

RESPONSE TO THE

PROPOSED CHANGE TO RESIDENT
DOCTORS ROTATION DATES
FROM 2021

NEW ZEALAND RESIDENT DOCTORS' ASSOCIATION



JULY 8, 2020

Thank you for the opportunity to respond to the Consultation Document.

We have reviewed the proposal itself and the basis upon which the suggestion to change the dates relies. Any decision is only as good as the information upon which it relies and if that information is not accurate or misinterpreted, poor decisions can arise. The proposal is drafted in favour of change; our fear is that where the supporting information is inaccurate the brunt of negative consequences that could arise will be borne by our members. Thus, an evidence-based approach is favoured here so that in any outcome decided, consequences are addressed.

Changing the start dates of the RMO year is a significant decision for our hospital and primary care workforce. It impacts in the system as a whole, notwithstanding our pipeline production of trained doctors. Multiple parties and individuals feed into this system, meaning that clarity around drivers, impacts and unintended consequences is essential if we are to ensure we make the best decision.

Our members practice evidence-based medicine in daily clinical practice. As such, this requires a consistent framework upon which a methodical and timely deduction of a clinical presentation is necessary. All clinical decisions are based on weighted evidence, the best of which require time investments from a wide variety of populations. Hence, the overriding theme to our member's reactions were as thus; why the rush? The difference of opinion around the validity of some drivers is exacerbated by the lack of evidence to support many assertions made in the proposal.

The lack of clarity around mitigation strategies was a second theme, we consider to be a product of the speed with which the proposal is being pursued. We are unclear why, in the event of a change of the dates be agreed, it has to happen this year. In saying this we do not agree with the extent argued in the proposal that COVID impacts demand a change this year for reasons we will articulate below. If we are correct (that the covid impacts are overstated) then why could a change not be proposed for 2021/2022 when more time for consideration and clarification around transition arrangements are available? Have we canvassed all the evidence available for the best decision?

Although there is diversity of individual opinion, overall Resident Doctors are not in favour of shifting the dates as follows:

- Should the TI year change 65% said "NO"
- Should the HO year change 61% said "NO"
- Should the Registrar year change 58% said "NO"

NZRDA received over 600 individual comments and submissions on the proposal demonstrating breadth of opinion as well as the motivation for being for or against. The reasons traversed the impact on individuals personally through to the system as a whole. The following attempts to capture all the above, focusing on why people disagree with the proposal as would be expected.

The "rush" has precluded other alternatives from being fully explored by NZRDA as we have been unable to gather responses and reactions from members to alternatives, such as for instance one scoped on the basis of risk benefit analysis, splitting the registrar changeover dates from House Officers and Trainee Interns. In this scenario, an annual "gap" releasing house officers stepping up to become registrars could have material benefit which NZRDA is available to discuss should you wish and if further time for consideration is made available.

The one universally agreed benefit to the proposed shift in dates is better alignment to the school year. The proposed change would put the start of training year after the end of the school year (typically mid-December). This will reduce the disruption for the family of RMOs with school age children who are required to relocate to another DHB area as part of their training. This mainly impacts registrars, but not universally.

As for the issue of whether accommodation is easier to find before or after Christmas, the response across the entire population (TIs and RMOs) was very variable largely dependent on locality and infrastructural support (e.g. outgoing Resident Doctors "handing over" flats to incomers).

Executive Summary

- Whilst there was a diversity of opinion, the majority of Resident Doctors are not in favour of shifting the annual rotation dates;
- The majority of TIs oppose a change in start date, and there are significant financial impacts. Delayed Quarter 2 starts for new graduates is already an option and could be further formalised and developed;
- The impact of COVID-19 on Trainee Interns and Resident Doctors training is either overstated or unspecified. NZRDA would appreciate specific registrars training deficits to be identified. With months until the end of this year, could any that are be rectified in any event.
- The impact on FRACP Part-1 sitters is high of any change to the registrar year;
- There is a significant risk that the NZ RMO workforce leaves for Australia where the pay is higher, and hours of work are less;
- The apparent "rush" to make a decision is considered inappropriate by Resident Doctors. Concern exists that the "rush" has precluded sufficient information and clarity around a significant number of issues as well as appropriate evidence being adduced in support of, or to base many subjective assertions made in the proposal document. It has also precluded further options being raised and explored;
- If change is to be considered, it should be considered for 2021/2022.

Impact of COVID-19

We submit that the impact on COVID is overstated in the proposed document.

No one doctor's learning is the same as the next: with COVID although what we did changed in some respects, it was still valuable experience, just different.

In the case of TIs, they primarily stayed in the workplace and continued to learn. The statement in the overview that "reduced clinical exposure for Trainee Interns, including through temporary suspension of student placements in some DHBs" is at best misleading or overstated and at worst dated. The Trainee Interns remained in the workplace – other student placements were suspended. What temporary disruption might have occurred as this was "sorted out" was very limited indeed.

Furthermore the universities have confirmed that "the majority of TIs will graduate on time" indicating that COVID" disruption" is not so much a concern as to impact graduation. In the event of individuals missing out on some single events such as medical long cases, we have plenty of time to ensure catch up occurs in the upcoming months.

Some have commented that due to the reduction in non-acute activity the access to supervision and learning for TIs was greater than normal over the COVID period. For other Resident Doctors some also commented that their learning was improved, including in surgery where cases were still proceeding, and registrars had access to better supervised operating than they normally would.

Elective procedural access was diminished, but with catchup now underway, the ability to rectify this gap is readily available and should be facilitated regardless of whether we change the dates or not.

Both MCNZ and the colleges have confirmed they will be flexible with respect to any impact of Covid on trainees' progression and whilst the exam dates are being reset, progression through training programmes has not been disrupted with Trainees being granted interim progression whilst awaiting the new exam dates.

If the year was shifted, the disruption of changeover impacting new exam dates scheduled for the early new year could be significant and detrimental to the Resident Doctors affected and the training pipeline. This is in addition to the annual impact on one of our largest exams, the FRACP part 1 which we will return to.

If further impacts on training are known, they should be detailed by programme so we can make an informed assessment as to remediation or adjustment.

As for the impact of June changeover, the vast majority of Resident Doctors changed on time at quarter 3. Those affected in the Auckland region and very few affected in the Wellington region have not had any detrimental impacts noted. Registrars as the proposal notes were less affected by this than House Officers however MCNZ has already said what impact on the granting of general registration it might have will be marginal at best.

Trainee Interns and Supervision

We have always had delayed start TIs commencing in second quarter but there is no accurate data in the proposal on how many TIs might have a delayed start as a result of COVID-19. Indications are there will be very few in this category:

- The universities have confirmed that "the majority of TIs will graduate on time".
- Those TIs that will be delayed due to COVID are those who did not stay in the workplace for personal reasons largely related to health risk which the Universities assure us are around 10 in number.
- We note the CMC report the Universities stating to them that 10% of TIs might be delayed (we assume including those who would have been delayed in any event), however should this be the most we can expect, disadvantaging 90% of the TIs, is not justified.

There are some TIs who would like a break between medical school and commencing employment. This option is already available were they to elect a second quarter start and could be made more formally available for those who wish, for instance those with school age children for who the change in dates to better coincide with the school year is a benefit (N.B. for all with school age children, not just TIs).

The Trainee Interns feel poorly represented in the process with the consultation document, in the view of many, misrepresenting an early survey conducted by NZMSA. At that time as now the majority of the TIs surveyed by NZRDA did not wish to change the commencement date from November, largely due to financial considerations.

The Trainee Interns are also concerned that the impact on them not be used to affect more senior resident doctor's views on what might be a better option for them. This concern arises from the nature of the proposal that links all three changeovers (TI, House Officer and Registrar). NZRDA does not believe this linkage is necessary, however.

The need to travel between locations is an issue, primarily for Otago graduates. Auckland graduates have two weeks between medical school and commencing employment however Otago does not. It is noted that Auckland have more holidays overall than Otago so an answer here may lie in revisiting the Otago final year timetable.

The graduation issue is one which we accommodate and have for decades; it is an important event; one supported through cover and leave available to our new colleagues.

Whilst stating that there is "a common interest in not disadvantaging the current cohort of Trainee Interns" (and putting aside future cohorts for a moment) the financial impacts on the Trainee Interns would do exactly this. Yet the proposal sheds no light on how this might be ameliorated this year, let alone for future years. The suggestion that some assistance might be available for those facing "financial hardship" is insufficient. These people come out of medical school carrying huge debts; their entry into the workplace

starts their journey to repaying this and financial independence. As a result, it could reasonably be said they all face financial hardship.

NZRDA believes the real difference in earnings caused by a delay should be made up.

The absence of clarity around this essential question renders the ability of respondents to genuinely consider the proposal in totality and we suggest is immensely dismissive of the Trainee Interns. This cohort has a reasonable expectation of earning come November. The ACE process has had and continues to have published dates for a commencement of employment in November forming at the very least a promise upon which the TIs have a right to rely. We suggest this guarantee should not be dismissed, certainly not without a clear pathway for compensation being outlined.

For the Trainee Intern cohort, the issues of supervision and skills potentially declining in the gap period are without an evidence base and prompted differing but subjective views. On the supervision issue:

- The majority of clinical supervision for new graduates comes from House Officers and Registrars so we question the impact of SMO leave.
- Having said that, if the SMO supervision issue is a factor, SMOs take leave in January and February also (and in some specialties more than at Christmas) so may not be resolved by shifting the date.
- New graduates start the last week in November, 3 weeks before the Christmas shutdown or leave period.
- The quieter non elective period gives the TIs a quieter transition into practicing life which is seen as a benefit.

Some figures on the amount of leave being taken and not taken by SMOs over this period would have helped support the proposition assuming it is SMO supervision that is crucial (as opposed to House Officer and Registrar which NZRDA believes to be the case). However, this being said, we are sure MCNZ would note that at any time, SMOs are required to provide supervision and not abrogate that responsibility for leave or any other reason.

A decrease in practical skills over the break was also noted by trainee interns as a concern especially for those skills such as IV line insertion that require repetition to maintain them – this should not be an understated risk as it is a mainstay of the house officer's role, one only need to ask a registrar outside of Emergency Department, Anaesthetics, and ICU whether their IV skills are of a suitable standard. Indeed, a common request of the latter two departments is difficult access; a simple delay of several months may see an increased demand for an already stretched service.

Overall, the consideration of supervision and skills delivery appear to at the very least balance out and cannot be used as a basis for such a huge change without a more definitive evidence based assessment as to impact on patient outcomes. International evidence is limited in its usefulness in the New Zealand context due to the application of the Trainee Intern year. However, that aside, if there is an impact the casue of it is not necessarily clear. NZRDA would welcome further research into this factor from which to make a plan to mitigate any validated risk to patients that does exist as best we can.

Colleges

NZRDA was disappointed to observe that much of the college reasoning to support the change was due to internal administrative benefits. Whilst we support administrative ease, the same level of concern for the impact and wishes of the resident doctors was not as evident.

The RACP for instance have a significant issue that currently negatively affects Australian FRACP part 1 sitters and will NZ sitters if the change goes ahead; the date that exam is traditionally sat. However, despite being aware and receiving multiple approaches to change the dates, has not done so. It would be appropriate we believe that should colleges wish to support the change they look to how they can change their other systems to, if not further support the trainees, then at least remove negative impacts.

A significant number of Colleges did comment however that support for the proposition from the two unions would be "critical": we understand STONZ is neutral to the proposition, our members collectively oppose the change. It is reasonable to assert therefore that this "critical" element is not present.

Some colleges did go further to state *"it is important that every effort is made to ensure the RMOs are not disadvantaged during the transition period" (RANZCG) and at least one college (Psychiatry) also noted the need to ensure any proposal is not "hurriedly implemented" as such would particularly disadvantage the graduating cohort who have already had a challenging year."*

One thing that is notably absent from the College letters is confirmation of any, and if so what, impact on training may arise as a result of COVID. All the Colleges have stated that they will be flexible given the circumstances, however in the absence of specifics regarding what they may not be able to be flexible about which would therefore impact on training, we are precluded from even attempting to remediate. This is not fair on the registrars and in the absence of specifics, should not be used to advance a change in rotation dates without first the opportunity to address any specific concerns.

Furthermore the change to the June rotation was not supported by NZRDA (despite the attempt to imply it was in the TAS communication dated 17 April 2020, notably not signed by NZRDA for this very reason) nor by the evidence of a need to delay at that time. What delay did occur was restricted to Auckland and Wellington with the rest of NZ rotating on time. Given the Auckland (and to a lesser extent Wellington) made a deliberate decision to step outside the previous agreement and "norm", it behoves these DHBs to ensure any training deficit that might have arisen is made up to these registrars in the remaining time this year.

As for the 5 versus 6 months for the Auckland and Wellington registrars impacted, a literature search on the issue of time versus competency based training assessments performed in late 2019 (see Appendix 2) has concluded that "Using time-length to measure competence and/or skills has not been proven and hence should no longer be utilised in an evolving medical education curriculum." Therefore, we would challenge any assertion that is basing concerns solely around time served.

Access to Leave

The proposal states that a change will provide "increased opportunities for leave" a statement that was viewed very positively by those in favour of the change; so much so that for some at least, this promise was the most significant factor in attracting them to vote "yes". We would therefore like to have a more definitive guarantee that this will be the case.

We ask for this to ensure our members who have voted on the basis of this promise achieve that outcome, but also because we are not convinced the assertion is correct.

The paper has suggested (incorrectly in our view) that RMOs have to accrue leave. We say "incorrectly" as the RDA MECA provides for the 30 days in any leave year being made available. A provision to pay back leave taken if someone leaves early exists to balance fairness to the employer should someone take more leave in a period than is proportional to the annual allocation. Putting interpretation to one side however, TAS does agree that employers can allow Resident Doctors to anticipate leave (the pay back provision again removing financial risk for the employer). For whatever reason this is pragmatically how the DHBs have treated Resident Doctors access to annual leave for decades with the annual allocation becoming effectively available from day one; and for a very good reason we might add based on RMO well being.

Resident Doctors can transfer leave between employers so after the first year at least, leave balances are usually available to them. These two considerations lead us to the conclusion, availability of leave is not for the most part as a result of not having an entitlement available.

By contrast, our experience is that leave availability is due to two main factors: the demand for leave and the amount of cover which is available to enable people to take leave. The latter remains largely static, the former (demand) is the variable factor.

So, if demand for leave increases over Christmas, there will be less available given the DHBs ability to cover is finite. NZRDA is concerned the proposal will increase demand which will result in less RMOs being able to get leave in the new Quarter 4 (old quarter 1) than is currently the case:

- Time off in lieu of statutory holidays worked must be taken in the year they are earned and cannot be transferred. There are 4 statutory holidays over Christmas and New Year which many Resident Doctors will work and as a result become entitled to at least 4 days in lieu they will need to take before the end of (the new) quarter 4 if they are leaving that DHBs employ. Under the proposal far more Resident Doctors will be changing employer at the end of what will be quarter 4 (as opposed to currently the end of Quarter 1) and the demand to take entitled TOIL will have a higher impact on available leave cover.
- The FRACP exams will continue to be sat immediately after the new changeover dates. This will result in more pressure to take MEL as well as potentially leave to transfer between employers all hitting at the same time.

- If the GPEP programme continues as currently scheduled, we will also lose 180-200 resident doctors from our hospital system for the December through February period putting even further pressure on leave availability. In reply to questions on this impact TAS stated *"The DHBs can't speak to the details of the GPEP programme, however the general provision in the RDA MECA that supports House Officers who are resigning DHB employment to take up a Registrar position continues to apply."* which appears to suggest they agree with our concerns here.
- RMOs who are transferring DHBs at changeover and sitting part 1's may well resign before Xmas to have at least one month to use to study to ensure as full as possible preparation for the exam.

The proposal states that *"In combination with other rostering requirements – for example the limit on when first year House Officers can work night shift – this is likely to mean there is a more equitable basis for RMOs to take leave over this period and help manage risks around how Christmas/New Year clinical cover is provided."* The issue of nights relates to the number of nights being performed and cover available, not to who does them. If there are 30-night shifts to be covered in a quarter, we will have arrangements for 30 aliquots of cover. Whether 1st quarter when nights are performed by second years (first years do more weekends in compensation) or third quarter so first and second years participate equally, there are still only 30 nights and cover for those doing nights, regardless of "who" has to be provided. Leave cover is separate and in addition to cover for night shifts.

Australia

The overview correctly confirms that there have been discussions amongst a wide range of stakeholders over a long period of time about the pro's and con's of changing the changeover dates. However, it is wrong to suggest this is due to current arrangements not being optimal from a training, welfare and operational perspective. When formally considered, on both occasions the proposition to change the dates was rejected as not being in the interests of the NZ pipeline, training, RMO wellbeing nor security of our medical labour market.

NZRDA attends twice-yearly meetings with the combined Australian medical unions where the issue of increasing medical school outputs has been on the agenda since it started. The impacts on job security, number of positions available, workforce impacts as well as pressure on industrial environment have been reported on over that entire period. It is not without considerable basis therefore we make the following comments about the Australian market and potential impacts on NZ of aligning our dates to better fit theirs.

In separate correspondence, TAS noted that they did not believe *"making recruitment of RMOs from Australia simpler is identified as one of the main benefits of the proposal"*. However, TAS went on to comment that *"The change would mean Australian RMOs would be able to complete their rotations in Australia and move virtually seamlessly into the NZ DHB training environment. In light of the reality of increased domestic competition for training positions in Australia, and the likely reduced opportunities for overseas trained doctors (see Scott, The Future of the Medical Workforce, ANZ-Melbourne Institute, 2019), we think the most likely flow is into NZ, rather than loss..."* and also, state *"the closer alignment of training years between New Zealand and Australia would make recruitment from Australia easier for DHBs."*

If TAS is correct it would be unlikely given the trans-Tasman system, that Australians would not seek to advance training opportunities in NZ. This would not necessarily result in an increased production of NZ SMOs however as Australians might seek to return to Australia once vocationally registered.

Currently we have very few trans-Tasman rotations; those we do have are largely found in the surgical sub specialities such as paediatrics, urology, neurosurgery, vascular etc. and one medical we are aware of (Haematology). And most of these rotations consist of Australians coming here: in the 10 years to 2018 for example no NZ neurosurgical trainees have rotated to Australia, all these rotations have consisted of Australians coming here. Great for training Australians and controlled of course by Australian based colleges, but what of our workforce?

The impact of greater competition for training opportunities on our own citizens however needs further and careful consideration.

In reply to the question "What percentage of RMOs would benefit from aligning with Australian changeover dates for training purposes?" TAS stated

that "...15 Medical Colleges have indicated formal or informal support for the proposed change in rotation dates. Consequently, it's reasonable to infer the great majority of trainees would benefit from the change in the medium term."

Traditionally however, including since the increased output from Australian medical schools, there has been scant movement of Australian graduates into the NZ workplace. NZ has never had a nett inflow of Australians; even at our highest retention rates (circa 2012-2014) we still had a nett loss to Australia. This includes the NZ citizens who have been attending Australian medical schools. In 2017, we understood there were approximately 400 such NZ citizens at some stage of their university course, of which at least 250 would have graduated by now.

Appendix one identifies the range of rates in \$NZ for a 40-hour working week in Australia versus NZ. This clearly identifies a significant pay gap between the countries (45% on average) made worse when considering the Australian overtime rates are considerably higher than our system and other factors such as higher superannuation contributions. Anything which enables the flow of NZ doctors to Australia should therefore be considered in the context of better remuneration available in Australia.

Despite the suggestion that Scott's report indicated a likely flow of Australians into NZ, it does not suggest this at all. Instead it notes the increased number of placements being made available in Australia, especially in rural and primary care, as well as a reduction in hours being worked by Australian doctors as the increased output has occurred.

NZ Resident Doctors continue to locum in Australia and those that wish to have little difficulty in finding positions. Australia is attractive as it is a similar system to our own, equivalent regulatory recognition and as we say, higher rates of remuneration.

The above suggests that an assumption that there would be a positive Australia to NZ flow is unsound. At the very least better modelling needs to be provided to evidence the potential outcomes of removing what is currently an advantage to our labour market in securing our doctors in employment ahead of the Australian year.

The proposal states that *"Better alignment of the training years for Registrars in both Australia and New Zealand would improve the selection, assessment and examination timetabling."* however it is unclear how this would be affected. As far as the FRACP part 1 examinations, changing the dates would be a huge disadvantage leaving sitters facing changeover immediately before these critical examinations. From our Australian experience we can confirm our changeover dates are the envy of our equivalent FRACP counterparts there. This examination is one of the most stressful amongst a group of exams that all pose significant stress. But in their response to further clarification regarding how we would manage this impact TAS was unable to offer any assistance and stated "this is a concern of the Trainee's Committee and the need for ongoing involvement of trainees in such discussions on this issue is noted". Again, before making a decision that impacts many RMOs in such a disadvantageous manner, better clarity about how we are going to address this is essential.

In reply to the assertion that *"where an RMO is required to undertake a placement in Australia, the current difference of dates means that services effectively face planned gaps/vacancies which can be difficult to cover. The proposed training year dates will significantly reduce the impact of these situations on RMOs and on services."* we reiterate our point that there are very, very few of these rotations. However, finishing in December is not mandatory: NZ doctors can continue to work through until February if that is mutually agreed. However again, should they need time to move, surely during the quieter Christmas period, managing one vacancy on a roster should not cause that much stress: we certainly manage far greater vacancies at much busier times of the year.

The proposal states that *"In the longer term, a more consistent and a more aligned training year will mean selection and examination processes are consistent and will remove any perceived disadvantage or inequity based on timing."* Again, this statement is without basis and as we have already said ignores as just the one example the negative impacts on FRACP trainees rendering the statement on the face of it, incorrect.

We suspect the desire to attract Australians is best captured in the following statement in the proposal. *"In the context of current difficulties around international travel, and the unknown impact on recruitment of RMOs from overseas, making New Zealand a more practical option for Australian trainees is an appropriate workforce goal."*

We are aware that 25% of the NZ resident doctor workforce is made up of UK graduates often on temporary work visas.

This has for some time now been a very real risk to NZs essential workforce as it leaves us at the mercy of any international factor that might impact. From a GFC, to BREXIT, to a pandemic; these and potentially other factors outside our control impact heavily on our workforce. And to add to this we are using a quarter our training resources to train for another country.

Some years ago, it was identified that we needed 200 more medical school placements. If we were to achieve that outcome, these workforce risks the proposal is currently raising would not be a reality. We strongly urge the DHBs to join with us to push for 200 more medical school placements, if not to get us through tomorrow, then at least the day after.

As for tomorrow, if the TAS concern about the impact of losing our UK grads is realistic that in itself is an issue we should focus on. We note however that the UK grads work visa's have been extended until February which, should they take advantage of the opportunity to stay, might well resolve the immediate workforce gaps we could have faced.

Transition Issues

Should the decision be to change all three dates, NZRDA does not believe a decision as to what to do with the "gap" this year needs to be made nationally.

Having the same date is the factor which impacts nationally, not what the resident doctors in a specific DHB do if as a result of changing the date a "gap" period arises.

We believe there should be the ability to decided locally, DHB by DHB. There could be for instance, a difference between those Resident Doctors who were affected by a delayed June changeover (Auckland) as opposed to the Resident Doctors in the rest of NZ for whom the June changeover proceeded as normal. And what for instance South Canterbury and its Resident Doctors might decide with a predominantly house officer population could be entirely different, and for good reason, from Waitemata or any other DHB. Issues and how they will impact will be better able to be remediated the closer to the Resident Doctors who are affected, it is.

The mechanism by which Trainee Interns are compensated for loss of earnings needs to be clarified and on the basis of matching the loss that would have been earned (nett), not simply where someone's definition of hardship is applied. Nor would as rumour have it, the ability to incur higher levels of student debt than they already have be acceptable.

The issue of FRACP part 1 sitters and any other exam sitters for whom exams arise in the new year must also be actively managed to assist them have the best possible chance to pass and therefore continue to uphold our training pipelines.

For those resident doctors who wish to take leave during the additional 7 weeks created as a result of the delayed start dates, this must be facilitated.

Those Resident Doctors who face financial consequences of the decision to move the dates must also be recompensed on an actual and reasonable basis. This includes (but is not limited to):

- where rental agreements are fixed to a date,
- having to find temporary "gap" accommodation which could be more expensive and certainly will be if post move accommodation agreements are already signed,
- having to pay rental costs as well as a mortgage for an extended period (as a result of the previously agreed changeover days)
- having to travel back to spend Christmas with family etc.

Finally, with respect to the questions:

- Do you consider there are other requirements – professional, legal/regulatory or contractual – to make this change, including the effective extension of Q4 (for House Officers) or second half-year run for Registrars?
- If so, what are these requirements and how should they best be met?

Yes, we do! However, they are potentially different depending on which employment agreement is applicable. NZRDA is happy to discuss this further.

Appendix One

Australian and NZ Salary Rates @ 40 hours per week effective 2019-2020 In \$NZ

HOs	NSW	VIC	QLD	WA	SA	TAS	NT	ACT	NZ
Year 1	\$87,354	\$79,604	\$82,407	\$92,371	\$80,468	\$73,762	\$80,209	\$92,441	\$ 59,949
Year 2	\$96,079	\$89,274	\$89,274	\$101,607	\$77,936	\$93,003	\$92,441	\$101,408	\$ 64,896
Year 3	\$108,817	\$91,766	\$96,142	\$111,762	\$81,319	\$99,230	\$101,408	\$114,511	\$ 68,571
Year 4	\$118,134	\$96,142			\$87,858	\$105,242	\$114,511	\$124,086	\$ 72,242
						\$110,633			
Regis- trar									
Year 1	\$108,817	\$111,998		\$117,355	\$140,729	\$95,924	\$110,633	\$114,511	\$ 76,186
Year 2	\$118,134	\$119,031	\$118,462	\$123,224	\$146,565	\$101,816	\$115,963	\$124,086	\$ 80,273
Year 3	\$127,486	\$126,019	\$137,347	\$132,466	\$153,140	\$108,304	\$121,425	\$133,701	\$ 84,327
Year 4	\$136,467	\$133,030		\$139,089	\$160,413	\$113,862	\$127,023	\$143,076	\$ 88,409
Year 5	\$153,436	\$140,035		\$146,043	\$166,249		\$132,755	\$160,873	\$ 92,450
Year 6		\$148,442		\$153,346	\$175,002		\$138,622		\$111,059
Year 7			\$151,077	\$161,013	\$189,591		\$150,766		\$115,752
			\$166,480						

Appendix Two

Competency-Based Medical Education vs. Time-Based Medical Education Literature Review

November 2019

Background

Constant changes are happening regarding the training of healthcare professionals for better patient outcome and improved medical education. Medical colleges have been transitioning from traditional time-based medical education (TBME) to a more competency-based medical education (CBME) approach. TBME is where the progression of a learner depends on the amount of time spent learning a skill or competency. It carries the assumption that when trainees complete their rotations, they will have achieved mastery of key skills, attitudes and knowledge. Time spent in training, however, is not representative of the experience gained and can have a negative impact on trainee mental wellbeing due to time pressure and forcing an unhealthy work-life balance.¹ CBME has been implemented in many medical colleges due to its advantages of flexibility, drive towards self-determination, consistent effective feedback, greater accountability and its focus on outcome-based learning.² It removes time-restriction to allow trainees to progress through training depending on achieving and mastering key competencies and skills. *Frank et al* have proposed the definition for competency in the medical context to be:

"Competency-based education (CBE) is an approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from an analysis of societal and patient needs. It de-emphasizes time-based training and promises greater accountability, flexibility, and learner-centeredness".³

Many colleges in New Zealand have continued to integrate their curriculum with a variant CBME and traditional time-based medical education (TBME) which have continued to be barriers to residents in completing their runs / attachments. Although residents have completed their competency-based component, some have not succeeded in achieving the pre-determined time requirement. Competency-based, time-variant education programs instead focuses on providing continuous mentoring over the course of the program rather than in short periods of time. This is due to the elimination of the time restraint on trainees. Time becomes a resource to trainees, rather than a threat.

Medical Education Frameworks

Canadian Medical Education Directions for Specialists (CanMED) and the United States Accreditation Council for Graduate Medical Education (ACGME) are frameworks of core competencies to evaluate residents in training that have been adopted in Singapore, United Kingdom, and United States of America for a more competency based learning.⁴

The ACGME has selected and endorsed a set of competencies that define the skills every practicing physician should possess. It was developed as a way to evaluate the education of residents by measuring the physicians' ability to administer a high level of care to patients using milestones. CanMEDS framework also describes the abilities physicians need to meet the healthcare needs of patients and serves to improve patient care. CanMEDs initiative began by the Royal College of Physicians and Surgeons. The framework roles are collaborator, leader, health advocate, scholar, professional, and communicator (see **Appendix 1**). Both frameworks' competencies have been adopted by many medical colleges as a measure of performance for CBME.

Currently in New Zealand, New Zealand Curriculum Framework (NZCF) is followed for prevocational postgraduate medical training. This framework includes competencies that trainees are required to achieve during a predetermined time period. Postgraduate year 1 and 2 (PGY1 and PGY2) doctors have clinical attachments. PGY1 trainees have 4 attachments, each of which are 13 weeks in duration. Each attachment assesses 5 key competencies from NZCF (see **Appendix 1**). PGY1 trainees are required to complete a minimum of 10 weeks. Trainees working part-time need to ensure they work at least 20 hours per week for it to count towards the prevocational medical training requirements. Even though competency is assessed through the NZCF Framework, a time restriction has been implemented for each run. Integrated TBME in NZCF provides a lack of flexibility for doctors and makes no compromises. In some cases, it has found to be punitive and detrimental to career development.

Quality of Life and Burn Out of Trainees

TBME assessments have been linked to trainee decline of mental health, burn out, decreased quality of life due to increased work, study pressure and time restraint.⁵ Medical trainees and doctors have been subjected to increased workload, time pressure and stress which have led to a higher rate of burnout compared to the general population. Physicians are at a higher risk of depression, substance abuse and anxiety which also causes a decline in patient care overtime. A causal link between stress, quality of life and burn out has been established in a longitudinal study with UK doctors.⁶ Stressful work environments of medical professionals and students have been normalised historically and currently which further proves to be detrimental to the wellbeing of doctors.

High levels of perceived stress are common amongst medical students during training and evidence suggests that stress during training may result in psychological and emotional damage during their professional lives, which again, contributes to the quality of patient care. A qualitative study in the UK found that medical students perceived academic and work demands provided major sources of stress.⁷ The pressure of assessments and applying for residency placements also negatively affected quality of life perceptions.⁸ Transitioning from pre-clinical to clinical, then clinical to qualification was perceived to be challenging as students felt the lack of guidance from the medical school and on the academic and individual requirements were

major sources of stress. Students found that they are expected to have a professional persona and found the expectation of confidence and competence to contribute to stress.⁹

Competency-Based, Time-Variant Education

Even though CBME has been implemented in many medical colleges, a time component requirement remains. Competency based, time-variant education frameworks and assessments aim to alleviate time pressure and to offer flexibility to trainees who are finding it difficult to perform under the time restraint or require a longer period to develop competency.⁴ Time variability is defined as the "Institutional acceptance of the need to adapt the pace, intensity or duration of training to ensure that the progress of an individual occurs as soon as and only when they have mastered essential competencies".¹⁰ On the other hand, trainees who are considered competent before the end of their attachments would also have more time to learn aspects of other key competencies or progress to the next stage of training. CBME also encourages an individualised approach to learning that is applicable to workplace training. It drives trainees to be held accountable for their own learning pace which then promotes learner-centeredness rather than pass-centeredness. A supportive, stimulating work and study environment can influence the innate desire to learn and encourages learning capacity; otherwise known as self-determination.¹¹ Granting learners significant responsibility during delivery of care in a protected and supervised environment before they complete a postgraduate program creates a seamless transition into practice.¹² The transition period for residents have been found to be one of the more stressful times during their training.¹

An example of time variability and competence to ease the transition from undergraduate to postgraduate education is being conducted in the demonstration pilot program titled: Education in Paediatrics Across the Continuum (EPAC).^{13, 14} This is a four-institution (University of Minnesota Medical School, University of Colorado, Denver School of Medicine and University of Utah) pilot which is testing the feasibility of utilising ACGME core competencies and entrustable professional activities (EPA) as the foundation of time-variant advancement graduate transition rather than the foundation of time spent on learning.¹⁵ EPA is a unit of competency in context. It is entrusted to learners for unsupervised execution of tasks once they have demonstrated adequate performance and competence. It is critical in its use to allow trainees to work without direct supervision.¹⁶ The program is mainly for undergraduate students who are sure of specialising in postgraduate paediatrics education. Students enter this program in their 2nd year of medical school and finish when they have been entrusted to perform 13 EPAs when entering residency and completing other school-related graduation requirements. They will then move on to practice or fellowship after being entrusted to perform 17 paediatric EPAs without supervision. For the past few years, the pilot institutions have chosen 2-4 students to experience longitudinal education and training. Currently, at least 6 students have successfully transitioned to graduate medical education based on performance and demonstration of competence in a time-variable manner.¹⁵

Hirsh has recommended continuity as an organising principle of clinical education by moving from short rotations to longitudinal education. This is to facilitate better guidance, assessments, building of supervisor-trainee relationships to further enable the progression of learners.¹⁷ Looking into the effects of flexible working hours, a study has concluded that flexibility had no adverse effects on patient outcomes, satisfaction, education quality and overall patient wellbeing.¹⁸

Postgraduate medical training in the Netherlands, United States and Canada have recently been implementing a change into the direction of time-variant structure.¹⁴ The individualised, competency-based, time-variable training allows the length of training to be dependent on the needs of the individual learners. Rather than the pre-specified time durations as the foundation for making decisions regarding the progress through a program, performance as indicators of competence is measured.¹⁹ Traditional time-based programs assume that a specified duration of training leads to competence for everyone. However, time spent on mastery of a skill or competence will be based on the individual's needs. Individual variation in the time it takes to develop competencies may in part be explained by motivation and self-regulated learning ability.

The Royal College of Physicians and Surgeons of Canada (RCPSC) have launched their transformation of resident education across all specialties to a competency-based structure called Competency by Design (CBD) in 2017. This includes 29 speciality programs. The structure has stage-specific EPAs and milestones from the CanMEDS Framework 2015.²⁰ Milestones illustrate the expected progression from novice to mastery. It allows learners to monitor their own development which then aids to guide individual curriculum development. The CBD curriculum is organised around the expected outcomes of a trainee and advancement of trainees are dependent on achieving those outcomes. It is designed as a time-free system.²⁰ In other words, trainees advance from one stage to the next as soon as they have successfully achieved a set of competencies that is specific to their specialisation and stage of training. Time becomes a resource and guide rather than a measure of competence hence trainees progress through residency at different rates. Feedback and reflection of progress from both trainee and supervisor is an essential component to this curriculum. Direct and indirect observation of trainees is incorporated into work regularly to maintain a record of the observed performance.²⁰ Supervisors provide valuable feedback to enable trainees to evolve and improve performance. Trainees are given more flexibility and accountability of their learning as they are encouraged to plan their learning experience and progress in collaboration with their supervisor/mentor. All CBD programs have Competence Committees to approve the stage progression based on the documentation and records of observed performance and achievements of EPAs.¹⁶ The committee also provides a guideline for training activities to facilitate progression and identifies those who have not attained EPAs and/or milestones to arrange appropriate additional support. There isn't a focus on lengthening or shortening training; there is a focus on the growth of trainees to ensure readiness of transitioning to practice.

Three residency programs (anaesthesiology, paediatrics and ophthalmology) in the Netherlands have utilised the competency-based, time-variant approach to allow for flexibility among their trainees.²¹ Trainees progress once they have demonstrated mastery

of knowledge, skills and attitude using workplace-based assessments. Using the Dutch competency-based philosophy, cyclical training of residents is conducted where trainees gather evidence of their development in a portfolio. This process encourages regular reflection on development and performance regarding specific tasks which then is used to guide personal development, future learning goals and strategies.²¹ Time-variant medical education may pressure trainees to obtain competency quicker in a competitive manner; however, this program aims to reduce this possibility by starting residents at different times in staggered periods.¹¹ There are multiple entry and graduation dates to allow for this. The structure is customised as trainees are given an individualised introduction program by the department from 2-4 weeks of their entry start date. If trainee has already obtained various competencies in various levels, then their rotations may be reduced or altogether skipped when trainee meets prespecified exit criteria. They can also choose to use the extra time to work on other skills up until the next rotation commences. If trainees require more time, the program can be extended by 3-6 months. Since burn-out is high in the work-life balance of residents, adjusting training programs to improve work-life balance is not merely an option, it's a necessity.^{22, 23} Trainees in these programs are given an opportunity to develop in a chosen direction at a speed that is suited to their capacity and schedule.

Accelerated Medical Education

An acceleration of training has been observed by those undertaking the CBME assessment framework as those who are deemed competent are able to move forward with their training. Eight medical schools with a 3-year medical pathway programs came together to form CAMPP (Consortium of Accelerated Medical Pathway Programs) in 2015.²⁴ Individualised training is catered for students in CAMPP, taking into consideration their existing skills and experiences that are of valuable to current learning and training. The training focusses on what the trainee needs to further develop and encourages the utilisation of existing skills for improvement. The 8 medical schools are: McMaster University Michael G, DeGroot School of Medicine; Medical College of Wisconsin (MCW)–Green Bay and Central Campuses; Mercer University School of Medicine (MUSM); New York University (NYU) School of Medicine; Penn State College of Medicine; Texas Tech University Health Sciences Center (TTUHSC) School of Medicine; University of California, Davis (UC Davis) School of Medicine, Queens University; and University of Louisville School of Medicine.¹³ New York University has 12 medical specialisation programs that are currently embarking on the accelerated pathway. This program aims to streamline the transition from undergraduate medical education into postgraduate by capitalising on training and assessing competency across the medical education continuum.²⁴ Their competency-based models allow shortening of medical education for those students who are deemed competent and provides individualised experiences for students who know what they want to do in medicine. The accelerated pathway also aims to reduce student debt and aids those who are seeking a rapid entry into the workforce. An example of accelerated medical education pathway is seen in the Dutch College of Medical Specialties. A cut on government funding for Dutch postgraduate medical programs led to all programs seeking flexibility and individualisation of training assuming that on average, length of

training will decrease hence training costs would also decrease.¹⁴ In 2014, Dutch College of Medical Specialties adapted regulations of postgraduate training which allowed for individualisation of training lengths. For trainees who are progressing faster, traditional time-based education does not allow for accelerated, individualised pathways to further master skills. For those who are of need to develop competencies further, time will be extended to allow this.¹⁴ Ottawa Anaesthesia CBME program has thirteen 4-week blocks per year for which training may be extended but not shortened to account for trainees who require more time to achieve competencies. CanMED framework is applied in this program of which the roles are completed longitudinally, usually without a time restriction.²⁵

For some, a set period isn't enough to achieve an acceptable level of competency, therefore more flexibility is required for learning support which is provided by a more CBTVE approach.⁴ University of Wisconsin-Milwaukee provides a flexible option called UW Flex Bachelor of Science Nursing Degree for registered nurses returning to school which was launched in 2014. This allows registered nurses to progress towards the degree by demonstrating skills and knowledge rather than accumulating course credits.²⁶ It utilises the knowledge and experiences nurses already have towards the completion of the degree. Trainees earn the degree by successfully completing a series of competency assessments for which trainees can take as little or much time needed to master each competency. Although the program is for 3 years, the median graduation time is 18 months.²⁶ The purpose of the flexible option is to overcome factors that prevents nurses from returning to school such as time constraints and incompatibility with registered nurses work schedule. Trainees are guided at every step and receive timely feedback from faculty which is essential for learning and development. This allows for choice and self-direction which is supported by the faculty and the assigned academic success coach.²⁶ Students are first put through orientation and given their individualised learning assessments which are guidelines to their learning path. An evaluation rubric that supports students' goal progression is kept as a record for advancement. A CBME approach is utilised in this program to facilitate learner-centeredness, flexibility and convenience to have a healthy work-life balance. It values the skills and knowledge that students may already have mastered to then progress on to other areas of improvement and growth.

Educational Theories Supporting CBME

There are currently no literature or empirical grounding on the theory that a pre-determined time period is related to an individual's mastery of specific key competencies and/or skills. Training length should be catered to the needs of the individual learner according to the educational theory Carroll model: Degree of learning = $f(\text{time spent}/\text{time needed})$.²⁷ The model states that a learner succeeds in learning a given task or skill to the extent of time they require to spend to learn the task; which is different for everyone.²⁸ This model has been applied to recent medical training and is one of the arguments for time variability. The model ties in with Blooms Mastery Learning theory that supports time variation as a necessity for mastery learning due to time reaching mastery standard is different for various learners.²⁹ Outcomes, however, are meant to be uniform with little to no

variation among learners to ensure high quality patient care amongst all trainees. The theory of self-regulation of learning is key in the development of competence hence individual variation on the time it takes to develop competence maybe explained by motivation and self-regulated learning ability. Self-regulation describes the control of medical performance using self-identification of areas that need to be improved, goal-directed behaviour, and the modification of behaviours to optimise learning and performance.³⁰ Time-variant medical education caters for this as consistent feedback from preceptors and supervisors are essential in the progression of stages for learners which then helps both, supervisor and trainee, to create an individualised plan for growth. Self-regulation for individualised plans is utilised by accelerated medical education programs and CBD as mentioned before.

Conclusion

Many medical trainees in New Zealand have failed their TBME despite having successfully achieved the key competencies during their runs. Several emerging medical programs have adopted the CBME assessment, with a time variant structure to alleviate stress and to provide a supportive and flexible learning environment for their trainees which inevitably affects patient care. Using time-length to measure competence and/or skills has not been proven and hence should no longer be utilised in an evolving medical education curriculum.

Appendix 1:

Table of medical education competency-based frameworks from various countries

CANADA		UNITED STATES	SCOTLAND	AUSTRALIA	NEW ZEALAND
PCPSC	CanMEDS	ACGME		AMA	NZCF
Medical Educator	Communicator	Patient Care and Procedural Skills	Delivering the Service	Patient-Doctor Trust Relationship	Professionalism
Scholar	Collaborator	Medical Knowledge	Demonstrating Personal Qualities	Diagnosis and Prognosis	Communication
Communicator	Leader	Practice-based Learning and Improvement	Working with Others	Complex Decision Making	Clinical Management
Health Advocate	Health Advocate	Systems-based Practice	Managing Services	Multi-disciplinary Approach	Clinical Problems and Conditions
Professional	Scholar	Professionalism	Improving Services	Professionalism	Procedures and Interventions
Leader	Professional	Interpersonal Skills and Communication	Setting Direction	Leadership in Health Services and Community	
Collaborator				Training the Next Generation Medical Education as Lifelong Learning	

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