Clinical orientation program for new medical registrars — a qualitative evaluation

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Abstract

We present a qualitative evaluation of a clinical orientation program for medical registrars within the Wellington region in New Zealand, designed and implemented by current advanced registrars. This program was intended to improve the transition from house officer to medical registrar. The program was qualitatively evaluated using focus groups comprising participants, presenters and senior nursing staff. Purposive samples were drawn from each of these groups.

The most significant finding was the perception of enhanced professional collegiality among medical staff. There were benefits to participants and presenters with improved communication between medical registrars. We believe there are individual, institutional and patient care benefits with a region-specific, clinical orientation for new medical registrars.

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What is known about the topic?

The transition from house officer to registrar is considered by many to be a difficult time, with an increased level of responsibility. Most hospitals provide an orientation program covering practical topics such as fire safety and occupational health, but there is no clinical orientation for medical registrars in New Zealand.

What does this paper add?

This paper reports on an evaluation of a clinical orientation for new medical registrars in the Wellington region which found benefits for the individual and for the culture of the organisations involved.

What are the implications?

To be effective, a clinical orientation program requires commitment to prepare the material, commitment by consultants to support the process and commitment from the organisation to allow participants to attend all of the sessions.

THE TRANSITION from house officer (PGY2) to registrar is considered by many to be a difficult time. There is an increased level of responsibility and some doctors are concerned that they lack the necessary skills. While most doctors will make the transition successfully, the amount of new information required to function effectively is significant. New registrars from outside of New Zealand must also adapt to a new hospital environment with new systems and procedures. Most hospitals provide an orientation program covering practical topics such as fire safety and occupational health, but there is presently no clinical orientation for medical registrars in New Zealand.

The medical registrar is a pivotal member of the acute care medical team. Outside of the normal hours (08:00–17:00 hours), the medical registrar is frequently the most senior person on site attending to medical problems. They are expected to lead the cardiac arrest team and in smaller hospitals will often also oversee patient care in intensive and coronary care units.

With an increasing number and complexity of interventions available for patients, there is pressure on new registrars to correctly identify problems and to intervene promptly with the appropriate measures. Acute cardiology is such an

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example. With rapidly evolving treatment options available for patients presenting with acute myocardial infarction, some registrars feel ill-prepared if they have not been previously exposed to acute cardiology.

Some second-year house officers have expressed concern about moving to registrar positions, citing concern over their ability to effectively manage medical emergencies. This may be in part due to the limited exposure to acute medical cases that many have experienced during their house officer years.

With medical residencies becoming increasingly clinically challenging, there is a requirement to prepare medical residents for the transition through the increasing levels of responsibility. Charap et al believe that with the ever increasing breadth of knowledge required to practise internal medicine, residency programs may need to be extended.[1] Equally, the realities of acute medical care mean that those staffing the hospitals in the evenings and overnight need to be prepared to identify and care for acutely unwell patients.[2]

We therefore believed that there was a need to provide a clinical orientation for new medical registrars commencing work within the Wellington region in New Zealand.

Objectives

Our intention was to provide a site-specific clinical orientation that would provide information leading to improved confidence and improved performance of medical registrars. The information was compiled and presented by current advanced training registrars in each of the medical subspeciality areas. The focus was on competency in day-to-day management of common medical presentations.

The anticipated benefits were:

- Improved clinical management of patients.
- Enhanced collegiality within the medical disciplines.
- Enhanced communication — particularly related to patient referrals — within internal medicine throughout the region.
- Orientation program sequence of events.

In 2004, the most common presentations to the sub-specialities respiratory, cardiology, haematology, oncology, endocrinology, neurology, infectious disease, gastroenterology and renal medicine were identified. Common presenting conditions in each sub-speciality were selected and a literature search completed on each, focusing on acute management issues. An intensive care category was also included, focusing on the appropriate management of patients who may soon need intensive care and how best to expedite the referral process. The topics are shown in Box 1.

A summary was prepared on each topic with an emphasis on local practices. These summaries were compiled into a bound book. The information provided focussed on investigation and management issues, also incorporating important pathways and protocols. The direct contact details of some consultants (for advice on management decisions) were also included if the consultant requested this.

An appropriate physician reviewed the written material. This was critical as it gave the physicians ownership of the process and the content as well as an opportunity to identify any specific information they wished to incorporate. This could best be described as "What would you want to know if you were called by a registrar at 2 am?"

Following discussion with advanced registrars before the commencement of the course, each presentation was delivered in a non-formal and open manner with an emphasis on roundtable discussion rather than didactic lectures. It was envisaged that a less structured presentation would generate more discussion than formal lectures.

The initial course in 2004 ran over 5 consecutive days. Each section was presented by an advanced trainee who could give the regional approach to the issues covered. As all of the course work had been prepared in advance by two of the authors, the time commitment for the presenters was minimised. Eleven new registrars attended the sessions.

The 2005 course ran over 4 consecutive days. After feedback from the earlier course, a level seven advanced cardiac life support (ACLS) course was included to ensure all new medical registrars would have the appropriate level of resuscitation

1 Content of orientation program, by sub-speciality

Sub-speciality	Topics
Respiratory	Pneumonia
	Chronic obstructive pulmonary disease
	Asthma
	Pulmonary embolus
Gastroenterology	GI bleed
	Paracetamol overdose
	Acute liver failure
	Cirrhosis
Neurology	Headache
	Seizure or syncope
	Stroke and transient ischaemic attack
Endocrine	Endocrine emergencies
	Thyroid dysfunction
Oncology	Spinal cord lesions
	Neutropaenic sepsis
Haematology	Bleeding disorders
Renal	Acute renal failure
	Dialysis complications
	Renal transplant
Intensive care	Referral process
	Intoxication
	Unconscious patient
	Hypotension
Cardiology	Chest pain
	Heart failure
	Arrhythmia
	Electrocardiogram
Infectious disease	Meningococcal disease
	Avian flu
	Microbiology sampling issues

certification before starting work. Twelve new registrars attended the course.

Capital and Coast and Hutt Valley District Health Boards agreed that retaining medical registrars was critical, and both organisations therefore agreed to provide paid leave to each participant for their attendance. The orientation program was delivered during the 2-week period between completion of house officer rotations and commencement of the registrar rotations, thus not impacting on service delivery as the house officers were not working over that period and the new, overseas registrars were yet to officially begin their employment. All participants received full pay to attend the course.

A written course evaluation was completed at the end of each session, rating each session on a five-point scale. Participants were encouraged to include comments for future improvements. This information was fed back to presenters after the completion of the course. These written evaluations do not form part of this research.

Qualitative methodology was used in evaluating the course as it was felt that it would provide useful information, which could be used to improve the quality of future orientation programs. We also wanted to assess the benefit of the program for a wider group of health professionals including the presenters.

Methods

After completing two programs, the process was evaluated using focus groups. Ethical approval was sought and obtained from Central Regional Ethics Committee. Three focus groups were formed. The first group involved a purposive sample of selected course participants from each of the orientation programs ($n = 7$). The group consisted of a mixture of New Zealand and overseas-trained doctors working at Wellington and Hutt Hospitals. The second group included a sample of senior nursing staff ($n = 7$) from the emergency department and the medical services who had witnessed several transitions of medical registrars. The third group comprised a purposive sample of advanced trainees who had given presentations ($n = 6$). Focus groups were used to generate themes, as the authors were interested in obtaining subjective assessments to determine the benefit of the orientation programs.

An introductory statement regarding the purpose of the focus group was given. Participants were asked to give verbal consent to participate

and to have the content of the discussions recorded. They were asked to comment on the impact of the orientation program. A written record was made focussing on discussion themes, feelings and important comments. The sessions were not limited by time, and each lasted between 45 and 60 minutes.

At the end of each session the tapes were reviewed and themes recorded. The content of these themes were correlated with the recorded notes. Key theme and quotations reflecting these themes were identified.

Researchers organised the program and also conducted the focus groups, which could have led to bias. However, this study was done as a part of a quality improvement program and there was no funding available to employ a facilitator.

2 Participant focus group comments

Relating to advanced trainees presenting the material:

- "The presentations were more useful coming from advanced trainees than from consultants."
- "It was more useful having a presenter who is at a closer level to the one you are working at."
- "The information was at the right level, while not trying to create just another reference book."

Relating to professional benefits:

- "When I had problems later on, I knew who to contact for support."
- "I discovered how friendly and more supportive the senior registrars were compared to the ones at home." (UK doctor).
- "If I had problems later, I knew the faces and knew who to call and how to access support."
- "Such a practical orientation should improve patient treatment and hopefully decrease problems with patient management."

Results

In 2004 and 2005 all new medical registrars starting in the Wellington region attended a clinical orientation course. As all participants were fully paid and free to attend all sessions, there was 100% attendance.

The participant focus group identified many positive outcomes from having attended the orientation. As could be expected, different individuals gained different benefits. There were, however, some common themes. The participants felt that information presented during the program was highly relevant, especially when delivered by an advanced trainee. They also felt that the material was delivered at the appropriate level. (Box 2).

Collegial benefits and communication

Professional relationships and communication between junior and senior registrars were enhanced. All interviewed participants found they could more easily identify with the advanced trainees having met them at the course.

The advanced trainees identified similar communication benefits from the courses. Some believed that there were more calls for advice, but not necessarily more referrals following the course than in preceding years. This was thought to reflect the participants' increased confidence in seeking advice from senior colleagues. The ability to "put a face to a name" when contacted on the telephone was also identified as a positive outcome.

All advanced registrars in the presenter focus group found the process a good one to be involved in. It was thought to be educationally beneficial to update and review basic topics, while teaching junior colleagues developed useful skills. It was noted that having the material prepared in advance was beneficial for the presenters as it decreased their workload.

Clinical safety

The registrars indicated that the orientation program did indeed prepare them for their initial call periods. Participant's confidence with procedures, the hospital environment and with key personnel provided a degree of reassurance they did not have before the course. For some, this was the confidence that their level of knowledge was better than they had anticipated. For others, it was improved confidence having had concerning questions answered in advance. Participants believed that this resulted in improved patient and doctor safety.

The nursing focus group identified different outcomes. There was not a perceived improvement in clinical skills among the new registrars. This is

in contrast to the views of the participants and presenters who had identified improved clinical skills as a result of attending the course. This discrepency probably reflects the fact that the new registrars were spread over three separate hospital campuses and that a 1-week orientation program alone will not necessarily produce significant changes in registrar behaviour such that others may notice. There was, however, an impression among the nursing staff that the new registrars were "happier" and "less stressed" and this resulted in the wards being a more pleasant place to work.

Discussion

The focus group results indicate a clear benefit for medical staff involved in the orientation courses. This benefit extended beyond the attendees, and included benefits for the instructors and the medical department as a whole. It is recognised that there is a benefit to patients in upskilling medical and nursing staff, especially in the early identification of medical problems and therefore the timely intervention in patient care.[3]

The instructors themselves were also beneficiaries of a formal orientation program. Khera et al indicated that senior registrars were able to clearly identify their own training requirements and that a key role of the senior registrar is education of junior staff.[4] Opportunities that allow for formal and informal teaching of junior colleagues develop educational skills among the registrars. This is an important professional skill, which benefits the senior registrars as they prepare for the transition to consultant.

We believe that this program fits into the General Medical Council (GMC) suggestions for training of new house officers that state that such training should cover "hospital or practice procedures and routines, accident and emergency services, resuscitation procedures, use of radiology and laboratory services."[5] New medical registrars who are stepping up to a new level of responsibility should receive a level of induction that will prepare them for their first few days on call. This preparation needs to be site-specific and interactive.

An enduring benefit of this process was the camaraderie and enhanced collegial relationships which developed. There was a clear benefit for participants in meeting other new registrars and discussing clinical issues before starting work. There was also a benefit for the consultants, who were pleased to be invited to contribute to registrar teaching and provide information that they felt was relevant for this region.

The focus groups not only identified the educational value of the programs but also highlighted the improved collegiality which developed between junior and senior registrars and physicians. This has probably resulted in a better and happier working environment for all concerned.

In conclusion, clinical orientation for new medical registrars in the Wellington region had benefits for the individual and for the culture of the organisations involved. To be effective, this program requires commitment to prepare the material, commitment by consultants to support the process and commitment from the organisation to allow participants to attend all of the sessions.

Competing interests

The authors declare that they have no competing interests.

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