

# **SUMMARY OF SUBMISSIONS TO THE DIRECTOR- GENERAL OF HEALTH'S COMMISSION ON THE RESIDENT MEDICAL OFFICER WORKFORCE**

Citation: Ministry of Health. 2009. *Summary of Submissions to the Director-General of Health's Commission on the Resident Medical Officer Workforce*. Wellington: Ministry of Health.

Published in June 2009

by the Ministry of Health, PO Box 5013, Wellington, New Zealand

ISBN: 978-0-478-31945-3 (online)

HP 4806

This document is available on the Ministry of Health website: <http://www.moh.govt.nz>

# **SUMMARY OF SUBMISSIONS TO THE DIRECTOR-GENERAL OF HEALTH'S COMMISSION ON THE RESIDENT MEDICAL OFFICER WORKFORCE**

## **EXECUTIVE SUMMARY**

The Resident Medical Officer Workforce Commission was established in October 2008 to investigate the issues facing the junior doctor workforce and to make recommendations on the medical workforce needed now and in the future.

As part of its investigation of the issues, the Commission sought written submissions from interested parties. Submitters were invited to provide any information they thought would assist the Commission in its deliberations. Nineteen written submissions were received, of which 17 were from organisations.

Submitters voiced pride in New Zealand's medical workforce and expressed concern about the issues seen to be undermining its stability and quality. They observed that previous attempts to address the issues have not been successful and many conveyed a sense that some problems have become urgent and resolution is critical.

Submissions contained a range of themes and issues, which can be grouped broadly into four areas.

### **Recruitment and retention**

Almost all the submissions noted that recruitment and retention are major issues, with the number of medical students now being trained insufficient to meet current and projected demand.

Several submitters asserted that Resident Medical Officers (RMOs) do not feel valued and this, above anything else, makes it hard to retain them in New Zealand's medical workforce. They said that as well as addressing workplace issues, retention would be assisted by establishing a culture that reflects the importance of training.

Rebuilding a trusting and reciprocal relationship between RMOs and District Health Boards (DHBs) was seen as being a priority, as was improving the relationship between RMOs and Senior Medical Officers (SMOs).

The lack of a career pathway for RMOs in Post Graduate Year (PGY) 2 and PGY3 places them at particular risk of becoming disenfranchised, disenchanted or even lost to the medical workforce.

A voluntary incentive-based debt relief package was proposed by several submitters. Such a scheme, they said, could encourage junior doctors to stay in New Zealand thus increasing the likelihood that they will pursue vocational training here.

### **The relationship between service delivery, education and training**

There was a clear view that DHBs focus on service delivery to the detriment of RMOs' training. DHBs themselves suggested that the relative priority of training and the service components of the RMO role need to be clarified.

Submissions generally supported maintaining the apprenticeship model, even though it is under pressure and the pedagogical relationship has been undermined by the change towards an industrial workplace model.

The lack of clear education and training pathways through PGY1 and PGY2 was an issue raised in several submissions.

### **Employment contracts and collective bargaining**

While strong collective bargaining has achieved many gains for the RMO workforce, submissions clearly indicated that this has come at a price with the adversarial relationship between DHBs and the Resident Doctors Association (RDA) a major contributor to a workplace environment that results in RMOs feeling undervalued. The RMO Multi Employer Collective Agreement (MECA) was seen as a cumbersome, inflexible and costly agreement that is inconsistently applied.

In order to meet the provisions of the MECA for a 55 hour working week, DHBs are increasingly dependent on a locum workforce, which is commonly paid substantially above MECA rates. The cost of locums was viewed as excessive and unsustainable. Competition between DHBs for RMOs makes it difficult for DHBs to take and maintain a collaborative stance on locum employment.

Submissions raised the question as to whether some employment processes for RMOs could be rationalised to a central source. This could range from career management and its associated components to a single employer, particularly for those in training.

### **Workforce planning, stakeholder alignment and sector leadership**

Several submissions addressed the need for better workforce planning, noting that although there have been several attempts at workforce planning, none yet have provided the necessary platform for workforce development.

Submitters observed that relationships between all parties need to be improved and alignment strengthened if the problems facing the RMO workforce are to be resolved. Submitters wrote of the different agendas and priorities of stakeholders, including RMOs, SMOs, RMO and SMO representative organisations, employers and their representative organisations, colleges, universities and the Medical Council of New Zealand (the Medical Council).

Virtually all submissions discussed the need for leadership in resolving the issues surrounding the RMO workforce. However, there was little detail or consensus about the type of leadership required.

## **1.0 INTRODUCTION**

In October 2008 the Director-General of Health established his Commission on the Resident Medical Officer Workforce (the RMO Commission). The RMO Commission is to investigate issues facing the junior doctor workforce and make recommendations on the medical workforce needed to deliver services now and into the future.

In particular, the Commission will make recommendations to the Director-General of Health on:

- the medical workforce needed to deliver services to meet the New Zealand population's health needs, in the context of changes in those needs as well as changing models of service delivery
- where the role of RMOs sits within the required medical workforce, how this aligns with the current RMO role, and whether there are aspects of the current role, including RMO deployment, that act as enablers of, or barriers to, ensuring a medical workforce that can deliver services to meet New Zealanders' health needs now and into the future
- whether there are RMO workforce supply and demand influences that act as enablers for, or barriers to, ensuring a medical workforce that can deliver services to meet New Zealanders' health needs now and into the future
- the changes, if any, that may be necessary to support the identified enablers or counter the identified barriers and how these changes could be implemented.

The Commission invited written submissions. Submitters were free to provide any information they thought would assist the Commission in its deliberations. A list of indicative questions was also provided for the guidance of those who wanted it (Appendix 1). Written submissions were in addition to consultation meetings held by Commission members around the country with interested stakeholders. The closing date for submissions was 30 January 2009, although late submissions were also considered.

By 20 April 2009, 19 written submissions had been received of which 17 were from organisations and two from individuals. A list of submitters is included as Appendix 2.

## **2.0 THE NEED FOR CHANGE**

Submissions addressed a wide range of problems with the recruitment, retention, training, support, deployment and working conditions of RMOs. They described the impact of the problems on the career development, satisfaction and commitment of RMOs as well as the effects on the wider system, including the cost to professional relationships and service delivery. While submissions individually addressed aspects of the problem, taken together they described a system in which quality is compromised and costs are rapidly escalating, and where change is urgently needed.

## 3.0 RECRUITMENT AND RETENTION

### 3.1 Recruitment

Almost all the submissions noted that recruitment and retention are major issues with the number of medical students now being trained insufficient to meet current and projected demand. Although virtually all DHBs and all specialties struggle to maintain RMO numbers, some are particularly severely affected with the shortage of RMOs getting worse as the year progresses. There is a view that the provisions and/or applications of the MECA have exacerbated this situation by limiting job sizes in such a way that additional positions – then hard to fill – have had to be created.

There is general agreement that Māori and Pacific people are under-represented in the RMO workforce. However, few suggestions (scholarships and affirmative action) were made of ways to address this issue, with a number of submitters commenting that the reasons for, and solutions to, this under-representation lie much earlier in the education system.

Several submissions expressed concern that the country is not training enough vocationally registered primary care practitioners to meet current or anticipated demand. The shortage of primary care training was seen as the reason, with the solution being to resource more primary care training places.

One submission suggested that present Medical Council, recruitment and employment processes do not support New Zealand's known reliance on imported doctors, adding to the supply problem.

### 3.2 Retention

#### ***The working environment***

Several submitters asserted that RMOs do not feel valued and this, more than anything else, makes it hard to retain them in New Zealand's medical workforce.

'The first goal should be to fill the gaps by improving retention. The key to this is by making RMOs at house officer level feel valued and able to see themselves as part of the solution.'

The lack of simple resources, such as common rooms and lockers, and minimal provision of support services and adequate supervision are a few examples of poor working environments. Rostering practices are mentioned as a source of tension for RMOs. Submitters said that RMOs at times defer taking leave, reluctant to exacerbate the pressures of understaffing.

As well as addressing workplace issues, submissions proposed that retention would be helped by establishing a culture that reflects the importance of training. A quality teaching environment within DHBs would include dedicated teaching time, adequate teaching and studying facilities, access to libraries and computers. While New Zealand salaries may never equal those in Australia, submitters suggested that ensuring training is of high quality may in some measure compensate for the difference.

Submitters also suggested that high profile industrial issues over recent years may have led RMOs to the perception of a troubled workforce where doctors are stressed and in conflict with health managers, causing them to question their future

within such an environment. Rebuilding a trusting and reciprocal relationship between RMOs and DHB was seen as being a priority. A related issue identified is the relationship between RMOs and SMOs, which has been somewhat eroded through rostering arrangements and other pressures. Mentoring and support from SMOs, which may enhance the job satisfaction of RMOs, is no longer as available as in the past and needs to be recovered.

Addressing RMOs' desire for flexibility and work life balance was suggested as another aid to retention, as was reversing the trend towards an increasing administrative load and a decreasing clinical load.

### ***The career pathway***

Submissions noted that the lack of a career pathway for RMOs in PGY2 and PGY3 places them at particular risk of becoming disenfranchised, disenchanted or even lost to the medical workforce.

Ideas for developing the career pathway for RMOs in PGY2 and PGY3 include: the colleges establishing some pre-training programme standards for RMOs; using these years as an opportunity to provide all doctors in training with a general practice run; the inclusion of competency based assessment; and including more clinically challenging/interesting practice.

'Selection of career is crucial to later workforce. Specialties need to be able to support and nurture those students and house surgeons who show an interest in their specialty. We are not supportive of early specialty training. However, there needs to be some connection between the service arrangements and the later career interests.'

Submissions also suggested that there may also be potential for new medical roles through assessing service models and working with clinical leaders and the profession generally to identify the training and career development needs of those doctors who do not want to pursue vocational training.

### ***Remuneration and incentives***

Submissions had relatively little to say on RMO remuneration, aside from a number of comments about pay relativity with Australia.

A voluntary incentive-based debt relief package was proposed by several submitters. Such a scheme, they said, could encourage junior doctors to stay in New Zealand in order to reduce their debt, thus increasing the likelihood that such doctors would pursue vocational training within New Zealand and settle here.

A further suggestion was to have the discrepancy between standard rates and locum rates reduced. Doing this would remove the incentive to become a 'permanent' locum.

A few submitters suggested that retention be made part of DHB performance indicators.

## **4.0 THE RELATIONSHIP BETWEEN SERVICE DELIVERY, EDUCATION AND TRAINING**

### **4.1 The relationship between service delivery, education and training**

There was a clear view that DHBs focus on service delivery to the detriment of RMOs' training. DHBs themselves suggested that the relative priority of training

and service components of the RMO role need to be clarified. Several submissions suggested that RMO training should feature in the KPIs of DHBs, and some added that they should be adequately resourced to support this.

‘The current reliance on doctors in training to provide service has often been at the expense of training, and we believe that this needs to be corrected. The introduction of protected time for formal teaching sessions and assessments, alongside the inclusion of medical training as part of DHBs’ KPIs would go some way to creating a solution.’

The apprenticeship model, in which RMOs learn from those further advanced in their training and teach those following them, was identified as an area in which the tensions between service delivery and education and training become particularly apparent. Submissions generally supported maintaining the apprenticeship model even though it is under pressure and the pedagogical relationship has been undermined by the change towards an industrial workplace model through which RMOs become commodities to fill rosters. Three month rotations were considered less than optimal, and at times counterproductive, as they make it more likely that poor performance will not be addressed in the knowledge that it will be only a few weeks until an underperforming RMO moves on.

It was proposed that in order for the apprenticeship model to work, teaching must be seen as a legitimate part of the role of house surgeons and registrars, and senior clinicians need to be encouraged to take a greater role in teaching. Submitters who addressed this issue had a range of suggestions, which included:

- the introduction of protected time for formal teaching sessions and assessments
- making training responsibilities explicit in employment contracts
- accrediting SMOs who provide training support
- changing requirements for practice certification renewal
- providing academic fellowships to enable RMOs to take time in their training for research
- placing a salary premium on higher academic qualifications.

## **4.2 Education and training issues**

There was a desire to see the priority of RMO education and training restored.

‘... the junior doctor years should encompass some of the most important progressions in clinical knowledge and skill in any doctor’s career. It is essential that the training provided and the learning experiences encountered are of the highest quality. They need to inspire and drive RMOs, fuelling their passion for medicine and ensuring that they strive to provide best practice. With a little more passion, in a supportive clinical environment, should come a greater dedication to the workforce.’

The lack of clear education and training pathways through PGY1 and PGY2 was an issue raised in several submissions. Some submitters favoured colleges establishing pre-training programme standards for PGY1 and PGY2, which would provide more focus and structure for RMOs at this point in their careers. A smaller number considered PGY1 and PGY2 to be an essential opportunity to experience a range of medical settings before committing to a vocational path. Others

believed that DHBs and universities should collaborate to provide a seamless learning experience from graduation through PGY1 and PGY2.

'There is generally a lack of structure in the ongoing training and education offered to this group, who are often seen simply as providing 'service' within the hospital with no real commitment from the hospital to further their education. Clearly putting these years within a continuing education framework would lead to better retention and a more positive environment.'

Views expressed on the introduction of competency based assessment were divided. Those in support of competency based assessment considered that it would clarify professional standards and expectations and might provide assurance that RMOs at PGY1 and PGY2 have a set of essential competencies in communication, diagnosis and patient management. Those opposing were of the view that a checklist cannot replace clinical judgment and professional care; will not solve the inconsistencies and deficiencies in trainees' learning, skills and experience; and may distort the learning priorities of trainees away from core competencies that are difficult to assess. One submitter supported the introduction of competency based assessments as long as they included competencies in the areas of communication, ethics and compassionate practice.

With regard to the curriculum, submitters suggested that universities, colleges and DHBs all have a meaningful role in the development of the curriculum and all should be involved. Several suggested that colleges in particular should be involved earlier and have input into pre-vocational training and curriculum development.

A few submissions addressed the need for the private sector to be more actively engaged in the education and training of doctors. Their argument was that not only is there unutilised training capacity within the private sector but that an increasing number of operations are being done privately, reducing trainees' exposure to some procedures in the public sector.

A few submissions addressed the difficulties in recruiting and retaining doctors in academic posts, noting that this will have to be addressed before any meaningful increase in medical student numbers can be achieved.

## **5.0 EMPLOYMENT CONTRACTS AND COLLECTIVE BARGAINING**

Submissions contained a lot of comments about the impact of employment contracts and collective bargaining on the RMO workforce. A few submitters acknowledged that the improvement in the working conditions for RMOs in the last 20 years has been a direct result of strong collective bargaining and that it is the practice rather than the principle of collective bargaining that is at fault.

### **5.1 A single employer**

One submission from an employer body said there is logic in examining whether some employment processes for RMOs could be rationalised to a central source. This could range from career management and its associated components to a single employer, particularly for those in training. The Auckland region already has such a structure, and the Midland region is looking at options for greater regional alignment of recruitment and career placement.

## **5.2 Adversarial stance**

Some submitters thought that the adversarial relationship between DHBs and the RDA is a major contributor to a fraught workplace environment that results in RMOs feeling undervalued.

There were several comments about the RDA's overly industrial and at times un-cooperative approach to negotiations. There is a view that the RDA resists attempts by DHBs to introduce creative solutions to RMO shortages and uses the threat of industrial action to prevent change from occurring.

The adversarial industrial relations environment has also created tension and eroded respect between RMOs and SMOs in the view of some submitters.

There were many pleas for a return to 'reasonableness' and good faith bargaining.

## **5.3 MECA cumbersome, inflexible and costly**

The RMO MECA is seen by some as a difficult document that is the result of an amalgamation of local documents and specific provisions negotiated over time to meet the needs of the day. The application of the MECA was seen as directly contributing to unsafe practice.

'The RMO MECA as it stands is unworkable and leads to unsafe practices. Whilst rosters need to be compliant to ensure that RMOs do not work for more than an average of 55 hours a week, the reality is that this creates shortfalls, which are then filled by locum agencies who in turn employ RMOs under contract to DHBs. There is no formal monitoring of the RMOs' hours of work, and it is likely that a number of RMOs are working upwards of 80 hours a week in performing locum duties on top of regular work.'

The MECA has dramatically increased the cost of continuity of care according to some submissions, primarily through the provisions regulating cross cover and the inability of PGY1 house officers to work at night unless they have performed three months of general medical cover.

## **5.4 Inconsistent application of the MECA**

Submitters commented that the shortage of RMOs places DHBs under extreme pressure. As a result, many DHBs will pay high premiums in order to be adequately staffed at nights and weekends. It was noted that the pressure to cover also leads to many RMOs being required to work in non-compliant roster schedules.

## **5.5 Locuming**

In order to meet the requirements of the MECA regarding average hours to be worked, DHBs commented that they are reliant on expensive 'professional locums' to maintain essential services. The cost of locums, including agency costs, was viewed as excessive and unsustainable. The premium paid for locum cover also acts as an incentive, drawing some RMOs away from regular work into locuming. There was support for reducing the pay disparity between permanent employees and locums. Competition between DHBs for RMOs in an environment where it is challenging to maintain services makes it difficult for DHBs to take and maintain a collaborative stance on locum employment.

Submitters noted that there is no monitoring of the hours an RMO has worked, and a shortage of RMOs makes employers seeking locum cover reluctant to ask how many hours a potential locum has worked that day or week. Submitters reported unsafe practices where RMOs work in excess of 80 hours a week, locuming on top of regular hours.

The impact of locuming on RMOs' training was another issue raised. Locums are generally regarded as being poorly supported and supervised with tenuous ties to any training they may nominally be involved in.

## **6.0 WORKFORCE PLANNING, STAKEHOLDER ALIGNMENT AND SECTOR LEADERSHIP**

The submissions discussed a range of problems with the RMO workforce. Some submissions also explored reasons for and potential solutions to the problems.

### **6.1 Workforce planning**

Several submissions addressed the need for better workforce planning. One, which identified a lack of vision as well as a lack of planning, referred to 'the fragmentation and conservatism of governance and education bodies involved in RMO training'. Although there have been several attempts at workforce planning, none yet have provided the necessary platform for workforce development.

There was a plea from some for much better alignment between workforce planning and health service demand. Submitters provided a hospital-level example of where such alignment is lacking – students who requested psychiatry runs were not allocated these runs despite a critical shortage of psychiatrists in New Zealand.

A submission on behalf of employers asked that workforce planning and development for RMOs be consistent with and support overall development of the medical workforce.

### **6.2 Stakeholder alignment**

Submitters observed that relationships between all parties need to be improved and alignment strengthened if the problems facing the RMO workforce are to be resolved. Submitters wrote of the different agendas and priorities of stakeholders including RMOs, SMOs, RMO and SMO representative organisations, employers and their representative organisations, colleges, universities and the Medical Council.

'The fragmentation and conservatism of governance and education bodies involved in RMO training [is a key issue]. There needs to be increased discussion and co-ordination between these bodies for an aligned vision of RMO education and training.'

Several submitters wrote of a loss of trust, goodwill and co-operation between the medical profession and the employer bodies that now stands in the way of a productive relationship.

### **6.3 Sector leadership**

Virtually all submissions discussed the need for leadership towards resolution of the issues surrounding the RMO workforce. However, there was little detail or consensus about the type of leadership required.

Opinion was divided on the need for a national training board. Some submitters expressed concern that a national training body might lead to a 'one size fits all' solution to workforce issues, and several expressed the need for leadership to be at national, regional and local levels. There was general support for the work of the Medical Training Board (MTB), which some suggested could take on a broader role.

## APPENDIX 1

5 December 2008

Dear

### **Director-General's Commission on the Resident Medical Officer Workforce**

As you will be aware, the Director-General of Health, Stephen McKernan, has established a commission on the Resident Medical Officer (RMO) workforce (the Commission).

The members of this Commission are Don Hunn (Chair), Angela Foulkes, Professor Peter Crampton and Professor Des Gorman.

The Commission held its first meeting on 6 November 2008. Discussion focused on scope and parameters of the Terms of Reference and we identified the main elements of our work programme. We agreed that the Commission's work should be informed by the perspectives of the sector – those who are involved in the training and employment of junior doctors, as well as junior doctors themselves. We have commenced a series of early meetings with a few key stakeholders as part of this process.

We would also like to consult more widely with a range of professional organisations and specialist groups. The mechanism for this will be initially by way of written submission, but may also include further stakeholder meetings.

We therefore invite your written submission. The Commission is aware that your organisation has been asked for many submissions and contributions in recent years and conscious that you may have found them time-consuming and may have questioned the value of the effort. It will be our intention to draw as much as possible on all the work that has been done already. It may be that earlier submissions remain valid and continue to represent your view on the issues, in which case you could simply send us a copy.

The Commission is also aware that your organisation has also been invited to make a submission to the Director-General of Health's Commission on Competitive and Sustainable Terms and Conditions for Senior Medical and Dental Officers Employed by District Health Boards (the SMO Commission). It may be that some of the matters you wish to raise will be of interest to both Commissions, in which case we would welcome a copy of your submission to the SMO Commission.

In order to simplify the task for those making submissions we had considered developing a questionnaire but decided this tends to put limits around responses. However we attach to this letter a first draft of the questions the Commission is developing to guide its own enquiries. It may assist you in focusing on those matters which in your view should have the highest priority.

Though we welcome your contributions at any time, submissions by 30 January 2009 will receive a formal acknowledgement. We will make every effort to ensure your views are considered in the Commissions deliberations.

Submissions and later contributions may be sent either by email to: [Brenda\\_wraight@moh.govt.nz](mailto:Brenda_wraight@moh.govt.nz), or by post to:

Brenda Wraight  
Director-General's RMO Commission  
Ministry of Health  
PO Box 5013  
Wellington

If you would like to meet with the Commission to discuss your submission, or other matters relating to the RMO workforce, please indicate that on your submission. Please note that a summary of submissions will be posted on the Commission's website, which can be found on the Ministry of Health website.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Don Hunn', with a long, wavy horizontal line extending to the right.

Don Hunn (Chair)  
RMO Commission

## **RMO COMMISSION**

### **Draft questions / prompts for submissions**

- What are the issues for the RMO workforce?
- In relation to RMOs, what should the goals and strategies be for the next decade?
- What essential matters have to be 'got right'?
- Is there sufficient leadership? Where should it come from and how should it be expressed?
- What is the role of the colleges and how does this role link with the employment of RMOs?
- What is the relationship between senior and junior doctors in the work environment?
- Incentives – how to recruit RMOs, improve their training and then keep a better share of them?
- What are the views on the proposal to establish a national training body? What roles might this body include over and above what has been recommended by the Medical Training Board?
- What are the views on the re-establishment of a broad educational vision for PGY1, PGY2?
- How do we keep the focus on junior doctors as future specialists in training?
- How might the DHBs and universities work together with regard to the curriculum?
- What are the views on a competency based approach to PGY1, PGY2 and vocational training?
- What are the views on the capacity of DHBs to support training and workforce development?
- What are the views on building infrastructure for medical training in a primary health care setting? How should this be met?
- What are the current views of the sector on the effectiveness of the structures, processes and outcomes of collective bargaining as they affect the recruitment and retention of RMOs?
- Are there currently impediments to ensuring that the RMO workforce reflects the diversity of the population, by ethnicity, gender and regional characteristics?

## APPENDIX 2

### LIST OF RESPONDENTS

#### ORGANISATIONS

Number	Organisation	Submitter
1	Bay of Plenty DHB	Graham Dyer, Chief Operating Officer Dr John Kyngdon, Medical Director
2	New Zealand College of Midwives	Karen Guilliland CEO
3	College of Nurses Aotearoa (NZ) Inc	Prof Jenny Carryer, Executive Director Ms Sue Wood, Fellow of the College
4	Middlemore Hospital Division of Medicine	Prof Jeff Garrett, Clinical Director of Medicine
5	Nelson Marlborough DHB	Denise Hutchins, GM Organisational Development
6	New Zealand Medical Association	Dr Peter Foley, Chair Dr Brandon Adams, Chair, Doctors in Training Council
7	New Zealand Medical Council	unsigned (email only)
8	New Zealand Medical Students Association	William Perry, President
9	Otago University Dunedin School of Medicine	Dr John B Adams, Dean
10	Taranaki DHB	John Doran, Chief Medical Officer
11	Wairarapa DHB	Alan J Shirley, Chief Medical Adviser and Chairman, Clinical Board
12	Royal New Zealand College of GPs	Karen Thomas, CEO
13	District Health Boards of New Zealand	Julian Inch, CEO
14	Association of Salaried Medical Specialists	Ian Powell, Executive Director
15	Otago DHB	unsigned
16	MidCentral DHB	unsigned email
17	DHBNZ	Gary Smith, Chair, DHB CE Group

#### INDIVIDUALS

Ind 1	John Grant	SMO, Dunedin
Ind 2	Anthony Chen	RMO, Middlemore