



## PROJECT REPORT

### Enhancing health professional education capacity in the Western Pacific region

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#### ABSTRACT:

In the past 5 years there has been a rapid rise in numbers of foreign-trained medical graduates returning to their countries to work as interns across the Western Pacific. These graduates were found to have a varied and different level of clinical knowledge and skill from that previously experienced in the region. This change in workforce profile led to an urgent need for upskilling clinicians as educators and supervisors. A team of clinical education facilitators were invited to design and deliver context-specific professional education workshops to address this need. These workshops were designed to equip clinical staff with education and supervision skills to optimise teaching and learning opportunities in clinical settings for these new graduates of foreign medical programs. Embracing a collaborative approach and addressing learning needs in local contexts has enabled the team to enhance medical education

capacity in the Western Pacific region. This article presents the context of the need for and development of clinical education workshops for intern supervisors in the Western Pacific.

## KEYWORDS:

clinical education, educator development, graduate medical education, health professional education, intern supervision, medical education, Pacific Islands, public health professional education.

## FULL ARTICLE:

### Introduction

Historically, the medical workforce in the Western Pacific region has predominantly been provided by Fiji, Papua New Guinea and Australia, supplying skilled doctors to many Pacific Island nations. With limited capacity and resources, few Pacific Islanders had the opportunity or capacity to undertake medical education. In recent years, countries including Papua New Guinea, Taiwan and Cuba have offered free or reduced-rate training for Pacific Island people. After the Pacific Islander students complete their medical degree in the foreign country, they are expected to return to their country of origin for their medical internship and ongoing medical careers. Only a few countries in the Western Pacific have internship training programs for medical graduates; these were designed for graduates predominantly from Fiji National University and the University of Papua New Guinea, rather than other foreign training programs. A significant change occurred in 2006, when Cuba offered free medical education to Pacific Islanders as a component of Cuba's foreign policy for medical internationalism. This led to a dramatic increase in the number of Pacific Islanders going abroad to study medicine. With the influx of new graduates from foreign medical programs, and in particular Cuba, an increasing demand for professional development of clinical staff to supervise and teach them became evident.

With minimal local capacity to develop and deliver clinical education programs in the Western Pacific region, a collaborative arrangement with local experts and experienced educators from Australia was established. This article explains the sudden need for clinical educators in the Pacific and details the steps undertaken to meet this demand. Outcome data of the workshop series will be presented in a subsequent article.

### Medical education needs in the Western Pacific

A sustainable medical workforce is vital for achieving improved health. The World Health Organization<sup>1</sup> recommends a minimum 2.3 health workers per 1000 population. Several Pacific Island countries fail to meet these standards<sup>1,2</sup>. Enhancing the size of the medical workforce is a key priority area<sup>3</sup>.

Undergraduate medical education in the Western Pacific region has predominantly been provided by Fiji and Papua New Guinea<sup>3</sup>. However, other countries including China, Taiwan, Georgia, Morocco, the Russian Federation and Cuba have been offering medical education for Pacific Island people<sup>1,3</sup>. Students travel to the sponsoring country to complete their medical studies and, upon graduation, are expected to return to and practise medicine in their countries of origin.

The largest foreign medical education program currently supporting Western Pacific countries is that provided in Cuba. Cuba has one of the largest health cooperation programs in the world<sup>2,4</sup>. In addition to providing thousands of doctors globally, it has hosted more than 20 000 students studying medicine from approximately 60 countries<sup>2</sup>. Cuba has provided medical training to over 850 students from Timor Leste since 2003, and students from the Western Pacific commenced in 2006 following strengthening of diplomatic relations<sup>2,4</sup>. By 2008 there were 64 medical students from the Western Pacific studying in Cuba, including students from the Solomon Islands, Kiribati, Vanuatu, Tuvalu, Nauru and Papua New Guinea. In 2013 these numbers had increased to 187, with students from the Solomon Islands (98), Kiribati (31), Vanuatu (25), Tuvalu (19), Nauru (7) and Fiji (7)<sup>1</sup>. Numbers of students have continued to increase, and the first graduates are now returning to their home countries to undertake their medical internships<sup>1-3</sup>.

In addition to increasing medical student numbers, significant efforts have been made to improve the medical workforce across the Western Pacific region. In 2011 Strengthening Specialised Clinical Services in the Pacific (SSCSiP) program

was established. Funded by the Australian Government through the Department of Foreign Affairs and Trade (DFAT) (formerly known as AusAID) and hosted at Fiji National University (FNU), SSCSiP was tasked with the responsibility to strengthen health worker skills, capacity and capability to meet clinical service needs in the Western Pacific<sup>1</sup>. In 2013 the Health Ministers of the Western Pacific recognised that the imminent return of large numbers of foreign-trained medical graduates would place demands on existing health staff and services<sup>1</sup>. They also determined that strengthening the capacity of medical internship programs through both new and expanded programs throughout the Pacific should be a key strategy<sup>1</sup>. Previously, with such small numbers of medical graduates, internships were only provided in a small number of countries. With Fiji's graduate student capacity exceeded, and the anticipated return of the foreign-trained graduates, Kiribati began developing its own intern program in collaboration with regional experts<sup>1</sup>. In 2014 the Kiribati Intern Training Program (KITP) was established, funded by DFAT and coordinated by FNU. The aim of this program was to support Kiribati and other Pacific Islands to develop quality internship programs and to build in-country capacity to ensure the new medical graduates from foreign countries were adequately supervised and trained to deliver safe and quality health care. As a component of the program, it was agreed that a detailed pre- and post-assessment of intern competencies should occur, with FNU helping to develop these activities<sup>1</sup>.

Since 2013 Western Pacific Islanders who have undertaken medical education in Cuba have been returning to their home countries to begin their internships. For the Cuban program, Pacific Island students spend their first year learning Spanish, and then undertake the 6-year medical degree in Spanish, before returning home<sup>4</sup>. The Cuban medical education program brings with it enormous opportunities but also a number of challenges. Cuban medical education is of a high standard for its focus on medical knowledge, and public and primary health<sup>4,5</sup>. However, concerns have been raised about the quality of the graduates' practical skills and their integration into their local health workforce<sup>1-3,6</sup>. Following in-country assessments, these new graduates have been found to lack clinical, procedural and communication skills for safe and effective medical practice as interns in Pacific Island hospitals<sup>7-9</sup>. For example, many of the new interns had difficulty inserting intravenous catheters, writing detailed prescriptions or communicating using medical terms in English<sup>7-9</sup>. This was not totally unexpected, as concerns had previously been raised<sup>1,2,5,6</sup>. To address the concerns about the clinical skills of the new graduates, a bridging program and a modified 2-year internship have been established in some countries.

This change in workforce profile led to a need to enhance clinical education to support the graduates and existing clinical staff. It had previously been recognised that effective education and support for the interns relied upon skilled clinical educators<sup>10</sup>. During the student assessment visits in the Solomon Islands it was recognised that the availability of educational support for both interns and clinical supervisors was inadequate<sup>8</sup>. Professional development in clinical education for the supervisors was considered a high priority, to deliver an effective intern training program<sup>8</sup>. The need for enhanced health professions education and training in the field of medical education had previously been identified, but not actioned<sup>3,6,10</sup>.

The need for skilled medical educators is not unique to the Western Pacific region. The need for capacity building of educators in other health professions in the Western Pacific region, such as in nursing and midwifery, has been also recognised<sup>11</sup>. However, it has been shown that individual context and culture play a significant role in capacity-building interventions and that in-country programs are preferable to sending staff overseas for training<sup>11</sup>. A context-specific program developed collaboratively with local knowledge of culture and needs was required.

In November 2014, Dr Sinead Kado, a medical officer from SSCSiP and Fiji National University, approached Associate Professor Louise Young (an educational psychologist) from James Cook University and Associate Professor Linda Sweet, a nurse/midwife from Flinders University, to determine their willingness to co-develop and deliver a clinical educator development curriculum for the Solomon Island internship program. They had all met and worked together through the development and delivery of a Graduate Certificate in Medical Education at FNU in 2013. Drawing on each person's expertise, and with Dr Kado's local knowledge of the needs and resources of Western Pacific Island countries, a 5-day clinical educator program with a combination of theory and practical activities was developed. Both James Cook University and Flinders University have supported the program by enabling the staff to travel and deliver the

workshops. Travel costs have been covered through the KITP program and/or local health departments.

### **Skills for development to be a clinical educator**

Clinical educator development involves improving teacher effectiveness in core areas including creating a positive learning environment, implementing clear learning objectives and outcomes, providing timely and relevant information, using questioning strategies, providing feedback, and undertaking assessment and evaluation<sup>12</sup>. Clinical educator development initiatives are known to create changes in attitude towards teaching, improved pedagogic knowledge and skills, changes in teaching behavior and changes in organisational practice and student learning<sup>13</sup>. Numerous studies have highlighted that staff who have not been in supervisory or educator roles before may experience reluctance, fear of teaching, and stress when expected to undertake these new responsibilities<sup>14</sup>. A program for clinical educator development was required for the Western Pacific for experienced local clinicians, who had little formal education or training in teaching and supervision.

The need for supervisor development or teaching the teachers has been identified consistently in the literature<sup>15-18</sup>. Knowledge domains that effective clinical teachers use include knowledge of the learners, general principles of teaching and learning, content-specific instruction and knowledge of subject matter. The three experienced educators collaborated to identify the needs for a program that would meet the Western Pacific Island context and address identified learning needs.

Given the context in the Pacific and the urgent need for skilled educators to support foreign-trained graduates, the development of teaching health services was thought to be most appropriate<sup>19</sup>. This would involve equipping staff with education skills to enable the senior doctors to function as true consultants, with cascading supervision, as in the traditional consultant–registrar–resident model<sup>19</sup> (p. 105). For such a model to be successful, the new graduates needed to be active participants in the medical team, capable of contributing to the medical duties of an intern. In the Western Pacific, intern supervision and support occurs within multidisciplinary teams, so the curriculum needed to traverse disciplines and health professions.

### **Program development**

Having established a team to develop and deliver a clinical education program for the Solomon Islands and agreed on the model, the next step was to consider the curriculum. It was agreed that a reflective teaching and learning process akin to action learning and teaching research would be used<sup>20</sup>. This required cycles of planning, delivering, assessing, evaluating and reflecting on our teaching, and on the clinical educator development program outcomes<sup>20-22</sup>.

Medical education literature was reviewed for best practice faculty development techniques and strategies (sources included Gibson and Campbell<sup>15</sup>, Hesketh et al<sup>23</sup>, Irby<sup>24</sup>, Kilminster et al<sup>16</sup> and Steinert<sup>12</sup>). The knowledge, skills and experience of two facilitators (LS and LY) in delivering postgraduate courses in medical education was also integrated. The repetition of common themes across a range of literature and experience identified relevant skills for a clinical teacher and defined core areas to be covered in the Pacific Clinical Educator Workshops. Workshops were developed using a six-step method for designing and implementing a curriculum developed by Kern<sup>25</sup>.

Content delivery aimed to involve active learning, so that participants experienced most activities as learners before they were asked to teach using similar methods. The workshop facilitators endeavoured to role model best practice by using session plans, learning outcomes, hands-on practical activities, role play, and giving and receiving effective feedback. Having fun and extending learning was a central element to all approaches. The 5-day workshop was structured in five main themes, one presented each day. These were ‘understanding learners’, ‘teaching and learning theory’, ‘practical skills for teaching’, ‘assessment and feedback’ and ‘putting it all together’.

### **Progress**

In March 2015, the team travelled to Honiara in the Solomon Islands and delivered the first 5-day program. Anecdotally, positive feedback was received from all participants, resulting in ‘the word spreading’, and subsequent invitations to conduct the program in other countries. In August 2015 the team travelled to Tarawa in the Republic of Kiribati, in

November 2015 to Port Vila in Vanuatu, and in November 2016 to Koror in the Republic of Palau. At each location the 5-day program was delivered with small modifications to address local needs in each location. Such modifications were primarily timing of the workshop around clinical service delivery to maximise attendance, resource availability, and small changes based on feedback from the previous workshops such as readings, ordering and timing of sessions. With a multidisciplinary approach, the team have provided education for medical officers, nurses, midwives, program coordinators, and allied health practitioners including dentistry and radiology staff. Again, anecdotally positive feedback was received from participants, and the reputation for providing locally relevant and effective education increased. Formal evaluation is currently under way and will be reported in the future. Embracing a collaborative approach and addressing learning needs for local rural and remote contexts has enabled the team to enhance clinicians' skills in effective medical education and supervision of interns in the Western Pacific region.

## Conclusion

In the past 5 years the Western Pacific region has seen a rapid change in the graduate medical officer profile, leading to an increased need for internship programs and clinicians equipped as educators. Interns returning to work in their home country after completion of some international medical programs are requiring upskilling in local procedures, processes and language. Clinicians who have never supervised interns require development of medical education skills to become effective clinical educators and supervisors. A 5-day workshop has been delivered at multiple sites across the region to address this urgent workforce need.

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