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Emerging Impacts of the 2017 Resident Doctors' Multi-Employer Collective Agreement

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sapere research group

About Sapere Research Group Limited

Sapere Research Group is one of the largest expert consulting firms in Australasia and a leader in provision of independent economic, forensic accounting and public policy services. Sapere provides independent expert testimony, strategic advisory services, data analytics and other advice to Australasia's private sector corporate clients, major law firms, government agencies, and regulatory bodies.

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Glossary

ACC	Accident Compensation Corporation
DHB	District Health Board
FTE	Full-Time Equivalent
HO	House Officer
MCNZ	Medical Council of New Zealand
MECA	Multi-Employer Collective Agreement
MOSS	Medical Officer Special Scale
NHS	National Health Service
NRA	Northern Regional Alliance
PGY(1 or 2)	Post-Graduate Year 1 or 2
RACP	Royal Australasian College of Physicians
RDA	Resident Doctors' Association
RDO	Rostered Day Off
RMO	Resident Medical Officer
SHO	Senior House Officer
SMO	Senior Medical Officer

Executive summary

Aim and approach

Sapere Research Group was commissioned by a number of large DHBs with tertiary hospitals to conduct an independent assessment of the impact of the Resident Medical Officer (RMO) multi-employer collective agreement (MECA) that took effect in 2017. We conducted interviews with informants in six DHBs, largely covering management and Senior Medical Officer (SMO) roles. We analysed data on rosters and their impact in order to arrive at a view on the MECA impact. The MECA is currently approximately half-way through implementation, and the major issues that informants see are those arising from rostered days off (RDOs), which are required to abut a weekend, and managing cover, including the level of relief required to cover rosters.

Significant direct costs for DHBs

We have received data from five DHBs, which indicates that to achieve full implementation they will require over 200 new RMOs, at a cost of over $25 million, accounting for deductions and levies. Since there are two other tertiary DHBs, and secondary hospitals will also see some increase in RMO numbers, it is likely that the national impact will be approximately 300 full time equivalent RMOs, at a cost of more than $35 million.

Some of these additional positions respond to existing shortages, or changes to the workforce model within a service. Changes to the workforce model allow for service enhancements and/or improved responsiveness to other departments.

Discontinuity and service disruption

The rosters required to implement the contract reduce the continuity between RMO and patient, and between RMO and SMO. This results in disruption of service in several ways: firstly it is more difficult to spread the doctors across the week, since RDOs are required to abut weekends. Informants reported instances of clinics being cancelled, SMOs covering for RMOs who are not available, and services working at the margin of safety with too few staff.

RMOs are usually the main point of continuity of care for hospital inpatients. This has been eroded, with increased instances of handover of patient care between doctors, and care more frequently provided by relievers rather than RMOs in permanent roles. Small and medium sized hospital departments with more specialisation and less ability to cover within the department workforce are particularly affected by these issues.

A serious impact on training

Increased levels of working in relieving RMO roles, as well as the inflexibility of rosters based around RDOs have had a negative impact on training. This arises because training cannot be attended when an RMO has an RDO, and because reduced continuity between senior and junior medical staff reduces the closeness of the relationship, and the confidence of SMOs to delegate clinical activities to RMOs. Informants reported examples of RMOs seeking to come to work even when on an RDO in order to achieve their training requirements. The increase in relieving and RDOs is likely to have a significant impact on

the duration of vocational training. In the example of a four year programme for a geriatric trainee, it is likely that training will be extended by six months.

An increased burden on senior medical staff

SMOs are experiencing increased pressure as a consequence of the RMO MECA. Reduced continuity and therefore delegation to junior doctors means that SMOs increasingly conduct RMO duties as well as their own, and may experience reduced RMO support when managing a complex case load of patients. Increased RMO numbers have the consequence of requiring more supervision for training purposes, which also falls upon SMOs. SMOs express concerns about the training and experience of the future cohort of senior doctors.

Workforce issues and impact on career progression

Recruitment to RMO positions is already emerging as an issue, with a return to reliance upon overseas graduates to fill the new positions. Recruitment difficulty presents a direct cost, but also indirect costs in time and continuity, particularly if northern hemisphere graduates leave before the end of the New Zealand training year. The increased number of RMOs also bears a risk of bottlenecks for entry to vocational training positions, an issue experienced in the English National Health Service (NHS).

A substantially increased proportion of relieving runs has limited appeal for most RMOs, and recruitment to these roles is difficult, while there are risks of losing staff who do more than one relieving run, compounding recruitment difficulties. RMOs working from a relieving pool may spend only a few days in a hospital department, and may have little knowledge of the processes and work of a department, reducing their ability to contribute to the overall workload. Relief runs also have a limited ability to count as time worked for vocational registration, further reducing their attractiveness for RMOs.

The difficulty of reconciling training needs and service delivery needs may push hospitals to increased use of non-training positions (Medical Officer Special Scale (MOSS) roles), and there are already some examples of this trend.

Discussion

While the direct costs arising from the MECA are significant, the indirect impacts on training and service delivery represent a bigger challenge to hospital services. Services which are already running near the limit of their ability, find that the additional burden arising from inflexible rosters and a greater presence of relievers, can result in reduced service delivery. This could be through cancellation of clinics or greater burden upon the rest of the clinical team in order to maintain care.

There is scope to monitor a number of specific measures prospectively in order to keep an eye on trends, and to assess the ongoing impact of the MECA and any other agreements around medical roles.

Overall, the MECA has had an unplanned impact on the training and clinical roles of doctors across New Zealand hospitals. There is room for professional leadership to address the future shape of medical training and service delivery in New Zealand, rather than to let such developments emerge in an unplanned manner.

1. Background

1.1 Aims

Sapere Research Group was commissioned by a number of District Health Boards with tertiary hospitals to undertake an independent assessment of the emerging impact of the Multi-Employer Collective Agreement (MECA) that applies to resident doctors, introduced on 13 February 2017.

The aim of the project was to assess the impact of the contract now that implementation is well under way in all the DHBs covered, with new rosters in place in many departments since late 2017. While there has been a degree of discussion and anecdote about the impacts of the contract, this project seeks to assess the impacts more formally and consistently, and to provide an independent view.

1.2 Key contract issues

There are two key aspects of the MECA that may have impacts of interest. These are the requirements for rostering (addressed in Schedule 10: *Safer Rosters* of the contract), and the requirements for relieving, expressed as a review of relieving roles (Schedule 12: *Other Agreements*).

Schedule 10 (s10) aims to replace the traditional practices of rostering junior doctors for 12 consecutive days, or up to seven consecutive night shifts, moving to a dispensation of a maximum of 10 consecutive days and four consecutive nights. The schedule explicitly states that the aim is to achieve this while not compromising minimum training requirements. A specific change process is expected to apply to the development of new compliant rosters, with a period expected to be typically two months for consultation with the relevant resident doctors, and an overall time frame of six months for a full roster change process.

The specific requirements of s10 are:

- No more than four consecutive night duties comprising no more than 10 hours shall be rostered;
- Following a period of night duty there shall be a break of at least the balance of the calendar day on which the duty finished, plus at least one further calendar day.
- No employee shall be required to work for more than 10 consecutive days;
- For each weekend day worked, there shall be a rostered day off (RDO) within the following fortnight;
- RDOs must be attached to a weekend unless by agreement to the contrary;
- Two weekends can be rostered in a row, but not more than once every six weeks (or five weeks by agreement). Remaining weekends must be completely free from duties;
- An alternative rostering pattern that limits the number of days worked in any 14 day period to 10 days and allows for four days off that are meaningful and recuperative for the employees may be implemented by agreement;
- Night shifts at weekends do not generate an RDO;

- Each RDO taken on Monday to Friday that is compensation for a weekend day results in a deduction from pay, varying according to seniority of the resident doctor and whether an urban or non-urban DHB.

Schedule 12 (s12) considers a number of matters, beginning with a commitment to work to support the career pipeline of medical graduates to completion of vocational training. Most immediately this schedule agrees to review relief arrangements, in order to avoid the use of cross cover, where one Resident Medical Officer (RMO) covers for another RMO.

1.3 Stage of implementation

In late 2017, TAS undertook a brief survey of DHBs to estimate progress with the implementation of s10 changes. Seventeen of the 19 DHBs that have rosters listed in s10 responded; these DHBs reflect 95 percent of all relevant rosters (135 rosters).

Across the 17 DHBs, just under half of the listed rosters had been addressed by the start of the 2018 training year (November for house officers (HOs) and December for registrars). Implementation of the majority of remaining rosters is planned for implementation in two tranches – quarter two of the 2018 training year and quarter one of the 2019 year. Developing and agreeing rosters is inherently more complex in larger services therefore compliant rosters have been established more quickly in smaller DHBs. For the seven large DHBs, one had yet to implement any compliant rosters with the others closer to half-way through.

DHBs are approaching implementation differently. Many are introducing HO rosters firstly, with registrars following; and others are working service by service. Across all 17 DHBs, a far greater proportion of HO rosters have been implemented (62%) compared to registrars (28%).

1.4 Approach

This project has a qualitative and a quantitative aspect. The qualitative component consisted of interviews with key stakeholders including:

- RMO unit staff (or Northern Regional Alliance (NRA) in Auckland);
- Service managers and finance staff;
- Senior medical officers (SMOs); and
- SMOs with specific training responsibilities.

Since a notice of intention to bargain for a new MECA had been served when we began the project, we were asked not to speak to resident doctors in order to ensure that there was no possibility of inappropriately influencing union members during the bargaining process; or of introducing bias by speaking only to non-union members.

The majority of informants for interviews were SMOs, speaking in their various capacities as trainers and supervisors, or as the clinical leaders of services. This report therefore reflects SMO views particularly strongly, although strong views and useful examples were also heard from other informants.

Throughout this document we report comments by informants. In each case we indicate whether the informant was an SMO or a service manager (including RMO unit staff), and indicate the DHB at which the informant worked with an anonymised letter code. Comment from an SMO from DHB E is therefore indicated as [SMO-A], and a service manager from DHB D is indicated as [SM-B].

2. Financial impacts

2.1 Direct costs

RMO salary and associated costs

The requirements for operating MECA compliant rosters have resulted in an increase in the number of RMOs to operate hospital services. Table 1 sets out the estimated additional FTE required for full implementation of the MECA across five of the six DHBs covered in this report. It represents an increase of approximately 204 full time equivalents (FTE) across all grades and comes at a cost of an estimated $25 million for these DHBs.

Table 1 Additional FTE and salary costs for five tertiary DHBs

House officers	Registrars	Total FTE	Estimated costs ($million)
87	117	204	$25.21

Source: DHBs and Northern Regional Alliance

1. Some salary costs are estimated based on assumptions about step on salary scale. FTE numbers are not finalised across all DHBs.

The estimated costs are approximate; in some cases rosters and FTE numbers are yet to be finalised and some salary assumptions have been made where new positions are not yet in place. In general, the cost above includes salary, Kiwisaver, training and registration costs (assumed); and is net of RDO deductions. Individual DHB costs within the total bucket are broadly comparable; however some differences remain such as the inclusion of relocation costs or the omission of potential salary category changes (i.e. a decrease in pay where average hours worked will decrease) for some DHBs. These variances are less material in the context of the overall cost and the estimate presented above is indicative of the total cost for these five DHBs.

Since there are two other tertiary DHBs, and secondary hospitals will also see some increase in RMO numbers, it is likely that the national impact will be approximately 300 full time equivalent RMOs, at a cost of more than $35 million.

A larger pool of RMOs also increases other associated overhead costs, for example meals, which can become significant in total, at an additional direct cost of $250,000 for one DHB.

Informants pointed out that some of these additional positions respond to existing shortages, for example in one DHB one of the HO rosters had been on their risk register for a period of time. In other cases, services have taken the opportunity, whilst redesigning rosters, to change the workforce model operated in the department. Changes to the workforce model allow for service enhancements and/or improved responsiveness to other departments, for example providing timely consulting services to the Emergency Department.

The financial cost of additional positions is top of mind for managers, but also for senior clinicians who are concerned it diverts resource away from other areas.

The numbers of additional FTE requirements…cost is a big factor for us. [SM-B]

Every dollar on salary support is a dollar not spent elsewhere in the system. [SMO-E]

Further, a common view expressed was that more could be done to address safer hours within the existing FTE pool if there was greater flexibility in the way that workforce could be deployed.

[I'm] not sure the country can afford it. We have to look at cleverer ways of using the resource we've got. [SMO-B]

In at least one DHB modelling work had been undertaken to show FTEs saved in the case where some RDOs did not abut a weekend. The MECA only allows for this in circumstances where all other options have been exhausted, and the Resident Doctors' Association (RDA) did not agree to implementation in this instance.

Resources required for implementation and administration of rosters

A number of people are involved in designing, agreeing, and administering new rosters. DHBs have taken different approaches to the development of s10 compliant rosters, including: running the process out of the RMO unit, delegation to the regional shared services agency, and the establishment of a local steering group and number of working groups. In all cases, the work involves managers, clinicians, analysts and accountants. The time and effort required has been substantial, drawing key staff away from their business as usual activities.

We are so lean on our back office resource, so the time required to implement this is a burden. [SMO-B]

By way of example, one DHB established a steering group with membership including executive team, RMO unit staff, clinicians and service managers; supported by a project manager and business analyst (part-time). This group has met weekly since May 2017. Further, small working groups were formed to develop each of the rosters included under s10, and the whole process and its resultant rosters underwent external review by another DHB's RMO unit manager.

Recruitment difficulties were identified across all the DHBs we visited, with some already experiencing increased costs of recruitment and arranging for cover.

We had moved away from agencies but now have an increasing reliance with 15-20% commission…additional duties with out of hours roster gaps not being filled…Plus the cost of administering this. [RMO unit team leader's] team are trying to wrangle people to come in for cover. Then there are other recruitment related costs with locums. I used to be processing about 20 invoices a week at the peak of the 'locum industry'. [SM-F]

A secondary issue was raised relating to the transactions associated with RDO deductions, with a view that the application of penal rates for out of hours work would be preferable.

2.2 Indirect costs

With an increase in the RMO workforce some additional, and indirect, costs will be brought to bear on DHBs. Perhaps most important are the additional requirements for training support from SMOs. For first and second year house officers (PGY1 and PGY2) the pre-vocational supervisory structure mandated by the Medical Council (MCNZ) requires that every HO has a supervisor overseeing their training. Supervisors fulfil both an educational and pastoral role, are involved in organising training and run allocation, and can supervise up to ten HOs. They receive a stipend from the MCNZ for this work.

A larger cohort of resident doctors may require additional support staff in RMO units to manage increased and on-going human resource and administrative work. Increased complexity within rosters may generate more work to find cover for absentees, on-going recruitment if turnover increases, and a greater number of run reviews overall (which require a consultation and approval process).

Additionally, there are financial penalties incurred by DHBs where RMOs work outside the terms of the MECA.

> *Once you start the schedule 10 consultation process you have to conclude within a certain number of months. Then if you can't find the doctors you're stuck…You end up paying when the rosters have gaps in them. [SM-E]*

3. Service impacts

3.1 Service delivery

The implementation of the MECA, and particularly the s10 requirements, is widely reported to be having an impact on service delivery. This is driven in several ways, partly as a consequence of the reduced continuity RMOs have both with SMOs and with patients, and partly because of the difficulty of deploying clinical resources smoothly over the working week, as a consequence of RDOs being required to abut weekends.

The issues of continuity are explored in more depth below, but some typical descriptions of the difficulty of running services serve to explain the dilemmas that service managers and clinical leaders are trying to manage.

> *We have to plan for registrar absences, so how do we rearrange our service to cope with the knowledge the RMOs won't be there? The first thing that goes is dedicated training sessions. Outpatient clinic is the next thing to go. You end up being in crisis management. [SMO-F]*

> *Our service is a mixture of acutes and clinics. The increase of staff on Tuesday to Thursday means we can't even cover acutes on Monday and Friday. Clinics become the sacrifice. On Mondays and Friday we will find we can't cover services, so pull SMOs in to cover RMO work to cover a safe service. We never had to do that before. Now it happens every month. [SM-D]*

> *The biggest impact of the registrar roster will be in oncology. They have a majority of advanced trainees. They will have to change all the SMO's rosters and the clinic space to meet the requirements. They can't take extra trainees to cover, because they don't want to dilute the training experience. They're very worried about it. [SMO-A]*

> *We book fewer patients when we have relievers. [SM-C]*

These show the pressure that the new contract requirements place upon services' ability to provide care. Particularly where services are already under considerable pressure, the reduced flexibility in deploying RMOs means that service delivery is sometimes reduced or curtailed, particularly clinics which tend to be easier to cut than ward activity.

As individual departments struggle to maintain the level of service provision, service managers put an increasing amount of time into juggling rosters and arranging relievers, while much of the burden of maintaining clinical care falls upon SMOs.

Figure 1: Case study - RDOs and relief for neurology registrars

The diagram below show the rotating six week roster for neurology registrar runs in an example DHB.

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Wk1			8	8	8	14	14
Wk2	8	8	8	8	8		
Wk3	15	8	8	8	15		
Wk4	8	15	8	8	8		
Wk5	8	8	15	8	8		
Wk6	8	8	8	15	8		
						No. RDO days per rotation:	2
						Per annum:	17.3

	RDO
Hours	Long day weekend
Hours	Long day weekday
	Weekend not rostered

Four out of every six weeks, one of the four neurology registrars will be on RDOs on Monday and Tuesday. On these days the reliever from one of two medical sub-specialty relief runs will cover. On the other two weeks this reliever will cover RDOs for the respiratory service. The reliever should be reasonably familiar with the service as they will spend two-thirds of their time in neurology.

The four neurology registrars also participate in the general medical night roster. This means that there are four weeks every six months where one of the registrars is on four nights during the week, and a reliever will backfill during the day. These relievers will be from a general pool of medical night relievers who spend brief periods of time across many different services, with which they will be relatively unfamiliar.

There are also another four weeks in the six month period where one of the neurology registrars is on three nights over the weekend. In these instances a reliever from the general pool will backfill on Monday through to Wednesday.

The presence of night relievers causes disruption for the service as they are unfamiliar with the department and unknown to its SMOs. They are unable to perform specialist procedures, such as neuro-physiology, and require more intensive supervision in clinics, etc.

One week in each six month period will be particularly problematic as one registrar is coming off nights and on RDOs, whilst another is going on night duty. This means that on Monday through to Wednesday, two of the four registrars in the department is a general reliever.

Any leave taken during these periods exacerbates the disruption.

3.2 Continuity with clinical teams

The increased incidence of RDOs and use of relievers has the consequence of reducing the continuity between SMOs and the RMO team who work with them. This in turn can have SMOs working with more junior doctors, especially house officers, who they may not know well, or who may be relieving in a department for only a day or two and have little understanding of department processes and approach. This can leave SMOs with less support to do their job, and require them to undertake more direct care, rather than work in a consultant model. As SMOs feel less comfortable delegating care to juniors, this means that the SMO role changes, as they take on more direct responsibility for continuity of care on a ward. Typical SMO comments include:

> *We used to have the continuity – now in paediatrics the SMO is the continuity. When SMOs take leave, you can't fall back on the registrar as being the person who has intimate knowledge of what has happened. [SMO-F]*

> *I was covering… …four ward rounds. The regular registrar was there for round one, I got a relief for round two, a second relief for round three, and non-one for round four. The only continuity was the house officer. The ward rounds take longer because the juniors don't know the patients. You can't rely on the registrar to provide the information because they weren't there two days ago. [SMO-F]*

> *I hear from the SMOs that they don't know who the house officers on their team are. The registrars find it a struggle having multiple house officers. [SM-D]*

> *You also lose continuity of knowledge of your registrars, so you don't know how much you can trust them, how well they've been trained, what they can perform. [SMO-F]*

In one case where registrar rosters hadn't yet been implemented, the issue was front of mind for the senior doctors:

> *Discontinuity is the one thing I'm most nervous about, with high workload and high turnover of patients in general medicine. Because of the complexity I need to share the cognitive load with another team member… …and that's my registrar. The idea of having a reliever come in on Monday is disruptive. There is a likelihood that I pick it up or do an extra one or two ward rounds, or they just pick it up and there is a risk they will miss something. [SMO-B]*

The change in SMO role is something that was consistently noted by informants from across all DHBs:

> *As a senior doctor you accept that you can't rely on your junior doctors being present or having continuity of knowledge. For example, the quality of discharge summaries, when people doing the discharge summaries have no knowledge of the patients. So you escalate to a higher level, but should SMOs do discharges? [SMO-A]*

> *It results in the SMOs doing things that they normally wouldn't do. Unlike the medical teams who have a big pool we have a small team and have to cover each other more. [SMO-E]*

[SMO colleague] said he was working as a house surgeon, being the point of continuity and checking bloods etc… …some places have always been like this of course. The small hospital won't be affected by it. [SMO-D]

The corollary of SMOs doing more of the process of care tasks traditionally done by junior doctors is that junior doctor roles risk becoming deskilled, with a narrower range of tasks, and lower expectations from their seniors.

The impact on the SMO role plays out both as a change in role, but also as a raw increase in workload, when SMOs are asked to cover or take on additional duties to accommodate the RMO rosters.

We ask the SMOs to do the additional clinics and pick up the slack. [SM-F]

SMOs do the ward round at the weekend on their own [SMO-E]

The new RMO rostering arrangements consistently appear to have a strong impact upon other members of the clinical team, with SMOs under pressure both in absolute workload terms, and to move away from a consultant role towards greater direct provision of care.

3.3 Continuity with patients

Rosters have reduced continuity between RMOs and patients. Since the junior doctor has traditionally been the main point of continuity of care in a tertiary setting, this means an increased number of handovers, each of which has a potential for clinical risk. One SMO explained the issue in concrete terms:

I can be down on a ward round and say to the house officer "that CT request needs to be physically taken to the radiologist" because of a particular key question. But if it happens to coincide with a handover, they are handing over to someone else who hasn't been party to the discussions, so we either don't get the answer to the question we want or it isn't prioritised. [SMO-E]

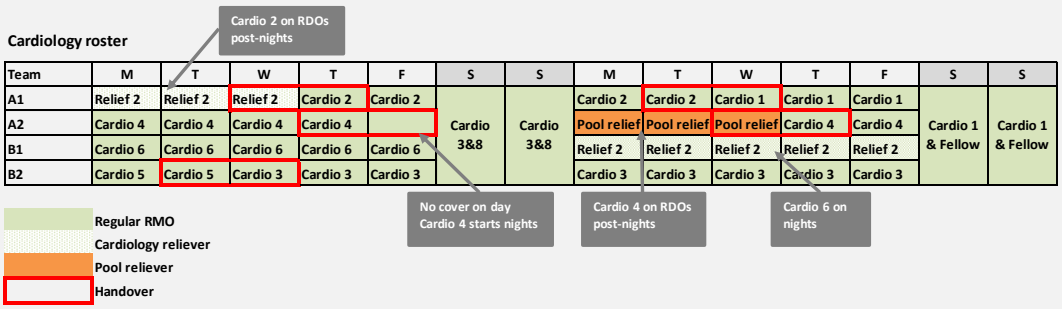
Handovers are widely considered to be a point of clinical risk for patients. Effectively passing clinical information to a new team, when there are a large number of complex patients, is a key point at which continuity of care for a patient can be impaired. While there is an extensive literature base on using tools such as electronic records to reduce the risks and to improve processes, increased handovers can still represent a risk to the quality of patient care. This issue was consistently raised by SMOs and service managers.

We explored the issue of handovers with two case studies. In the first we analysed the handovers for registrars in a newly implemented cardiology department roster. In the second, the NRA provided an analysis of house officer rosters in a large general medicine department. In both examples there is a significant increase in handovers (excluding existing handovers between the day and night shift) as a consequence of RDOs.

Figure 2: Case study - handover of care in a cardiology department

The diagram below represents the roster over a fortnight, for registrars covering the inpatient ward of a large DHB Cardiology department. By way of explanation:

- A1, A2, B1, B2 represent the inpatient teams working with an SMO.
- Each cell shows the registrar that is on duty that day (named "Cardio 1", "Cardio 2", etc.) with dedicated Cardiology relievers shaded in light green and relievers from a general pool coloured orange.
- There are two registrars covering the wards over the weekend when the SMOs are not on duty.



Team	M	T	W	T	F	S	S	M	T	W	T	F	S	S
A1	Relief 2	Relief 2	Relief 2	Cardio 2	Cardio 2	Cardio 3&8	Cardio 3&8	Cardio 2	Cardio 2	Cardio 1	Cardio 1	Cardio 1	Cardio 1 & Fellow	Cardio 1 & Fellow
A2	Cardio 4	Cardio 4	Cardio 4	Cardio 4				Pool relief	Pool relief	Pool relief	Cardio 4	Cardio 4		
B1	Cardio 6	Cardio 6	Cardio 6	Cardio 6	Cardio 6			Relief 2	Relief 2	Relief 2	Relief 2	Relief 2		
B2	Cardio 5	Cardio 5	Cardio 3	Cardio 3	Cardio 3			Cardio 3	Cardio 3	Cardio 3	Cardio 3	Cardio 3		

In this particular fortnight there are additional handovers between registrars that arise as a result of split night shifts and RDOs; they are represented by red boxes on the diagram. Previously an RMO could work a seven night block and was backfilled during the day with the same reliever. Under the new roster the nights are split (into a block of 3 and a block of 4) across two RMOs who are backfilled during the day by two relievers.

The view from this department is that this roster represents a best case scenario – none of the regular RMOs are on leave during the fortnight which would require a further handover of care to a reliever, and this is a large department that has two dedicated Cardiology relievers. Even so, a reliever from the general pool is still required on three days to cover the RDOs after one of the regular RMOs has been on duty for three nights.

Figure 3: Case study: handover in a large general medicine department

The table below shows the increase in number of handovers after implementation of s10 compliant rosters in a large general medicine department. By way of explanation:

- There are four teams (white, red, gold, black) with three house officers in each team (12 HOs in total shown in the table as W1, R2, G3, B1, etc.)
- The roster templates compared are for the same 13 week run in 2017 and 2018 (quarter 3)
- Each time you have a change in RMO as a result of a set of RDOs or a set of nights there needs to be a handover. It is assumed there will be two handovers for every set of RDOs and two handovers for every set of nights.

	Prior to Schedule 10					Schedule 10				
HO	**Set of RDOs**	**Hand overs**	**Set of nights**	**Hand overs**	**Total**	**Set of RDOs**	**Hand overs**	**Set of nights**	**Hand overs**	**Total**
W1	0	0	1	2	**2**	3	6	1	2	**8**
W2	0	0	1	2	**2**	3	6	0	0	**6**
W3	0	0	1	2	**2**	2	4	1	2	**6**
R1	0	0	1	2	**2**	3	6	1	2	**8**
R2	0	0	1	2	**2**	3	6	1	2	**8**
R3	0	0	1	2	**2**	2	4	0	0	**4**
G1	0	0	1	2	**2**	3	6	1	2	**8**
G2	0	0	1	2	**2**	3	6	1	2	**8**
G3	0	0	1	2	**2**	3	6	1	2	**8**
B1	0	0	1	2	**2**	3	6	0	0	**6**
B2	0	0	1	2	**2**	3	6	1	2	**8**
B3	0	0	1	2	**2**	2	4	1	2	**6**

Of the 12 HOs, previously each had two handovers within the 13 week run, whereas now:

- 1 HO has 4 handovers
- 4 HOs have 6 handovers
- 7 HOs have 8 handovers

Source: NRA

3.4 Recruitment and workforce

While it is still relatively early in the implementation, recruitment was seen as a big risk, and some services reported that recruitment was already difficult. A step increase of approximately 250 to 300 junior doctors cannot be met in a short timeframe from a New Zealand graduate cohort of fewer than 600 graduates per annum. This is particularly the case since many of the new RMO positions are at senior house officer or registrar level, requiring years of experience after medical school training.

This issue can play out in several ways, but commonly seems to result in hospitals increasing their recruitment of overseas doctors to meet the demand, particularly junior doctors from the UK. This in itself brings complications, not only because of the increased direct cost of overseas recruitment, but because the training year for UK doctors runs from August to August, and a proportion of these tend to leave their New Zealand post early, in April to June, so they can enjoy travel or return to the European summer. This leaves services short of staff as they head into the winter peak of demand. Typical comments include:

> *The reliever roles will be bloody hard to fill. We will end up with disenfranchised registrars… …so we will get the ones that have failed in New Zealand or from overseas. [SMO-B]*

> *We have had to scrape the bottom of the barrel with recruitment. We're now recruiting from the UK, but they won't be able to start until August or September. [SM-F]*

> *We used to bring 40-50 doctors from the UK every August. We got that down to 15-20, but we will be back to that level. We have difficulty recruiting relievers, and more relievers coming in. [SM-C]*

> *We're quite dependent on the UK doctors, leading to time of year issues: they start leaving from about now. [SM-A]*

The other important aspect of recruitment and workforce planning lies in the career progression of graduates to vocationally registered SMOs. There are questions about whether the larger cohort of RMOs will be able to find training places and more senior positions. Several informants made this point, reminding us that the English NHS has faced a similar issue of bottlenecks for junior doctors trying to get into training positions.

> *This will end up with a huge number of doctors around the country. If they stay in New Zealand long term this will create bottlenecks at registrar level. There is a capped budget for training. DHBs are reluctant to take on new trainees for other than service reasons [SMO-E]*

> *If you look at the whole landscape, is there an endpoint that makes sense? We hire another 30-40 doctors, but where are the SMO jobs? [SMO-D]*

> *I'm sitting on two gaps for June. I'm recruiting from the UK, but they won't be able to start until August, so I have to beg people here. [SM-F]*

> *Relievers are difficult to recruit. We end up with those who don't want to or can't progress training. [SMO-D]*

4. Training impacts

4.1 Issues raised by informants

Informants felt that the RMO MECA reduces continuity between resident doctors and both patients and SMOs. This reduced continuity is principally seen as arising from the requirement for RDOs, and especially the requirement that RDOs abut a weekend. Increased levels of relieving activity were also seen as problematic for training programmes.

These issues were seen as having impacts across a number of training areas. These included continuity of supervision, access to training activities, and potentially extending the duration of vocational training. While the specific way that these impacts play out can vary from department to department, they were expressed with a very high level of consistency in the different hospitals we visited.

4.2 Meeting training requirements

The requirement that RDOs abut a weekend can reduce access to hospital experiences that occur on days close to weekends. For example, an elective surgical list that takes place on a Monday or Tuesday may provide an opportunity to participate in specific procedures that are required for training completion. An RDO can mean that a trainee will take longer to experience training opportunities, and potentially lengthens the overall duration required for training as a consequence. This issue applies across all levels and grades of RMO, but is particularly acute for those training in procedural specialties. The issue is still important for non-procedural specialties, however, since RDOs may affect the ability to attend clinics that occur on specific days of the week, representing important training and experiential opportunities.

Service managers and SMOs at several of the hospitals we visited reported anecdotal evidence of RMOS seeking to come to work on RDOs specifically for training experiences. Typical remarks included:

> *I haven't had people coming in on RDOs, but it has been a shock to them that they can't swap with friends. [SM-D]*

> *The RMOs are frustrated that if they work in the weekend they can't work on the Friday, which is when lots of the work happens. They want to be here on a weekday as much as possible. [SM-F]*

> *Some of our registrars have said they will come in on RDOs. But that introduces indemnity issues. [SMO-E]*

> *RMOs complain about less theatre time. They were coming in on days off, going over to the elective super clinic, but we stopped that. Before section 10 RMOs often used to come in to do ward round the following day if they did a procedure with an SMO the day before. They can't do that now. [SM-D]*

> *We have keen registrars not yet on a training programme, or a trainee who wants to do a special procedure, and they're just coming in. We're supposed to stop this, but the surgeons*

won't turn them down. And it puts pressure on the others to do the same, to look good. [SM-F]

In one case an SMO reported that house officers seek to come in on an RDO for their Medical Council (MCNZ) protected training session, which in that case occurs on a Thursday:

I had been telling them to come in, but I shouldn't. [SMO-D]

One cardiology department had a clear example of the difficulty imposed by abutting RDOs to a weekend:

We appointed an extra trainee instead of a reliever… …we've got disgruntlement that they do want to be there on RDOs, since they miss out on the cath lab. [SM-F]

Clearly departments are not able to allow RMOs to come in for training on an RDO, since this both undermines the point that RDOs exist as rest days for safety purposes, while also raising liability issues, particularly if someone who is not supposed to be present is involved in patient care. Equally, allowing an RMO to swap with a colleague, even if it were permitted under the agreement, may risk pushing them to an excessive number of worked hours in a week, with financial penalties for the DHB.

The scheduling of clinics and surgery, which are key places for training experience, is a complex process involving matching physical resource in terms of theatres and workforce availability from all professions in the wider clinical team. There is usually limited ability to accommodate further complexity arising from the RDO impact on access to training. One RMO unit manager explained the dilemma:

House officers have sessions on Tuesdays or Thursdays – PGY1s will be hit the hardest. They have to attend 70% of sessions on average across the year (allowing for sick leave, annual leave etc.). Can we adapt the teaching? We could change to a different day and have started those conversations. Could we viably move teaching for house officers to a Wednesday? Medical registrars [already] have teaching on a Wednesday… …we also have house officers who have to commute in from [other hospital site]. [RM-D]

This example outlines the trade-offs which RMO units and service managers have to make in scheduling dedicated training sessions in ways that reduce service disruption and are viable for trainees to attend, as well as for SMOs to deliver. If registrars already have training on Wednesdays, the physical and clinical workforce capacity to deliver training to house officers at the same time may be limited.

RDOs have an impact on access to training experiences that occur on specific days of the week, but may also have an impact on a trainee's ability to complete enough work days to meet their requirements. New graduates at PGY1 and PGY2 are required by the Medical Council to complete at least 10 weeks full time equivalent of work in each 13 week attachment.[1] Five or six RDOs in an attachment have the impact of reducing the time available in which to use leave entitlements such as annual leave, sick leave or training leave.

[1] https://www.mcnz.org.nz/maintain-registration/prevocational-training-pgy1-pgy2-and-nzrex-requirements/#Content-h2-3 (accessed 12 April 2018)

This has not yet emerged as an issue in the short time since roster implementation for most house officers, but is expected to arise as a constraint as the year progresses and RMOs seek to use their leave entitlements.

To some extent these issues are magnified by a lack of direction from the professional colleges on how to accommodate some of these pressures within their stipulated training requirements. Most colleges covering New Zealand doctors are Australasian, and are reluctant to engage with issues that affect a proportionately small number of their trainees. Several SMOs involved in training remarked on the difficulty of engaging with colleges to address these issues:

> *The colleges are very challenged – Australian based colleges don't want to discuss [this issue]. [SMO-D]*

> *My impression of the colleges is they're scared shitless. [SMO-F]*

Some informants also suggested that the increased number of RMOs meant that less clinical experience is gained during routine work.

> *They aren't getting the same service exposure and we're not getting the same outputs. [SMO-C]*

> *In order to comply with the roster we have three house surgeons on a team, but they're not getting enough exposure to patients. [SMO-D]*

Overall, the impact of the contract, and particularly the number of RDOs and the requirement to abut them to a weekend, appear to have the impact of making training requirements more difficult to achieve for RMOs at all grades. The ability of services to accommodate the additional complexity in order to facilitate training activities is limited, given the constraints of a complex system involving, usually, constrained physical facilities and a range of professionals from different disciplines. Equally, the increased number of RMOs and increased time off during the week make it more difficult for RMOs to achieve training requirements and gain experience.

These issues are a source of great concern to SMOs and to service managers who generally have a strong commitment to training, but find it increasingly difficult to reconcile the delivery of training within a variety of constraints, which are exacerbated by aspects of the RMO contract.

Figure 4: Case study: RDOs for orthopaedic registrars

The diagrams below show the repeating four week roster for senior orthopaedic registrar runs, and the repeating eight week roster for junior orthopaedic registrar runs, in one DHB.

Senior registrars are on duty one weekend in every four, and have two associated RDOs on a Monday and Tuesday. This totals to 26 RDOs over the years where the senior registrar will not be participating in the service and will miss learning opportunities where particular procedures or teaching sessions occur on those days.

Senior registrars

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Wk1	15.5	8	8	15.5	8		
Wk2	8	8	8	15.5	8		
Wk3			8	8	8	14.5	14.5
Wk4	8	8	8	8	8		
					No. RDO days per rotation:		2
					Per annum:		26

	RDO
Hours	Long day weeked
Hours	Long day weekday
	Weekend day not rostered

Junior registrars are on duty both days of one weekend and one further weekend day in every eight weeks, and have three associated RDOs on Thursday and Fridays. The juniors will also have two RDOs after one night duty in every eight weeks (the balance of Monday followed by Tuesday and Wednesday). This totals to 32 RDOs over the year where the junior registrar will not be participating in the service.

Junior registrars

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Wk1	1.5	10	10	10	8.5		
Wk2	8	8	8	8	15.5		
Wk3	8	8	8	8	1.5	11	11
Wk4	8.5			8	8		
Wk5	8	8	8	8	8	8	8
Wk6	8	8	8				
Wk7	8	15.5	8	8	8	8	
Wk8	8	8	15.5	8			
					No. RDO days per rotation:		5
					Per annum:		32.5

	RDO (2 weekend days)	Hours	Weekend duty (2 days)
	RDO (1 weekend day)	Hours	Weekend duty (1 day)
	RDO (post-nights)	Hours	Night duty
Hours	Long day weekday		

In terms of the impact on the service, each week one of the four senior registrars will be on RDOs Monday and Tuesday and a reliever from the Orthopaedic relief run will cover. Although these relievers always work in the service, they are year 4 registrars and therefore less experienced than the regular registrars who are years 5, 8 and 10.

4.3 Supervision

Great numbers of RMOs, and less continuity with them, is seen by many SMOs as a challenge for supervision. The continuity of the traditional apprentice model of training is more difficult to maintain, and the explicit training time required to supervise someone with whom you are less familiar becomes greater. SMOs are categorical that their ability to supervise is being impaired:

> *The obvious issue we've had is that junior doctors are learning through their clinical exposure and supervision… …part of that supervision is dependent on the relationship between SMO and RMO. The problem is that you have intermittent access and a lot of time off, with more days off during the week. [SM-E]*

> *Our ability to provide training has been critically compromised by RDOs. [SMO-A]*

The increasing number of house officers places a burden upon supervisors, and there appears to have been little if any consideration of increased SMO resource needed to supervise the larger numbers of RMOs required by the new contractual arrangements. An increased number of international graduates can also raise the level of supervision needed for people who are adjusting to the New Zealand environment as well as working in the health system:

> *Because more people are coming in at 2nd and 3rd year, there are lots of international graduates, we're seeing more people but not confident that they're well supervised. I know one director of clinical training who is going under because of the numbers. [SMO-C]*

This in turn has an impact on SMO morale and motivation:

> *The SMO role is about building up the relationship with the trainee. Someone moving in and out of the team doesn't build up the relationship and bond that makes you want to teach. [SMO-B]*

SMOs typically feel that training is an important obligation of their professional role, and see this becoming steadily more difficult. To some extent this is caused by a number of factors, as pressure and burden on the SMO workforce increase due to other changes, but there is a widely held view that the fragmentation induced by the RMO contract, and particularly the s10 requirements for RDOs abutting a weekend, make it more difficult to provide effective supervision for trainees.

4.4 Duration of training

There are two main channels by which the RMO MECA affects the duration of training: increased time spent relieving, and the greater number of RDOs.

While large departments may be able to operate relief pools within a single department, allowing for training within the specialty, small and medium sized departments more typically have to rely upon a pool of generic relief doctors. The greater number of relief runs performed by junior doctors, primarily to cover RDOs, therefore have a limited contribution to a junior doctor's training credit. The requirement is that only six months of relieving can count as vocational training for medical registrars.

As training duration expands, it can have two follow on impacts: as trainees take longer to reach the end of their training they may prevent the flow of new trainees into the positions they already hold, creating bottlenecks in vocational training. The alternative is that more training places will open up to accommodate the number of trainees who seek positions, leaving hospitals with an increased salary bill for trainees, whether or not they are needed for service delivery.

We have explored this issue via a case study that examines the potential extension to training for a Geriatric Advanced Trainee as a result of s10, prepared by the NRA. We also use a case study to demonstrate the increase and overall proportion of relief runs.

Figure 5: Case study - impact on training for Geriatric Advanced Trainee

The Geriatric Advanced Training Committee (Royal Australasian College of Physicians) allows 20 weekdays off within a six month run, or 40 days within a continuous 12 month job. If the threshold is exceeded then additional training time is likely to be imposed. Geriatric trainees typically dual train with General Medicine with a training time of 48 months. A typical training period would involve the following runs, with RDOs resulting from most rosters:

- 18 months Geriatrics – 39 RDOs
- 6 months Palliative Care Medicine – 0 RDOs
- 6 months Neurology – 8 RDOs
- 6 months Category A run (Respiratory/Cardiology/Renal) – 13 RDOs
- 6 months Category B run (e.g. Rheumatology) – 8 RDOs
- 6 months General Medicine – 13 RDOs

Average leave per registrar at one DHB has been calculated using payroll data for July 2017 to February 2018. Each year a registrar might be expected to take:

- Annual Leave – 29.6 days
- Medical Education Leave – 7 days
- Sick leave – 2.8 days

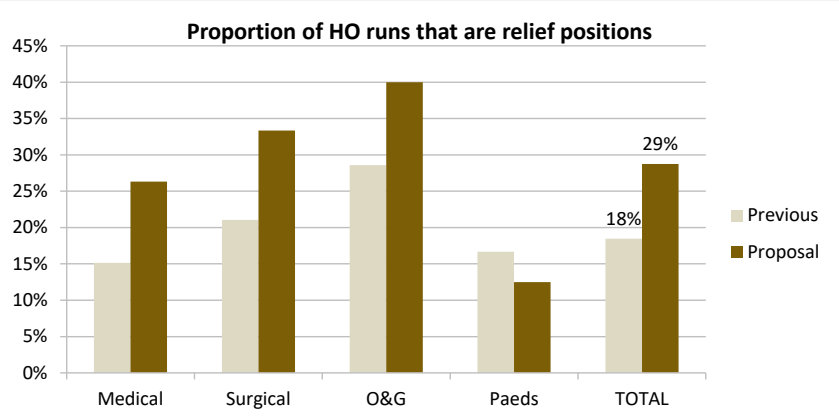
Impact on 48 month training for Geriatric Advanced Trainee	
Total RDOs over 48 month training	81
Total leave days over 48 Month Training	157.6
Total days off	238.6
Total Days off over threshold	78.6
Additional Training Required	**4 months**
Actual Additional Training Required	**6 months**

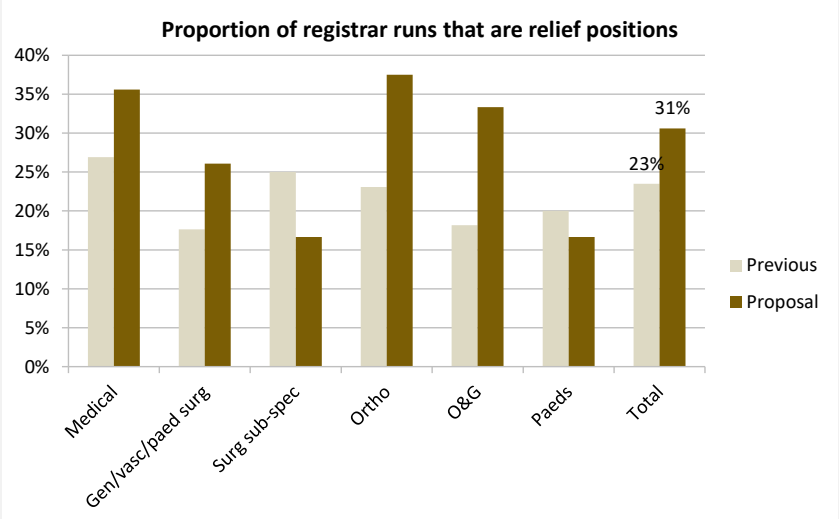
Leave and RDOs account for an estimated total of 239 days off over the four year training period – 79 days above the 160 day threshold. This is equivalent to almost 16 weeks of training time that will have to be 'made up', requiring an additional 6 month run.

Source: NRA

Figure 6: Case study - increase in relief runs

The charts below show the increase in relief runs across most service areas in an example DHB.





Once all compliant rosters are implemented in this DHB, relief will account for 29 percent of all HO runs compared to 18 percent previously. For registrars, almost one-third of runs will be in relief compared to around one-quarter previously. The relief component varies across services; changes for some will be due, at least in part, to decisions taken about the most appropriate staffing model for that service, that deal with existing service issues or enhancements.

In another DHB we visited, 27 percent of HO runs and 29 percent of medical registrar runs are in relief under new MECA rosters.

4.5 Non-training roles

The traditional service model in larger tertiary hospitals is very much designed around training, with RMOs and SMOs working in distinct and complementary clinical roles but also as trainees and supervisors respectively. RMOs typically act as the point of continuity for inpatients, with SMOs working as consultants, supporting house officers and registrars with expert advice and decision making. This role arrangement may not be the case in smaller hospitals, in which there is less training, potentially no registrar training at all, and SMOs may take a more prominent role in continuity of care. Non-training roles are therefore relatively uncommon in tertiary hospitals.

Several informants noted that the increased difficulty of reconciling training and service delivery requirements is likely to result in an increase in non-training roles, where service delivery is the single goal.

> *You end up saying why have SMOs? Get a MOSS instead... ...if you're under the pump for service delivery you don't want RMOs or SMOs. We're moving towards MOSS [roles] in ED. ED don't want more trainees. This could spread into general medicine for the acute work. [SMO-A]*

> *A lot of specialties will end up with non-training posts, which will be harder to recruit to. Look at the NHS Trust Grade Doctors – that's where we'll end up. There are pros and cons to this, but it doesn't support training needs. [SM-C]*

If this direction does emerge, and it appears that early signs of it are already appearing, it raises important questions about the future balance of professional roles in New Zealand hospitals, and the future organisation of training in hospital settings.

5. Other issues

The central issues that were consistently raised by informants from all DHBs revolved around the impact of reduced RMO continuity on service delivery and training. But a number of broader issues were raised.

5.1 RMO salary impacts

A number of informants suggested that the combined impact of deductions for RDOs, and the down-grading of positions that move to do fewer hours, has reduced RMO income. One service manager reported that RMOs had threatened to join a locum service on RDOs in order to recoup income. We investigated the income impact by considering the impact of new rosters compared for surgical registrars and medical house officers in one DHB.

Figure 7: Case study - RMO salary impacts

Example of net salary impact for registrars on a surgical roster

	Current salary		Proposed salary	Gross salary difference	RDO deductions		Net salary difference
Registrar	Step/Yr	Category	Category	Proposed to Current	RDO days	Total Deduction	Variance less RDO Deduction
Reg 1	6	B	C	-$11,764		$0	-$11,764
Reg 2 - SET Trainee	6	B	B	$1,960	21	$5,859	-$3,899
Reg 3 - SET Trainee	6	B	B	$1,960	21	$5,859	-$3,899
Reg 4 - SET Trainee	6	B	B	$1,960	21	$5,859	-$3,899
Reg 5 - SET Trainee	6	B	B	$1,960	21	$5,859	-$3,899
Reg 6	2	B	B	$1,629	21	$4,872	-$3,243
Reg 7	2	B	B	$1,629	21	$4,872	-$3,243
Reg 8	2	B	B	$1,629	21	$4,872	-$3,243
Reg 9	2	B	B	$1,629	21	$4,872	-$3,243
Reg 10	2	B	B	$1,629	10	$2,320	-$691
Reg 11	2	B	B	$1,629	10	$2,320	-$691
Reg 12	1	B	B	$1,546	16	$3,520	-$1,974
Reg 13	8	B	B	$2,129	16	$4,848	-$2,719
Reg 14 - SET Trainee	10	C	C	$2,072	21	$6,909	-$4,837

The table above uses an example surgical registrar roster to demonstrate the impact of the MECA on RMO salaries. In this example there were 14 registrars participating in the previous roster.

- 13 positions remain on the same pay category as previously, with a salary increase as part of the new MECA. However, there is a net decrease once deductions are made for RDOs, the size of which varies depending mainly on the number of weekends a particular registrar is required to work.
- One position has dropped down a pay category (from B to C) due to a reduction in hours worked with an associated drop in salary.

Example of net salary impact for house officers on a medical roster

	Current salary		Proposed salary	Gross salary difference	RDO deductions		Net salary difference
House officer	Step/Yr	Category	Category	Proposed to Current	RDO days	Total Deduction	Variance less RDO Deduction
HO 1	1	D	C	$10,538	15	$2,880	$7,658
HO 2	1	D	C	$10,538	15	$2,880	$7,658
HO 3	1	D	C	$10,538	15	$2,880	$7,658
HO 4	1	D	C	$10,538	15	$2,880	$7,658
HO 5	1	D	C	$10,538	15	$2,880	$7,658
HO 6	1	D	C	$10,538	15	$2,880	$7,658
HO 7	1	D	C	$10,538	15	$2,880	$7,658
HO 8	1	D	C	$10,538	15	$2,880	$7,658
HO 9	3	D	C	$12,050	15	$3,300	$8,750
HO 10	3	C	C	$1,386	15	$3,300	-$1,914
HO 11	2	C	C	$1,312	15	$3,120	-$1,808
HO 12	4	C	C	$1,461	15	$3,480	-$2,019
HO 13	3	C	C	$1,386	15	$3,300	-$1,914
HO 14	2	C	C	$1,312	15	$3,120	-$1,808
HO 15	3	C	C	$1,386	15	$3,300	-$1,914
HO 16	3	C	C	$1,386	15	$3,300	-$1,914
HO 17	2	C	C	$1,312	15	$3,120	-$1,808
HO 18	2	C	C	$1,312	15	$3,120	-$1,808
HO 19	2	C	C	$1,312	15	$3,120	-$1,808
HO 20	2	C	C	$1,312	15	$3,120	-$1,808

The second table above uses an example medical house officer roster to demonstrate the impact of the MECA on salaries. In this example there were 20 HOs participating in the previous roster.

- Nine positions move up a pay category (from D to C), with an increased salary for that category under the MECA. RDO deductions erode some of that increase however the net impact is still an increase in salary.
- 11 positions remain on the same pay category as previously, with a salary increase as part of the new MECA. However, there is net decrease once deductions are made for RDOs, the size of which varies slightly depending on what step/year each RMO is at.

5.2 Days in lieu

While a component of the previous round of RMO MECA negotiations, rather than those that took effect in February 2017, a large number of informants raised the issue of days in lieu for RMOs being taken at short notice. The requirement is that DHBs provide at least 28 days' notice for a roster, whereas RMOs are able to take a day in lieu with only 14 days' notice, often making the resulting gap difficult to cover. Given the consistency and emphasis which many informants placed on the issue, this is clearly disruptive, and a burden upon clinical teams who have to cover for an absent colleague.

The issue tends to be less common among more senior RMOs, and people in smaller, more closely knit departments, where the impact on colleagues is noticeable, and activity that is

perceived as un-collegial is more personalised within the clinical team. Larger departments or those with a less collegial atmosphere can see this circumstance occurring more frequently. Where a lieu day is used at short notice to cover a period in which annual leave has already been declined because other staff are already on leave, it is particularly difficult to arrange cover.

> *When there is a registrar we double book clinics, with the consultant in the room next door [to the registrar]. When they take lieu days we have to cancel patients, so we've gone back to single booking clinics. [SM-F]*

> *The 14 days' notice for a day in lieu is a problem in bigger departments. They don't see it as a department issue, they see it as a battle with the rostering office. [SM-C]*

> *The short notice reliever is good, but we once had one pull a whole week of lieu days when he was the only short notice reliever. [SM-F]*

5.3 Support for safer rosters

While noting issues about the implementation of the RMO contract, many informants acknowledged that historic working patterns for RMOs were risky, and that there had been a need for change. Typical comments include:

> *What has happened in terms of safer working hours is a good thing [SMO-C]*

> *Nobody argues with moving to safer rosters, but organisationally we weren't ready for the change… …From a supervisor's point of view nobody wants a burned out trainee workforce. I'd acknowledge that things have changed over the years, with unprecedented pressure from sicker patients and shorter stays. RMOs take the brunt of that. [SMO-A]*

> *We did seven nights in a row when I was a registrar. I went back and re-read notes I'd made, and they were absolute nonsense. It's a safety issue. [SMO-B]*

> *With hindsight we should have been resolving RMO working hours issues before the involvement of the RDA. [SM-F]*

Some informants felt that safety issues for junior doctors arise not only as a consequence of long hours or night shifts, but from the increasingly intense daily workload.

> *We should be looking at the workload during the day for juniors – that's what's making them feel unsafe. This is the real issue – the confusion between quantity and quality of work… …Junior doctor roles are losing responsibility, increasingly becoming administrative and secretarial. [SMO-F]*

> *We already had safe working hours – we needed safe working conditions. That involves looking at the busyness of the working conditions. [SMO-E]*

5.4 Professional issues

A number of both service managers and SMOs speculated about the impact of the contract on the future SMO workforce. It was noted that SMOs are often called upon to work long hours and weekends, and that an increasingly transactional and less professionalised resident

doctor workforce could produce a different kind of SMO in the future. While speculative, this issue was raised by a number of informants as a fundamental influence upon the future shape of medical roles, and as a challenge for the future organisation of services.

> *We're creating a lifestyle that may not be the case when they become a consultant. [Clinical] training is an issue, but also about training for being a part of the health system…you become part of the team whenever you're required…that's a really important part of being part of the clinical workforce. [SM-E]*

The issue of the professional role filled by members of the clinical team, including both junior and senior doctors, is one that is considerably broader than the scope of this report. It is clearly influenced by a wide range of factors, and not by the RMO contract in isolation. But the issue is a fundamental one for the future delivery of services, and does set some of the professional context in which the impacts of industrial negotiations could be considered. This in turn raises the issue of the linkage between professional leadership in terms of clinical roles, for all members of the clinical team, and the alignment that industrial negotiation has with the direction of professional change and development as clinical roles continue to evolve in the New Zealand health system.

6. Discussion

Strengths and limitations

This report has used a mixture of qualitative interviews and quantitative case study approaches to explore the impacts of the 2017 RMO MECA for tertiary DHBs. As with any research approach, there are limitations. We were asked not to talk directly to RMOs, since a new bargaining round had been initiated and we did not want to be in the position of inadvertently and inappropriately influencing members of the bargaining body through our discussions. The RMO perspective is therefore missing from this report except as heard at second hand. However this does not represent a severe limitation given the purpose for which this report was commissioned, which was to observe the impact of the MECA on services, rather than on the specific experiences of RMOs.

By contrast, there are a high proportion of SMOs among our informants, and this report may therefore reflect the SMO perspective particularly strongly. The sheer strength of the response of SMOs to invitations to take part, with large numbers making time to discuss the issues at short notice, in itself indicates the strength of feeling from this group. However service managers and SMOs did present similar views and experiences on many different issues, and the exceptional consistency of the material we heard from both SMOs and service managers across different DHBs gives us confidence that the material we have been able to capture is valid and consistent.

Main findings and discussion

While there was a fairly strong view among many of our informants that there had been a real need to change rosters for RMOs, there was a widespread perception that the mechanisms adopted in the MECA were not the best approach, bringing disruption to services as well as to training, and ultimately undermining training opportunities for the very workforce it is intended to support. At a high level, our main findings are that:

- The requirement for RDOs to abut weekends significantly disrupts training, and along with increased relieving requirements is almost certain to extend the duration of vocational training;
- The requirement for RDOs to abut weekends, and for more relieving pool RMO roles, significantly disrupts service delivery, and raises issues of continuity of care for patients;
- The overall effect of the MECA is to exacerbate other trends that increase burden on the wider clinical team, and especially upon SMOs who bear responsibility for training supervision and service delivery.

Several issues lie underneath these overall findings. The first is that, while the same MECA applies to all RMO grades, resident doctors are a diverse group with a wide range of professional and personal needs. Professionally, the role and needs of a registrar are very different from those of a new graduate. Our view is that the training disruption caused by the MECA is least significant for new graduates, and most significant for senior trainees.

Since implementation of the MECA is only at about the half way stage across most DHBs, it is relatively early to see the training impacts emerge, although it is noteworthy that there are already reports of resident doctors seeking to come in for training purposes on RDOs, and

that SMOs already report a degree of loss of continuity with house officers. The other aspects of training which informants were concerned about, in particular extended training duration and increased difficulty meeting MCNZ training requirements in PGY1/2 are likely to emerge over the coming year.

The impact on service delivery appears to be significant. This is in part because many hospital departments are running very lean, and it takes little disruption to push them beyond the limit at which they can offer stable and effective care. While there are many sources of pressure on hospital services, it seems clear that service managers and SMOs see the impact of the MECA as a specific mechanism that exacerbates challenges to service delivery, and is already doing so even at the present stage of partial implementation. The inflexibility of roster design required for full MECA implementation makes the already complex task of deploying a clinical team to provide several different kinds of care across different settings even more difficult. Reconciling service delivery and training needs at the department level becomes an ever more unsatisfactory compromise.

The underlying issue of decreased continuity is the problem that drives many of the impacts of the MECA. We have explored estimates of the increased number of patient handovers arising from new rosters, and these appear to be significant. While handovers will always exist anyway, and hospitals should be exploring the potential for electronic information systems to reduce the clinical risk associated with handovers, it should be noted that such systems are still in their infancy, and that an increase in the well documented clinical risk associated with passing care between doctors is a clear consequence of new rosters.

While collecting data retrospectively is often difficult, we suggest that it would be valuable to collect information prospectively on a number of measures relating to training and service delivery, so that trends can be monitored, and the impact of the existing, and any future, industrial bargaining can more easily be anticipated and assessed. Our suggestions include:

Measure	Reason
Patient handovers	Increased clinical risk
Percentage and absolute number of lieu days requested in the 14-28 day window.	Disruptive events for departments, may result in cross cover or no cover.
Comments by RMOs from post run reports.	Qualitative indicator of satisfaction of RMOs with training, continuity and team relationships
SMO s13.4 claims	Instances of SMOs covering for RMOs. Likely to be an underestimate, since anecdotally many don't claim.
Average duration of relievers in departments	Monitoring length of stay of pool relievers, since induction into a new department limits productivity.
Number of different RMOs working with an individual SMO over a quarter.	Indicates continuity of supervision
Cancelled clinics because of lack of cover.	Service impact arising from inflexibility in cover arrangements
Accrued annual leave	Indicates an inability to take full leave on top of RDOs and other forms of leave.
Sick leave days for RMOs	Successfully reducing fatigue should reduce sickness and exhaustion.
% teaching sessions attended.	Trends in ability to attend training around rostering requirements.

In our view an important, and longer term, challenge lies in the underlying shift to a transactional rather than a professional relationship between RMOs and their clinical and management colleagues. Several informants commented on aspects of this, and we observed a number of clinicians expressing the view that junior doctors have in some respects abdicated professional responsibilities to their colleagues and services. This perception exists alongside the experience of less continuity with RMOs, and less confidence in delegating care. If this view of RMO roles becomes more widespread among their clinical colleagues, then this represents a very unfortunate rupture in collegiality among clinical teams in our hospitals, and a problematic new direction for medical roles in New Zealand.

Overall, while the direct costs of the changes arising from the MECA are significant, our view is that the wider consequences are a greater issue. The impacts upon service delivery and training strike at the fundamental roles of members of clinical teams in hospitals, changing the relationships between RMOs and their colleagues, and to some extent changing the nature of work that RMOs and SMOs routinely carry out. These changes are arising as an unintended consequence of an industrial relations negotiation rather than as a planned, professionally led process aimed at determining the best future roles of clinicians in our hospital services.

This leads to a broader point: the real and pressing issue of making the RMO experience safer, both for RMOs and for their patients, appears to have been considered in isolation without exploring the ripple effects upon training and service delivery. Delivering health care is a highly complex activity, and even a relatively small or specific change can have profound consequences across the wider system. We have seen that the reduced flexibility arising from new rosters can be modelled, and their impacts assessed on a number of measures, including patient handovers and training duration. This kind of analysis seems to be important when considering industrial issues, in order to avoid unintended consequences.

At the highest level, the implications from the changes to the MECA raise questions about the future professional roles of doctors, both at every level throughout their training, and once they enter an SMO role. Those roles have been affected as a consequence of the MECA. These are questions that should be considered by a professionally led planning process that can then feed in to service delivery, training and industrial strategy. How we train doctors, and at what level they are expected to perform in the clinical teams that they work in, are important questions that should reflect professional judgments about what is achievable and safe, and should then be supported by fair and reasonable agreements on working conditions. A professionally led process is most likely to lead to a sustainable arrangement for the safe and effective training of doctors and delivery of services.