the learning experience, the current situation would seem to be an ineffective use of highly educated and motivated doctors entering the system. If interns are not given the opportunity to assess patients and develop management plans, the potential supervision, feedback and learning is also lost, including assessment of whether they meet the standard of safe practice.

A 'defensive' approach to training "*may lead to the practice of abundant supervision in an attempt to avoid lapses in quality and safety. In this circumstance, the "over-oversight" makes training lengthy, costly and inefficient and undermines the trainees' development of full responsibility.*"<sup>5</sup>

5 Hirsh et al, *Time to trust: longitudinal integrated clerkships and entrustable professional activities Academic Medicine Vol 89 No. 2 February 2014*

A related issue, explored further under our second term of reference, is the limited or absent exposure to the full patient journey and to the range of patient care settings outside of public hospitals. One observation made during our consultation is that the internship involves "*a lot of babysitting rather than continuity of care*",<sup>6</sup> with a focus on managing the acute care situation instead of the holistic patient. This is hardly reflective of the type of practice we should be instilling in our future medical workforce. The predominantly public-hospital focus of the current model limits the interns experience to a very narrow slice of patient needs.

### 2.2.2 Supervision and assessment

#### KEY POINTS FROM CONSULTATION

- Assessment processes are variable
- Majority of effort goes into a very small number of interns, while the majority receive less support/feedback
- Little support for work-place based assessment, though multi-source feedback considered valuable.
- Supervision also variable; Emergency and General Practice best experience.
- Day to day supervision dictated by models of care, culture and setting

6 Comment from jurisdictional consultation forum

*“There is huge variability in the intensity of supervision – sometimes it is inappropriately lacking, others inappropriately demanding”  
Jurisdiction consultation forum*

The variability in supervision and assessment is another significant weakness of the current model.

We recognise that national registration requirements have a limited role in determining the quality and nature of day to day clinical supervision, which is predominantly dictated by the culture of the organisation and the model of care.

There are opportunities to improve supervision through ensuring that models of care more explicitly recognise education functions and requirements, as well as through better use of ‘near to peer’ supervision within the learning process.

Over-protective supervision can restrict intern activities to a very narrow range, impeding the learning process that is essential for the development of capable, confident doctors. It is therefore critical that interns are supported to undertake the full range of activities necessary for their development.

Specifying the mandatory learning experiences that interns are expected to gain, and be observed on, may better align educational and clinical supervision with the expectations of their role.

We consider that full-scale implementation of workplace based assessment (WBA) would require significant additional resources and at this time, the available evidence and experience does not suggest this would be the best investment. However, we recognise the importance of assessing performance in the workplace and we discuss the use of Entrustable Professional Activities (EPAs) as a basis for assessment later in this report. We also support the use of multi-source feedback in the assessment process.

### 2.2.3 Work readiness of graduates and transition to vocational training

#### KEY POINTS FROM CONSULTATION

- Initial transition from student to worker is steep
- However, the standard of expectation over the full year of the internship is relatively low
- One-year timeframe is limited in preparing interns for vocational training
- The prevocational period would be better structured as a 2-year learning period incorporating the internship.

*“Students are now really observers in final clinical years. Many students get to the end with very light experience and not much confidence.”  
Jurisdiction consultation forum*

The transition from student to employee is a challenging process for many graduates, regardless of their profession. The challenge arguably has two facets – the psychological shift from relative freedom to the responsibility of working in a team, and the expectation of skills needed for day one.

While respondents broadly endorsed the knowledge and thinking development component of medical programs, concerns were raised about:

- The work readiness of graduates.
- The variability in the quantity and quality of clinical experience.
- The addition of the MD research requirement adversely impacting on clinical exposure.

In contrast to other professions, many medical graduates experience a significant jump in expectation from the student on placement to the intern charged with responsibility for patient care.

This may be due to a lack of clarity or agreement on the specific capabilities employers expect of graduates on entry and how these relate to the outcomes that university programs are expected to achieve. It will be important to define what is meant by work-readiness; given it has aspects of practical competence, professionalism and fitness to practice.

Another reason may be the lack of structure and responsibility of students on clinical placement, particularly compared to other professions with a more defined role for students in the care team.

A number of existing models, such as primary longitudinal placements, provide students more meaningful responsibility for patients, building clinical competence and understanding of the whole patient journey. This compares with the more self-directed and unstructured nature of the experience in other models.

We recommend that graduates be expected to be work-ready at the point of entry through agreement on the baseline capabilities and behaviours expected of them and by enabling a more defined role for students in the clinical team.

The role of the internship in supporting transition into vocational training is limited. The timing of entry into vocational training varies across the Colleges, with the majority enrolling trainees at PGY3, some selecting earlier and others substantially later.

There is no agreed set of general capabilities and experience that Colleges seek at entry.

The current one-year internship alone is therefore not sufficient to meet the performance expectations of most Colleges of their beginning vocational trainees. While the vast majority of doctors complete a second, general year, this is largely unstructured, with no specific outcomes. The transition could be better facilitated through a structured transition to practice training period covering two years that provides and assesses the general capabilities expected by Colleges at entry.

While outside of the scope of this Review, we consider there would be benefits from consistency in the timing of entry into vocational training, particularly if aligned with the performance expectations of trainees from a two year transition to practice training preparation.

#### 2.2.4 Length of Terms

*“The current model requires 5 x 10 week rotations which are resource-intensive for supervisors, are disruptive to continuity of care, and do not allow for integration of the intern into the team – these factors lead to interns being delegated low level tasks for the duration of each term which then starts all over again with the next term”  
Discussion paper submission*

There was much discussion in our consultation about the fact that while short term lengths maximise career exposure, this comes at the expense of productivity for the team and learning for the intern. Many noted that 10 weeks is too short to build trust and a real learning relationship between the intern and their clinical supervisors.

Doctors in training raised the concern that longer terms may not necessarily lead to more learning, if the extra time is spent doing the same type of work and also that it might add to the problem of ‘bad’ terms.

The current intern registration standard does not specify the number of terms, apart from requiring three mandatory terms in medicine, surgery and emergency care. However the MBA/AMC *Intern training – guideline on terms*, notes that *“the longer interns spend in any one term the more they will become familiar with clinical routines, develop productive supervisory relationships, and build relationships with all staff involved with patient care.”*<sup>7</sup>

The central issue, in our view, is the quality of the learning experience, for which the length of term

7 Australian Medical Council; Medical Board of Australia *Intern training – Guidelines for terms, 2013 p.1*

is only one contributing factor. Any move to longer terms should therefore be accompanied by corresponding improvements in the learning experience.

### 2.3 The impact of replacing bachelor medical degree with MD qualifications on internship requirements

The move to graduate entry and more recently, MD programs does not appear, from our consultation and review of the limited research, to have resulted in graduates better prepared for the internship. However the absence of objective data on graduate skill or preparedness across all the Australian medical schools makes it difficult to confidently conclude this.

It was a widely expressed concern (mainly but not exclusively from respondents not directly involved in medical student education) that the move to MD programs with the additional requirement for time for research would impact on clinical experience. As there is no national, systematic reporting of the hours of clinical time in medical programs, and given that much of the expected clinical time of medical students is unsupervised and self-initiated, there is no basis on which we can test this matter.

Neither is it the case that students from graduate medical programs are any more certain of their career direction, though there is evidence that more of them make their minds up during the internship.<sup>8</sup> Students of MD programs noted their career exposure was more limited due to the additional research requirement of their program, which takes away from clinical time.<sup>9</sup>

### 2.4 Different perspectives on the current model

It is worth noting that a range of views exist on the fitness for purpose of the current internship model, with the most notable differences evident between doctors in training and medical students who favour the status quo, and other stakeholders who advocate more strongly for change.

It is understandable that doctors in training have concerns about change to the model. As one submission put it, *“part of the difficulty ... [is] ...that as stakeholders and beneficiaries of the current system, which is generally very well resourced, we are wedded to the idea of the status quo. It is*

8 Medical Students Outcomes Database data analysis provided by Medical Deans Australian & New Zealand May 2015

9 Submission on Medical Intern Review discussion paper

*difficult to think outside the box when you are very firmly in it.*<sup>10</sup>

There are clearly aspects of the current model that are highly valued by doctors in training and which we should ensure are maintained in any changes made to it:

- Structured, supervised practice that combines on the job training with educational support.
- High quality supervision and feedback on performance.
- Broad exposure to the practice of medicine to build general capability.
- The ability to make informed career choices.

We agree that these aspects of the current system are valuable. In fact, many could be done better, and we have taken this into account in arriving at our recommendations for change.

We also note the current discussions within the medical profession about doctors' mental health and bullying and harassment in the workplace, both of which highlight the importance of effective support and supervision for junior doctors. A Beyond Blue study found that doctors reported substantially higher rates of psychological distress compared to both the Australian population and other Australian professionals, with high levels of burnout among young doctors.<sup>11</sup> We hope our recommendations to achieve a more seamless transition process and improve supervision will contribute to the broader efforts underway to address these important issues.

## 2.5 Conclusion

The internship continues to play an important role in completing and synthesising the initial medical education process, building a general foundation of capabilities and identifying those unsuited to a career in medicine.

Notwithstanding the changed context in which most junior doctors work, with limitations on independent practice for many years following graduation, we do not consider that current medical programs, at this time, can achieve the equivalent of the internship from the perspective of the Medical Board of Australia's need to ensure safety to practice. We therefore do not recommend that general registration be moved to the end of medical school at this point. However, this should be further considered as changes to the system are implemented.

The weaknesses of the current internship model undermine its longer-term fitness for purpose. We recommend there continue to be a supported, graduated exposure to clinical practice, with a greater focus on capabilities, more flexibility in how these can be acquired, and exposure to the full range of patient care needs and care settings of today's health system. We consider it more realistic to achieve these aims over two years and therefore recommend moving, over time, to a two year transition to practice period, while maintaining the registration milestone at the end of the PGY1 (intern) year.

### Recommendations

1. That the internship be changed to:
  - Provide clinical experience in the full patient journey and exposure to a variety of patient care settings, with at least some time outside of a single care setting.
  - Require demonstration of specific capabilities and performance, within a time-based model.
  - Ensure robust assessment of capabilities and feedback on performance.
  - Ensure doctors in training have sufficient responsibility, under supervision, to develop competence and confidence while maintaining patient safety.
  - Enable and require a philosophy of individual accountability for learning.
2. That the internship should have entry requirements that reflect agreed and defined expectations of work-readiness that graduates must meet before commencing. Specification of the expectations and certification of work-readiness should be undertaken collaboratively by employers, universities and the Australian Medical Council within 1-2 years.

<sup>10</sup> Doctor in training submission to Medical Intern Review discussion paper April 2015

<sup>11</sup> Beyond Blue *National Mental Health Survey of Doctors and Medical Students October 2013*

## Effectiveness of the intern year in producing doctors with appropriate skills and competencies to meet national health care needs including generalist practice

### KEY POINTS FROM CONSULTATION

- Narrow focus on acute care rather than full patient journey.
- Lack of access to conditions/diseases managed outside of public hospitals
- General practice & community settings the biggest gap
- Short rotations impede development of professional skills such as teamwork and impact productivity
- 12 months may be too short to build general foundation.

The internship forms an important component of a longer medical education process designed to produce a medical workforce aligned with future community needs. It should therefore prepare graduates for the context in which they will be expected to work. It would appear however that insufficient attention has been given to this aspect of the aims and structure of the internship.

While the importance of aligning the internship with societal health needs is widely recognised, we found varying views on the extent to which the current model achieves it. A minority considered the mix of terms within a hospital setting adequate to build broad, general skills. However most recognised the limitations of a model that has limited or no exposure to community settings.

Our view is that the current model remains largely skewed towards a public hospital, acute care experience, with inadequate exposure to the full patient journey, different care settings and to conditions no longer managed in public hospitals.

While this might have been appropriate when public hospitals and inpatient care provided a higher proportion of the nation's health care, and when patients stayed in hospital for longer, it is not the case any longer. This structural bias is a significant weakness.

Establishing whether the model produces the specific capabilities needed to meet national health care needs would be more straightforward if there was clarity on the capabilities we are seeking. In addition to specific skills, we would argue that experience and understanding of modern health care provision are also important.

It was widely agreed that many capabilities developed in the internship are general, with the transition process described as being less about content and more about generic skills. This aligns with research that *"the skills ... deemed most important for new interns ... [are] ...organization and time management and prioritization skills; effective communication skills; basic clinical skills; and knowing when to ask for assistance."*<sup>12</sup>

Notwithstanding the generic nature of these skills, the clinical setting and discipline are considered to provide an important context for learning, while variety of exposure enables interns apply, adjust and refine their skills in different scenarios. The matter of whether and/or how the settings should be specified prompted significant debate in our consultation.

### 3.1 Mandatory terms

#### KEY POINTS FROM CONSULTATION

- Debate on whether mandatory terms in fact provide general experience.
- Rigid requirements limiting capacity and scope for innovation
- Mandatory terms used as a proxy for good supervision (despite supervision in fact being highly variable)
- Strong concern about moving away from mandatory terms from doctors in training
- More support for mandated skills / competencies within time-based model

<sup>12</sup> Angus et al *What Skills Should New Internal Medicine Interns Have in July? A National Survey of Internal Medicine Residency Program Directors Academic Medicine, Vol. 89, No. 3 / March 2014*

One feature of the internship required by the Medical Board of Australia and intended to build general skills, is the requirement for mandatory terms in medicine, surgery and emergency care. However, it is clear that many interns undertake their mandatory terms in sub-specialist, rather than general medical and surgical units.

It is difficult to assess whether or not this is a problem without a clearer understanding of the capabilities expected to be achieved.

The MBA/AMC guideline on intern training states “*approved terms will provide generalist experience... and may be in general (medical/surgical) units and some medical/surgical subspecialties*”<sup>13</sup> (emphasis added) and also that medical terms must provide “clinical experience in a range of common medical conditions”. This would seem to imply a preference for a general rather than subspecialist experience.

There is no corresponding statement for surgical terms, though the guideline states they must provide “clinical experience in managing critically ill surgical patients”, which appears less dependent on the general or subspecialist nature of the term. However, it is likely that in larger hospitals experience in managing critically ill surgical patients will be limited as such patients are increasingly managed in an intensive care unit. This again points to the need to be clearer on the capabilities or attributes that the period is intended to develop.

It does not appear that mandating time served in the clinical area necessarily results in other expectations of the experience being met. For example, the requirement that “interns should participate actively in operating theatre sessions”, stands in contrast to the common feedback that an intern can spend an entire surgical term without ever going to theatre.

While there are accreditation processes in place to ensure terms provide adequate learning experience, the concerns about reduced clinical exposure discussed earlier indicate that this range of learning experience is not uniformly available. The focus on time gives no guarantee that the learning outcomes will be achieved.

It is hardly surprising that doctors in training strongly defended the need for these mandatory terms to remain part of the requirements of the internship. There is a not irrational concern that without this mandatory requirement there would be

no incentive for employers to ensure a fair mix of clinical terms. Without a clear articulation of the capabilities required to be demonstrated over the internship, doctors in training rely on the structure of the experience to meet their training needs. Moreover, it is seen as administratively easier.

Reorienting mandatory requirements towards an emphasis on capabilities and performance may lead to more rigour around achievement of learning outcomes while de-emphasising a prescriptive focus on time served. This could be achieved within an overall model that is still time-based, which would address the concern, raised by many, that wholly competency-based models underestimate the need for, and value of, adequate time and experience to consolidate skills.

It is important to highlight that some flexibility already exists within the current framework. The Intern training – Guidelines for terms states:

*“These guidelines are not prescriptive about the training setting. They recognise a need for greater flexibility in the location and nature of clinical experience offered during the intern year, particularly experience outside major hospitals. Interns may undertake their work-based clinical experience across a number of settings, even within a specific term. The Australian Medical Council (AMC) also acknowledges that as models of care evolve and change, intern training will evolve and change in response. These guidelines support innovation in defining clinical experiences in diverse health settings, while maintaining the quality of the clinical experience.”*<sup>14</sup>

It is not clear whether this flexibility is universally recognised or adopted. Certainly, the time-based requirement for medical, surgical and emergency care terms in the current standard is applied rigorously and is an important basis for the term accreditation model applied by the postgraduate medical councils.

In moving to define mandatory capabilities and performance, it will be important to consider the settings in which these can be acquired, as this will provide an indication of how much time should be spent in particular clinical areas.

It will also be useful for Colleges to specify their expectations of general capabilities from the prevocational training period, although preferably as a combined piece of work.

.....  
13 Australian Medical Council Limited; Medical Board of Australia, *Intern Training – Guidelines for Terms 2013*

.....  
14 Australian Medical Council Limited; Medical Board of Australia, *Intern Training – Guidelines for Terms 2013*

The RACS JDocs Framework<sup>15</sup> sets out learning outcomes and professional standards expected of junior doctors across the first three postgraduate years, which is aligned with the Australian Curriculum Framework for Junior Doctors. A consistent set of expectations across vocational training programs would help to better align the transition to practice period with subsequent training, including any implications for mandatory experience.

### 3.2 Contribution of internship to generalist practice

#### KEY POINTS FROM CONSULTATION

- Language about generalism is unclear.
- General skills developed in internship are about transition to practice, professional and clinical skills
- Internship builds understanding of health system and the role of others
- General experience also important for career choice

The question of how the internship supports generalist practice sits within a broader discussion currently underway about how to achieve a balance between generalist and increasingly subspecialist practice and the development of a medical workforce with an appropriate skill set and philosophy of care.

The varied interpretation of what is meant by generalism and generalist skills and practice in different contexts adds some complexity to the debate. It is important, therefore, to identify the contribution of the internship in this regard.

We consider the general capabilities and experience developed during internship fall into three categories, with some overlap, and these are achieved to varying degrees in the current model:

- *Transition to practice* – understanding hospital processes and developing professional skills, such as teamwork, communication, multi-tasking, required to work effectively within the health system. This also continues the process of identity formation, begun as a medical student.

- *Clinical skills and experience* – the ability to assess undifferentiated and recognise deteriorating patients, make clinical decisions, confidently prioritise tasks and know when to ask for help.
- *Philosophy of care* – recognising the type of lifelong practice that is required given the complex needs of patients, and valuing the role of other health workers.

The development of these capabilities is limited by the current one-year timeframe. A longer period would more realistically allow for diverse clinical experience, including in different settings, and would further develop the ‘wide-angle’ view of medicine which stakeholders consider important at this foundation stage of training.

The suggestion of moving to a two-year transition to practice is not, in our view, a radical one.

- The Australian Curriculum Framework for Junior Doctors (ACFJD), developed by the Confederation of Postgraduate Medical Education Councils (CPMEC), is designed to cover the first two postgraduate years, though has never been systematically implemented as such.
- Most Colleges require two postgraduate years of training as a precursor for, or component of, their vocational training programs.
- A number of States and Territories accredit facilities and terms for PGY2 doctors.
- The vast majority of interns today complete a second, general year, though this is currently unstructured and may not occur at the same facility.

It would appear, then, that the majority of components of a structured, two-year model already exist in some form. Taking a more deliberative approach to the second year may strengthen the development of general capability and philosophy of care and better align with vocational training entry.

.....  
<sup>15</sup> Royal Australasian College of Surgeons *JDocs Framework Learning Outcomes and Professional Standards 2014*

## Recommendations

3. That the current model of internship move to an integrated, two-year transition to practice model, with the first postgraduate year continuing as a prerequisite for general registration and with a certificate of completion, auspiced by the Australian Medical Council, to confirm a set of agreed outcomes aligned to vocational training. This should occur within 2-5 years.

We recommend a model based on the first two postgraduate years and which maintains the current flexibility to enter into vocational training from the second postgraduate year. We also recommend testing the option of the two-year period being the final year of university and first postgraduate year.

4. That the following occur to support the change process and further investigate aspects of the models:
  - a. Revision of the intern registration standard to emphasise capabilities and performance and experience in the full patient journey and de-emphasise time-based elements – to be undertaken by the Medical Board of Australia in close consultation with jurisdictions, employers and others, within 1-2 years.
  - b. Development of a detailed and measurable two-year capability and performance framework, that builds on existing curriculum frameworks - to be undertaken through a national process involving jurisdictions, the Australian Medical Council, employers, colleges, postgraduate medical councils, universities and others, within 1-2 years.
  - c. Development of a certification process for the two-year transition to practice model, to be undertaken by the Australian Medical Council in conjunction with postgraduate medical councils, jurisdictions and others, within 1-2 years.
  - d. Evaluation of different models of capability assessment, including resource requirements – to be undertaken across a number of jurisdictions and patient care settings within 2-5 years.
  - e. Evaluation of options for an e-portfolio to provide greater individual accountability for learning and support the assessment process – to be undertaken within 2-5 years.
  - f. Identification of accreditation arrangements for a two-year transition to practice model – to be undertaken by the Australian Medical Council in collaboration with jurisdictions, universities, postgraduate medical councils and others, within 2-5 years.
  - g. Examination of the capacity to assess and certify the capabilities and performance required for general registration within university programs – to be undertaken across different medical programs and health service settings within 2-5 years.

## The role of internship in supporting career decision-making by doctors

### KEY POINTS FROM CONSULTATION

- Internship important in career choice, but not as a primary purpose.
- Responsibility within the clinical team helps make minds up
- Trade-off in term length between career exposure and learning / productivity
- Rural careers and pathways important
- Competition for vocational training intense, with CV inflation

The broader context of aligning workforce supply to locations and specialties of community need is important to bear in mind when considering the role of the internship in supporting career decisions.

The 2006 Council of Australian Governments (COAG) agreement to significantly expand the domestic medical workforce supply was taken to address persistent workforce shortages that were particularly acute in outer metropolitan, regional and rural locations and which affected certain specialties more than others.

A number of elements made up the approach to dealing with the problem. The overall number of graduates was dramatically increased. New medical schools were established to provide more diversity in program type, focus and ethos, reflective of differing needs and contexts. There were particular strategies put in place to build a sustainable rural and regional workforce, including regionally-based medical schools, Rural Clinical Schools, University Departments of Rural Health and mandatory rural rotations.

At the postgraduate level, there have been significant efforts by jurisdictions to target the growth in graduate numbers towards locations and specialty areas of need, for example, through increasing the number of rurally-based internships and through models that place more focus on primary care.

However it is likely that the bulk of the increase in graduates has, by default, boosted supply into popular specialties in well-served, inner-metropolitan centres, given the inherent bias of the internship towards specialist, hospital-based

practice rather than the settings and locations where the majority of interns are needed.

In addition, some structural features of the public health system arguably create perverse career signals, for example, where the number of available vocational training positions reflects service needs met by a registrar-level workforce, rather than expected future demand for specialists.

It is easy to understand, then, that doctors in training may have a skewed perspective on their career prospects, given they have limited exposure to some settings of future workforce need; imperfect information and potentially counter-intuitive signals about long term career opportunities. While this can partly be addressed through provision of structured career planning, it also requires change to the structure of the intern experience to align it with areas of future need.

It is also clear that looking at the internship year in isolation has limited value, given that medical students start their career planning well before graduation and indeed many decide on their ultimate career path well after the internship, perhaps as a result of the factors just outlined.

Setting aside the current bias toward specialist, hospital-based practice, it is difficult to judge the effectiveness of the internship in supporting career choice. It certainly helps some graduates to make up their minds based on their experience in intern rotations. Some argued the internship is best at confirming which careers interns do *not* want to pursue, which is a good thing in itself. However, many interns pursue careers without any direct work experience during the internship, such as public health, pathology, radiology and so on. The reliance on clinical exposure as the main tool for career planning is therefore not sound.

We got the strong sense from our consultation that many graduates have already started to position themselves for their preferred careers before they leave medical school, with many, for example, enrolling in additional qualifications to meet College points-based selection criteria.

The factors we have just outlined highlight the importance of providing these students and graduates with good career advice. Some have suggested that practical information about prerequisites for entry into vocational training, or the level of demand for different specialties is hard to access.

The United Kingdom uses competition ratios to show the ratio of applications to available positions in each specialty. While this would be possible in Australia for some specialties, it would be substantially more complex in others, given current accreditation arrangements and selection processes.

However there are examples in Australia of innovative ways to provide doctors with career information. For example, the NSW Health *Map My Health Career* site profiles each medical specialty and provides an ability to compare specialties, including whether they are over or under-subscribed. It includes video testimonials from practitioners working in the field. Similar resources at a national level may be useful.

We recognise that having to commit to a career pathway, at whichever point it occurs, can be stressful and that many factors influence the choices that medical graduates make. Experience in the specialty has been found to be lower down the list of influencers than factors such as appraisal of one's own skills, the intellectual content of the specialty and interest in helping people<sup>16</sup>. This would support the concept that more structured career planning may be valuable.

While career planning is the responsibility of the individual, we recommend that it be facilitated to the extent possible at each stage of medical education, starting at medical school. It should include formal career counselling, so that the valid career aspirations of students and graduates are framed by a good understanding of future workforce needs and expectations of training as well as appraisal of their own skills. Neither the individual nor the system benefits from graduates collectively aspiring to a narrow range of career choices when community needs are in fact much broader.

#### 4.1 Rural and regional exposure

There were different views about the benefits of mandating rural terms for interns from a career perspective. Our view is that it would not be beneficial to mandate it and would in fact cut across the work done in a number of states to create positions where those with an interest in rural practice can complete the majority of their internship in that environment.

It is widely recognised among doctors in training that regional and rural terms offer potential, and in some cases better, clinical experience that is not available to interns in major urban hospitals.

#### 4.2 Future health system medical workforce needs beyond patient care

Our consultation identified a number of potential health workforce needs beyond those driven by changes in demography, disease burden, and changes in models of care, for example, the impact of personalised or targeted medicine and the need for greater ehealth skills. Most of these fall outside the scope of this review.

One topic raised was the need to develop the future academic medicine workforce given the age profile of that workforce and specific skills requirements. The option of a dedicated pathway from prevocational into vocational training was suggested. It was also suggested that terms in medical education should be considered as part of the prevocational rotations.

A related and overlapping topic was whether opportunities for skills development and practice in medical research should be specifically allowed for in any revised models of internship. We acknowledge the importance of both of these noting that there is a small but significant cohort of intern entrants who already have research qualifications and an increasing interest in participation in research driven by the competition for vocational training places in some disciplines or for positions in teaching hospitals.

We consider that appropriate models should really map from medical program through to post vocational period. Consequently while we draw attention to this issue, it requires a detailed examination outside the terms of reference of our review.

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<sup>16</sup> Scott, A. *Medical Career Path Decision Making. A Rapid Review Centre for Research Excellence in Medical Workforce Dynamics August 2015.*

### Recommendations

5. That career planning across the medical education continuum is better aligned with societal health and medical workforce needs. Specifically, that:
  - a. Universities provide targeted career information to medical students, within 1-2 years.
  - b. Colleges make available information on entry requirements and success rates for selection into vocational training programs, within 1-2 years.
  - c. Employers provide formal, structured career planning during transition to practice training, including assisted self-appraisal and self-reflection, within 2-5 years.
  - d. Jurisdictions provide best available data on projected workforce demand at regular intervals, such as every 3-5 years, within 2-5 years.

## Models to support expansion of intern training settings

### 5.1 Capacity and numbers

#### KEY POINTS FROM CONSULTATION

- The health care system has the capacity to provide internships for the current level of domestic graduates.
- Expansion to other settings considered most important for educational reasons
- PGPPP was very well received but overly expensive. An alternative mechanism to support placements in General Practice would be valuable
- Private and not for profit sector has capacity and is willing, provided funding is available
- Increases in pre- and vocational training places are not visible to graduates

Recommendations about the number of medical graduates or intern positions are outside the scope of this Review; however a number of observations about the link between numbers and the internship model are important to highlight, as these have a bearing on decisions about change.

Our consultation found that the significant and rapid increase in intern numbers in recent years has had a range of impacts on health services and on the intern experience itself.

The growth has enabled States and Territories to expand intern numbers in line with workforce priorities, for example through increasing positions in rural and regional locations and outside of major metropolitan facilities.

It has also facilitated, through Commonwealth programs in particular, exposure to a broader range of settings such as general practice, private hospitals and Aboriginal Medical Services for some doctors, considered positive both from a capacity and a learning perspective.

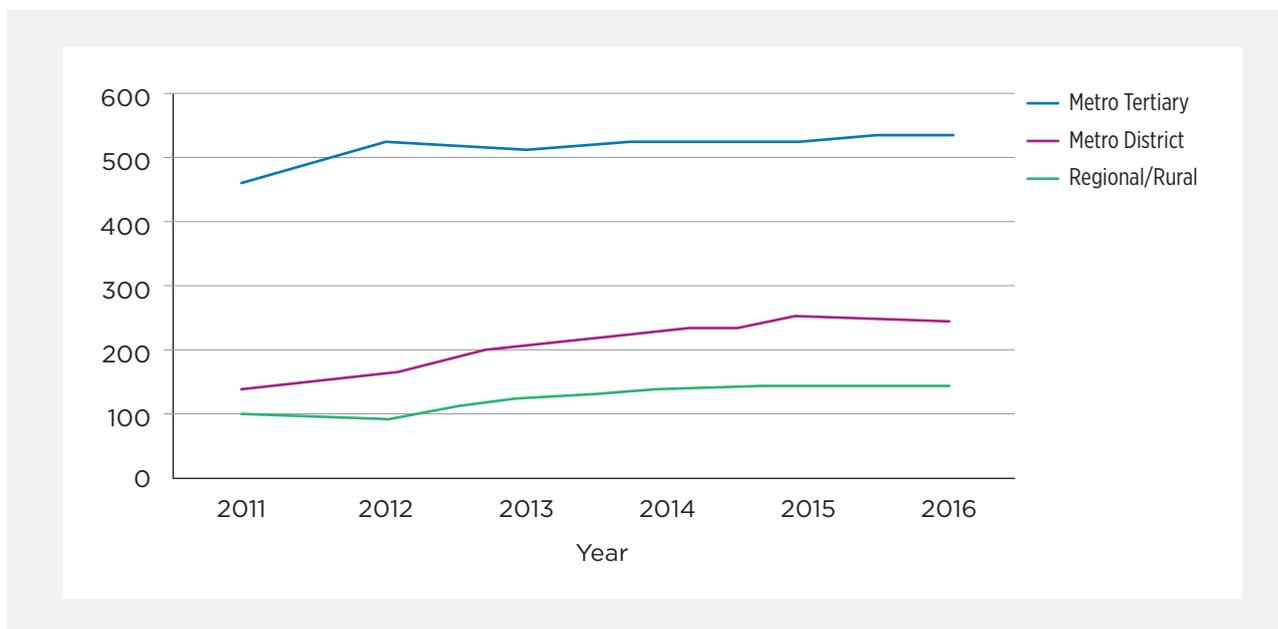
There is anecdotal evidence that the growth in junior doctors is feeding through to the vocational training pipeline, further addressing maldistribution of the workforce and boosting supply in those specialties and geographic locations that have faced workforce shortages in the past.

The growth in numbers is considered, however, to have created some pressure in the system, or added to existing pressures, particularly given the requirements of the current internship model.

- The growth in the junior workforce is reportedly increasing the supervision burden, particularly as the bulge in junior doctor numbers makes its way through to increases at a more senior level. National data show that increases over 2004-2013 in the rate of hospital non-specialists and specialists in training exceed those of specialists and General Practitioners.<sup>17</sup>
- The requirement for mandatory terms, particularly the emergency care term, is creating capacity constraints in some areas. It is also concentrating the growth in intern numbers into mandatory terms, while valuable clinical exposure and learning in other clinical areas is potentially being missed.
- Notwithstanding initiatives to grow capacity in other settings, a significant proportion of the growth is likely to have occurred in large metropolitan facilities, given these were more easily able to grow rapidly. However there is no publicly available data to assess this. Analysis of data from one state (Figure A) shows modest growth outside of metropolitan tertiary centres, including in regional-rural hospitals.
- Existing concerns about clinical exposure, most commonly heard in major metropolitan centres, may have been magnified with an increasing pool of junior doctors accessing the available clinical learning opportunities. It is likely that the increase in intern numbers has exacerbated a longer term issue of reduced breadth and depth of clinical exposure driven by the change in clinical practice.

17 2004-2013 increase in Full Time Equivalent rate per 100,000 population: 34% for hospital non specialists, 68% for specialists in training, 18% for specialists and -3% for General Practitioners. Source: AIHW Medical Labour Force Surveys, 2004-2009; National Health Workforce Data Set: medical practitioners, 2011 – 2013.

**Figure A: Growth in distribution of intern positions by facility type, NSW.**



\*Source: NSW Health data on intern positions, categorised according to NSW Hospital Peer Groups 2014

The capacity for further growth in intern (and prevocational positions generally) in regional and rural settings is not clear as we heard different views on this around the country. Limitations include the capacity for adequate supervision given that regional and rural hospitals have a higher proportion of visiting medical officers and fewer registrars. However, consideration should be given in some locations to transferring intern places from metropolitan tertiary centres to reduce the doctors in training load in those settings.

### 5.2 Implications of further growth on the current internship model

A common discussion during our consultation was the scope for further expansion in graduate numbers and the extent to which this could be accommodated within the current model.

It should first be pointed out that health services have clearly planned for the increase in domestic graduates that arose from the 2006 decision to expand the number of medical training places. As of 2015, there are in fact over 200 more intern places available than domestic graduates of Australian universities.<sup>18</sup>

<sup>18</sup> Report on the National Audit of Applications and Acceptances for Medical Internship and the Late Vacancy Management Process for 2015 Clinical Year (3229 State/Territory positions, with 3004 domestic graduate applicants).

The international full fee paying student cohort of Australian universities is substantial, representing an additional 545 students (17%) on top of the number of domestic students expected to graduate in 2015. The number of international students graduating is also projected to increase by almost 20% in the coming years, compared to an increase of 4% for domestic graduates.<sup>19</sup>

The two aims of meeting Australia’s health and medical workforce needs and ensuring a robust international education sector are therefore potentially in conflict when it comes to the internship.

We do not consider the requirement to accommodate international students graduating from Australian universities as a sufficient rationale on which to change the internship model for all, given over four fifths of total graduates are domestic. We note that other countries with similar health systems also have significant international full fee paying student populations without any corresponding promise of an internship.<sup>20</sup>

<sup>19</sup> Medical Training Review Panel 18<sup>th</sup> report, May 2015. Note this excludes consideration of any increase in domestic graduates resulting from the recently announced medical school at Curtin University

<sup>20</sup> In 2013/14, 11.6% of students in UK medical and dental programs were from outside the EU (Higher Education Statistics Agency). International students from Irish medical schools accounted for 31-49% of applicants for intern positions over 2010-2012 (Health Service Executive Implementation of the reform of the intern year 2<sup>nd</sup> interim report).

Notwithstanding any decisions about the mix of domestic versus international full fee paying graduates, there is a general need to ensure the growth in workforce is aligned with expected service needs. There is some evidence of the rate of growth in medical workforce outstripping the growth in services. As service models change through technology, team-based models of care and more focus on out-of-hospital care, this will further impact workforce requirements, including distribution.

Any further growth in total intern numbers would need to be carefully considered in terms of:

- Limited ability to provide mandatory terms (particularly emergency care) in certain states, while the current time-based registration requirement remains.
- Further impost on clinical supervisors, particularly until the increase in junior doctor ranks feeds through to more senior staffing. This could be partly addressed by providing a more substantive role for other junior doctors (e.g. vocational trainees) in intern supervision and teaching.
- Risk of further dilution of the learning experience, particularly in those metropolitan facilities where the clinical exposure is reportedly already weak.
- Increasing intern numbers at the expense of growing positions in the subsequent training pipeline. This could result in an expanding cohort of residents and senior residents competing for limited numbers of vocational training positions, with impacts on overall length of training.

Moving to a two year model, particularly if this allowed certain mandatory requirements to be met over a longer period, would smooth the impact of further growth on capacity. Equally, moving to a model of mandated capabilities and performance rather than the current, time-based structure, could enable the system to spread the growth in numbers more evenly through the system.

Another common observation about the numbers was that in fact the internship is not the main problem; rather it is the pipeline into vocational training and the need to align the number of PGY2/PGY3 and vocational training positions with the numbers coming through the system.

We agree that this alignment is important but note that the magnitude of the concern may be partly attributed to a lack of visibility of the real progress that has been made to increase training positions. The high level data (Figure B) shows training

positions have increased substantially across the board over the past decade, more or less keeping pace with the growth in graduate numbers:

- Domestic graduates of Australian universities have increased by 129%, from 1,287 in 2004 to 2,944 in 2013.<sup>21</sup>
- Intern trainee numbers / positions have increased by 103%, from 1,622 in 2005 to 3,287 in 2014 and exceed the number of domestic graduates.<sup>22</sup>
- Supervised practice PGY2 positions (the subset of all PGY2 positions for which there is data) have increased by 102%, from 1,536 in 2005 to 3,107 in 2014.<sup>23</sup>
- First year vocational training positions have increased by 141%, from 1,438 in 2005 to 3,467 in 2014.<sup>24</sup>

As the local workforce supply has increased, there has been a corresponding reduction in reliance on international medical graduates to meet workforce needs, including those coming through the Australian Medical Council standard pathway.

- The total number of temporary work visas issued to medical practitioners fell by 35% over the period from 2004-05 to 2013-14.<sup>25</sup>
- The number of international medical graduates granted advanced standing through the competent authority pathway decreased by 19% over the period 2009-2013.<sup>26</sup>
- AMC standard pathway graduates made up 7% of filled intern positions in 2005, but only 0.2% of the total in 2014.<sup>27</sup>

The level of concern about numbers, particularly from doctors in training, would seem to point to information gaps about the true picture. Substantial growth has clearly occurred, though perhaps not in those specialties or locations that are popular with doctors in training. There is a need for this data to be more easily accessible to doctors in training and others.

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 21 Medical Training Review Panel 13th and 18th reports  
 22 Medical Training Review Panel 13th and 18th reports  
 23 MTRP 13th and 18th Reports. Note PGY2 figures are approximates and may under-represent actual numbers.  
 24 Ibid  
 25 Medical Training Review Panel 13th and 18th reports  
 26 MTRP 13th and 18th reports  
 27 Medical Training Review Panel 9th and 18th reports

### 5.3 Private and not-for profit capacity

**Figure B: Growth in domestic medical graduates and postgraduate medical training positions 2004–2014**



\*Includes first year basic trainees and first year trainees in programs that combine basic and advanced training.

**Notes**

1. Information sourced from multiple MTRP Reports (7th to 18th)
2. PGY2 supervised positions are likely to significantly underrepresent total number, as States/Territories have historically had 'supervised' and other PGY2 positions representing different workforce groups
3. Vocational trainee numbers may understate capacity as they are based on the number of trainees rather than the number of positions, and therefore do not identify unfilled positions.

The private and not-for-profit sector indicated that many organisations have the capacity and interest to offer intern training providing it is funded. A number have been steadily building their training capacity, for example through placement of medical students and taking on vocational trainees. They do not report concerns from patients of trainee involvement in their care.

They raised some barriers that impact their decision to engage in intern training:

- Funding of intern placements for both domestic and international graduates;
- Support at jurisdictional level for collaboration between public and private sectors allowing appropriate provision of resourcing, insurance coverage and leveraging of training opportunities available;
- Resourcing of appropriate supervision, a particular issue in settings where services are provided on a fee-for-service basis; and
- An open and transparent process for placing interns which gives primacy to graduate preferences and recognises the value of placement opportunities across all sectors.

There is one well established intern training network managed by a private health provider (Ramsay Health’s Greenslopes Private Hospital network). The network, which was established with support of the Commonwealth Medical Internships program, involves rotations through a mix of training settings and areas of workforce need. In other situations, private facilities sit within a public prevocational training network, with interns rotating through both settings.

Our view is that in addition to any benefit to capacity, a primary reason to pursue intern placements in these settings is the educational value of access to the range of modern health care settings. We recognise the major barrier to this would appear to be current funding arrangements.

While it was put to the reviewers that the private sector should contribute to the cost of the interns based on their service roles, the absence of data on this makes it difficult to set a benchmark for any such contribution. We believe it would be useful to measure, on a regular basis, the service contribution roles of interns in both public and private sectors.

**5.4 Costs**

Expansion of intern training beyond public hospital settings will necessarily involve investment. However, current health system funding arrangements are an impediment to making this investment cost neutral.

It would not be a straightforward exercise to reduce funding in the public health system in order to increase it within the private, non-government or general practice settings, particularly given the service delivery component integrated within intern training. Even transfer of places and associated funding from major metropolitan hospitals to regional or rural hospitals in the same public system would be difficult. The service role of interns is not negligible so there would be a need to replace those functions.

To date, the Commonwealth has provided funding for intern training in expanded settings through the Commonwealth Medical Internship program and the former Prevocational General Practice Placement Program (PGPPP). One criticism of the PGPPP was its cost, averaging \$218,000 per full-time equivalent post<sup>28</sup> (inclusive of salary) in community settings. A number of states have funded some intern training posts in general practice settings, with two of these funding at substantially lower levels but still generating interest from some general practices.

One impediment to placing junior doctors in GP settings is the restriction on access to Medicare benefits, which means that those doctors are not currently able to bill Medicare. However there is a mechanism to enable this through classification of a dedicated workforce program under Section 3GA of the *Health Insurance Act 1973*. This would enable PGY2 doctors with general registration to bill Medicare and hence recoup some, if not all, of their salary cost.

We recommend that consideration be given to establishing a new program under Section 3GA of the *Health Insurance Act 1973* which would allow for a defined number of accredited prevocational positions in each state and territory. Salary arrangements would need to be negotiated locally and could consist of a mix of state/territory funds and Medicare Benefits Schedule (MBS) billed funds. Within the overall costs of the MBS, this is likely to be a very small and possibly non-additional cost.

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28 Mason, J *Review of Australian Government Health Workforce Programs* 2013, p.89.

## 5.5 International Full Fee Paying Students

The aims of ensuring Australia has the right number, mix and distribution of medical workforce and supporting a robust international education market have created pressures on the internship, particularly in the case of international full fee paying students who come to study medicine in Australia.

The issue of international full fee paying students is intended to be specifically examined as part of Phase Two of this Review. However, it is useful to discuss it briefly here, particularly in the context of models that may be available to create capacity, including in expanded settings.

From the perspective of health services, a primary consideration is to ensure sufficient graduates are coming through the pipeline to meet future workforce demands. This relies on workforce modelling of future demand, which is sensitive to changes in the landscape over the long term, such as health professionals deciding to retire later, changes in technology or models of care that impact the workforce mix and international migration flows.

The number of domestic medical student places is determined by the Commonwealth Department of Education in consultation with the Department of Health. This differs from other professions where universities have the flexibility to alter enrolment numbers in line with student demand. The cap on medical student places recognises the significant cost of training and the need to align university places with the postgraduate training pipeline. While this process may be imperfect, it does result in a known quantity of domestic graduates that health services can plan to accommodate, broadly aligned with future workforce needs. This is demonstrated by the planned growth in intern places following the 2006 COAG decision to expand medical school places.

For international full fee paying students, however, there is no similar mechanism for alignment of numbers with projected workforce needs or with the capacity of the health system to provide postgraduate clinical training positions. The resulting mismatch creates pressure to provide internships for these graduates, many of whom intend to practice outside of Australia.<sup>29</sup> Given the estimated cost of providing an internship is approximately \$100,000

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29 MSOD *Commencing Medical Student Questionnaire Reports* show that 95% of Australian/NZ citizens/PR first preference for location of future practice was Australia, compared to temporary residents ( 48% (2009) - 60% (2011))

per position, this is a significant investment to be made by health services in a workforce that they may not need.

Table 1 outlines the distribution of international students across medical schools, indicating several universities with fewer than 10 expected international graduates and others with much higher numbers. Notwithstanding differences in distribution, the overall number is significant and growing.

No state or territory, other than the ACT, has guaranteed a position to international students. In the past, due to workforce shortages, all international students were able to secure an intern position, but this has not been the case for the past number of years, as the increase in domestic graduates has occurred.

**Table 1: International(a) medical students expected to graduate: projected numbers(b) 2015 – 2019<sup>30</sup>**

University	2015	2016	2017	2018	2019
<b>New South Wales</b>					
Newcastle/UNE	33	26	27	21	24
Notre Dame Sydney	0	0	0	0	0
Sydney	76	67	69	80	80
UNSW	57	70	57	62	81
UWS	14	20	20	19	20
Wollongong	9	9	5	12	12
<b>Total NSW</b>	<b>189</b>	<b>192</b>	<b>178</b>	<b>194</b>	<b>217</b>
<b>Victoria</b>					
Deakin	6	5	5	12	12
Melbourne	34	33	45	40	40
Monash	54	71	58	73	65
<b>Total VIC</b>	<b>94</b>	<b>110</b>	<b>108</b>	<b>125</b>	<b>117</b>
<b>Queensland</b>					
Bond	2	0	0	0	0
Griffith	6	4	3	10	10
Queensland	120	110	107	90	90
James Cook	27	15	21	35	32
<b>Total QLD</b>	<b>155</b>	<b>129</b>	<b>131</b>	<b>135</b>	<b>132</b>
<b>Western Australia</b>					
Notre Dame Fremantle	0	0	0	0	0
UWA	31	39	23	30	30
<b>Total WA</b>	<b>31</b>	<b>39</b>	<b>23</b>	<b>30</b>	<b>30</b>
<b>South Australia</b>					
Adelaide	27	21	25	31	34
Flinders	20	25	14	30	30
<b>Total SA</b>	<b>47</b>	<b>46</b>	<b>39</b>	<b>61</b>	<b>64</b>
<b>Tasmania</b>					
<b>Tasmania</b>	<b>22</b>	<b>25</b>	<b>20</b>	<b>18</b>	<b>20</b>
<b>Australian Capital Territory</b>					
<b>ANU</b>	<b>7</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>10</b>
<b>Total</b>	<b>545</b>	<b>542</b>	<b>502</b>	<b>573</b>	<b>590</b>

(a) Excludes all offshore programs, including UQ Ochsner and Monash Malaysia.

(b) No allowance has been made for student attrition.

<sup>30</sup> Source: *Medical Training Review Panel 18th report* Table 2.32

A report of the national audit of intern acceptances for 2015 shows a total of 480 international medical graduates applied for a position in 2015, with 377 receiving an offer.<sup>31</sup> It is not possible to identify where the remainder have gone, though it is reasonable to expect that a significant number would have returned to their home countries.

Anecdotal evidence suggests that not all international fee paying students who graduate actually apply for an intern position and a small number who accept and start in positions subsequently resign as offers are made in their home countries. Others are sponsored by their home countries to complete their medical studies in Australia on the understanding they will return home to work on completion. It is clear, then that some graduates have options to continue training at home.

Australia's higher education sector is a significant export industry and revenue generator. In 2010, Australian universities generated income of approximately \$3.7 billion.<sup>32</sup> Australia's growing share of the international education market made it the third largest provider of education services in the world<sup>33</sup> in 2009. The desire to ensure this sector of the economy remains robust is understandable.

Recognising that this is a complex issue impacting on stakeholders within and outside of the health system, a number of possible avenues could be explored to address the current situation. This would require further consideration and consultation either as part of Phase 2 or as a separate piece of work.

1. *Continue the current situation* – some international graduates will continue to gain positions where vacancies remain at a State/Territory level or through Commonwealth initiatives. The precedent has been set over a number of years that not all international graduates will receive an intern position and, as discussed, it would appear that some at least have options for accessing training in their home countries.

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<sup>31</sup> *Report on the National Audit of Applications and Acceptances for Medical Internship and the Late Vacancy Management Process for 2015 Clinical Year*. 270 international graduates accepted State/Territory intern positions, 81 accepted Commonwealth Medical Internships places and 26 offers made in the late vacancy management process.

<sup>32</sup> Norton, A 2012 *Mapping Australian higher education*, Grattan Institute, Melbourne, cited in *National Medical Intern Summit Background Paper*, NSW Ministry of Health February 2013

<sup>33</sup> *National Medical Intern Summit Background Paper*, NSW Ministry of Health February 2013

2. *Modify the numbers* – Assuming there is an ongoing need to align total graduate numbers with predicted workforce demand, there could be a collaborative process to determine the desired number of graduates, including whether there should be some alteration to the current mix and distribution across medical schools and type of place.

However, is unlikely to be acceptable that the number of domestic student places, and hence opportunities for Australians to become doctors, should be reduced in order facilitate the international education sector, particularly where many international students may not stay in the Australian health system over the longer term.

3. *Alter funding arrangements* – an argument put forward by some is that international student revenue subsidises the training of domestic medical students, though the limited evidence available on this subject does not support a large direct effect.<sup>34</sup> International student revenue may be supporting other universities activities, which leads to questions of overall funding of universities, a matter clearly outside the scope of this Review.
4. *Develop a private funding model* – A model previously raised in discussions about the internship is to package the intern year as part of the offering that universities make to international students. In this model, universities could charge an additional amount for each year of their program and use that to purchase an internship position at a partner health facility.

This would increase the overall cost for international students, though it would come with a corresponding guarantee of an internship. Such an arrangement would recognise that the internship in this context is specifically geared towards meeting the registration requirement for international graduates, rather than necessarily contributing to the local medical workforce pipeline. It would mean the graduate would be paid during their internship, which may address industrial concerns about unpaid or self-paid models of internship.

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<sup>34</sup> Goulston et al *Medical student education – what it costs and how is it funded?* *Internal Medicine Journal*, Royal Australian College of Physicians 2012

In our consultation we have not explored the advantages or disadvantages of these options as this falls outside our terms of reference. Options 2-4 would all require further research, as the consequences may not be straightforward. For example, some would see option four as the most attractive as it recognises that demand for intern positions above Australia's predicted workforce needs is being created specifically to support international graduates.

Option 4 provides a mechanism to build that capacity, including in expanded settings, as purchased intern positions could be created within a variety of settings, subject to meeting the relevant accreditation standards.

However, it would result in a higher cost on the student that may adversely affect international market competitiveness and at least subtly would alter the dynamic of the intern-employer relationship.

Later in this report we propose different models for the internship, one of which relies on strong partnerships between health services and university medical schools. This model could also support a purchaser/provider model of internships for international full fee paying graduates.

### **Recommendations**

Ministers should note the need for expansion in intern training settings for educational and capacity reasons and to align the internship with modern health care delivery. We recommend:

6. That expansion of training settings is further supported through:
  - a. Jurisdictions and the private and not for profit sector identifying and, where feasible and affordable, implementing opportunities to expand suitable placements in private, not for profit and community settings, within 1-2 years.
  - b. The Commonwealth Government providing targeted access to Medicare billing arrangements for PGY2 doctors placed in general practice settings, within 1-2 years.
  - c. Analysis of interns' service contribution in different settings to inform discussion on their role and help define benchmarks for private sector contribution to their training, within 1-2 years.

## Improving the Training System

*“The general response that we should keep the current model seems to ... lack appreciation of how significantly healthcare delivery has changed over the last 20-30 years in health services. Both medical school and medical college curricula have changed significantly over the last 10-20 years in recognition of this, but the structure of the intern year remains essentially the same”*

*Discussion paper submission*

There are a range of areas in which the current internship needs to be improved. In this chapter, we set out a number of changes that can be made within the parameters of the current model, which should be the starting point for improving the system. These changes alone, however, may not deliver the lasting change needed to successfully modernise the internship.

Part of the solution, therefore, lies in the structure of the internship itself. In the next chapter, we propose a series of structural changes that can be adopted over time to better reflect societal needs in today's health system and to improve the quality of the experience. These represent a progression of incremental and more substantive alterations that have the ultimate goal of a broad-based, more seamlessly connected training experience.

In examining the changes that need to be made, it is useful to consider the features of a training model that would best meet the needs of junior doctors, health services and ultimately patients.

### 6.1 Ideal training model

Figure C illustrates features of an ideal training model that integrates the transition from medical school into transition to practice and further training and provides a quality learning experience. It has a number of features:

- Successful integration of each stage of training, with continuity in the learning process and ability for learners to progressively develop and consolidate skills, build confidence and autonomy. The connections between each stage are better aligned, avoiding gaps in training, unnecessary repetition and inefficiency.
- Strong partnerships between universities and health services to ensure the clinical learning experience prepares graduates who are work ready, while also possessing the capability, values and habits needed for decades of practice.
- A clear understanding of the capabilities and experience to be developed over the transition to practice and robust assessment processes to ensure these are achieved. Colleges, employers and regulators agree on the general learning outcomes expected from the transition period, which provides a consistent foundation for entry into vocational training and further employment.
- Supervision arrangements that provide a balance between ensuring safe patient care and testing graduates abilities to manage real and demanding scenarios. Educational supervision ensures that meaningful feedback occurs throughout the learning experience.
- A robust infrastructure to support supervision and assessment, with junior doctors trained and tested, at appropriate stages of their training, on their ability to supervise and teach. This builds capacity and sets the expectation that supervision is essential to a quality system.
- Exposure to the full range of patient care needs and patient-centred care, including through time in diverse settings. This broader exposure fosters an understanding of the type of practice required in the modern health system and also models the range of career paths available.
- Use of technology and educational tools to maximise the learning experience, with more control by the learner over their goals and progress. An e-portfolio to plan, gather and demonstrate evidence of learning facilitates ongoing, progressive assessment and consistency in recognition of prior learning. Simulated learning enables the development and assessment of skills without compromising patient care.
- A career planning process that provides doctors in training with an accurate picture of available careers paths and predicted workforce needs to facilitate realistic career decisions.

- Regular, accessible performance data on the training system that provides feedback to education providers and employers, information to doctors in training and the public and a robust basis for ongoing quality improvement.

Our present system has some way to go to reach this ideal state. Table 2 outlines aspects of the current model compared with the features we are aiming for.

In arriving at the recommended changes we propose for the system, we have been guided by three factors – the issues to be addressed, some guiding design principles and elements that need to be balanced.

The issues have been discussed throughout this report and so are restated in summary form here.

We have classified our design principles for changes to the system into two categories; those that align workforce mix and distribution with community

need and those that enhance safety, quality and competence in the transition process.

### ISSUES TO BE ADDRESSED

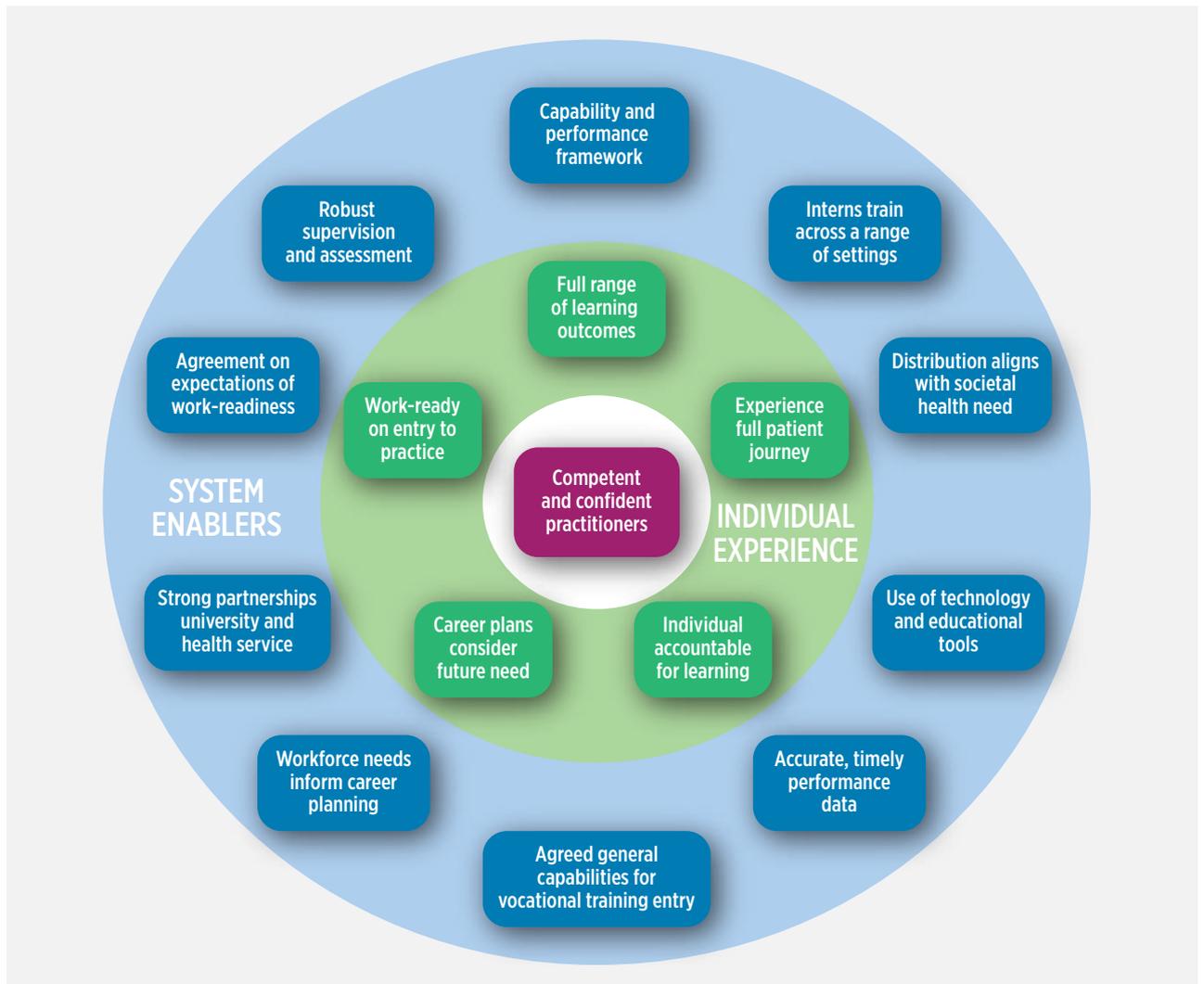
#### Alignment with societal health needs

- Limited exposure to full patient journey
- Unclear the extent to which ‘general’ skills achieved
- Mismatch of career preferences and workforce need/opportunity

#### Achieving better quality training

- Graduate work-readiness
- Variability in supervision; weak assessment processes
- Reduced clinical exposure
- Lack of flexibility (mandatory terms) and one-size-fits-all
- Capacity constraints in current model

Figure C: Features of an ideal transition to practice training model



## Promote community interests by aligning the internship with societal health needs

- *Align the distribution of internship positions with community needs* – the internship should facilitate the required mix and distribution of the medical workforce necessary to meet current and future community health needs.
- *Ensure the intern model provides exposure to general principles of medicine across the health care continuum* – the internship should provide exposure to, and experience in, the full patient journey and across a range of settings.

- *Avoid any lengthening of overall training time* – we should avoid placing any further impediments to efficiency in the training pipeline.
- *No 'lost generation'* – changes to the system should not create unintended negative impacts on any cohort of graduates going through their training.

**Table 2: Features of internship – current and ideal state**

Where we are now	Where we want to be
<ul style="list-style-type: none"> <li>■ Medical students have limited roles in, and responsibility for, patient care in many settings, resulting in a steep transition into internship</li> <li>■ Employers report that medical graduates are not work-ready on entry</li> <li>■ There is no evidence to determine whether graduates have met expectations on entry</li> <li>■ The initial transition to work is focused on learning workplace systems and processes, to the detriment of clinical learning and/or the unnecessary repetition of learning</li> </ul>	<ul style="list-style-type: none"> <li>■ Medical students have defined responsibilities in the clinical team and opportunity to learn skills and apply knowledge</li> <li>■ The capabilities and experience that graduates are expected to possess on entry are clearly articulated, with evidence that they have been developed and assessed</li> <li>■ Graduates have a good understanding of the systems and processes of the workplace and are therefore better prepared, in their initial transition, to focus on clinical learning.</li> </ul>
<ul style="list-style-type: none"> <li>■ A significant portion of intern time is spent on administrative aspects of clinical care, with limited opportunity to develop clinical reasoning skills and judgement</li> <li>■ Interns spend defined periods of time in mandatory terms on the assumption that the full range of learning experiences will follow</li> <li>■ Interns focus on the acute care situation and have limited visibility of the full patient journey</li> <li>■ Supervision arrangements vary from over-supervised with insufficient opportunity to learn, to situations that give cause for concern about both intern and patient safety</li> <li>■ There is limited engagement between supervisors and interns in a significant number of terms, with interns not receiving adequate feedback on performance</li> </ul>	<ul style="list-style-type: none"> <li>■ Interns undertake the full range of activities to support their learning. This includes the important administrative aspects of care as well as clinical reasoning and judgement</li> <li>■ Interns and supervisors are clear on the capabilities and experience to be acquired; terms enable acquisition and assessment of these capabilities</li> <li>■ Interns have exposure to the full patient journey</li> <li>■ Supervision arrangements make best use of available members of the health care team and appropriately balance patient care and intern responsibility</li> <li>■ Interns have more responsibility to manage their learning; the performance of supervisors in teaching and supervision form part of performance appraisal</li> </ul>
<ul style="list-style-type: none"> <li>■ Colleges independently specify expected general capabilities and experience required for selection onto training</li> <li>■ There is no ability for individuals to provide evidence of prior learning in a consistent format</li> </ul>	<ul style="list-style-type: none"> <li>■ Colleges collectively agree the general capabilities expected of the transition to practice period and there is evidence that these have been adequately assessed</li> <li>■ Evidence of other learning undertaken during the period is accessible and maps to College requirements</li> </ul>
<ul style="list-style-type: none"> <li>■ The internship is a disconnected year in the training continuum that homogenises graduates of differing medical programs to a relatively low standard and fails to provide a consistent, accepted bridge into vocational training</li> </ul>	<ul style="list-style-type: none"> <li>■ The transition to practice period is more seamlessly integrated with university education and entry into College vocational training</li> </ul>

## Enhance quality, safety and competence of medical graduates in the transition to work

- *Value the intern role in the health care team* – interns should be expected to operate at a level commensurate with their attributes and skills and appropriate for patient safety.
- *More seamless transitions* – from knowledge to experience and from general to specialist, with the ability to build upon learning at each stage.
- *Adequacy of clinical exposure* – the internship must provide learning experiences sufficient to develop safe practitioners with the ability to take more autonomous responsibility for care. Wholesale restrictions on clinical experience are not an appropriate response to inadequate supervision.
- *Ensure models of care better integrate education and training* – changes to models of care need to take account of impacts on education functions, including potential unintended effects on the development of capability.
- *Individual accountability for professional development* – we should recognise and treat interns as adult learners, with greater ownership over their development and the tools to enable it.
- *Continued ability to screen for lack of fit / fitness* – it remains important that the small number of doctors who are unsuited or unfit for a career in medicine are identified in any new system.
- *Graduate preparedness* – there should be a mechanism to provide employers confidence that graduates have achieved a consistent level of preparedness for the workplace.

The factors needed to be balanced in making recommendations include:

- *Capacity constraints* – the capacity to expand numbers in the current system is limited, particularly due to the nature of the mandatory term requirements.
- *Employment opportunities versus workforce need* – the majority of internships are spent in acute care environments of hospitals, and, while there will continue to be a major need for this, an increasing amount of medical care is provided outside of hospitals and in non-acute care and the future medical workforce needs to be trained for this.
- *Flexibility versus uniformity* – the current model illustrates this trade-off; the uniform, time-based definition of mandatory terms reduces flexibility in the system. It is important that the uniformity is anchored in the right way, so that it provides sufficient flexibility to accommodate the range of different care contexts in our system.

- *Federal/state funding arrangements limit range of opportunities* – the current investment in the internship is substantial and it is unlikely that further, new resources are available. This requires a focus on how best to deploy the existing investment, which is dependent upon both Commonwealth and state funding decisions.
- *Requirement for certification of safety to practise* – whatever changes are made, the need to assess safety to practise will remain as one element in the systems that safeguard the public. This should be done on the basis of general, well defined and enduring capabilities.
- *Liability for risk* – patient safety is a paramount concern, with the flow on approach to liability potentially constraining the training experience at all stages. Enabling a greater role for students in patient care has potential implications for risk sharing between universities and health services. Similarly, involving non-public sector services more in training may involve sharing liability.

Our terms of reference focus on the internship rather than the continuum from medical school to vocational training. However there are potentially greater benefits to be achieved from change across the continuum than the current one-year period. We recognise this in a number of the changes and models we propose, while remaining consistent with our terms of reference.

## 6.2 Necessary Changes

The changes that we recommend should occur regardless of any modification to the internship model, and which should be implemented in the short term, are:

### 6.2.1 Make the training more holistic

Given the current internship model is skewed heavily towards public hospital, acute medicine, we recommend a more holistic training experience across the domains of:

- *Patient need* – exposure to the full patient journey and continuity of care across primary and preventative, acute, sub-acute.
- *Care contexts* – experience in public and private hospitals, outpatients/private rooms and community /GP settings, integrated models of care.
- *Care settings* – at least some time across tertiary, outer metropolitan, regional or rural settings.

The Victorian community based internships initiative is a good illustration of a more holistic intern training experience.

It provides exposure to the full patient journey, which develops understanding of the complexity of patient care needs, the roles of others in the health care system and the importance of patient-centred care.

It provides experience across a range of care contexts, building knowledge of the different decision support systems in place within hospital and community environments.

It demonstrates the comparable learning outcomes available in rural and community training settings.

This is backed up by the evidence, which shows “no significant difference in performance between student and junior doctors training in urban settings

*compared with those in rural and remote settings”<sup>35</sup> and that rural GP placements “offered the opportunity to follow patients ...to experience the impact of continuity of care... [and]... development of a greater degree of autonomy, responsibility and confidence.”<sup>36</sup>*

Patient safety is likely to benefit from interns’ experience of clinical decision-making and patient care across different settings and from the perspective of the holistic patient journey.

Another example of holistic intern training is the PIERCE model, which integrates internship requirements with provision clinical experiences required for the Rural Generalist Pathway.

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<sup>35</sup> Young et al *Rural General Practice Placements: alignment with the Australian Curriculum Framework for Junior Doctors Medical Journal of Australia* 199 (11) December 2013

<sup>36</sup> Ibid

## Community Based Internship - Victoria

### Background

The Department funds a number of community based internship programs in rural/regional Victoria. These are built on strong partnerships across public and private health services and community organisations to provide an integrated internship that combines community and hospital time, while meeting MBA registration requirements. The programs aim to increase the number and capability of rural doctors through a comprehensive training program and expand training capacity for practising rural doctors. It is in place, with local variations, in the following locations:

- Murray to Mountains Intern Program
- Grampians Medical Training Intern Program
- East Gippsland Community Based Internship
- Echuca Intern Network

### Objectives

- To increase the number of intern places in Victoria
- To build training capacity in rural health services
- To provide an opportunity for doctors to commence their training in rural settings
- To provide a first year of an integrated training pathway that will lead to a career in rural practice.
- To assist retention and recruitment of medical workforce to meet rural/regional service needs.

### Intern Model

Interns are based in a community setting and rotate in to the hospital for their mandatory terms, which meets registration requirements and provides a holistic perspective of the patient journey from first point of care through to hospital admission.

### Benefits

- ✓ Longitudinal, integrated system
- ✓ Assessment monitored with close supervision
- ✓ Enhanced training experience in diverse settings
- ✓ More holistic exposure to a range of patient needs.

## Prevocational Integrated Extended Rural Clinical Experience – Queensland

### Background

The Prevocational Integrated Extended Rural Clinical Experience (PIERCE) aims to increase the training capacity of the Rural Generalist Pathway and strengthen trainee commitment to rural practice by providing authentic integrated extended rural clinical experiences in suitable accredited rural hospitals that meet prevocational training requirements.

The Rural Generalist Pathway (RGP) has proved to be effective in addressing the workforce in rural Queensland communities. An external review of the program revealed strong support for it, particularly in terms of:

- The establishment of a sustainable and effective training pathway
- The value of the practice of rural generalism in Queensland and its contribution to addressing rural medical workforce needs across the state.

An audit of RGP training sites indicated that access to Anaesthetics, O&G and Paediatrics was a bottleneck for the expansion of the RGP. PIERCE aims to address this by offering PGY1/2 trainees an opportunity to undertake integrated extended rural clinical experience that embeds training in these specialties within the placement.

### Objectives

1. Increase prevocational training capacity within Primary Allocation Centres of Rural Generalist Pathway by 15 positions by 2016
2. Promote the attainment of knowledge, skills, expertise and attitudes required for Rural Generalist Prevocational Certification.
3. Strengthen and consolidate trainee commitment to a rural outcome

### Intern Model

Interns are based in an accredited hospital and undertake rotations in accredited terms, including Extended Rural Clinical Electives. These include Traditional Block Rotations, short 8 to 10 week placements in inpatient specialist units in major hospitals. The PIERCE term is usually 15 weeks in duration and must consist of clinical experiences in Anaesthetic, O&G or Paediatrics. A Senior Medical Officer oversees the intern during training in each rotation.

### Benefits

- ✓ Provided an exceptionally high quality training program valued by trainees and graduates
- ✓ Reflected the commitment of senior clinicians to the program through high quality supervision and support
- ✓ Demonstrated a high degree of flexibility and responsiveness to trainee needs
- ✓ Met the needs of local communities through reduction of critical medical vacancies, enabled health services to expand service delivery and is making services more accessible and affordable to local residents
- ✓ The fast track nature of the program – attractive to trainees but also addresses the workforce needs of rural communities in a timely fashion
- ✓ The quality of the training and supervision offered
- ✓ Career opportunities presented throughout the training, albeit currently perceived as limited to the State of Queensland.

## 6.2.2 Improve assessment

The current assessment process has room for improvement on a number of fronts.

1. It is weighted towards the identification (and support) of those with major problems but provides little informative feedback to the rest, regardless of their relative performance.
2. It focuses on time served and the global nature of performance, but does not meaningfully assess the specific capabilities that are expected of generally registered doctors.

Many in our consultation noted that the capacity of the system to do a better job of assessment is low. Supervisors were reported as having highly variable levels of engagement depending on their hospital time, other commitments, level of training in assessment and interest in intern training. Supervisors may not see their interns more than a few times per term, compared to the more formal arrangements for teaching of medical students and closer service engagement with, and commitment to, registrars in their own discipline.

The development and nationwide roll-out of the AMC standard assessment form is a significant advance. As this was only fully implemented in the current year its full impact is unknown. However, given the structural constraints noted above, it is unlikely that changing the assessment forms alone will achieve a better outcome.

There were concerns raised about the resource implications of moving to workplace-based assessment on a broad scale. A pilot of workplace based assessment for international medical graduates found that *“summative WBA is feasible, provided there are committed project teams and assessors. It is intensive in use of time and resources”* and that *“a key lesson to be learnt ... is that assessor engagement is required for a successful WBA program.”*<sup>37</sup> Anecdotal advice on the experience of WBA in the UK Foundation program suggests it was not a substantially better discriminator of performance in many circumstances, though aspects of it, such as multi-source feedback, worked well.

Concerns about moving towards WBA as the basis for assessment mirror aspects of the broader debate about competency-based education. Some mistakenly consider it to be aiming too low –

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37 Nair, B. *A systematic approach to workplace-based assessment for international medical graduates*, *Medical Journal of Australia* 2012

arguing that physician training is striving for something nearer to expertise than competence, when in fact, competency models allow for a range of levels of achievement.

Others argue that disaggregating the learning experience into discrete, measurable competencies can detract from more global assessments of skill, including those things not as easily measured.

*A general competency is difficult to assess, but the ability to execute a specific activity can be observed and appraised ... [this] ... tends to produce long checklists of specific competencies, formulated as activities that, in the end, do not quite reflect the original meaning of the general competency.*<sup>38</sup>

It is also clear that practitioners use many competencies together on a day-to-day basis and assessing them separately is a somewhat theoretical exercise.

*[Doctors] ... are not asked to play a health advocate role on Monday, be a communicator on Tuesday, collaborator on Wednesday, and an expert on Thursday. All roles are intertwined in a complex way that makes them less visible and measurable.*<sup>39</sup>

The process of measuring competencies within day-to-day activities is therefore perceived to be arduous and to require significant assessment resources.

The use of Entrustable Professional Activities (EPAs), now being used in a number of programs around the world, including the Royal Australian and New Zealand College of Psychiatry training program, may address some of these issues.

EPAs bridge the gap between theory and practice, as they situate competencies within the clinical context. Whereas competencies *“in the aggregate, define the ‘good physician’”*, EPAs *“represent the day-to-day work of the professional”*.<sup>40</sup> More specifically, EPAs are *“units of professional practice, defined as tasks or responsibilities to be entrusted to the unsupervised execution by a trainee once he or she has attained sufficient specific competence”*.<sup>41</sup>

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38 Ten Cate, O. *Competency-Based Postgraduate Training: Can We Bridge the Gap between Theory and Clinical Practice?* *Academic Medicine* 2007, Vol 82 (6)

39 Ibid

40 Association of American Medical Colleges *Core Entrustable Professional Activities for Entering Residency Curriculum Developers Guide* 2014

41 Ibid

EPAs address issues of volume and the ability to capture the mix of interrelated competencies involved in demonstrating performance. They commonly describe important general activities, for example taking a patient history, are limited in number, but embed the full range of abilities that trainees must possess in order to be trusted to perform that activity. *“One of the defining markers of an EPA is that its performance requires integration of competencies, usually across domains.”*<sup>42</sup>

Achievement of particular EPAs can be certified to mark progression, for example through a statement of awarded responsibility to mark *“the threshold on which it is entrusted to a trainee to be carried out independently.”*<sup>43</sup> Their practical application can be facilitated by use of milestones to describe performance at different points in the learning continuum.

For example, the US Association of American Medical Colleges EPA of “Gather a history and perform a physical examination” describes the milestones of ‘pre-entrustable’ and ‘entrustable’ behaviours for one of the critical competencies involved in the task.

This approach addresses the concern that competency-based models might lead to doctors being ticked off on a range of competencies in a few days or weeks without adequate opportunity for consolidation of skills over time. Behavioural milestones mark the progression towards competence and expertise.

We note, however, that curriculum descriptions are never perfect. “It will never be possible to completely describe professional practice in terms of tasks and responsibilities, and we are also trying to define a moving target as practice is always changing.”<sup>44</sup> There is therefore good reason to maintain a time component to the internship.

We recommend that EPAs are trialled for the internship and broader prevocational training period in Australia. This will require careful consideration and testing of models to meaningfully assess performance in the workplace. We expect that models may vary depending on local context and assessment resources.

Implementation of new assessment models should be accompanied by appropriate support for learners, supervisors and assessors. We note the many training resources available to support supervision and assessment including health service and university programs and formal, national qualifications.

Critical Competency	Pre-entrustable Behaviours	Entrustable Behaviours
<p><b>PC2:</b></p> <p>Gather essential and accurate information about patients and their conditions through history-taking, physical examination, and the use of laboratory data, imaging and other tests</p>	<p>Either gathers too little information or exhaustively gathers information following a template, regardless of the patient’s chief complaint, with each piece of information gathered seeming as important as the next. Recalls clinical information in the order elicited. Limited ability to gather, filter, prioritise, and connect pieces of information. Uses analytic reasoning from basic pathophysiology knowledge without ability to link findings to prior clinical encounters. Incorrectly performs and elicits most physical examination manoeuvres. May miss key physical exam findings. Does not alter the head-to-toe approach to the physical examination to meet the developmental level or behavioural needs of the patient. Does not seek or is overly reliant on secondary data. (PEDS, IM, PSYCH)</p>	<p>Clinical experience allows linkage of signs and symptoms of a current patient to those encountered in previous patients. Still relies primarily on analytic reasoning of basic pathophysiology to gather information, but the ability to link current findings to prior clinical encounters allows information to be filtered, prioritised and synthesised into pertinent positives and negatives as well as broad diagnostic categories. Performs basic physical examination manoeuvres correctly and recognises and correctly interprets abnormal findings. Consistently and successfully uses a developmentally appropriate approach to the physical examination. Seeks and obtains data from secondary resources when needed. (PEDS, IM, PSYCH)</p>

.....  
42 Ibid

43 Ten Cate, O. Competency-Based Postgraduate Training: Can We Bridge the Gap between Theory and Clinical Practice? *Academic Medicine* 2007, Vol 82 (6)

.....  
44 Ross M *Entrustable Professional Activities The Clinical Teacher* 2015

### 6.2.3 Improve supervision

The variability of supervision is both widespread and longstanding, with organisational culture and the model of care likely to be more influential drivers of the quality and nature of day-to-day clinical supervision than national registration requirements. While concerns about the safety and suitability of supervision can be identified and addressed through the accreditation process, this addresses only a narrow part of a broader issue.

Our view is that improving supervision is a long-term process rather than something that can be rapidly fixed; however steps should be taken now to resolve the issues of variability. Some measures we recommend are:

*Build capacity for near to peer supervision and teaching.* Many in our consultation suggested that near to peer education would benefit the system. The evidence on peer-assisted learning supports this, with positive outcomes reported from using students to teach complicated technical skills<sup>45</sup>; Foundation Year 1 trainees providing induction to subsequent trainees;<sup>46</sup> and arranging peer teaching session on specific clinical topics.<sup>47</sup>

This could be embedded within the system by requiring demonstration of supervision and teaching capabilities at each stage of the training pipeline. At a vocational training level, it would build skills and provide College trainees the necessary authority for a more substantive role in supervising prevocational trainees. It is positive that revised vocational training accreditation standards now include that “*the curriculum prepares specialists for the role of teacher and supervisor of students, junior medical staff, trainees, and other health professionals.*”<sup>48</sup>

Equally, one of the entrustable professional activities to be developed over the period could be related to teaching and supervision, for example, requiring trainees to teach or supervise medical students or support their peers. This would build capability, normalise the expectation that providing and receiving supervision is an essential part of medical practice and potentially influence assessor behaviour.

This approach would build skills in teaching and supervision into the structure of the training pipeline which, over time, may address variability and smooth some of the supervision burden by having trainees at each stage of training providing supervision for those who follow.

*A national training survey* – the UK national training survey occurs annually, with a take-up rate of close to 100%. It publishes trainee evaluation of training terms from foundation through to vocational training and is available online. We consider that widely available, regularly updated performance data, at a reasonably granular level, has the potential to drive behaviour and provide a basis for ongoing quality improvement.

*Teaching and supervision to be part of contracts and performance assessment* – we have not, as part of this review, examined the performance assessment process for senior medical staff in relation to supervision and teaching. However the sense from our consultation was that lack of interest or capability in supervision and teaching were difficult matters to resolve, and the recent increase in the number of learners may have added to the problem. There may be benefit in explicitly including teaching and supervision as part of contracts and performance review, if it is not already, and in using trainee term evaluations as evidence for the performance review process.

*Recognition of good supervision* – Most of the burden of supervision of interns is carried by a relatively small number of clinicians. There may be value in a national scheme to recognise supervisors. Such a scheme could be based on a combination of indicators of good supervision such as results of national training surveys, local 360 degree assessments and participation in and completion of training in supervision of medical trainees. Some states at least, have supervision awards to recognise exceptional performance and showcase the benefits of good supervision.

45 Knobe, M. *Peer teaching: a randomised controlled trial using student-teachers to teach musculoskeletal ultrasound* Medical Education 2010

46 Everson, M. *A Novel Approach to Junior Doctor Induction: A Near-peer Based Curriculum Developed and Delivered by Outgoing F1s* Medical Education 2014

47 Ding, N. *Peer teaching in Foundation Year 1, Medical Education 2012 Vol 46*

48 *Standards for Assessment and Accreditation of Specialist Medical Programs and Professional Development Programs by the Australian Medical Council Draft Revisions July 2015; Standard 3.2.7*

## National Training Survey – UK

### Background

Every year the General Medical Council (GMC) runs a survey asking all doctors in training (over 54,000) for their views about their training. The GMC uses the national training survey to underpin the assurance of the quality of postgraduate medical education and training.

### Objectives

- To provide an evidence-base to identify systems improvements in medical education and training
- To assist with shaping the future of postgraduate medical education through feedback and evaluation
- To produce better information on graduate preparation for practice

### Description

The survey is open for 6 weeks over March to May and results are published online, one month after the survey closes. The response rate in 2014 and 2015 was over 98%. Generic questions about the foundation programme (internship) are asked; these include but are not limited to induction, educational supervision and clinical supervision.

The tool produces a set of reports that allow for year on year trends and is available electronically for public access. The reporting tool also allows employers to study the survey responses and compare by local education provider, specialty or deanery. It allows employers to benchmark against comparable organisations and compares their own performance over time. This enables employers to identify outliers and keep improvements consistent over time.

### Benefits

- ✓ Empowers local quality improvement
- ✓ Informs policymaking and policy development
- ✓ Supports evaluation and influences policy change
- ✓ Provides meaningful data to track progress and inform change in medical education and training

### 6.2.4 Work ready graduates

*“The transition from medical school student to practising doctor will always represent a stressful and uncertain period. This transition is a very important first step in the early career of a junior doctor and, indeed, a healthy level of stress displays an appropriate response to this complex process. However, there are ways to ease the levels of stress and improve the quality of transition experienced by new doctors.”<sup>49</sup>*

There is scope to better facilitate the transition from university to practice by ensuring graduates are more consistently work-ready. A threshold matter to address will be to define what work-readiness means, as there are likely to be varying expectations and interpretations. Preparedness has been described to cover *“all the attributes that we should expect of new graduates which include professionalism, employability, competence, readiness, fitness for purpose and fitness to practise.”*<sup>50</sup>

.....  
49 Brennan, N. et al *The transition from medical student to junior doctor: today's experiences of Tomorrow's Doctors, Medical Education 2010; 44: 449-458*

50 General Medical Council *“Be prepared: are new doctors safe to practise?”*

A number of these aspects emerged during our consultation. Some health service representatives suggested graduates could come more consistently prepared for certain clinical tasks and with a clearer understanding of what is expected of them working in the health environment. They observed that it was difficult to know the specific skills that graduates possess, with a resulting fairly low benchmark assumed. They also commented on the difficulty of getting access to information from universities, for example on matters impacting on professionalism and fitness to practice. Universities noted a lack of feedback from health services on the quality of their graduates and variable interest in facilitating student access to good clinical learning.

Many in our consultation highlighted the scope for final year medical students to have greater involvement in patient care, particularly low decision activities such as clerking tasks, under supervision, with the dual benefit of building their familiarity with the system and potentially freeing up more time for interns to focus on the other patient care activities.

This is supported by the evidence that prior clinical experience can reduce the stress of transition – “for those who found at least some aspects of the transition extremely challenging and stressful, any prior experience ameliorated this”<sup>51</sup> and the more meaningful the experience, the better. “The practice of ‘doing’, as opposed to just observing, is very important.”<sup>52</sup>

UK research has found that medical graduates who completed shadowing attachments were more likely to feel prepared, as were graduates of problem based learning courses.<sup>53</sup>

While all medical programs have significant clinical placement periods in their final years and some have formal pre-intern terms, it is not clear that uniform outcomes are achieved. It is fair to say that, with some exceptions, employers have been passive about what they expect of medical graduates before employing them as interns. This may reflect their lack of active role in the selection of interns in some locations or the fact that Commonwealth-supported graduates are guaranteed a position. Regardless of the reason, it cannot continue.

One potential mechanism to define expectations of readiness is to specify those entrustable professional activities which should be completed by the end of medical school, as the Association of American Medical Colleges has done. There, graduates must meet 13 EPAs by the time they enter their residency training programs.

Many of these EPAs align with the Australian Medical Council intern outcome statements. For example the EPA to ‘gather a history and perform a physical examination’ is similar to the AMC outcome statement 2.3: perform and document a patient assessment, incorporating a problem-focused medical history with a relevant physical examination, and generate a valid differential diagnosis.

It may be, therefore, that part of the issue is about the supporting assessment frameworks and forms of evidence being agreed between employers and universities, so there is confidence that outcomes have been achieved to the expected standard.

51 Brennan, N. et al *The transition from medical student to junior doctor: today's experiences of Tomorrow's Doctors*, *Medical Education* 2010; 44: 449-458

52 Ibid

53 Cave, J. et al *Easing the transition from student to doctor: how can medical schools help prepare their graduates for starting work? 2009 Medical Teacher* 05/2009 Volume 31 Issue 5

Suitable EPAs, or more specific capabilities could be defined and implemented over time and it should be a pre-requisite for being employed as an intern that these are met.

Adopting this approach would also enable those programs where students have more clinical responsibility to demonstrate a higher level of prior learning, with potential to reduce assessment tasks in the internship.

### **AAMC Entrustable Professional Activities for Medical Graduates**

The Association of American Medical Colleges has developed a set of EPAs that graduates should be able to perform at the start of their residency program

1. Gather a history and perform a physical examination
2. Prioritize a differential diagnosis following a clinical encounter
3. Recommend and interpret common diagnostic and screening tests
4. Enter and discuss orders and prescriptions
5. Document a clinical encounter in the patient record
6. Provide an oral presentation of a clinical encounter
7. Form clinical questions and retrieve evidence to advance patient care
8. Give or receive a patient handover to transition care responsibility
9. Collaborate as a member of an interprofessional team
10. Recognize a patient requiring urgent or emergent care and initiate evaluation and management
11. Obtain informed consent for tests and/or procedures
12. Perform general procedures of a physician.
13. Identify system failures and contribute to a culture of safety and improvement

We note that the Australian Medical Council is currently examining matters related to professionalism and fitness to practice of students, including the continuum of medical education and transition from university to employment. This is timely and will no doubt contribute to the definition of work-ready graduates and identification of necessary mechanisms and processes to support the transition from student to employment in the health system.

### Role of universities in the internship

It was suggested to the Review that one option for change to the current model is to transfer responsibility for the internship to university medical schools. It was argued that this would leverage existing teaching resources at university and provide some consistency over the transition period. It could also offer particular advantages in terms of the international student cohort.

However, the concerns with this approach include:

- The risk that this would send a signal that the internship is a continuation of a formal education process rather than a work-based period of experiential learning.
- A potential further devaluing of the work role of interns.
- A potential entrenchment of exclusive access by universities to the hospitals they are linked with for undergraduate training.
- Unwillingness of the health system to fund positions over which they feel they would have less control.
- Poorer control by the health system to distribute the workforce in line with planned service needs.

In the consultation we found little support for this model, and indeed antagonism in some quarters. We have therefore not recommended further consideration of it. We do, however, support the need for strengthening the shared responsibilities of universities and health systems in medical education and training. We have proposed one model for a restructured internship that relies on shared governance between universities and health services in supporting a two-year transition to practice model that spans the final year of medical school and first year of postgraduate practice (see section 7.1).

#### 6.2.5 Value after-hours work

Our consultation highlighted the learning value of after-hours work, where interns, often limited to very specific tasks during daytime shifts, have more direct responsibility for patient care. Doctors in training were in agreement, but noted that after hours work rarely offers access to the same type of supervision and education as day shifts, detracting from the value of longer periods.

It is a realistic expectation that healthcare, as a 24/7 business, require a component of after-hours work as part of health professional practice. There is evidence to show that good learning experiences are available outside of day shifts. A survey of foundation year one doctors in Scottish hospitals implementing the Hospital at Night system found 98% felt they had gained valuable experience working at night and 96% felt they would not have gained this experience conducting only daytime shifts.<sup>54</sup>

The learning value of after-hours work should be explicitly recognised and supported with models to enable appropriate access to supervision and teaching. Models already in place illustrate the potential benefits; for example, the Hospital Out of Hours Team at Perth's Fiona Stanley hospital. Similar models or principles could be applied across many intern training settings.

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<sup>54</sup> Gibson, S. Hospital at night and surgery: is it detrimental to the trainees of the future? *British Journal of Surgery* 2008

#### 6.2.6 More individual accountability for learning

It is no surprise that medical graduates are eager to learn, often with a good idea of the career direction they wish to take, and associated preparation requirements. We heard of many interns and PGY2s enrolling in additional qualifications as positioning strategies for selection into vocational training.

We know the average age of interns is now significantly higher than it was in the past – in one state, the average intern is reportedly 29 – and that many graduates bring previous career and educational experience with them.

We also heard that the opportunity for learning and reflection in the internship is limited, for example by the volume of paperwork, the general stress and workload of the job or the fact that interns are not always able to attend the structured education sessions that are run in the hospital.

There are a number of observations to make about this:

- The current system does not appear to grant interns permission or accountability for managing their learning – at least, not on a structured, consistent basis. The idea that learning occurs only when packaged up and provided from supervisor to trainee is clearly not the basis on which we should be supporting adult learners in the workplace.

## Hospital Out of Hours Team (HOOT) – Western Australia

### About the Model

The Hospital Out Of Hours Team, (HOOT) is a dedicated team of onsite clinicians tasked with providing care to Fiona Stanley Hospital inpatients seven days a week in the out-of-hours period (Monday-Friday 1600-0800; Saturday and Sunday 24/7) in designated inpatient ward areas.

The model is comprised of Interns, Residents and Registrars allocated to wards depending on the three types of shifts – evening, night or weekend. The medical team works in concert with a dedicated nursing team. The team has a formal handover at the commencement and end of shift with an identified medical and nursing lead, and clear pathways for escalating the care of a deteriorating patient. There is a senior clinician with dedicated medical oversight of the HOOT. Doctors in training rotate through the different HOOT allocations through the rotation and gain exposure to a variety of different medical disciplines.

### Objectives

- A supportive model to facilitate high quality patient care in the after-hours environment
- A robust model for handover of patients with clear documentation to bridge the in hours and after-hours' time periods.
- A clear triage system for out of hours tasks to allow for efficiency in use of clinician time and to prioritise workload.
- A model which incorporates governance of Doctors in Training with the addition of formalised training and access to specialised simulation exercises in the context of an out of hours environment.
- Interns on the team have an identified registrar for supervision on each shift.

### Intern Model

- Unique opportunity for interns to receive vital experience in an after-hours environment prior to receiving general registration with the MBA.
- Clearly identified supervisor within a team environment for each Intern and Resident Medical Officer working out of hours.
- Doctors in Training allocated to HOOT rotation receive structured and protected teaching time supported in the form of HOOT Simulation Training and HOOT Intern Bedside Teaching.
- The formal education components of the rotation are administered by the Medical Education Unit with structured evaluation of the teaching program.

### Benefits

The benefits of the presence of a HOOT team are summarised by the points below:

- ✓ Team based care with increased efficiency of task allocation.
- ✓ Improved governance of doctors in the after-hours environment.
- ✓ Higher levels of supervision of doctors in training in after-hours roles.
- ✓ Higher levels of teaching and training opportunities.
- ✓ Greater opportunity for dedicated teaching to doctors involved in after-hours care.

- Many patient care activities, including the paperwork many say are taking away from learning, are opportunities for learning and reflection, if framed appropriately. This is not to say they are a sufficient learning experience, but they are valid and important.
- In the days of ubiquitous technology, the idea that interns need to sit in a room for a couple of hours once a week to learn (as opposed to streaming, podcasting, or other forms of just in time learning) appears out-dated and anachronistic, although we recognise the value of protected learning time.

We recommend the system recognise the accountability of the individual in managing their learning, with appropriate points of supervision, feedback and support. One way to facilitate this is through technology, for example an e-portfolio, allowing interns more control over their learning goals. The New Zealand *ePort* has a number of useful features:

- Final year medical students can record details of their prior learning, which provides an opportunity to integrate and build upon learning at medical school within the internship

## ePort Intern e-portfolio – New Zealand

### Background

The introduction of an ePortfolio for postgraduate year 1 and 2 doctors was part of a suite of measures that commenced in November 2014, following a review of prevocational medical training by the Medical Council of New Zealand (Council).

### Objectives

The broad changes to prevocational training, of which the e-portfolio was part, were designed to:

- Improve the quality of learning for interns.
- Improve the balance between service demands and training requirements.
- Increase the opportunity for interns to obtain the broad based core competencies needed for medical practice in New Zealand and gain a general scope of practice.
- Improve the vertical integration on the continuum of learning, and transition between medical school, prevocational training, and vocational training.
- Increase opportunities for interns to work in community based and outpatient settings.
- Create greater accountability of training providers.
- Improve the opportunity for PGY2s to extend competencies relevant to vocational training.
- Increase the opportunity for senior doctors to participate in the supervision and training of interns.
- Improve the learning opportunities for those working in relief and locum positions.

### Description of Model

Prevocational training spans the two years of practice after graduation. In PGY1 interns are required to:

- Substantively attain the learning outcomes outlined in the New Zealand Curriculum Framework for Prevocational Training (NZCF) (prior learning can be taken into account), to obtain the broad based core competencies needed for medical practice in New Zealand.
- Record attainment of the NZCF learning outcomes in their electronic record of learning (ePort), which helps the intern to reflect on their learning and informs the conversations between intern and supervisor. Council have adopted a high trust model where evidence and sign off of each learning outcome is not required.
- Satisfactorily complete four 13-week, Council-accredited clinical attachments (minimum of 10 weeks in each attachment). The mix of clinical attachments needs to provide the intern with sufficient opportunity to substantively attain the learning outcomes in the NZCF. Any learning outcomes not attained can be covered by the formal education programme and other learning.
- Hold advanced cardiac life support (ACLS) certification at the standard of New Zealand Resuscitation Council CORE level 7 less than 12 months old.

In PGY2 interns are required to work in accredited clinical attachments and continue to develop and maintain a personal development plan. By 2020 each intern will need to complete a community based attachment in either PGY1 or PGY2. Council approved a staged transition, with a goal of 10% of interns completing a community based clinical attachment in the year commencing November 2015 and working towards 100% compliance by November 2020.

### Benefits

Early benefits, including of the e-portfolio, include:

- ✓ Improved public health and safety. The introduction of the ePort web based eportfolio system means an intern's record of learning is portable from attachment to attachment and from hospital to hospital therefore supervisors are well informed and have an awareness of any risks.
- ✓ Increased accountability. The reporting available from ePort has provided District Health Boards with live data relating to their prevocational training programme, which has informed quality assurance and improvement.
- ✓ Improved feedback to interns. The transparency of the system has meant more interns are meeting with their supervisors to receive formal feedback on their performance and progress.
- ✓ Improved quality of feedback. Over the last 12 months at least 300 supervisors have attended training covering supervision and feedback techniques and the new requirements for prevocational training.

- The system enables overall learning goals to be set by the intern and/or supervisor, as well as specific learning outcomes in particular terms, linked to the prevocational curriculum.
- It enables progressive, portfolio assessment where supervisors can view the progress of intern to date, rather than assessing the term in isolation of previous performance history. This has reportedly influenced supervisors' assessment behaviour, as their assessments are visible to the subsequent term supervisor in the chain.

We recommend that the potential be examined for similar models to be adopted in Australia. We recognise the difficulty of implementing such models at a national level, given our devolved structure, however there may be benefit in one or two jurisdictions demonstrating proof of concept of a similar model.

### 6.2.7 Integrate education in models of care

The dilution of clinical exposure identified in consultation may be partly attributed to the introduction of new models of care that aim to achieve better patient care and efficiency, but which have not adequately considered impacts on education and teaching.

Concerns about supervision also have a strong relationship to the model of care in place for the service. A common concern raised, which was most graphically described by doctors in training, was about access to supervision in some surgical and psychiatry terms, with interns left to fend for themselves in managing the medical needs of patients. To their credit, interns reported a range of ways in which they sought out and accessed support, in the absence of the immediate availability of their designated senior supervisors.

## Orthogeriatric Service Westmead Hospital – New South Wales

### Background

Elderly orthopaedic patients often present considerable challenges for orthopaedic interns. Medical management of complex co-morbidities can require multiple consultations and technical skills beyond the expectations of interns. Because of workforce issues, interns or residents are often largely responsible for this care co-ordination.

### Objectives

- To improve patient outcomes and overall patient care
- To improve the intern's learning experience
- To improve better management of clinical teams

The Geriatric Advanced Trainee is embedded within the Orthopaedic team. Care delivery is ward based with the trainee expected to remain on ward during the working day. A weekly "board round" has commenced whereby orthopaedic registrars and interns, allied health, nursing and geriatric medicine convene for a structured 30 minute review of all patients on the ward. This provides an opportunity for interns to raise issues they may be dealing with to both their registrar or to the relevant multidisciplinary team members. General medical advice for non-geriatric patients is also provided to the interns by the geriatrician, to help with their workload and patient care.

The ward has fostered a culture of direct supervision of the interns by the orthopaedic Nursing Unit Manager (NUM), and this has been sponsored by both the orthopaedic surgeons and the geriatricians. The Orthopaedic Ward NUM is uniquely placed to assist interns with advice on orthopaedic issues and often facilitates the discussions between intern and orthopaedic registrar. This not only provides some confidence for the interns but also minimises miscommunication and unnecessary delays in patient management. The needs of underperforming or struggling interns are often established and escalated to both geriatrician and orthopaedic head of department early in the term.

### Benefits

- ✓ Patients are under surveillance from a senior clinician and recognition of deteriorating patients occurs earlier
- ✓ The advanced trainee can assist the interns with consultations to relevant teams and can advise on relevant information to provide to consulting teams and how to carry out recommendations once provided
- ✓ Most medical issues can be handled directly by the geriatric advanced trainee and this provides an interface for medical education
- ✓ Being ward based, the relationships between intern and geriatric advanced trainee are strengthened and advice or assistance is readily available.

Others pointed to examples where the model of care provided a specific pathway for support, including terms in private settings with a dedicated consultant on-call for medical management issues and models of care in a number of locations for orthogeriatric patients. The latter also highlight the role of other members of the health care team in supervision of interns.

As models of care change, it is important to ensure that education aspects do not suffer as a result and in fact there can be gains from both a service and education perspective of purposeful change that incorporates both. The experience of introducing a new model of care at Royal Brisbane Hospital to meet time-based access targets for emergency departments illustrates both the need to consider education and the value of doing so.

A review of the experience found that *“the approach to teaching and learning for junior doctors has fundamentally changed. Although an ED rotation still provides essential exposure to the assessment and management of the undifferentiated patient, senior staff now explicitly model expected behaviours and partner with junior doctors in the management of patients throughout their (now shorter) ED journey.”*<sup>55</sup>

The UK National Health Service has facilitated a range of local pilots to demonstrate the potential for education and service benefits from change projects, a number of which demonstrated very clear benefits to both patient care and trainee education.

## **Better Training Better Care – UK Model**

### **Background**

The Better Training Better Care (BTBC) programme was developed in 2011 with both national and local work streams. The local work stream focused on supporting NHS trusts to pilot change projects to improve education and training and, as a consequence, improve services for patients. Sixteen local pilots were carried out, of which ten successfully demonstrated a culture for innovation in the delivery of education which both increased the quality of education and improved patient care and safety.

### **Objectives**

- Appropriate supervision, and/or implementing a consultant present service
- Service delivery must explicitly support training
- Making every moment count.

### **Sample projects**

Two of the pilot sites were East Kent Hospitals University NHA Trust and the Kings College Hospital NHS Foundation Trust.

East Kent Hospital University created a new service model in medicine whereby a new rota system was developed that involved trainee doctors working for ‘hot’ periods of four weeks, followed by ‘cold’ periods of six weeks, with benefits including a 6% reduction in length of stay for Wednesday and Friday admissions; a 20% increase in number of discharges on a Saturday and a 6% increase in number of discharges on a Sunday.

Kings College Hospital developed the Rapid Assessment and Treatment (RAT+) system whereby two consultants are involved in the patient journey, one as part of the initial assessment team and the other working with trainee medical staff. This delivered service benefits including 24% reduction in time to treatment, 44% reduction in time to refer to inpatient teams and 10% reduction in length of time patients spent in Emergency.

### **Benefits**

Several factors were critical to the success of the pilots. These included stakeholder commitment and engagement, which encompasses:

- ✓ Trust support to improve engagement, address issues in implementation and support or drive the spread and adoption of the pilot project
- ✓ Clinical leadership to champion the pilot project and improve engagement
- ✓ Doctors in training and other participants to commit and engage with the pilot project
- ✓ Improvements in multidisciplinary team working and trainee support
- ✓ Increase contact with supervisors and an increase opportunity to learn as reported by trainees

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55 Wright, L. *Teaching and learning in an era of time-based access targets: Impact of a new model of care on junior medical officers Emergency Medicine Australasia 2015*

We recommend there is support for a similar program in Australia, but with a focus on sustainable change rather than piloting. There are many innovative pilot programs in Australia, only some of which we have reported here. It was reported to us that many others had not survived due to lack of funding or organisational support. Consequently there was a degree of scepticism about another program supporting pilots. However it is also clear that without some form of incentive and at least short term additional support there will not be systematic evaluation of current practice and change as there is a lack of visibility of the problems and system inertia to do anything about it.

Consequently while there may be areas where there is a need for specific pilots to test new approaches, the primary focus should be on sustainable change. This should be based on evaluation of local training

and service needs (both within hospital and regionally) and surfacing the strengths and weaknesses with local stakeholders. This program should support local innovation to improve the training experience through changes that, for example, improve supervision (e.g. in care of surgical patients or during after-hours or weekend periods), allow rostering that protects time for self-directed training experience (for example time to attend operating theatre, outpatients, simulation centre or research), or provide more diversity of settings of care while improving patient care. Where appropriate this should build on the innovative models that have already been demonstrated to be effective in Australia. It is important that doctors in training are involved in the design and implementation of these changes. This local change can be supported by system-wide tools.

## Modernising the model

The changes we have recommended for the training system are a necessary first step towards achieving better outcomes from the internship. However, of themselves, they are unlikely to achieve the type of lasting improvement that is required.

Reorienting the internship model itself can better align it with the needs of our community and improve the quality of the experience. One way to achieve this is by better connecting university, prevocational and vocational training, including through clearer definition of the outcomes expected at each stage. Figure D compares current outcomes across the continuum with a scenario where outcomes are better specified at each stage, including those under examination in this Review.

We consulted on four conceptual ways to structure the intern experience, summarised in Table 3.

Two of the models (A and B) limited changes to within the traditional 12-month period, with Model A effectively continuing the current model but promoting change to occur locally. Model B proposed systematic but incremental change by moving the focus of assessment towards capabilities and performance,

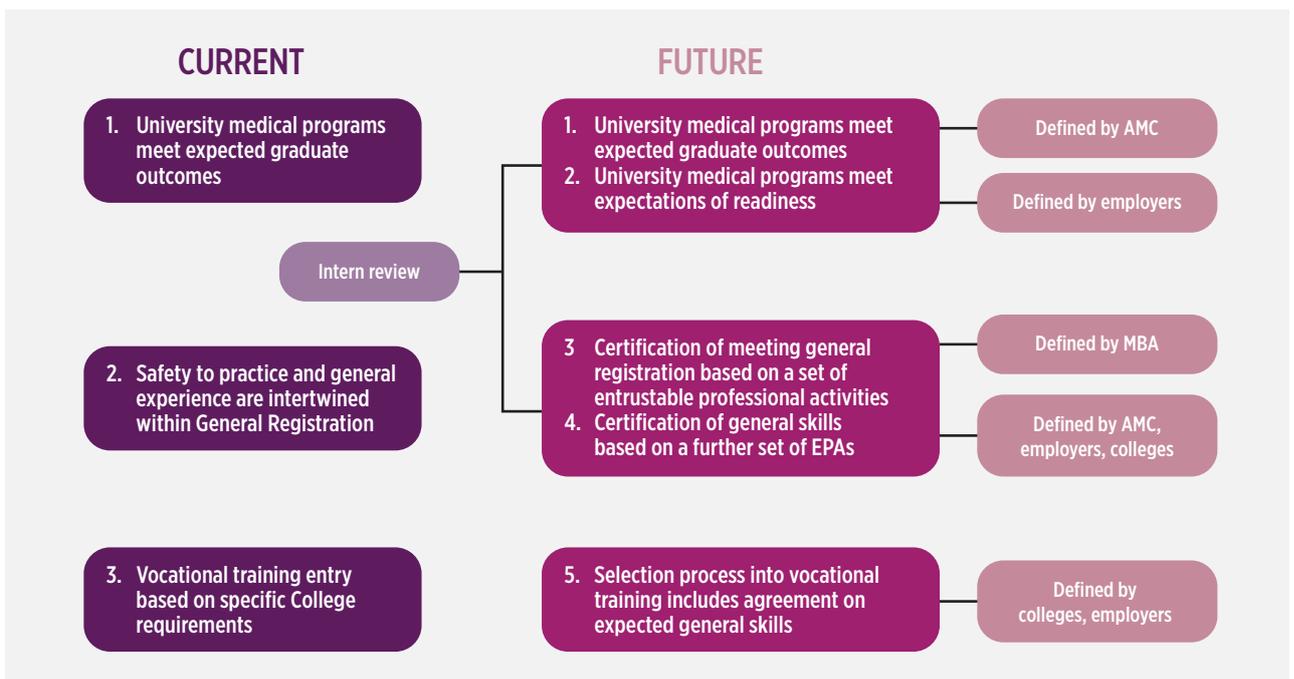
with more flexibility in mandatory terms and a focus on more diversity in exposure within each term. It proposed at least one term to be provided outside of a single acute care setting, with flexibility in the number and length of terms.

Models C and D proposed a two year model, of which the internship would form part, with Model C covering the first and second postgraduate years and Model D comprising the final year of medical school and first postgraduate year.

Both models rely on mandatory capabilities, which could be in the form of a set of Entrustable Professional Activities, to be achieved over the two year period. Demonstrated achievement of the EPAs would contribute to a certificate of completion, awarded at either the end of PGY2 (Model C) or end of PGY1 (Model D). This would constitute evidence of a broad set of general capabilities, which could be used by Colleges and employers as a selection criterion.

Model D, therefore potentially shortens overall length of training by enabling graduates to enter vocational training from PGY2 where they hold the certificate of completion.

**Figure D: Definition of expected skills/outcomes**



**Table 3: Summary of models proposed in Options Paper**

<p><b>Model A (1 year – current)</b></p> <ul style="list-style-type: none"> <li>■ No national changes imposed on current structure</li> <li>■ Current registration arrangements remain</li> <li>■ Local change and innovations to continue, with ability to adopt proposed system improvements (e.g. holistic experience, supervision)</li> <li>■ Access to private/non-government and GP settings subject to Commonwealth approach</li> </ul>	<p><b>Model B (1 year – incremental change)</b></p> <ul style="list-style-type: none"> <li>■ Specify mandatory skills required while allowing more flexibility in mandatory terms</li> <li>■ Map skills to graduate outcomes, College pre-requisites and the settings/specialties in which they can be acquired</li> <li>■ Flexibility in the number and length of terms</li> <li>■ Exposure to patient journey and different care contexts within a term; at least one term in a different setting (e.g. not all in tertiary facility)</li> </ul>
<p><b>Model C (2-year PGY1/PGY2)</b></p> <ul style="list-style-type: none"> <li>■ Two year program based on mandatory skills / competencies and flexibility in mandatory terms</li> <li>■ General registration based on core capabilities, awarded end PGY1; certificate of completion at end PGY2</li> <li>■ Skills mapped to College pre-requisites and/or curricula, to facilitate RPL, provide flexibility and reduce the stress of career choice</li> <li>■ Flexibility to provide longer terms</li> <li>■ At least one term provides exposure to patient journey and different care settings</li> <li>■ Mix of ‘soft’ streamed and unstreamed to cater for graduate preference and workforce needs</li> </ul>	<p><b>Model D (2 year PGY-1/PGY1)</b></p> <ul style="list-style-type: none"> <li>■ Two year program based on mandatory skills / competencies and flexibility in mandatory terms</li> <li>■ Program covering final year university and PGY1, with certificate of completion awarded at the same time as general registration</li> <li>■ Skills mapped to College pre-requisites and/or curricula, to facilitate RPL, provide flexibility and reduce the stress of career choice</li> <li>■ Flexibility to provide longer terms</li> <li>■ At least one term provides exposure to patient journey and different care settings</li> <li>■ Mix of ‘soft’ streamed and unstreamed to cater for graduate preference and workforce needs</li> </ul>

All models kept the current registration milestones – provisional registration at graduation and general registration, or equivalent, at the end of PGY1 – at the same points. Maintaining the timing of the current registration milestones was in recognition of the lack of support for moving general registration to the point of graduation, which would likely face considerable resistance from some sectors of the medical profession and would reduce the likelihood of securing the necessary agreement of all jurisdictions.

Moreover, as we discussed the options with authorities, it became evident that substantial change could be achieved without changing the registration milestones up front, though clearly some change to the content of the intern registration standard will be necessary.

In line with the general feedback from doctors in training which supported the current system, they favoured Model A as involving the least amount of change. However that model was not supported by other stakeholders consulted on the options paper.

Our view is that continuation of the current model would significantly undermine the longer term fitness for purpose of the internship and we do not advocate it.

For the remaining models, feedback reinforced that, rather than being separate, discrete options, they are instead varying points along a continuum of change. It was also clear that the level of appetite and readiness for change varies across the country.

#### KEY POINTS FROM CONSULTATION

- Doctors in training were the only group to support Model A (no systemic change).
- Broad support for two-year model as a better platform for general experience
- However, need to avoid lengthening overall training time – ability to stream/theme in PGY2 important for some.
- Model spanning final year medical school and PGY1 attractive, but would need time and effort to achieve. It poses particular challenges for some medical programs
- Features supported in each option:
  - Mandatory skills/competencies rather than current mandatory terms.
  - Exposure to broader settings and care contexts
  - More work-ready graduates
  - Potential for longer terms
- Doctors in training favour status quo, though see merit in aspects of models
- Options seen as a continuum of possible changes over time.

In some places, introducing even a small amount of flexibility will be a springboard for innovation. In others, a longer period may be required to adapt to new requirements. This in itself is not a bad thing, but points to the logic of testing out different approaches and potentially allowing jurisdictions or

even more localised entities (e.g. a hospital, a health service or a university) to progress at different rates depending upon local circumstances.

While it is useful to allow the system to adopt changes at different rates, there would be significant complexity in a longer term scenario of different models in different jurisdictions. It may be possible to handle this within a national framework, but it would add to the level of risk. A mixed model could potentially involve:

- Interns who have completed one-year of postgraduate training with general registration.
- Interns who have completed a two year postgraduate model, with a certificate of completion awarded at the end of PGY2.
- Interns who have completed a two-year model with a certificate of completion awarded at the end of PGY1.
- Medical graduates who have completed the first part of a transition to practice model in one state, who are applying for internship in a different state.

It is therefore important to be clear about the final goal, though acknowledging that it may take some time to achieve full implementation.

Our view is that the further learning gains to be made from a one-year program are limited. Moreover, it seems illogical to continue to focus, in a learning sense, on one year of the prevocational period when by far the majority of graduates will undertake at least two years and many vocational

training programs require at least two years postgraduate experience.

Therefore our recommendation is that the goal should be an integrated, two-year transition to practice model that certifies a broad set of general capabilities, aligned to requirements for vocational training. We recommend a progressive implementation over time, starting with model B as a step in the process.

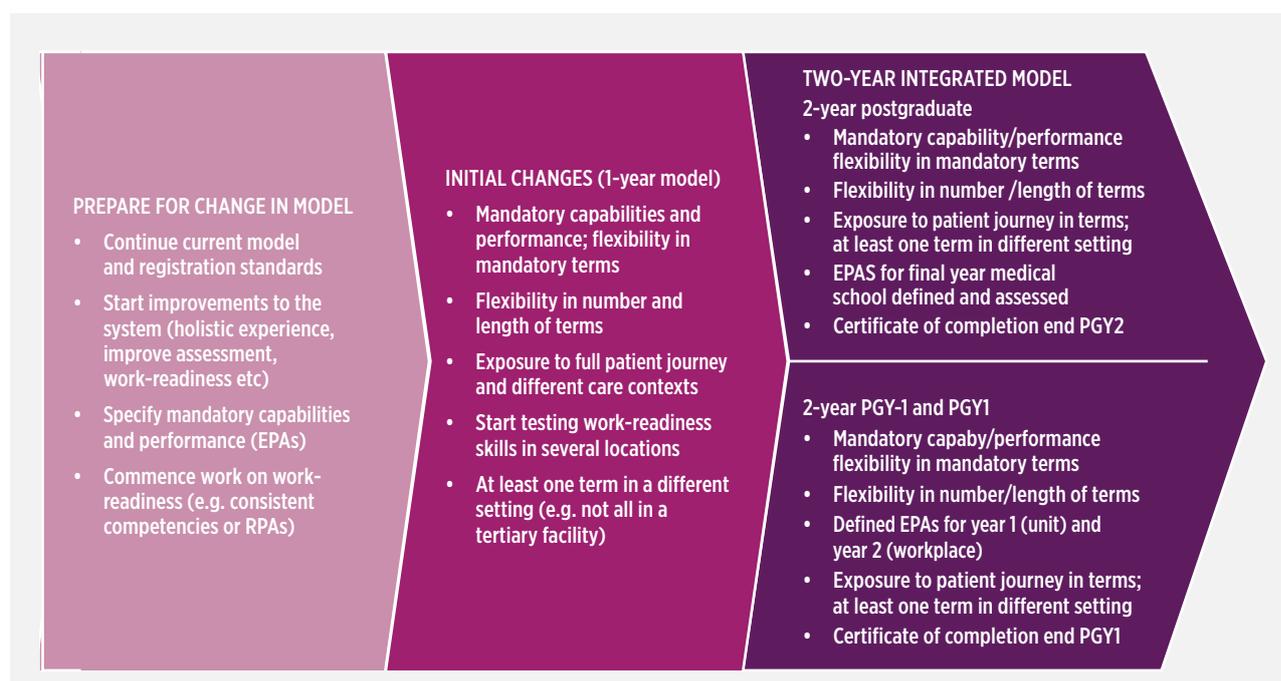
We have used the term transition to practice to emphasise that this new model is not a repeat of the current internship over a two year period. Rather, we envisage a flexible model based on graded autonomy, diverse exposure and clearly articulated capabilities and performance and that continues to accommodate entry into vocational training from the second postgraduate year.

We have considered the options for organisations to auspice and certify the two-year model and it seems to us that the Australian Medical Council would be best placed to manage this process.

## 7.1 Moving to a two-year transition to practice model

Figure E sets out how the initial steps in the implementation process might occur. An initial requirement will be to develop a two year performance and capability framework, which should be detailed, measurable and supported by appropriate resources for both supervisors and learners.

**Figure E: Possible continuum of change to the intern model**



A range of existing resources can be used to guide this work, including the Australian Curriculum Framework for Junior Doctors, College frameworks such as the RACS JDocs and curricula used in other jurisdictions to cover the first two years of postgraduate practice.

It would be clearly preferable that the specified capabilities and performance align with College expectations for vocational training. One matter that will require some navigation is the variable entry points and methods of selection into vocational training and how this relates to the transition to practice period.

For example, the Royal Australasian College of Physicians requires trainees to prospectively register from PGY2 in order for that year to be classified as 'core' basic training. The Royal Australian College of General Practitioners fellowship requires 12 months of hospital training, with the PGY2 year therefore counted as part of the program. Entry into other College programs occurs from PGY3 or later.

The question of accreditation of the two year model will need to be explored, including how the accreditation of a model spanning university training and postgraduate practice would look. It is fortunate that the Australian Medical Council has oversight of both university and prevocational training, though with significant differences in the accreditation process.

There will be a need to identify requirements for a formal assessment and certification process that gives confidence in the objectives of transition to practice being achieved. This certification would form a transferrable eligibility for entry to vocational training. The assessment process needs to reflect the nature of work-based learning, be flexible enough to be delivered in most, if not all, clinical settings, not remove doctors in training from their service and training roles for extended periods, and be affordable.

We recommend that the assessment be based on a combination of the successful demonstration of specific capabilities, for example through entrustable professional activities, and general term assessments. We propose a two phase assessment process. Phase One would usually be completed in the first year and would focus on safety to practise. Phase Two would usually be completed by the end of the second year and would focus on development of broader general capabilities. However, there should be flexibility about when most if not all Phase 2 EPAs could be achieved.

We recognise that this additional assessment and certification may require a different assessment model and potentially additional resourcing. We recommend that assessment models are tested out in a variety of settings to ensure they adequately discriminate performance, are able to be practically implemented, and leverage the accountability of the individual in driving the process.

## 7.2 Merits and challenges of different two-year models

Each of the two-year transition to practice models we proposed has specific considerations that will influence the direction that is ultimately pursued. The choice of model will probably be largely pragmatic but should be based on the final goal.

The move to Model C (across PGY1 and PGY2) is the most straightforward and appears to be a logical extension of the current model. It requires minimal directive change to university medical programs and has the potential to improve the training experience. Many jurisdictions already accredit facilities for the first two years, some offer two-year employment contracts and there has been a curriculum framework developed for the first two years.

Relative to the current model, it offers:

- Structuring of the learning experience across the two years.
- Essential experiences could be achieved more flexibly in the transition to practice period.
- More well-rounded exposure and the ability to further develop general skills through a longer time frame and broader range of placement settings.
- More assurance of capabilities and an assessment model that supports graded autonomy.
- A general focus, but with the ability for some 'soft' streaming aligned to career interest.
- Improvement in the quality of clinical exposure and responsibility.

However, if primacy is given to a long-term goal which maximises utilisation of existing resource inputs, improves clinical training while potentially shortening overall training time, then Model D offers the most potential gain. Relative to the current situation, this model provides:

- A more structured transition from university to the workplace, with graduates more work-ready and capable of functioning at a higher level.
- Potential to shorten overall training time and enable graduates to stream in PGY2, provided there is agreement by stakeholders on the general skills and experience to be certified.

- Potential to move the registration barrier, over the longer term, to the end of medical school.
- More well-rounded exposure and the ability to further develop general skills through a longer timeframe and broader range of placement settings.
- More assurance of competencies and an assessment model that supports graded autonomy.
- A general focus, but with the ability for some 'soft' streaming aligned to career interest.
- Improvement in the quality of clinical exposure and responsibility.

As with all substantive changes, care would need to be taken that risks and issues are minimised in the implementation process. There are a number of risks involved in each of the models for reform, including C and D:

- A funding mechanism will be needed to facilitate exposure to the range of patient care settings.
- Capacity may not currently exist to increase capability assessment tasks, including the potential increase in student assessment required to demonstrate work-readiness.

Model C poses fewer implementation risks and challenges because it does not rely on changes to university medical programs other than those necessary to ensure graduates are work-ready. Neither does it require specific changes to the sharing of liability for risk between universities and health services.

However, a number of stakeholders raised concerns about introducing any unnecessary delay into the progression to vocational training. It may be useful to examine whether the second postgraduate year could sustain some overlapping of transition to practice and vocational requirements, particularly if these are based on a broad set of capabilities and experience and agreed forms of assessment. There should also be some capacity to align term allocations with career preference, as currently occurs.

By contrast, Model D may require significant restructure of some university medical programs; though others may be ready now, particularly where strong partnerships exist with health services. Also, universities may not see benefits in this model in the absence of changes to the registration milestone, i.e. moving general registration to the end of medical school. The model may not necessarily shorten training if stakeholders do not agree on recognition of general capabilities or do not trust the certification process.

### 7.3 Changes to the intern registration standard

A requirement for implementing the initial changes to the internship, while moving to a two-year model, is to examine the current intern registration standard. Feedback from our consultation was that the requirement for time-based mandatory terms was too rigid and is unsupported by the evidence.

The standard requires evidence of satisfactory performance under supervision in the following:

- A term of at least eight weeks that provides experience in emergency medical care. This term must provide experience under close supervision in the assessment and management of patients with acute undifferentiated illnesses, including assessment and management of acutely ill patients. This is a term in emergency medicine or in general practices accredited for intern training by an authority approved by the Board and assessed as providing sufficient exposure to emergency medicine.
  - A term of at least 10 weeks that provides experience in medicine. This term must provide experience under supervision in caring for patients who have a broad range of medical conditions and opportunities for the intern to participate in the assessment and admission of patients with acute medical problems; the management of in-patients with a range of general medical conditions; discharge planning, including preparation of a discharge summary and other components of handover to a general practitioner or a subacute or long term care facility, or ambulatory care.
  - A term of at least 10 weeks that provides experience in surgery. This term must provide experience under supervision in caring for patients who have a broad range of acute and elective surgical conditions and/or who exhibit the common features of surgical illness including the metabolic response to trauma, infection, shock, and neoplasia.
  - A range of other approved positions to make up 12 months (minimum of 47 weeks full time equivalent service). These terms provide experience in additional areas such as but not limited to aged care, anaesthesia, general practice, medicine, palliative medicine, psychiatry, rehabilitation medicine and surgery.
- All terms must be accredited against approved accreditation standards for intern training positions by an authority approved by the Board.

Further guidance on terms is provided in the *Intern training – Guidelines for terms*, which states:

*“These guidelines are not prescriptive about the training setting. They recognise a need for greater flexibility in the location and nature of clinical experience offered during the intern year, particularly experience outside major hospitals. Interns may undertake their work-based clinical experience across a number of settings, even within a specific term. The Australian Medical Council (AMC) also acknowledges that as models of care evolve and change, intern training will evolve and change in response. These guidelines support innovation in defining clinical experiences in diverse health settings, while maintaining the quality of the clinical experience”.*

This guideline is important in recognising the scope for flexibility and innovation in the system while maintaining the quality of the clinical experience. It is clear, however, that the time requirement for medical, surgical and emergency care terms in the current standard limits this scope for flexibility.

In moving to define mandatory capabilities and performance, it is likely these will be able to be achieved across a range of terms, regardless of whether they are medical or surgical. Capabilities such as recognition of the deteriorating patient, the ability to work in teams, to communicate with patients and to understand the importance of high quality documentation are not reliant upon the clinical setting.

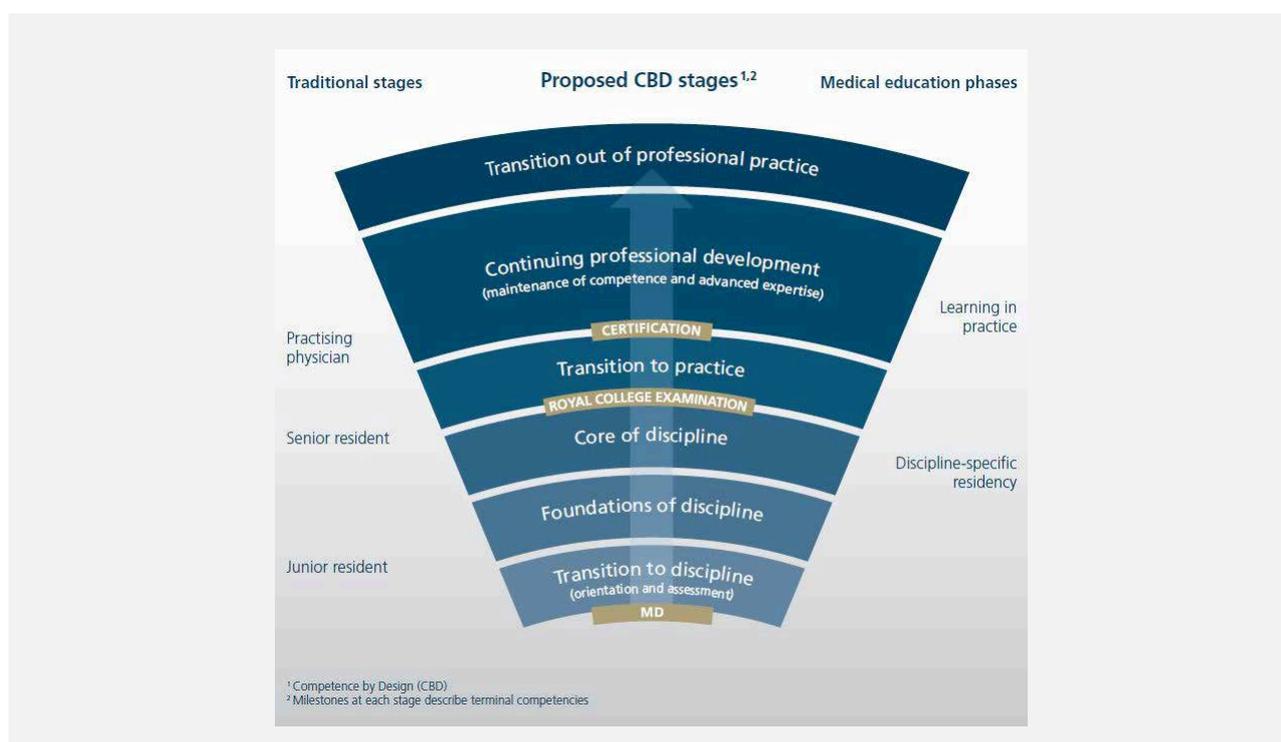
We consider that it is still highly desirable for the transition to practice period to include a breadth of exposure, as terms in medicine, surgery and emergency care can provide. However, the question of how much time should be spent in these clinical areas becomes less about the time needed to acquire specific capabilities than about understanding broadly the care of medical, surgical and emergency patients. Moreover, under our preferred two year model there is less need for all three terms to occur in the first year or for all of any required period in a mandatory term to occur in that year.

We recommend that the rigidity in the intern registration standard should be about the quality of the training experience and ensuring safety, rather than on time served in particular specialities.

#### 7.4 Mandatory capabilities and performance

In moving to a model based on capabilities and performance, a range of work in Australia and overseas can inform the process. The Canadian CanMEDs framework and 2014 Milestones Guide provide good conceptual models for setting out competencies within domains of practice, at progressive levels of achievement. Figure F illustrates the CanMEDs ‘competence continuum’, which is used to describe milestones of performance at each stage through residency training.

**Figure F: CanMEDS Competence Continuum<sup>56</sup>**



We have discussed how entrustable professional activities can be used to integrate diverse and interdependent competencies within global descriptors of work, thereby making the translation of theoretical competencies meaningful in a clinical setting.

We recommend that the Medical Board of Australia, in close consultation with jurisdictions, employers and others, specify the capabilities and performance required to meet the general registration standard. We suggest these could take the form of EPAs, which should be limited in number and should provide an indication of the settings in which they can be acquired.

### **7.5 Flexible term lengths**

Our options paper proposed reducing the number and thereby increasing the length of prevocational terms. There is debate about the optimum length of a prevocational term, with many in our consultation pointing out the potential for productivity and learning benefits from longer terms and doctors in training raising valid concerns that longer terms may not automatically improve the learning experience or supervision. The limited available evidence suggests better learning outcomes from

longer terms, but does not provide substantial evidence of a minimum or maximum.

The current MBA intern standard, aside from the three mandatory terms, in fact allows for flexibility in term lengths. We do not recommend that the revised standard should set a benchmark. Our view is that there should be an appropriate balance between productivity and learning and that it is the quality of the learning experience, rather than the length of the term that is important, therefore adding another element of rigidity in the system may not improve the situation.

## Preparing for different futures

Improving the current training system and moving to a new transition to practice model will necessarily involve a staged approach over time. Some sequencing of activities should occur, where necessary, to define changes and validate their benefits before more widespread adoption.

Table 4 sets out objectives for changing the current system and an example of some primary and secondary enablers we consider necessary to achieve them. It also highlights where some pilots or testing of changes, as proof of concept, may be useful, though this would not be needed for all.

**Table 4: Objectives and enablers for change**

Objective	Primary Enablers	Secondary Enablers	Proof of concept
Align internship with societal health needs	<ul style="list-style-type: none"> <li>■ Provide exposure to the range of healthcare settings, to inform career choice</li> <li>■ Ensure mix/distribution of positions aligns with locations / specialties of workforce need</li> </ul>	<ul style="list-style-type: none"> <li>■ Broaden intern exposure within public health system, e.g. community/ outpatients</li> <li>■ Continue support for internships in private/ non-government facilities</li> <li>■ Support GP placements by designating a targeted workforce program under the <i>Health Insurance Act 1973</i></li> <li>■ Establish formal career planning, commencing at medical school</li> <li>■ Disseminate data on workforce demand / supply by specialty</li> </ul>	
Ensure the internship better reflects the modern health system context	<ul style="list-style-type: none"> <li>■ Provide exposure to the modern practice of medicine across a range of care contexts, including the full patient journey</li> </ul>	<ul style="list-style-type: none"> <li>■ Broaden intern exposure within the public health system, e.g. community / outpatient services</li> <li>■ Continue support for internships in private/ non-government facilities</li> <li>■ Support GP placements by designating a targeted workforce program under the <i>Health Insurance Act 1973</i></li> </ul>	
Improve assessment	<ul style="list-style-type: none"> <li>■ Define the Entrustable Professional Activities interns should achieve over their training.</li> </ul>	<ul style="list-style-type: none"> <li>■ Create assessment tools tailored to use with EPAs, including tools for multi-source feedback</li> <li>■ Identify or develop training resources suitable for intern supervisors / assessors</li> </ul>	<ul style="list-style-type: none"> <li>■ Pilot a range of assessment models based on EPAs</li> </ul>
Improve the learning experience	<ul style="list-style-type: none"> <li>■ Identify requirement for learning resources to support trainees and supervisors</li> <li>■ Develop tools to enable more learner control over the process</li> </ul>	<ul style="list-style-type: none"> <li>■ Identify or develop training resources suitable for intern supervisors / assessors</li> <li>■ Identify requirements for e-portfolio and assess against available tools</li> </ul>	<ul style="list-style-type: none"> <li>■ One/two states to adopt e-portfolio</li> </ul>
Improve work readiness	<ul style="list-style-type: none"> <li>■ Define employer expectations of work readiness</li> <li>■ Agree the certification process to demonstrate that work readiness expectations are met</li> </ul>	<ul style="list-style-type: none"> <li>■ Define EPAs that graduates need to demonstrate by time of graduation</li> </ul>	<ul style="list-style-type: none"> <li>■ Test ability to achieve EPAs in different medical programs/ settings</li> </ul>

Objective	Primary Enablers	Secondary Enablers	Proof of concept
Continuous quality improvement	<ul style="list-style-type: none"> <li>Scope/specification for national training survey and other performance indicators to be collected</li> </ul>	<ul style="list-style-type: none"> <li>Identify possible existing data sources, providers, resource implications and funding models to support ongoing performance monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Pilot introduction of training survey prior to full roll out</li> </ul>
Improving governance	<ul style="list-style-type: none"> <li>Identify collaborative governance arrangements for implementation</li> <li>Identify governance for certifying completion of transition to practice training</li> </ul>	<ul style="list-style-type: none"> <li>Partnerships in place to support better outcomes from final year medical school placements</li> <li>Identify accreditation requirements for moving to different models of internship, including Model D</li> </ul>	

## 8.1 Governance

Current governance arrangements for the internship, outlined in Figure G, demonstrate the many players involved directly and indirectly in the internship.

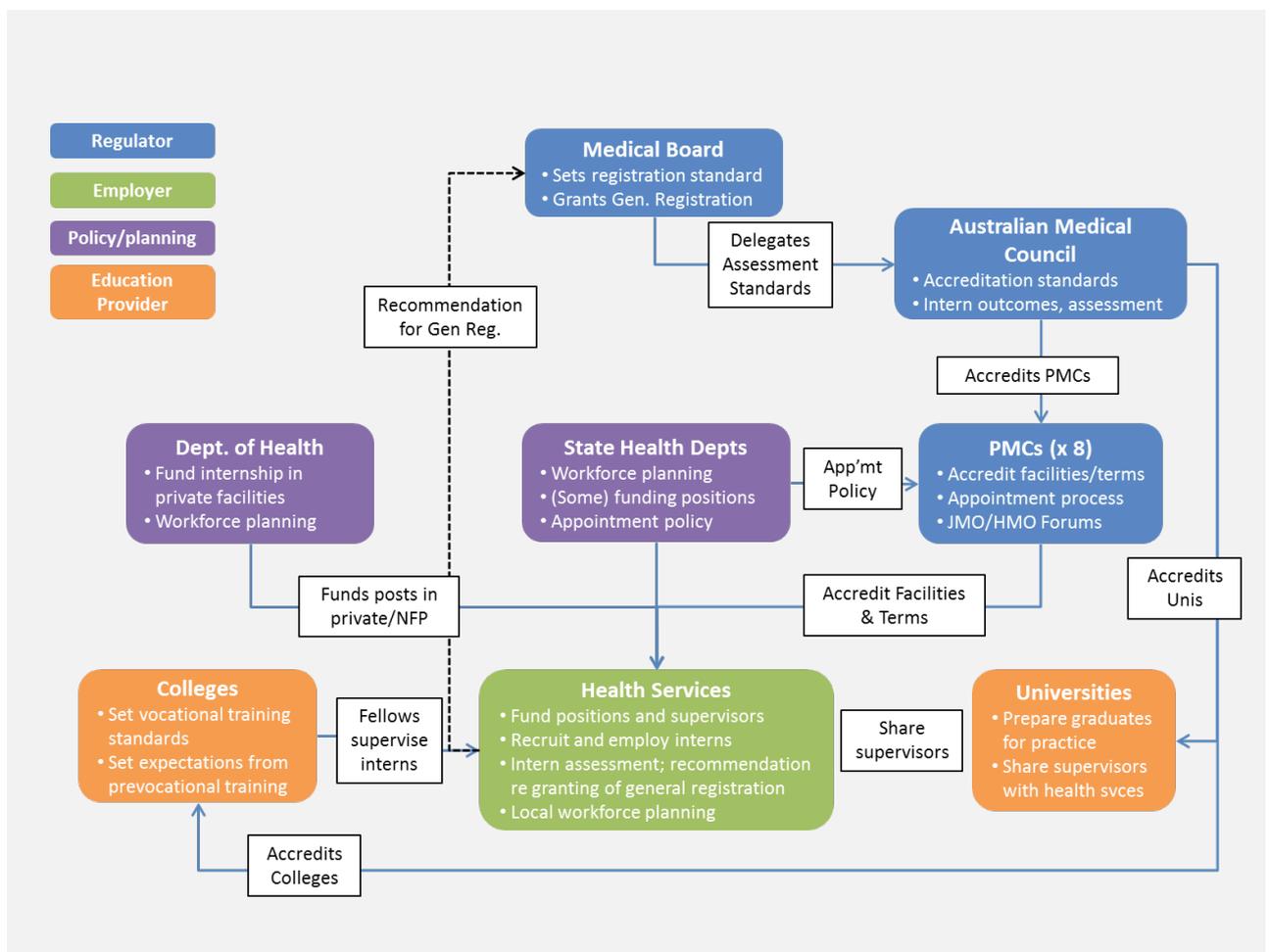
This is perhaps reflective of its loosely defined purpose and the incremental development of increasing formality and structure over time:

- It is a work-based year, but has educational elements;

- It has broad expected learning outcomes but no curriculum;
- It has national outcomes and standards, but state-based bodies responsible for accreditation

Since the introduction of the National Registration and Accreditation Scheme in 2010, there has been a progressive development of national standards for the internship, including outcome statements, assessment forms and accreditation requirements for postgraduate medical councils.

**Figure G: Organisations involved in internship**



While recommendations on governance are outside the scope of this Review, it is useful to raise a number of matters that should be considered with regard to governance of the implementation process and ongoing oversight of the internship itself:

- While our consultation reinforced that the internship is a period of work-place learning rather than formal education, it is clear that better definition of the learning outcomes is required and that resources should be in place to ensure these are achieved.
- Moving to a more robust model will therefore need development, testing and implementation of some educational resources. An organisation or collaboration of organisations should be charged with developing these resources, preferably at a national level.
- There is also a need to provide faculty development for supervisors and assessors involved in intern training, particularly if moving to competency assessment. This may be a time-limited requirement and could be embedded within existing organisations as appropriate.
- The preferred approach of a two-year model is based on a certificate of completion, in addition to the award of general registration issued by the Medical Board of Australia. It is important that the certificate is meaningful for the individual and others such as employers or Colleges. For example, the certificate of completion could constitute evidence of meeting selection criteria for further employment or entry into training. It would be desirable for this to be nationally consistent, in the same way that general registration is now. We therefore consider the Australian Medical Council best placed to manage this certification process.
- Our devolved model of governance means that the implementation process will require very

strong partnerships and collaboration between all stakeholders. At a national level, this will particularly be the case between the Medical Board of Australia, Australian Medical Council, jurisdictions and Colleges. At a state level, strong partnerships will need to be in place between public and private health services, postgraduate medical councils and universities.

## 8.2 Energising and supporting change

There are a range of areas where evidence will be required to support the change process. In our consultation on the options paper, we flagged a number of data and evidence gaps, which were broadly supported, with some additional suggestions.

We also flagged some potential pilot projects. Some observed, however that there is a prevalence of pilots in this field that never progress to more wide scale implementation. Therefore, it was suggested that recommendations should focus as much as possible on systemic changes, with pilots only occurring where necessary to prepare for this systemic change.

We agree with this but also think there is a need to stimulate the identification of need for and benefits of change at a local (or regional) level and start change in ways that are sustainable (see section 6.2.7). There is considerable variability in health service models around Australia and change in service delivery models and medical education and training models is occurring in different ways and at different rates reflecting that variation. The available resources both to identify and support change also vary substantively across some of the locations.

Table 5 sets out some areas where we suggest evidence gathering or development work.

**Table 5: Evidence and development**

Data/evidence gap	Research or Development work
<ul style="list-style-type: none"> <li>■ What are the economic costs and benefits of changes proposed in this Review? Will these changes lead to a more sustainable health workforce and better patient outcomes?</li> <li>■ What is the service contribution of interns to patient care?</li> </ul>	<ul style="list-style-type: none"> <li>■ Cost-benefit analysis, including assessment of how this will improve design and utilisation of intern year to deliver workforce and patient outcomes.</li> <li>■ Analysis of estimated intern service contribution in a range of settings, quantified in dollar terms.</li> </ul>
<ul style="list-style-type: none"> <li>■ What capabilities and performance should be developed in initial the transition to practice?</li> <li>■ How do these align with graduate outcomes, College entry requirements and/or curricula? In which settings can they be acquired?</li> <li>■ What recognition do College programs provide for general skills/experience?</li> </ul>	<ul style="list-style-type: none"> <li>■ Specify capabilities and performance possibly in the form of EPAs.</li> <li>■ Map capabilities to university outcomes, College requirements and the settings in which they can be acquired.</li> <li>■ Map College criteria – skills, time, rotations, and analysis of similarities and differences.</li> </ul>

Data/evidence gap	Research or Development work
<ul style="list-style-type: none"> <li>■ What are employers' expectations of work-readiness? Do graduates meet these expectations?</li> <li>■ How well prepared for internship do graduates feel at the end of medical school?</li> </ul>	<ul style="list-style-type: none"> <li>■ Define work-readiness and requirements for how this will be certified.</li> <li>■ Development of specification for national training survey on graduate confidence and preparedness for internship.</li> </ul>
<ul style="list-style-type: none"> <li>■ What are the best and most resource efficient models for capability assessment?</li> </ul>	<ul style="list-style-type: none"> <li>■ Test validity, rigour and resource implications of workplace models for assessing EPAs.</li> <li>■ Evaluate different models across a number of sites/ settings to identify the best model for system wide implementation.</li> </ul>
<ul style="list-style-type: none"> <li>■ Is it possible to certify final year medical students to reach the requirements of general registration?</li> </ul>	<ul style="list-style-type: none"> <li>■ Test the ability to achieve requirements in different medical programs and health service settings.</li> </ul>
<ul style="list-style-type: none"> <li>■ How can an e-portfolio best support the learning and assessment process?</li> </ul>	<ul style="list-style-type: none"> <li>■ Evaluate existing Australian and NZ e-portfolios for fitness-for-purpose.</li> <li>■ Implement and evaluate in at least one large site.</li> </ul>
<ul style="list-style-type: none"> <li>■ How is the system performing and what areas require improvement?</li> </ul>	<ul style="list-style-type: none"> <li>■ Specify indicators of performance and identify requirements for collection and monitoring.</li> <li>■ Specify and trial a training survey to collect trainee evaluation data on their experience.</li> </ul>
<ul style="list-style-type: none"> <li>■ What measures can be taken to ensure models of care support education functions and patient care?</li> </ul>	<ul style="list-style-type: none"> <li>■ Test the capacity to introduce or refine models of care that cater for both service and education needs and contribute to safe, and/or improved patient care.</li> </ul>

### 8.3 Development of common tools

We have discussed some learning tools that we consider valuable and relevant to this Review. The use of an e-portfolio has been introduced in New Zealand and has benefits for the learner and for the system in enabling a portfolio assessment process that takes into account the progressive learning of the intern, rather than assessing each term in relative isolation.

Another tool worth showcasing is the NSW Map My Health Career website, which provides doctors in training with clear, useful information about careers in medicine and key information about each specialty such as working hours, length of training, entry requirements and the level of demand.

There have been a number of successful national programs to promote collaborative changes in models of care starting with the National Demonstration Hospitals Program from the early 1990s, the Breakthrough Collaboratives in general practice and the National Health Partnership. Particularly in the hospital sector, these have achieved major changes in the models of care. The experience of these programs could be used to inform a similar approach to roll out changes in transition to practice training based on current and future pilots.

## Map My Health Career – New South Wales

### Background

NSW Health developed the Map My Health Career website to support the decision making process of medical students and junior doctors in their choice of specialty. An online career planning tool was developed which provides information and interactive resources to aid medical students and junior doctors in career decision making.

Research was undertaken which identified a lack of credible, centralised and easily accessible information regarding the specialty choices available and the implications of the choice.

### Objectives

- To deliver, in one centralised resource, the key information that helps junior doctors choose their specialty.
- To highlight the possibility of undertaking specialist training and subsequent practice outside of metropolitan Sydney and in undersubscribed specialties.
- To deliver the information effectively to the key audience of junior doctors and medical students and to the secondary audience of Directors of Pre-Vocational Education and Training.

### Description of Tool

The tool was designed to be an online hub that is an engagement point for junior doctors and medical students in NSW and to supply them with information regarding the study and work implications of their chosen specialty, career pathways and links to other information sources.

The resource is targeted to the very specific key audience of junior doctors and medical students and so has a demographic specific look and feel, high specification interactivity, targeted branding and full functionality available on hand held devices.

The resource delivers information via a range of media including video and it is proposed to add live streaming with social media interactivity of relevant information events.

### Expected Benefits

- ✓ Increased interest by junior doctors and medical students in the less well publicised and under-subscribed specialties.
- ✓ Increased interest by junior doctors and medical students to train and practice outside of metropolitan Sydney.
- ✓ More confident and informed counselling by Directors of Pre-Vocational Education and Training of Junior Medical Officers through the provision of information on the website

## 8.4 Timeframes for change

As with all reform processes, the timeframes for implementation need careful consideration. Progressing too slowly runs the risk of losing momentum and disenfranchising stakeholders who do not see any visible signs of change. Equally, making sudden, bold changes can create unintended consequences for those currently in the training system, particularly if the system is not ready for that degree of change.

Our terms of reference require us to provide advice on:

- Immediate changes that should be made;
  - Changes to be implemented within a 2-5 year timeframe;
  - Changes that would require greater than 5 years to implement;
- We see a natural progression of activities that should occur to reform the system and have therefore provided a suggested timeframe for each recommendation. We have taken immediate to mean a 1-2 year timeframe as some recommendations will require a development or specification phase prior to implementation.

## 8.5 Phase Two implementation

This Review was originally established in two phases; an initial review to assess the need for reform and make recommendations for change and a subsequent phase to enable further consideration of the impact of recommendations, including upstream and downstream effects and the approach to implementation. It was also intended that options for international full fee paying students could be considered within the context of the recommendations.

Throughout this report we have signalled issues with specific upstream and downstream impacts. A number of our recommendations clearly rely upon active participation and involvement of universities and specialist medical colleges in the change process.

Universities will need to actively participate in the process to define expectations of work readiness and agree on how these would be certified. They will have interest in and resources to support clinicians who teach and supervise students and interns, particularly as many pointed out that the same individuals often do both. There are specific implications of moving to a transition to practice model commencing in the final year of medical school and we have suggested assessing the feasibility of certifying final year medical students against the requirements for general registration. We have also made some suggestions regarding internship for international fee paying students.

Specialist medical colleges will have an interest in the concept of a two-year model, both in terms of alignment with their current expectations of capability and experience on entry and its relationship to the current entry points into

vocational training. We have suggested the two year model should have a certificate of completion that would constitute an eligibility criterion for entry into vocational training. We have also suggested there would be benefits to be gained from consistency in the timing of entry into vocational training.

We recognise there will be a need to further consider the impacts of specific recommendations; however we also consider it important that implementation of some recommendations starts immediately; particularly where these are to be achieved within 1-2 years.

We have noted the many organisations with interest and involvement in prevocational training, many of whom will have roles and responsibilities in implementation. It will be essential that governance arrangements for this are strong and effective. These could either be established as Phase Two of the review or alternatively a more ongoing oversight process for implementation, rather than a discrete phase of further analysis and consultation.

The latter would enable holistic monitoring of the various strands of research and development activity that will need to occur over time to inform, validate and monitor the change process. We note that the New Zealand Medical Council applied a project management approach to implementing the recommendations of its internship review. This involved strong governance arrangements, defined scopes of work for each activity and continuity in key staff across the different strands of implementation. Governance arrangements in Australia are clearly very different, however a project management approach may be useful to consider here.

### Recommendations

7. That the following research and development activities occur to support the change process:
  - a. Identification of requirements for, and possible approaches to a national training survey to capture ongoing performance data, within 1-2 years.
  - b. Identification of other relevant data indicators, and implementation of these, to support ongoing monitoring and evaluation of the change process, within 1-2 years.
  - c. Provision of dedicated, time-limited support for local innovation initiatives that have the potential to create sustainable improvements in the training experience, within 2-5 years.

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## A Review Terms of Reference

### Background

Australia has a high quality and well trained medical workforce.

Over the last twenty five years there have been significant and rapid advances in the treatment of acute and chronic medical conditions, changes in how and where health services are delivered and evolving healthcare and population needs.

There have also been changes in university based medical training including a significant expansion in the number of medical schools. In 1988 there were nine medical schools all offering undergraduate entry courses. In 2014 there are eighteen Australian Medical Council (AMC) accredited medical schools in Australia. The first graduate entry medical training program in Australia commenced in 1996 and in 2011 the University of Melbourne became the first Australian university to offer the primary medical qualification at a Master Degree level.

There have also been changes in regulation including implementation of the National Accreditation and Registration Scheme (NRAS) in 2010 and changes to the Health Insurance Act 1973. To be eligible to receive a Medicare provider number with access to the Medicare Benefits Schedule, doctors must complete a program of postgraduate vocational training (specialty or general practice) after internship.

Despite these significant changes in the healthcare environment, undergraduate medical training and regulation there have been minimal changes in how or where interns are trained in Australia over this timeframe.

Completion of a medical internship is a requirement for a medical graduate of an Australian Medical Council (AMC) accredited medical school to gain general registration. The Medical Board of Australia registration standard for Granting general registration as a medical practitioner to Australian and New Zealand medical graduates on completion of intern training states that "Internship is a period of mandatory supervised general clinical experience. It allows medical graduates to consolidate and apply clinical knowledge and skills while taking increasing responsibility for the provision of safe, high quality patient care. Diagnostic skills, communication skills,

management skills, including therapeutic and procedural skills, and professionalism are developed under appropriate supervision.

Internship also informs career choices for many graduates by providing experience in different medical specialities including general practice, and providing a grounding for subsequent vocational (specialist) training. Completion of internship leads to general registration. General registration indicates that the practitioner has the skills, knowledge and experience to work as a safe entry level medical practitioners able to practise within the limits of their training."

Australian medical schools enrol domestic and international full fee paying students. Since 2007 there has been a significant increase in the number of domestic and international students graduating from Australian medical schools. At the 14 July 2006 Council of Australian Governments (COAG) meeting States and Territories guaranteed intern training for Commonwealth funded medical students.

### Purpose of the Review

The purpose of the Review is to examine the current medical internship model and consider potential reforms to support medical graduate transition into practice and further training and to ensure that the workforce continues to be well trained, fit for purpose and is equipped to meet the changing health needs of the Australian population.

### Scope of the Review

The scope of the Review will focus on medical intern training in Australia, particularly:

1. The purpose of internship and whether the current model remains valid and fit for purpose.
2. The effectiveness of the internship year in producing doctors with appropriate skills and competencies to meet national health care needs and support generalist practice
3. The role of internship in supporting career decision making by doctors
4. Models to support expansion of intern training settings.

Medical internship is one part of the medical training continuum. While the Review will not examine university medical training or vocational training it is acknowledged that changes in internship may have implications for other parts of the training continuum and these must be considered in developing recommendations. It is acknowledged that all the issues are interrelated and cannot be considered in isolation however key changes will need to be identified that will drive other changes in the system.

The Review will be undertaken in two Phases. Phase One will develop recommendations and Phase Two will consider the impacts of the Phase One recommendations on other parts of the training system and training options for international full fee paying students in the context of the recommendations for change. Therefore, Phase Two requires the development of a project plan following the recommendations of Phase One. It is expected that a project plan outlining the work to be undertaken in Phase Two will be developed by Health Workforce Principal Committee (HWPC) for AHMAC approval.

In developing recommendations Phase 1 of the Review will provide advice on:

- any immediate changes that should be made;
- Changes to be implemented within a 2-5 year timeframe;
- Changes that would require greater than 5 years to implement; and
- Which recommendations may have implications for other parts of the medical training system and need to be further considered in Phase Two.

## **Issues and themes to be considered by the Review of Medical Internship Training**

### **1. Purpose of internship**

The Review is to consider the purpose of internship and whether the current model remains valid and fit for purpose.

There is currently only one pathway for medical graduates of Australian Medical Council (AMC) accredited medical schools to obtain general registration. Medical graduates must complete internship before being eligible for general registration. While undertaking internship doctors are granted provisional registration by the Medical Board of Australia (MBA). This is in contrast to other health professions, such as nursing, when upon completion of the university health professional course the graduate is eligible for general registration.

In countries such as the USA and Canada there is no internship but medical graduates instead enter a residency training program directly after completion of university medical education.

Twenty five years ago in Australia there was no mandatory requirement to undertake vocational training in general practice before commencing as a general practitioner and after completion of the intern year doctors were able to start practising as general practitioners. However in 2014 after completing internship doctors are required to undertake further postgraduate training to be able to work as an independent medical practitioner and be eligible to receive a Medicare provider number with access to the Medicare Benefits Schedule.

Twenty five years ago all medical programs were undergraduate entry. Since this time a number of graduate entry programs have been established and more recently a number of universities are offering the primary medical qualification at a Master Degree level.

The Review will provide advice and make recommendations on:

- Whether the current internship model continues to be fit for purpose and if not, the changes required to ensure it continues to be fit for purpose.
- How internship supports transition from medical school to practice and if internship provides a grounding for vocational training.
- The need to have a discrete period of internship before entry into vocational training, alternative internship options and alternative pathways to general registration operating concurrently for medical graduates of AMC accredited medical schools.
- The impact of replacing the bachelor medical degree program with master degree qualification on internship requirements.
- Opportunities for reducing the total length of medical training by changing internship.

### **2. The effectiveness of the internship year in producing doctors with appropriate skills and competencies to meet national health care needs and support generalist practice**

The review will consider if internship produces doctors with the appropriate skills and competencies to meet the changing health needs of the Australian population and whether it supports doctors to undertake generalist practice as they progress in their career.

Interns must satisfactorily complete 47 weeks of practice, including 8 weeks of emergency medicine, 10 weeks of surgery and 10 weeks of medicine to be eligible for general registration. The Review will consider the rationale for intern requirements and how these align with and support current healthcare models.

Currently doctors complete an internship and a second postgraduate year before entering vocational (speciality) practice. These are termed prevocational years and are considered to be 'generalist' as the doctor undertakes a range of different rotations rather than specialising in one area. However, despite this generalist experience as an intern there is increasing subspecialisation and a decrease in generalist practice as a doctor progresses further in their career.

The Review will provide advice and make recommendations on:

- The effectiveness of internship in producing doctors to meet the changing health needs of the Australian population
- The effectiveness of internship in supporting ongoing generalist practice

### **3. The role of internship in supporting career decision making by doctors**

The registration standard states that internship also informs career choices for many graduates by providing experience in different medical specialities including general practice, and providing a grounding for subsequent vocational (specialist) training.

The Review will provide advice and make recommendations on:

- How effective internship is in supporting career decision making by junior doctors
- Changes to internship to further support career decision making

### **4. Models to support expansion of training settings**

More than half of all health services are delivered outside of public hospitals but the majority of internships are currently undertaken in the public health sector. The Review is to consider funding models to support further expansion of intern training in other settings, including private and community settings.

At the 2013 National Medical Intern Summit a significant majority of participants agreed that a broad range of settings including general practice, community and private hospitals should be used to prepare medical graduates for practice.

The Review will provide advice and make recommendations on:

- Models to support expansion of training settings.

# Project Plan

## Background

Over the last twenty five years there have been significant and rapid advances in the treatment of acute and chronic medical conditions, changes in how and where health services are delivered and evolving healthcare and population needs.

There have also been changes in university based medical training including a significant expansion in the number of medical schools, a move to graduate entry medical training and more recently, the introduction of primary medical qualifications at a doctoral level.

There have also been changes in regulation including implementation of the National Accreditation and Registration Scheme (NRAS) in 2010 and changes to the *Health Insurance Act 1973*, which require completion of further postgraduate vocational training (specialty or general practice) after internship in order to be eligible to access the Medicare Benefits Schedule.

Despite these significant changes, there have been minimal changes in how or where interns are trained in Australia over this timeframe.

Completion of a medical internship is a requirement for all medical graduates of Australian Medical Council (AMC) accredited medical schools to gain general registration. General registration “*indicates that the practitioner has the skills, knowledge and experience to work as a safe entry level medical practitioners able to practise within the limits of their training.*”

The Medical Board of Australia (MBA) intern registration standard states that internship allows graduates to consolidate and apply clinical knowledge and skills and to develop diagnostic, communication, management skills and professionalism. It also states that internship informs career choices by providing experience in different medical specialties.

The Review of Medical Intern Training has been commissioned by the Council of Australian Governments (COAG) Health Council to examine the current medical internship model and consider potential reforms to support medical graduate transition into practice and further training.

## Purpose and Scope

The purpose of the Review is to examine the current medical internship model and consider potential reforms to support medical graduate transition into practice and further training and to ensure that the workforce continues to be well trained, fit for purpose and equipped to meet the changing health needs of the population.

The Review will focus on medical intern training in Australia, particularly:

1. The purpose of internship and whether the current model remains valid and fit for purpose.
2. The effectiveness of the internship year in producing doctors with appropriate skills and competencies to meet national health care needs and support generalist practice.
3. The role of internship in supporting career decision making by doctors.
4. Models to support expansion of intern training settings.

A number of matters fall outside of the scope of the review:

- The Review will not examine university medical training or vocational training. However it is acknowledged that medical internship is one part of the medical training continuum and that changes to internship may have implications for other parts of that continuum, which will be considered in developing recommendations
- The Review will not examine the appropriateness of the number of medical graduates from Australian universities or the number of intern training places.
- It will not consider the current COAG guarantee of intern positions for Commonwealth-supported graduates nor the priority or manner in which appointment to intern positions is made across the country.

In developing recommendations Phase 1 of the Review will provide advice on:

- Any immediate changes that should be made;
- Changes to be implemented within a 2-5 year timeframe;
- Changes that would require greater than 5 years to implement; and
- Which recommendations may have implications for other parts of the medical training system and need to be further considered in Phase Two.

### Independent Reviewers

Professor Andrew Wilson and Dr Anne-Marie Feyer have been appointed by AHMAC as Co-Reviewers to lead the review of Medical Intern Training.

#### Professor Andrew Wilson

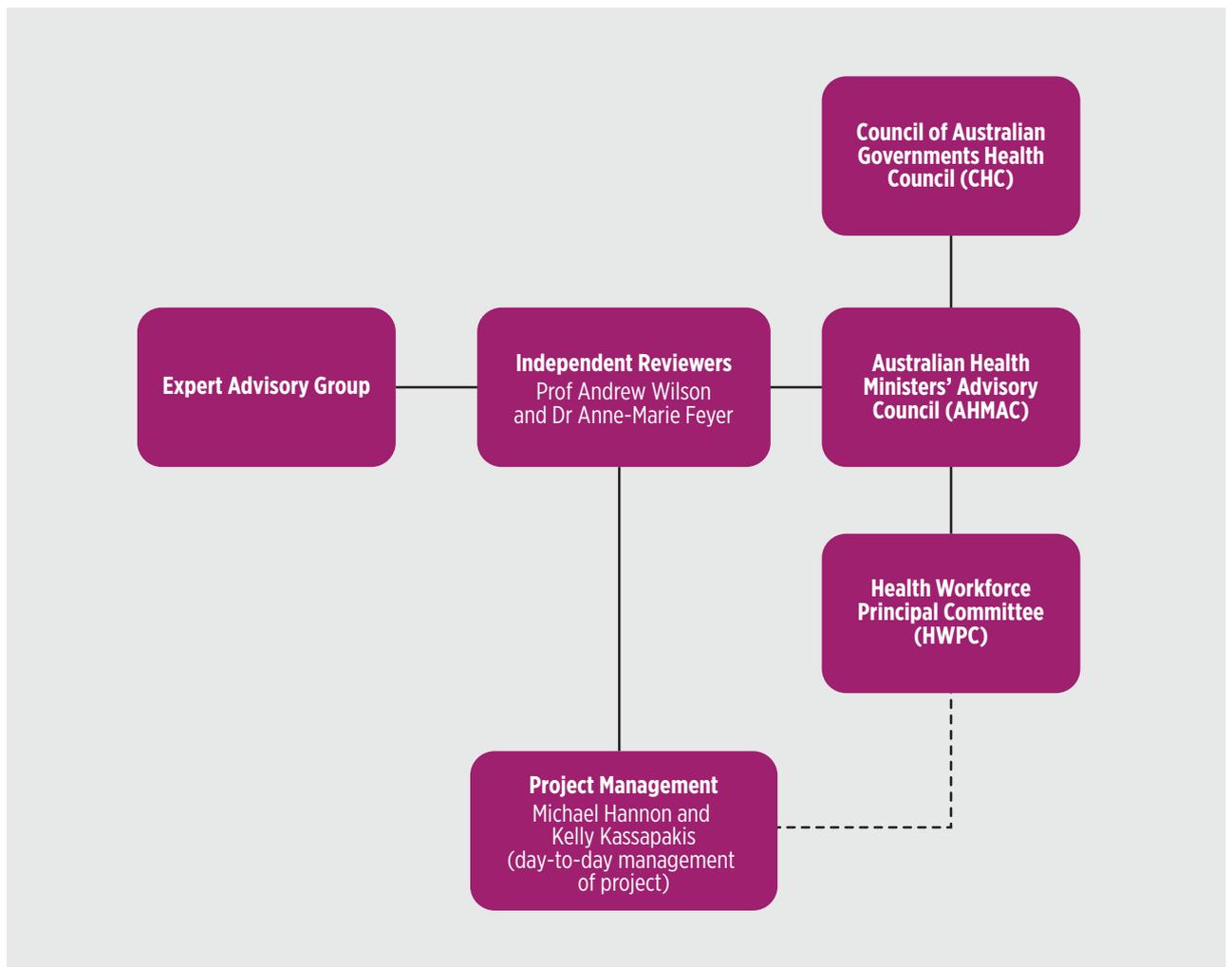
Professor Andrew Wilson is Director of the Menzies Centre for Health Policy at the University of Sydney. His past appointments include Chief Health Officer and Deputy Director General Public Health, NSW

Health; Deputy Director General Policy, Strategy and Resourcing, Queensland Health; Executive Dean, Faculty of Health, Queensland University of Technology; Professor of Public Health, and Deputy Head of the School of Population Health, and Deputy Dean and Director of Research, Faculty of Health Sciences, University of Queensland.

#### Dr Anne-Marie Feyer

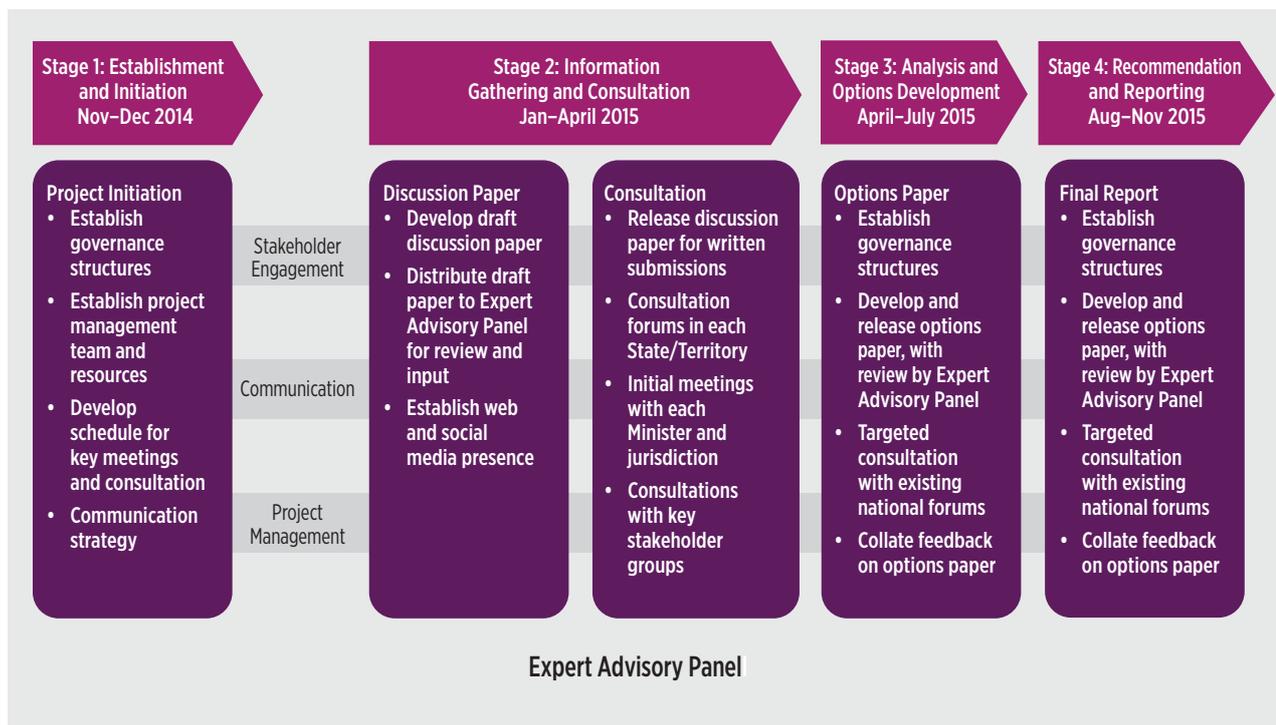
Dr Anne Marie Feyer has more than 25 years' experience in public health research and policy, with extensive experience providing strategic as well as specialist technical advice to government and industry. Her career has spanned senior academic and private sector roles, including a range of senior advisory posts, working closely with policy makers and service providers on a range issues. Most recently, Dr Feyer led the evaluation of the NSW Health Chronic Disease Management Program, and provided technical expertise in the development of the NSW Integrated Care Initiative and Strategy recently launched by the NSW Minister for Health.

## Governance



## Project Plan

The National Medical Internship Training Review is expected to occur over a period of twelve months.



## Deliverables

Description	Stage	Responsible	Planned date (approx.)
Project Initiation	1	Review Team	December 2014
Develop Draft and Release Final Discussion Paper	2	Independent Reviewers / Review Team <i>Input from Expert Advisory Panel</i>	Mid February 2015 (release)
Consultation	2	Independent Reviewers / Review Team	January 2015 – April 2015
<ul style="list-style-type: none"> <li>■ Consultation forums in each State and Territory.</li> <li>■ Consultation with key stakeholders.</li> <li>■ Written submissions</li> </ul>			March 2015 Ongoing
Analyse written submissions and feedback from consultations	3	Review Team	End March 2015 – Mid April 2015
Develop and Release Options Paper	3	Independent Reviewers / Review Team <i>Input from Expert Advisory Panel</i>	April – May 2015 End May 2015 (release)
Targeted consultation on options paper	3	Independent Reviewers / Review Team	June-July 2015
Collate options paper feedback	3	Project team	July 2015
Develop the final report	4	Independent Reviewers / Review Team <i>Input from Expert Advisory Panel</i>	July – August 2015 Draft final report by end August 2015
Draft Final report submitted to AHMAC October meeting.	4	Independent Reviewers / Review Team	Submit during September for October 2015 meeting
Incorporate feedback from AHMAC and Final Report to be presented to COAG Health Council at November meeting.	4	Independent Reviewers / Review Team	November 2015

## Jurisdiction Consultation Schedule

State/ Territory	Location	Dates and Times
NSW	Sydney	Forum 1: Monday 2 March, 10.00 - 12.00 Forum 2: Thursday 5 March, 10.00 - 12.00
VIC	Melbourne	Forum 1: Tuesday 03 March, 10.30 - 12.30 Forum 2: Tuesday 03 March, 14.00 - 16.00
TAS	Hobart	Wednesday 04 March, 10.00 - 12.00
WA	Perth	Monday 09 March, 10.00 - 12.00
SA	Adelaide	Tuesday 10 March, 14:00 - 16:00
QLD	Brisbane	Monday 16 March, 10.30 - 12.30
	Townsville	Tuesday 17 March, 10.00 - 12.00
NT	Darwin	Wednesday 18 March, 10.00 - 12.00
ACT	Canberra	Tuesday, 24 March, 10.00 -12.00

## Communications Plan

### Website

The Review will use the COAG Health Council website, which can provide a dedicated page for the project. While the functionality of the page has limitations, it can include links to key documents, updates on current status, contact details for interested parties to register for information on the project.

Limitations of the website include that it cannot host discussion forums/threads. The Review team will identify alternative options for this functionality if required for the project.

### Social Media

The Review will establish a social media presence to communicate updates and progress of the review to a wider target audience and to provide the ability for individuals to target specific questions or inputs to particular groups of stakeholders, e.g. medical students or junior doctors. Twitter is proposed as the main social media platform.

## Stakeholder communications

A complete stakeholder list is provided in Appendix A, which includes key groups/forums of those stakeholders. An initial approach to communication across different categories of stakeholders is provided below.

Target Audience	Objective	Method	Timing / Frequency
<b>Jurisdictions</b>	<ul style="list-style-type: none"> <li>Update on progress</li> <li>Seek input on discussion and options papers; draft final report</li> <li>Feedback on proposed approach</li> <li>Possible access to data</li> </ul>	<ul style="list-style-type: none"> <li>Meetings with Ministers/ Secretaries</li> <li>HWPC and HWPC reference group meetings</li> <li>State/Territory Forums</li> <li>Newsletter; Web page</li> </ul>	<ul style="list-style-type: none"> <li>Updates per HWPC schedule</li> <li>Forums in March 2015; targeted consultation in June/July</li> <li>Newsletters over course of project</li> </ul>
<b>Employers</b>	<ul style="list-style-type: none"> <li>Awareness of review and update on progress</li> <li>Seek input on key issues / and potential options</li> <li>Canvass potential changes</li> </ul>	<ul style="list-style-type: none"> <li>Consultation on discussion paper</li> <li>State/Territory Forums</li> <li>Newsletter; Web page; database</li> <li><i>Input through EAP</i></li> </ul>	<ul style="list-style-type: none"> <li>Forums in March 2015,</li> <li>Targeted consultation as required</li> <li>Newsletters over course of project</li> </ul>
<b>Medical Students and junior doctors</b>	<ul style="list-style-type: none"> <li>Awareness of review and update on progress</li> <li>Seek input on key issues / and potential options</li> <li>Canvass potential change</li> </ul>	<ul style="list-style-type: none"> <li>Social Media (Twitter) Updates</li> <li>Committee (AMSA) meetings</li> <li>Invites to consultation Forums</li> <li>Potential focus groups</li> <li>Newsletter / E-mail / Web</li> </ul>	<ul style="list-style-type: none"> <li>Meeting with AMSA and National Council conference</li> <li>Forums in March 2015</li> <li>Newsletters over project</li> </ul>
<b>Regulatory Bodies</b>	<ul style="list-style-type: none"> <li>Update on progress</li> <li>Seek input on discussion and options papers; draft final report</li> <li>Canvass potential change</li> </ul>	<ul style="list-style-type: none"> <li>Targeted consultations throughout the process</li> <li>Meet with key committees</li> <li>Newsletter / E-mail / Web</li> </ul>	<ul style="list-style-type: none"> <li>Attending key meetings Feb-March 2015,</li> <li>targeted consultation Jun/Jul</li> <li>Newsletters over course of project</li> </ul>
<b>Universities</b>	<ul style="list-style-type: none"> <li>Update on progress</li> <li>Seek input on key issues / and potential options</li> <li>Medical student input if/as required</li> </ul>	<ul style="list-style-type: none"> <li>Meet with existing forums</li> <li>Consultation Forums</li> <li>Newsletter / E-mail / Web</li> </ul>	<ul style="list-style-type: none"> <li>MDANZ meeting visit.</li> <li>Forums in March 2015, targeted consultation Jun/Jul</li> <li>Newsletters over course of project</li> </ul>
<b>Specialist Medical Colleges</b>	<ul style="list-style-type: none"> <li>Awareness of review and update on progress</li> <li>Seek input on key issues / and potential options</li> <li>Input on specific content</li> </ul>	<ul style="list-style-type: none"> <li>Meet with existing forums</li> <li>Newsletter E-mail / Web</li> </ul>	<ul style="list-style-type: none"> <li>CPMC meeting March 15</li> <li>Targeted consultation through project</li> <li>Newsletters</li> </ul>
<b>Postgraduate Medical Councils</b>	<ul style="list-style-type: none"> <li>Update on progress</li> <li>Seek input on key issues / and potential options</li> <li>JMO awareness and input</li> </ul>	<ul style="list-style-type: none"> <li>Meet with forums</li> <li>Consultation Forums</li> <li>Newsletter / E-mail / Web</li> </ul>	<ul style="list-style-type: none"> <li>CPMEC meeting 13 March</li> <li>Updates on webpage and through newsletters</li> </ul>
<b>Unions</b>	<ul style="list-style-type: none"> <li>Update on progress</li> <li>Seek input on key issues / and potential options</li> </ul>	<ul style="list-style-type: none"> <li>Seek submission on discussion paper</li> <li>Potential to meet as a group</li> <li>Newsletter/Email/Web</li> </ul>	

## Stakeholder List

The following table identifies the range of stakeholders with a potential interest and influence in medical intern training, to guide the consultation process for the Review.

Stakeholder Category	Stakeholders	Umbrella organisations/meetings
Jurisdictions	<ul style="list-style-type: none"> <li>■ Health Ministers-state/territory/commonwealth</li> <li>■ Secretaries/Director-Generals-state/territory/commonwealth</li> <li>■ Health Departments- Workforce Policy Branches</li> </ul>	<ul style="list-style-type: none"> <li>■ COAG Health Council (CHC)</li> <li>■ Australian Health Ministers' Advisory Council (AHMAC)</li> <li>■ Health Workforce Principal Committee (HWPC)</li> </ul>
Regulation and accreditation	<ul style="list-style-type: none"> <li>■ Medical Board of Australia(MBA)</li> <li>■ Australian Health Practitioners Regulation Agency(AHPRA)</li> <li>■ Australian Medical Council</li> <li>■ NSW Health Education &amp; Training Institute (HETI)</li> <li>■ Northern Territory Postgraduate Medical Council</li> <li>■ Postgraduate Medical Council of Queensland</li> <li>■ South Australian Medical Education and Training;</li> <li>■ Postgraduate Medical Education Council of Tasmania</li> <li>■ Postgraduate Medical Council of Victoria</li> <li>■ Postgraduate Medical Council of Western Australia;</li> <li>■ Canberra Region Prevocational Management Committee</li> </ul>	<ul style="list-style-type: none"> <li>■ Confederation of Postgraduate Medical Education Councils (CPMEC)</li> </ul>
Employers	<ul style="list-style-type: none"> <li>■ Public health services/networks/districts</li> <li>■ Private hospitals</li> </ul>	<ul style="list-style-type: none"> <li>■ Senior Executive Forums</li> <li>■ Australian Private Hospital Association</li> <li>■ Catholic Health Australia</li> </ul>
Intern Managers	<ul style="list-style-type: none"> <li>■ Directors of Medical services</li> <li>■ Directors of Prevocational Education &amp; Training/DCT</li> <li>■ JMO Managers or equivalent</li> </ul>	
Universities with medical schools	<p>Vice-Chancellors and Medical Deans</p> <ul style="list-style-type: none"> <li>■ <b>ACT:</b> ANU</li> <li>■ <b>NSW:</b> Newcastle/UNE, Notre Dame, UNSW, Sydney, Western Sydney, Wollongong</li> <li>■ <b>NT:</b> Flinders</li> <li>■ <b>QLD:</b> Bond, Griffith, James Cook, Queensland</li> <li>■ <b>SA:</b> Adelaide; Flinders</li> <li>■ <b>TAS:</b> Tasmania</li> <li>■ <b>VIC:</b> Deakin, Melbourne, Monash</li> <li>■ <b>WA:</b> UWA, Notre Dame</li> </ul>	<ul style="list-style-type: none"> <li>■ Medical Deans Australia and New Zealand</li> <li>■ Universities Australia</li> </ul>
Junior medical officers	<ul style="list-style-type: none"> <li>■ Interns</li> <li>■ Residents/house officer</li> <li>■ Other doctors in training</li> </ul>	<ul style="list-style-type: none"> <li>■ AMA Council Doctors-in-Training</li> <li>■ Each College has a trainee committee</li> <li>■ ANZJMOC</li> <li>■ PMC JMO Forums – e.g. NSW HETI has PGY1/2 reps from each training network; QLD – 30 reps selected by CV submission</li> </ul>

Stakeholder Category	Stakeholders	Umbrella organisations/meetings
Postgraduate medical training	<p>AMC accredited medical colleges</p> <ul style="list-style-type: none"> <li>■ Australasian College of Dermatologists</li> <li>■ Australasian College for Emergency Medicine</li> <li>■ Australasian College of Sports Physicians</li> <li>■ Australian college of Rural &amp; Remote Medicine</li> <li>■ Australian and New Zealand College of Anaesthetists</li> <li>■ Royal Australian College of Medical administrators</li> <li>■ Royal Australasian College of Physicians</li> <li>■ Royal Australasian College of Surgeons</li> <li>■ Royal Australian College of General Practitioners</li> <li>■ Royal Australian and New Zealand College of Obstetricians and Gynaecologists</li> <li>■ Royal Australian and New Zealand College of Ophthalmologists</li> <li>■ Royal Australian and New Zealand College of Psychiatrists</li> <li>■ Royal Australian and New Zealand College of Radiologists</li> <li>■ Royal College of Pathologists of Australasia</li> <li>■ General Practice training:</li> <li>■ Regional Training Providers</li> </ul>	<ul style="list-style-type: none"> <li>■ Committee of Presidents of Medical Colleges (CPMC)</li> </ul>
Medical students	<p>Domestic students:</p> <ul style="list-style-type: none"> <li>■ Commonwealth Supported</li> <li>■ Full Fee paying</li> <li>■ Bonded Medical places Scheme(BMPS)</li> <li>■ Medical Rural bonded Scholarship Scheme</li> </ul> <p>International full fee paying students</p>	<ul style="list-style-type: none"> <li>■ Australian Medical Students' Association(AMSA)</li> <li>■ Each medical school has its own Medical Student Society</li> </ul>
Medical Industrial / Representative Organisations		<ul style="list-style-type: none"> <li>■ Australian Medical Association</li> <li>■ Australian Salaried Medical Officers' Federation</li> <li>■ Australian Indigenous Doctors' Association</li> <li>■ Rural Doctors Association of Australia</li> </ul>
Health consumers		<ul style="list-style-type: none"> <li>■ Consumers Health Forum of Australia</li> </ul>
Rural Health Workforce Agencies		<ul style="list-style-type: none"> <li>■ Rural Doctors Network</li> <li>■ Rural Workforce Agency Victoria</li> <li>■ Rural Doctors Workforce Agency (SA)</li> <li>■ Health Workforce Queensland</li> <li>■ Rural Health West</li> </ul>
Other health professionals	<ul style="list-style-type: none"> <li>■ Nursing</li> <li>■ Allied health</li> </ul>	<ul style="list-style-type: none"> <li>■ Chief Nursing &amp; Midwifery Officer national forum</li> <li>■ Chief Allied Health Officer national forums</li> </ul>
Other		<ul style="list-style-type: none"> <li>■ National Medical Training Advisory Network (NMTAN)</li> </ul>

## List of Expert Advisory Panel Members

Mr Adrian Anthony

Associate Professor Victoria Brazil

Professor Richard Doherty

Dr Joanna Flynn

Professor Annemarie Hennessy

Dr Rob Mitchell

Dr Brendan Murphy

Professor Richard Murray

Professor Paddy Phillips

Dr Andrew Singer

Dr Michael Walsh

## List of stakeholder meetings and submissions

### Phase 2: Information Gathering Jan – April 2015

#### Discussion Paper

- Develop draft discussion paper
- Develop draft paper to Expert Advisory Panel for review and input
- Establish web and social media presence

#### Consultation

- Release discussion paper for written submissions
- Consultation forums in each State / Territory
- Initial meetings with each Minister and jurisdiction
- Consultations with key stakeholder groups

Date	Discussion Paper Consultation Meeting
Tuesday, 13 January 2015 (Teleconference)	Department of Health & Families, Northern Territory
Thursday 12 February 2015 (Teleconference)	Department of Health & Human Services, Victoria
Tuesday 17 February 2015	National Medical Training Advisory Network
Wednesday 18 February 2015 (Teleconference)	Medical Board Australia
Wednesday 18 February 2015	Australian Medical Student Ass'n
Thursday 19 February 2015	Committee of Presidents of Medical Colleges
Thursday 19 February 2015	Australian Medical Council
Saturday 21 February and Sunday 22 February 2015	Australian Medical Association – Council of Doctors In Training
Monday 2 March 2015	New South Wales Forum Session 1
Tuesday 3 March 2015	Victoria Forum Sessions 1 & 2
Wednesday 4 March 2015	Tasmania Forum Session
Wednesday 4 March 2015	Department of Health and Human Services, Tasmania
Thursday 5 March 2015	New South Wales Forum Session 2
Monday 9 March 2015	Western Australia Session Forum
Tuesday 10 March 2015	South Australia Forum Session
Wednesday 11 March 2015	South Australian Health
Friday 13 March 2015	Confederation of Postgraduate Medical Education Councils
Sunday 15 March 2015	Australian Medical Students Ass'n
Monday 16 March 2015	The Department of Health, Qld
Monday 16 March 2015	Queensland Forum Session 1 (Brisbane)
Tuesday 17 March 2015	Queensland Forum Session 2 (Townsville)
Wednesday 18 March 2015	Northern Territory Forum Session
Thursday 19 March 2015 (Teleconference)	Royal Australasian College of Medical Administrators
Monday 23 March 2015 (Teleconference)	Medical Deans Australia & New Zealand
Tuesday 24 March 2015	Department of Health, Canberra
Tuesday 24 March 2015	Australian Capital Territory Health
Tuesday 24 March 2015	ACT & Commonwealth forum
Thursday 26 March 2015 (Teleconference)	Consumer Health Forum
Tuesday 31 March 2015	Australian Private Hospital Association and Catholic Health Australia
Friday 10 April 2015	Department of Health, Canberra
Tuesday 28 April 2015 (Teleconference)	Australian Indigenous Doctors Association

## Discussion Paper Submissions (Organisations/Individuals)

- Alfred Health
- Austin Health
- Australian & New Zealand College of Anaesthetists
- Australian College of Rural & Remote Medicine
- Australian Commission on Safety and Quality in Health Care
- Australian Indigenous Doctors Association
- Australian Medical Association (NSW) and ASMOF Alliance
- Australian Medical Association (SA) Doctors in Training Committee
- Australian Medical Association Doctors in Training
- Australian Medical Association QLD
- Australian Medical Council
- Australian Medical Students Association
- Australian Private Hospitals Association
- Canberra Region Medical Education Council
- Charles Sturt University
- Commonwealth Department of Health
- Confederation of Postgraduate Medical Education Councils
- Consumer Health Forum of Australia
- Dr Benjamin Veness
- Dr Beth Mah
- Dr Bob Worswick
- Dr David Everett
- Dr Diana C S Khursandi
- Dr John Olsen
- Dr Marcus Handmer
- Dr Rob Pearlman
- Dr Sue Morey and Dr John Best
- Dr Susannah Ahern
- Epworth HealthCare
- Flinders University
- Health Education Training Institute
- HealthCare Consumers Association
- Health Education and Training Institute NSW Junior Medical Officer Forum
- La Trobe University
- Medical Council of New Zealand
- Medical Deans Australia & New Zealand
- Medical Student Council of Victoria
- Northern Territory Medical Education and Training Centre (METC)
- NSW Medical Students Council
- NSW Ministry of Health
- Patient-Centred Medical Workforce Capability Project Team, UTAS-Launceston Clinical School, Melbourne Medical School, Monash-Eastern Health Clinical School and Flinders University
- Postgraduate Medical Council of Queensland Junior Medical Officer Forum
- Postgraduate Medical Council of Victoria
- Professor Brian Jolly
- Professor Kerry Goulston
- Professor Michael Hensley
- Professor Paul Worley
- Professor Randall Faull
- Professor Wendy Hu
- Queensland Medical Student Council
- Ramsay Health
- Royal Australasian College of Physicians
- Royal Australasian College of Surgeons
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists
- Royal Australian College of General Practitioners
- Rural Doctors Association of Victoria
- South Australia Health
- South Australia Salaried Medical Officers Association
- South Australian Medical Education and Training (SA MET) Health Advisory Council Accreditation Committee
- South Australian Medical Education and Training Health Advisory Council
- Southern GP Training
- St Vincent's Health Australia
- The Monash University Medical Society
- The Royal Australasian College of Medical Administrators
- The Royal College of Pathologists of Australasia
- University of Adelaide
- University of Melbourne Medical Student's Society
- University of Sydney
- University of Western Sydney Medical Student's Society
- Western NSW Local Health District

## Options Paper Consultation Meetings and Feedback

Phase 3: Collation and analysis  
April – July 2015

### Options Paper

- Collate and analyse written and oral submissions from consultation
- Develop and release options paper, with review by Expert Advisory Panel
- Targeted consultation with existing national forums
- Collate feedback on options paper

Date	Consultation Meeting
Tuesday 19 May 2015	National Medical Training Advisory Network
Saturday 13 June 2015	Australian Medical Association Doctors in Training
Monday 15 June 2015	Confederation of Postgraduate Medical Education Councils
Tuesday 16 June 2015	Australian Medical Council
Wednesday 24 June 2015 (Teleconference)	Medical Board Australia
Thursday 2 July 2015	Committee of Presidents of Medical Colleges
Saturday 4 July 2015	Australian Medical Students Association
Monday 13 July 2015 (Teleconference)	Medical Deans Australia & New Zealand
Tuesday 14 July 2015 (Teleconference)	Department of Health & Human Services, Victoria
Wednesday 15 July 2015 (Teleconference)	The Royal Australasian College of Medical Administrators
Friday 17 July 2015 (Teleconference)	NSW Health Education & Training Institute
Monday 20 July 2015	Australian Capital Territory Health
Monday 27 July 2015	The Royal Australasian College of Physicians

### Options Paper Feedback (Individual/Organisations)

- Australian Medical Association and Australian Medical Association Doctors in Training
- Australian Medical Student Association
- Committee of Presidents of Medical Colleges
- Confederation of Postgraduate Medical Education Councils
- Consumer Health Forum of Australia
- Department of Health (Commonwealth)
- Department of Health & Families, Northern Territory
- Department of Health & Human Services, Victoria
- Department of Health and Human Services, Tasmania
- Dr Fiona Tito Wheatland
- Health Education and Training Institute Junior Medical Officer Forum
- Dr Julie Ash
- Medical Board of Australia
- New South Wales Health Education and Training Institute
- NSW Ministry of Health
- South Australian Health
- South Australian Medical Education and Training Health Advisory Council
- South Australian Medical Education Training Health Advisory Council Doctors in Training Committee
- The Department of Health, Queensland
- The Royal Australasian College of Medical Administrators
- Western Australian Health (Postgraduate Medical Council WA)

## Other Consultations

### Hospital visits (Engaging with Doctors in Training in the workplace)

Date	Meeting
Wednesday 11 March 2015	Royal Adelaide Hospital
Tuesday 17 March 2015	Townsville Hospital
Thursday 14 May 2015	Westmead Hospital
Monday 20 July 2015	Canberra Hospital

### Minister Meetings

Date	Meeting
Tuesday 20 January 2015	NSW Health Minister The Hon. Jillian Skinner MP
Wednesday 4 March 2015	TAS Health Minister The Hon. Michael Ferguson MP
Monday 9 March 2015	WA Health Minister Dr Hon. Kim Hames MLA
Monday 13 April 2015	QLD Health Minister The Hon. Cameron Dick MP
Wednesday 15 April 2015	Commonwealth Health Minister The Hon. Sussan Ley MP

### Expert Advisory Panel Meetings

Date	Meeting
Thursday 5 February 2015	First Expert Advisory Panel Meeting
Monday 18 May 2015	Second Expert Advisory Panel Meeting
Thursday 6 August 2015	Final Expert Advisory Panel Meeting





