Rural Undergraduate Medical Education Summit 2014

Clearwater Resort – Christchurch
Saturday 4th and Sunday 5th October 2014

Introduction:

This summit is to explore the outcomes and value of rural undergraduate medical education programmes in New Zealand. It is recognised that these programmes are more expensive than standard urban based programmes and we need to highlight the value to rural New Zealand of the investment made in them. We need be able to give our stakeholders the confidence that their investment is well placed to make a difference.

Community Contact Week

Sue Pullon – Patrick McHugh

Unuhia te rito o te harakeke kei hea te komako, e ko?
Kii mai koe ki ahau he aha te mea nui a te ao?
Maku e kii atu he tangata, he tangata, he tangata

Tear out the new shoots from the flax where will the bellbird sing?
You ask me what is the most important thing in the world?
I'll reply It is the people, it is the people, it is the people.
SIR APIRANA NGATA

Community Contact Week (CCW) is one part of the Healthcare in the Community module in 3rd year. The programme has been running for nineteen years now. Convened out of Wellington (Hamish Wilson is the convenor) each medical school takes a third of the class for CCW, usually the third week in August. Convenors and administrators from each of the three centres put a lot of effort and energy into the arrangements for this week including a Dunedin based briefing a short time before the week begins. Students allocated to each of the three centres travel by various means to their CCW locations. There are many logistics involved. Many of the South Island placements use cars, the lower North Island placements require flights, shuttles, buses and trains. Wellington cohort students are placed in Newtown/Capital, Porirua, Kapiti Coast, Whanganui, Palmerston North, Wairarapa and Hutt Valley.

CCW helps prepare medical students for anything and this young third year, continued on to participate in Tairāwhiti IPE programme in 6th year

Each CCW student completes a reflective piece of writing for their health in communities (HIC) tutor. In Wellington each group are also required to produce a report on their experiences. Students can choose their own format for the report – this may be a video, essay, piece of artwork, PowerPoint presentation – the variety is endless.

- "really great experience, and easily the best part of an incredibly tough year!"
- "An invaluable experience for the third year curriculum. An eye-opener especially to an urban kid like me who had never really experienced rural New Zealand. It was awesome."
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The Tairāwhiti IPE project.

Sue Pullon – Patrick McHugh

In New Zealand health professional degree programmes are provided by a wide range of tertiary institutions and even within the same institution almost wholly uni-disciplinary clinical placements often occur in same area, with the same providers but different programmes. Those operating programmes don't communicate with each other and students don't learn together and don't learn to communicate professionally. Is it little wonder that poor interdisciplinary communication is the single most common reason for reported complaints.

The Tairāwhiti IPE (TIPE) project has grown and matured over the 2012 to 2014 period of its existence. Funding was initially set up for a pilot but they now have funding from Workforce New Zealand to sustain the programme. Overall the project has been very successful with several different combinations of professions being involved.

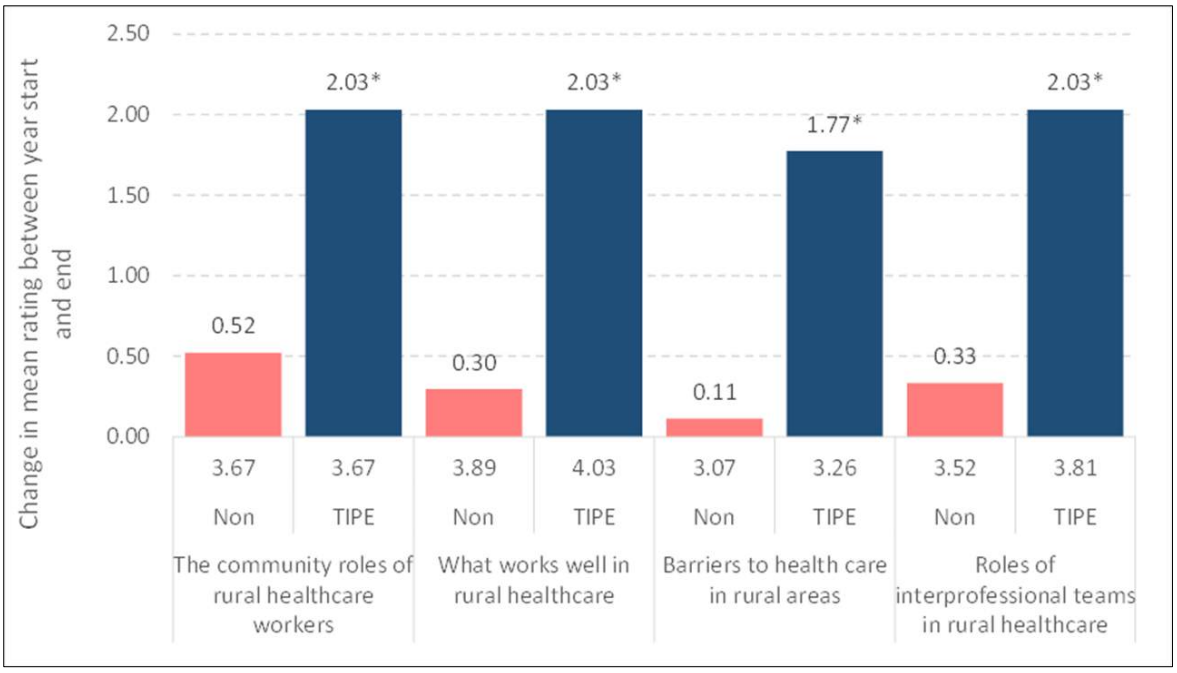
Stud.	Dietet.	Dental	Med	Nurs	Pharm	Physio	Totals
3yr totals	19	24	33	31	24	24	159

The project has been running a cohort study comparing year-start to year- end for each group of students looking at the experience and one of the common factors is the benefit of the students housing-in together for the duration of the programme. The Governance and management is a key to the success of the programme and represents one of the hardest areas to manage. Students have the opportunity to practice many skills under supervision.

Comparison between year-start and year-end results compared to their peers who did not take part in TIPE, students demonstrated:

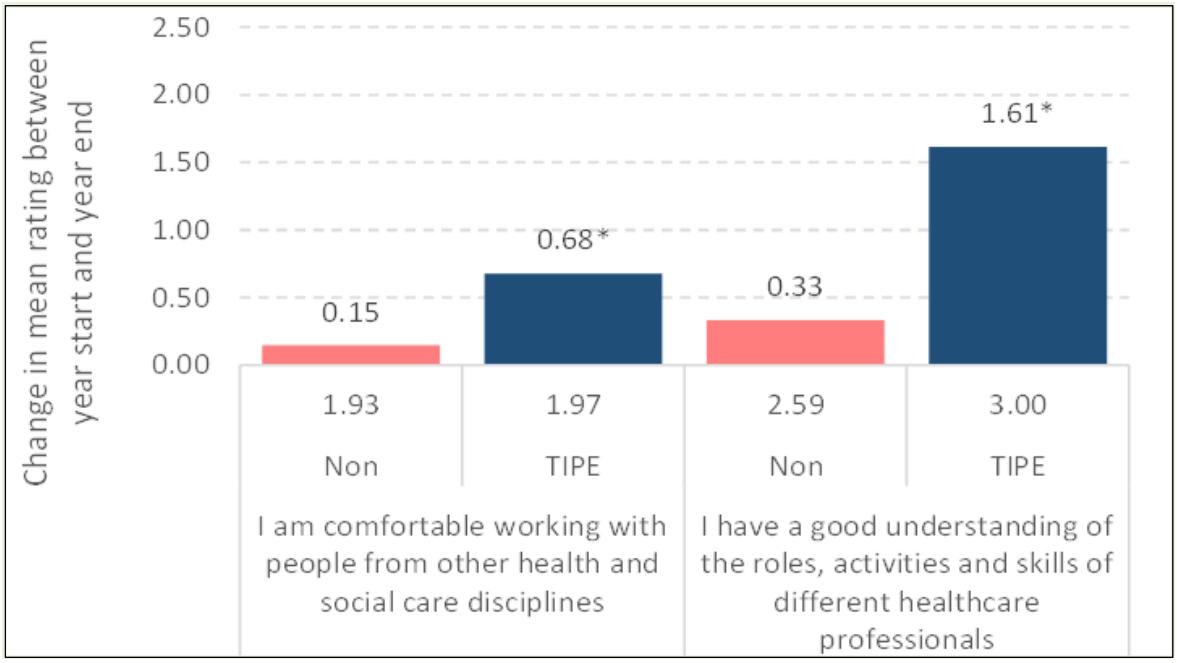
- Significantly increased knowledge and confidence about many aspects of rural healthcare
- Agreement that an interprofessional approach permits health professionals to meet the needs of patients.
- Comfort working with and understanding of the roles of other health professionals.

Graph 1: Change in knowledge for different aspects of rural healthcare between the year-start and year-end surveys for TIPE and non-TIPE students (Students using a 1 for differ



Graph 2: Change in knowledge for different aspects of rural healthcare between the year-start and year-end surveys for TIPE (n = 31) and non-TIPE students (n = 27). (Students using a 1 – 5 scale)

Note: The x-axis numbers show the year-start means. TIPE changes are marked with an asterisk where the change between the two surveys is significantly different from the change for non-TIPE students (p < 0.000).

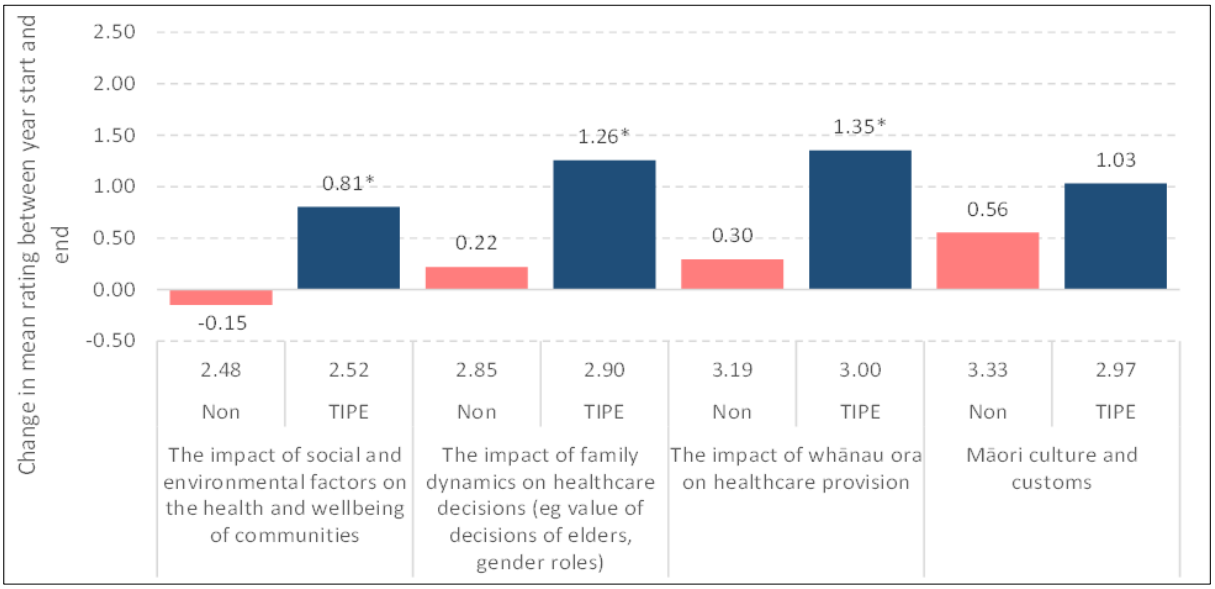


Comparing of year-start and year-end results compared to their peers who did not take part in TIPE, students demonstrated significantly increased:

a) Knowledge across three areas:
   - the impact of social and environmental conditions on the health and wellbeing of communities,
   - the impact of family dynamics on healthcare decisions, and
   - the impact of whānau ora on healthcare provision.

b) Knowledge in two of the three areas of chronic condition management:
   - knowledge of evidence based guidelines and
   - education resources.

Graph 3: Change in knowledge for different aspects of Māori and community healthcare between the year-start and year-end surveys for TIPE and non-TIPE students (Students using a 1 – 5 scale)



Student Highlights

"I don't think I could have come into a warmer, friendlier, more welcoming community. ….I've never ever been able to apply my concepts of Hauora Maori and things like that [before] that we get taught in our courses... "

"They've looked after us, they've given us freedom to go off and like really develop as real world [practitioners] I think, …and living in a little flat, we've had so much fun, we've done so much bonding…."

"The inter-professional stuff we did …with the physio was awesome. I learnt so much about what they did, and it was really fun. I had a day with pharmacy, I learned heaps …and with nursing"

"…this is easily the most beneficial course I've ever done as part of my medical degree. I say this because it's the first time we have been able to integrate all the other professions."

"The quality of the PPFs[local staff] is excellent. We are comfortable approaching them to raise concerns, and seek clarification. They are very, very supportive of us"

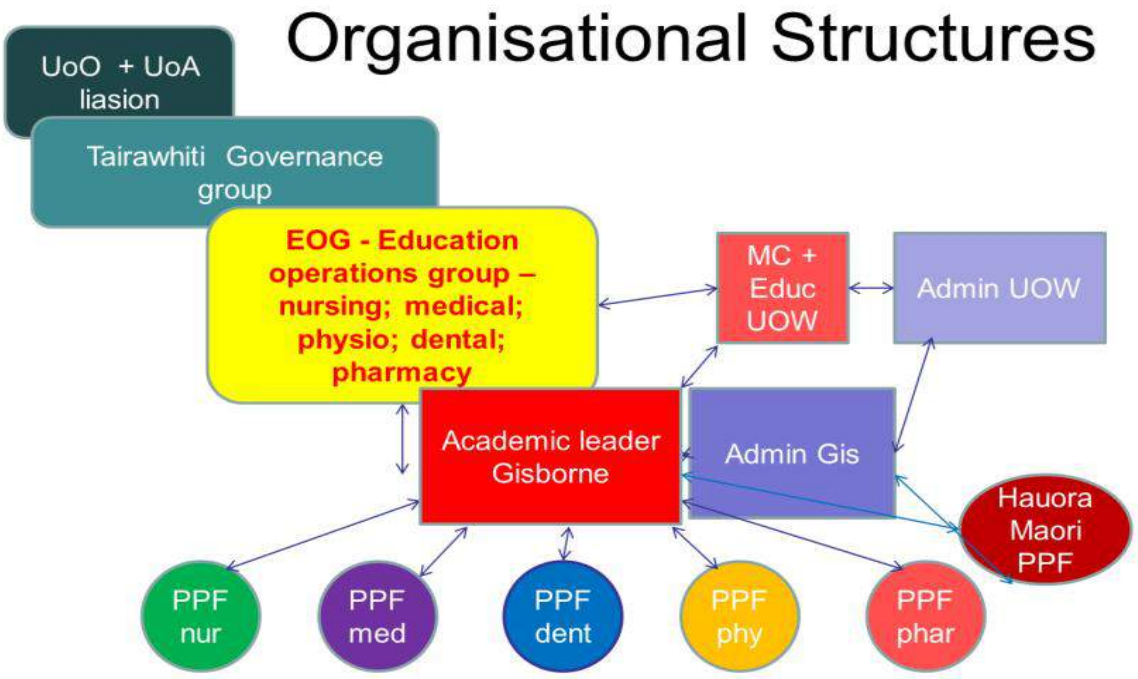
Health Workforce New Zealand (HWNZ) has committed to sustainable funding of TIPE for 2015 and for 2016 and has stated an intention to support expansion of such models to a nationally coordinated programme with Auckland and Otago Universities encouraged to roll-out proven model(s), in similar-sized sites with a priority for rural areas over a geographic spread.

"TIPE is in place as a sustainable programme that is achieving the intended outcomes and has the support of the local community. TIPE's achievements support the need for it to continue. Commitment of resources to developing governance and management structures, a curriculum agreed across participating disciplines, and to developing a locally based programme team has provided a strong foundation for continuing the programme."

(Independent evaluation report to HWNZ, Jan 2014)

There have been some challenges on the organisational side, co-ordinating disciplines from various schools, scheduling blocks, managing multiple organisational relationships and locations, student timetables, clinical placement capacity and securing sustainability and the future is uncertain.

There is a limit to the clinical capacity - (of) a region but provider capacity can be maximised by having good organisation of all the placements in the area through a single point of contact. Knowing well in advance that students are coming and resting providers at times (particularly the smaller ones). Training, support and practice at having students is all helpful.



Year 4 Community Placements

Prof Felicity Goodyear-Smith

Felicity spoke of the increasing student numbers and the challenges to recruit and accredit sufficient teaching practices. There are several new groups looking for experience in the rural practices that will compete for access to the teaching practices.

University of Auckland is planning year 4 community placements. From 2015 all University of Auckland Year 4 students will have a two week long community placement in the 2nd half of their Emergency Department run which includes the learning of procedural skills. The focus will be on seeing undifferentiated / acute patient presentations and wherever possible also rural immersion, in Hauora Maori with inter-professional experience.

The attachments will occur in a combination of community hospitals, rural practices and A&M centres. Students will be placed mostly in pairs with one coordinator per site but the students will rotate around a number of professionals and locations to gain the opportunity to practice many skills under supervision. In this way each student will gain experience in a variety of clinical skills and encounter a comprehensive range of professional situations (See table that follows).

Procedural skills checklist	**Range of professional experiences**
– Wound care – Suture of wounds / Suture removal – Biopsy of skin lesions – Administer O_2 – Give injections – Joint Aspiration / Steroid Injection – Give immunisations – Initiation of IV access (lure) – Preparation and administration of nebuliser – Perform and interpret ECG – Venepuncture opportunities – Apply cryotherapy – Other procedures initiated (list)	– General practice consults including procedures – Practice nursing eg wound dressing, immunisations, cervical smears – Community pharmacy – Social or community worker – Podiatry – St John – Laboratory – District nursing – Plunket

There are various outreach clinics to be experienced:

<table>
<tr><td>Auxiliary sites</td><td> 

Inside mobile clinic
 </td></tr>
<tr><td>– Satellite clinic
– Mobile clinic
– School clinic
– Marae clinic
– Rest-home
– Hospice</td><td> 
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The Department of General Practice and Primary Health Care is finding challenges to recruitment of practices. Identifying practices is made difficult when finding that PHOs, DHBs, and the RNZCGP are not quite willing to share their information so they are falling back to Google search which is helpful but is time consuming.

A team, Tana Fisherman - Senior Lecturer and Keryn Roberts - Practicum Placement Administrator, went around the area northern part of the North Island. It was exhausting travelling and with the diverse schedules of GPs and practice managers, getting to see a practice was difficult and appointments were hard to arrange. So they went cold calling. They found practice managers to be the key but seeing them was very time-consuming as they sometimes work part-time and across practices. They noted the absence of a formal access and training agreements.

Interest turned out to be surprisingly high, around 90% compared to an anticipated 20-30%, but making it happen is difficult as practice ownership is now complicated with corporate schemes, partnerships, and trusts. They may need to talk with GP, PM, CEO to get access permission and identify a teacher. There is a huge diversity in terms of organizational philosophy. Many practices have additional sites which is good for student experiences but sometimes difficult to keep track of, practice spaces are bigger & expanding with new buildings, additions and only a small number of solo practitioners remain in very remote areas.

Outcomes of the recruitment visits

- More than 200 practices were contacted and to date 116 practices have been visited
- All but 2 practices visited said yes
- Not all were suitable
- Nearly 80% of all practices have been contacted – Auckland & surrounds remain
- It is important to explain the dividing line allocating territory to the two Universities
- It is important to convey the impact of expanding enrolments for medical schools

Most rural practice sites want a mixture of Yr 4 & Yr 6 placements and there are those interested in starting with Yr 4 who would like to take Yr 6 in future indicating a capacity for increase student numbers. They found a huge diversity in terms of organisational philosophy.

Broadway Health Kaikohe

Raetihi Doctors Surgery

Patea Health Centre

Family CentreTaumarunui

Hospitals in Rural Communities

They represent a changing environment (eg Kaeo). There is a mixture of public and private hospitals, often in partnership with general practice as access point eg Pohlen Hospital xture of public and private hospitals, often in partnership with general practice as acce free maternity & hospital level aged care, medical and some specialist surgical services. A&M clinics are not at all suitable with their context of minimal investigation and follow up with a high rate of referral to hospital.

Whangaroa Hospital, Kaeo

Matamata Hospital

Thames Hospital

Tokoroa Hospital

It is important to develop strong collaborative links. Nurses and GPs need to develop a network, receive honorary clinical lecture positions and library access before the academic year begins with connection to Goodfellow learning and CME. There is a plan to present at the practice managers conference next year and maintain that important link. Partnerships with St John, Pathlab & community pharmacists need to develop. Students do not need their own room or computer to work with the team where clinical activity is taking place. Practices are keen to be given ideas for delivering student learning and requested brief suggestions or hints. They were not necessarily looking for a whole learning module but more of a tweet, twitter or blog. The school can introduce projects, create research opportunities and have strategic conversation and students will come with procedural skills & ED experience so overall practices liked this idea and indicated they were "ready for action".

Accommodation is available, with most sites being supportive and interested in home stay opportunities within the community. Suitable backpackers have been identified but it is important to list them as many may not be appropriate due to co residency of seasonal workers.

The visits have created an initial engagement, started the building of relationships and demonstrated the value of talking face-to-face. "Could we come back please?"h

There is a need for communication between parties, the Universities, RNZCGP and DHBs and a need for assistance to increase the necessary infrastructures. It is recognised that the PGY and GPEP placements would place a stress on the capacity for placements.

Group Discussion

- capacity is an issue no matter what programme is running, the second issue is funding.
- should there be a collaboration to achieve a common database of placements?
- we are bombarded by student requests for placements, there needs to be more dialogue and communication
- notion of engaging with the community rather than just pushing the students out there
- fear of students being displaced by other sector required placements
- there is an optimal time of duration for an attachment to be useful but dependant on the nature of the attachment an optimal time if too long can become negative.
- students generally work in an apprenticeship model and feedback is important
- having other doctors, registrars can facilitate student vertical teaching
- rural students spoke of quality verses quantity as being important and to promote good independent patient contact, space and opportunity in facilities is important.
- It is immense value to obtain a quality placement with facility and good teachers
- students build up to develop a good connection with the personnel, the patients and the community
- with patient contact the student grows with confidence within the programme and they need to have good hands on exposure with patients
- there are risks associated with undergraduates consulting patents and they must not assume any clinical responsibility
- involvement with the rotational programme (seven weeks) for fifth year students inspired participating GPs to teaching.
- Introduction to the role of a student of a rural attachment programme was variable but in general students were orientated, introduced to how the practice works and initially the student observed the doctor working 'flower potting'. Once familiar, students would move to more 'hands on' learning by participating in the consultation. There is seen to be value in upskilling of our teaching workforce. There is opportunity and value in other health professionals providing teaching. In rural settings there are usually no boundaries between primary and secondary care providing a lot more flexibility for teaching.
- For a robust programme the right programme model, the relationships and the expectations of each stakeholder and the balance was important. Students valued continuity of patient contact and suggested there would be value in having an active (confidential) surveying of placements and the collation of these to find trends with regards to great/poor placements. This survey needs to be established within a safe environment for the students with maybe links for the students and facilitators to communicate if needed. It is important for the experience to be positive and role models to inspire the students. The IPE programme has experienced some RMIP students and found them to be much more patient centred/holistic on arrival as opposed to hospital practice students who are more disease centred.

Fostering social accountability in health professional education: can IPE help?

Sue Pullon – HoD Primary Healthcare and General Practice
Patrick McHugh – Social Accountability

"…the obligation [of health professional schools] to direct their education…activities towards addressing the priority health concerns of the community, region, and /or nation they have the mandate to serve"
(WHO, 1995. p.3)

"Health is all about people. Beyond the glittering surface of modern technology, the core space of every health system is occupied by the unique encounter between one set of people who need services and another who have been entrusted to deliver them. This trust is earned through a special blend of technical competence and service orientation, steered by ethical commitment and social accountability, which forms the essence of professional work."
Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. The Lancet 2010;376:1923-58.

21st century imperatives for Health Professional (HP) education

- improving quality, equity, relevance
- better effectiveness in health care delivery
- reducing the mismatch with societal priorities
- redefining roles of health professionals
- and providing evidence of the impact on people's health status

December 2010

Global Consensus for Social Accountability OF MEDICAL SCHOOLS

Highlighted needs of Health Professional education to…

- Respond to current and future health needs and challenges in society
- Reorient their education, research and service priorities accordingly
- Strengthen governance and partnerships with other stakeholders
- Use evaluation and accreditation to assess performance and impact
- Surely the care HP students might provide for patients is providing benefit to communities?
- Yes, but…is this service rather than social accountability?
- Are there other imperatives? Other places where social accountability can be considered?
- Assessment in any IPE context is challenging

What about curriculum design? Assessment?

Intended learning outcomes (ILOs) need to be clear and well-articulated for IPE

- Ideally need to be -
  - Common to all learners
  - Professionally neutral (no professional group at either an advantage or disadvantage)
  - Potential for each student to contribute equally
  - Appropriate to the particular cultural context
- Demonstrated through meaningful and useful assessment
  - That is recognised and valued equally by each discipline

To embed social accountability into the theoretical aspects of the curriculum (such as student assessment) presents a challenge.

Social accountability in relation to assessment

The context

- A five week IPE immersion programme
- A key shared IP group activity – devising and executing a community education project
- Assessed by an IP teaching team

An unexpected journey…

- Assessment became a socially accountable activity

In Tairāwhiti IPE

- Collaboration across University of Otago and Eastern Institute of Technology; the first two years
- IP education in high needs rural areas with strong Maori populations
- Rural, clinically-based, 'transition-to-practice' clinical placement programme for final year students
- Five week rotational blocks (averaging 12 students/block)
- Dentistry, dietetics, medicine, nursing, pharmacy, physiotherapy - students and staff

A Range of Broad Objectives

- **Rural health objectives**
  - meet rural health needs;
  - increase rural training opportunities,
  - enhance workforce;
  - better equip for comprehensive generalist practice
- **Interdisciplinary objectives**
  - greater understanding between health disciplines,
  - patient-centred collaborative practice and effective teamwork
- **Hauora Maori objectives**
  - better addressing health needs;
  - working and researching within Maori models of health care
- **Chronic conditions management**
  - team-based care,
  - self-management and expert patients

Intended Learning Outcomes

Eight Domains – within a rural clinical context

- Communication
- Treaty of Waitangi
- Hauora Maori
- Collaboration
- Roles and responsibilities
- Patient/client/whanau-centered approach
- Team functioning
- Negotiating decisions

The community education project – key aims

- to devise a credible and usable community education resource
  - that would be of immediate benefit to the community… the community identified the topic of need
  - as well as a vehicle for student learning
- Intended learning outcomes related to team processes and team work
  - although students often see content–based outcomes as prime objective.

Community Projects

Block	Projects	Block	Projects
Block 1 2012	Healthy Homes Men's Health	**Block 1 2013**	Rheumatic fever Breast Feeding
Block 2 2012	Exercising for Life (preparing for duathlon) Rheumatic fever knowledge	**Block 2 2013**	Recycling (composting) Healthy Shopping
Block 3 2012	Healthy Gardening Infection Control	**Block 3 2013**	Healthy Eating Smoking Cessation
		Block 4 2013	Waterwise Workplace Wellness
		Block 5 2013	Health Literacy Lifestyle for Health

Evaluation was by

- **Focus groups** - every block of students
  - Audiotaped, transcribed, analysed
  - 84 students (as at end 2013)
- **Interviews** with community providers
  - Field notes
  - 12 community provider representatives (as at end 2013)

Results:

In these focus groups and interviews conducted at the commencement of their experience students expressed that:

- **There appeared to be a lack of understanding over what community and teachers wanted**
  - *"We tried so hard to figure out what they wanted us to do but it just didn't make any sense"*

- **There was a lack of understanding over what community and teachers wanted**
  - *"[how does it]advance our knowledge, our general knowledge, about physiology or different aspects of health?"*
  - *"Like doing the project and all is fun, except that the topic of the project was completely irrelevant to our specialties"*
  - *"…anything can be a really good topic but it's like the stuff we did we kind of already knew anyway and I didn't feel that we did a lot of learning from our project, so it was kind of just time-consuming".*

Then there were light bulb moments

Students themselves realised and raised a relationship between the community project, its assessment and this being socially accountable

- *"Like I don't feel like my [discipline] training is advanced because I know about water supply, but it's just nice to work on that as a group, and give back"*
- *"I liked that we were doing a real project".*
- *"And if it's giving back, then I think it's great… it does make a difference."*

What the teachers realised…

- *"we [now] tell them [explicitly] that it's … a way of contributing to <u>your</u> on-going learning but it contributes significantly to the community as well."*
- *"And so it's a contribution as well, as opposed to what I understand examination to be, it's for me to either fail or pass it."*
- *"…what we're thinking about is better preparing them for what's going to help them as they go into our community. So better prepared for the exposure part"*

Execution and production of projects – later reported by students as powerful learning experiences.

- *"I think with us 'cos we were actually doing it for real people who were actually going to implement our thing, like in the back of our mind … 'Oh my goodness'."*
- *"I thought it was a really good chance to tie in everything we learnt, as well. Like we all got up and gave our mihi…"*
- *"We had to make this good, because this is actually going to be used in two weeks' time, and they're going to be doing this programme."*
- *"Our group worked on a project called 'Water-wise' which aimed to demonstrate history of Uawa, the water supply system, the water condition and current water regulations in Tolaga Bay. It was a great experience again as I could observe how Maori culture and their spiritual bonding is valued in areas like Tolaga Bay. Through this project I learnt the meaning of water in Maori culture …"*

Spontaneous provider views

- *"The presentation itself is a resource and their presence [referring to the students] has made an impression on us".*
- *" the resource [the students created] is tangible and 'enhanced our actual service"*
- *"Data [the students] gather and analyse is 'fantastic' and 'continually used' to inform service delivery"*
- *"From one project, the student project resource successfully supported a key funding application"*
- *"For some students the direct relevance of the projects, conceived by community agencies, to their prospective role as health professionals initially proved challenging".*
- *"with a degree of creativity and persistence less seemingly clinical aspects of a course, e.g. student assessment, can be framed in manner that is socially accountable".*

"Instructional reforms should: …promote interprofessional and trans professional education that breaks down professional silos while enhancing collaborative and non-hierarchical relationships in effective teams;…and promote a new professionalism that uses competencies as objective criteria for classification of health professionals and that develops a common set of values around social accountability".

Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. The Lancet 2010;376:1923-58.

TIPE Community Placement in Gisborne

Alice and Megan (Tairāwhiti IPE students, physiotherapy) presented their experience in the Gisborne community. They valued the shared accommodation with students of other disciplines; with associated dinner and other time conversations was an important learning time. They spoke of getting the understanding of the Te Whare Tapa Whā model and joining local sports teams in the process of community immersion.

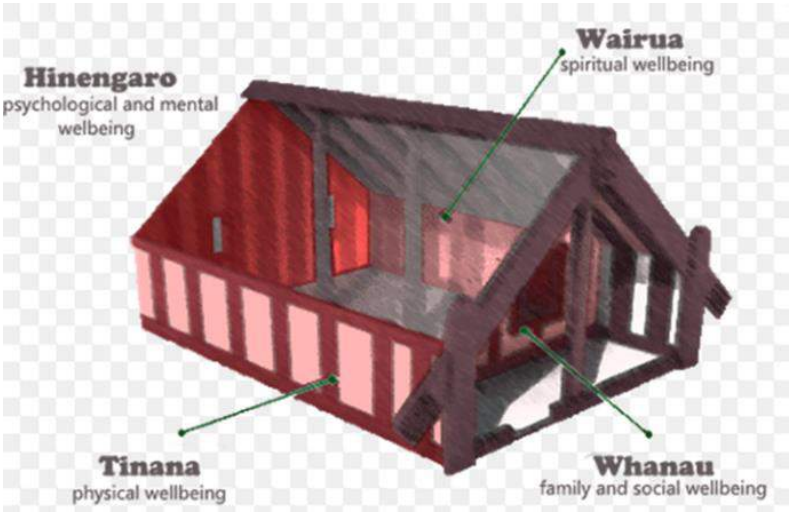
They found that the people of Gisborne recognised the following in their community:

- Weaknesses
  - Unemployment
  - Social breakdown of family units
  - Gang violence/affiliations
  - Health inequalities and problems – CVD, obesity, lung cancer, diabetes
  - Drugs/alcohol
- Strengths
  - Great sunny weather
  - Friendly people
  - Beautiful scenery and beaches
  - Surfing culture and other sport/activity

In the course of their attachment:

- They participated in Noho marae where they experienced a powhiri, heard the history of the area and discussed whanau ora. They partook of the kai and enjoyed getting to know the people and each other.
- They attended Kaumatua Day, a fortnightly programme for elder Maori. At Turanga Health, started in 1999, they participated in health checks, physical activity and experienced fun and companionship.
- They worked with a cardiology nurse, attended a dental centre, and experienced dietetics, occupational therapy, the heart failure nurse, pharmacy and attended surgery. They learned a lot from dinner time conversation and the group projects they undertook.
- Wairoa was a new initiative in TIPE, four students were based there. They found it a similar community to Gisborne but smaller with a larger Maori population. They video-linked for class time and undertook a separate group project.

- **Implementing Te Whare Tapa Whā**
  - Building rapport/relationships
  - Patients tell physios things they won't tell other HCP's
  - Saw this work in a lot of our patients
  - Ask the question about cultural considerations



- They noted the overcrowding, cultures/language barriers and distractions from achieving optimal healthcare. The elderly and the variety of ages and conditions they brought. They noted the innovation/engagement with the community and felt it was rewarding seeing progress in this close-knit community.
- They attended outpatients, the inpatient team, in-service education sessions, MDT meetings and Journal Club.
- Above all they enjoyed the region.

Group Discussion

- Living with students of other disciplines provided them with a broader understanding of the scope of practice of other students as most conversations were based around daily routines and current work experience
- Social Accountability, do we teach it, do we experience it?
- Is the community teaching the University social accountability or is the University teaching it to the community
- The understanding of the aspects of social deprivations within rural areas vs that en masse in South Auckland, the importance of community engagement and community involvement.
- The emergence of the student's connections with community health as a transforming experience for the students – adult learners making their own connections, the students recognised they had to experience it – they didn't know the value of it until they had to experience/apply it.
- Recognised that there can be a danger of 'over teaching' social accountability.

Pukawakawa: Does it influence workforce choice?

Christina Mathews

Christina Matthews was from the North Shore originally and "now a 5th year medical student at the University of Auckland, doing Pukawakawa based in Northland DHB currently and loving life!" She has spent seven weeks in Kaitaia and was just about to wrap up the last two weeks of psychiatry before heading back to "the big smoke".

Pukawakawa Programme is a year long rural/regional student placement programme with 24 Auckland 5th year students living in shared accommodation experiencing integrated health care placements.

This is the group of twenty four 5th years at our welcoming powhiri this year. It is getting increasingly popular with up to 70 students applying for the 24 spots this year.

Whangarei is the hub with four peripheral spokes in Kaitaia, Rawene, Kawakawa and Dargaville. Seven weeks is spent in a rural center working a mixture of hospital and GP work so seeing the services -"this is a highlight of the year".

The curriculum is slightly different to that in Auckland or Waikato. It focuses on seeing a generalist view on health care, learning in the hospital, in different services and a huge amount of rural experience.

The learning outcomes remain the same as the rest of the cohorts for 5th year but the students value the special extra experience.

When comparing Pukawakawa's curriculum to that in Auckland or Waikato, there is a 10 week combined women's and children's health, ophthalmology is just one week to allow for a week of orthopaedic surgery, and there is a combined integrated care of seven weeks which includes general practice.

Normal Year 5	
Obs & Gynae	**5 weeks**
Paediatrics	**6 weeks**
Specialty Surgery	**2 weeks**
Ophthalmology	**2 weeks**
Psychiatry	**6 weeks**
General Practice	**4 weeks**
Selective	**6 weeks**
Formal Learning	**2 weeks**
Population Health	**1 week**
Holiday	**3 weeks**
Clinical Leadership	**1 week**

Pukawakawa	
Women & Children's Health	**10 weeks**
Specialty Surgery: Orthopeadics, ENT, Urology & Ophthalmology	**4 weeks**
Integrated Care & General Practice	**7 weeks**
Psychiatry	**6 weeks**
Selective	**4 weeks**
Formal Learning	**2 weeks**
Population Health	**1 week**
Holiday	**3 weeks**
Clinical Leadership	**1 week**

The Study

Rationale

- Maldistribution of NZ doctors in rural and regional areas.
- Strongest link to rural career choice is a rural background

Aim

What are the early outcomes of the Pukawakawa programme?

- Location
- Career intentions
- Reasons

Design

- Participants: graduates from 2008-2011
- Survey
- Results as at March 2013.
- Definition of rural/regional

Links were sent to an online survey for 78 graduates from the 2008-2011 cohorts. They were asked to identify where they want to work, where they are currently working, in what specialty do they intend to work, and demographics – explain RRAS, ROMPE, MAPAS, the reasons why and qualitative questions on the effects of Pukawakawa and the highlights of their year. The reasons are based on the MSOD questionnaire from Australia. All our results are to March 2013. They used the same definition as the

RRAS admission scheme does at Auckland to define rural/regional. Any hospital outside of the main centres: Auckland, Hamilton, Tauranga, Wellington, Porirua, Hutt, Upper Hutt, Christchurch, and Dunedin city councils.

Results

Responses were received from 72 of the 78 students who were sent links. This represents a 63% response rate.

Current place of work

Entry pathway	Urban DHB	Regional/rural DHB
General (n=14)	**5**	**9**
MAPAS (n=15)	**9**	**6**
ROMPE (n=16)	**3**	**13**
Total	**17 (38%)**	**28 (62%)**

**62% of graduates were working in regional or rural hospitals compared to urban hospitals and it was well spread over the general and MAPAS group, with an increase in the ROMPE proportion linking to the impact of rural background. Broken down into which DHB they go, Northland DHB had the highest proportion of PGY1-PGY3 students returning, followed by CMDHB and LAKES; 22-29% for NDHB; 15-20% of graduates for CMDHB and Lakes. Of those working in Northland DHB, 93% reported their experience there as a Pukawakawa medical student affected their choice of current place of work; 79% cited the opportunity to do more hands on work at that site; and 71% identified that hobbies in the area and the atmosphere/work culture affected their current place of work.*

Intended future DHB

DHB Region	N (%)
Northland	**16 (13.6%)**
Auckland	2 (4.4%)
CMDHB	**3 (6.7%)**
Waikato	3 (6.7%)
Lakes	**9 (20%)**
Taranaki	2 (4.4%)
Tairāwhiti	**2 (4.4%)**
Hawkes Bay	1 (2.2%)
Nelson Marlborough	**1 (2.2%)**
Southern	1 (2.2%)

**100% of respondents intend to work at some point in their career in rural and regional hospitals.*

Factors that affected the student's response:

Rural/regional

- Hours of work
- Types of patients

Urban

- Prestige of hospital
- Teaching at hospital
- Ability to do research

Intention of specialty

First choice		Second choice		Third choice	
Surgery	**18%**	GP	33%	GP	20%
GP	**15%**	Emergency	9%	Paediatrics	11%
Paediatrics	**13%**	General Medicine	9%	Rural and remote medicine	11%
General Medicine	**13%**	Rural and remote medicine	7%	General Medicine	9%
				Emergency	9%

**Students ranked their three choices of specialty. Overall 68% of respondents put GP in their top 3 choices. The significant reasons that respondents that put GP or RR medicine in top three choices gave versus other responses were hours of work, ability to do flexible hours, the location, hobbies in area whereas experience in that specialty and ability to do future research were important to those who wanted other specialties.*

How Pukawakawa experience affected views

- *"Absolutely confirmed that I was to work in Whangarei."*
- *"The peripheral placement (Rawene) was, in retrospect the most important part of the programme to give insight into the lives of rural doctors/patients. Just staying in Whangarei would not have been enough to appreciate the isolation and the issues these communities face. It was also a privilege to get to live in such a unique place."*
- *"Introduced me to the possibility of rural hospital medicine as a career"*

Participation affected career intention

- *"I came back to Whangarei because of the paeds experience as a HO and now am part of the training programme - which unfortunately means I need to head back to Auckland/bigger centre to complete my training. It is definitely in my plan to return to a somewhat rural place to settle as a consultant."*
- *"I think knowing what a rural hospital is like in terms of the patients and the working conditions for the house officers may have influenced decision. Seeing the lifestyle of the house officers perhaps influenced my decision."*
- *"Definitely made me think about practising in a general scope as opposed to super subspecialising."*

Themes of best experiences at Pukawakawa

- *"Feeling like a useful part of the hospital community, like you were appreciated and valued not just an extra or in the way like some other hospital placements. Forming close bonds with the other students."*
- *"Spending a significant period of time in one area and one hospital- gave a sense of belonging to a community/area that is lost with clinical placements in large urban hospitals."*
- *"This was a turning point for me in my learning experience. The small and friendly hospital gave me confidence to take my learning into my own hands."*

- *"Encounters with patients from the Hokianga in Whangarei hospital - these were profoundly more rewarding because I could identify with places the patients connected to."*

Conclusions

- Benefit ++
- Unique experience
- Increase rural workforce
- Generalised specialties such as rural hospital medicine and GP.

Limitations

- ROMPE/MAPAS crossover
- Selection process

Credits

- Associate Professor Warwick Bagg
- Professor Phillipa Poole
- Dr Jill Yielder
- Vernon Mogol
- Kimberly Buckley
- Ian Wood

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Career Choices from Pukawakawa Students

Win Bennett

Academic Coordinator, Northland Health Campus

Evidence shows that:

- Students from rural areas are more likely to practice in rural areas.
- NZ experience shows that clinical attachments and role models have a significant effect on career choice
- Participation in a rural programme is associated with positive attitudes to a rural career

The Pukawakawa programme was studied in comparison with the standard fifth year programme. The study examined the aims of the programme, explored the current place of work, intended future DHB they would work in, any awareness of intended speciality, how the Pukawakawa experience affected viewpoints and how participation affected career intention. It examined themes of best experiences of Pukawakawa. The uniqueness of the experience brought the benefits of the programme. The study illustrated the ROMPE/MAPAS crossover limitations. Since its inception in 2008, 125 students have experienced the Pukawakawa programme. Of these students 25% have returned to Whangarei as Medical Officers (MOs) in the hospital. The study found 17 MOs who had been Pukawakawa students and were now working at Whangarei and enrolled 14 of them into the study.

Demographics of the 14 MOs found:

- 60% grew up in rural environment
- 35% went to a rural High School

They were asked about their career intentions during their undergraduate time.

- On entering Medical School - 50% anticipated rural or provincial careers; 35% were undecided
- After Pukawakawa 70% firm career choices; 90% rural/regional
- Career choices: General medicine; General Practice; then orthopaedics, Obstetrics and Gynaecology, Emergency Medicine; rural hospital and then a range of other specialties.

They gave various reasons for choosing to work in Whangarei

Reason	Pukawakawa	Non Pukawakawa
Match with personal goal/career intention	8 60%	6 42%
Lifestyle	5 35%	7 50%
Nature of health needs in Northland	6 42%	3 20%
Reputation of Pukawakawa	5 35 %	3 20%
Friends and Family in Northland	5 35%	7 50%
Others – learning opportunities, friends experience, avoiding Auckland, interest in Public Health		

In reflecting on their time in the Pukawakawa programme the students commented:

"The teaching is very high quality; it's not just sort of going through the motions of teaching. There's formal teaching every week and everyone really gets into it."

"And being in the smaller hospital it meant you get to see more things, do more things, and get to know people that you're around, so you feel like you can approach people and learn off each other as well."

"And the local communities really took you in as well, and we went on TV and did all sorts of weird stuff, it was awesome".

"I went flying in the micro light; you just get to do random stuff".

"I went out in a Coastguard boat."

"They don't have student fatigue up here like all the other big hospitals do. You know, they're not sick of students yet."

"It changed not just my views on health but my political views. It changed everything based on a year here and I think I have a much better, much broader appreciation of society for having lived here"

"Trying to figure out how people manage without cars, and you know why having eight children at home means you can't come to hospital"

"And being Māori, and the emphasis on Māori health, I think that's really important. And it was great to get more exposure to that."

Conclusions

The Pukawakawa programme does influence career intentions and choices through providing a wider learning environment and students are having a very positive experience with it. The programme is aimed to drive recruitment for post graduate locations and career intentions through focus groups and targeted interview topics. Student's preliminary themes and illustrative quotes from these groups focussed around:

- learning and teaching factors
- positive effect of good relationships
- gained insight into broader determinant of health
- process of deciding location of PG employment
- impact of living together
- personal factors affecting return

The Pukawakawa Programme has been Demonstrated to be Academically Robust

Win Bennett, Pukawakawa Programme and **Assoc. Prof Warwick Bagg MPD, School of Medicine, Auckland** reviewed the academic performance of Pukawakawa. They asked the question ***"Are students academically disadvantaged by participating in the Pukawakawa programme?"***

Method

They compared

- **Percentage who achieved distinctions and the number of failures in overall grade**
  - combination final clinical grade, and written grade by reference to rubic and moderation by Board of Examiners

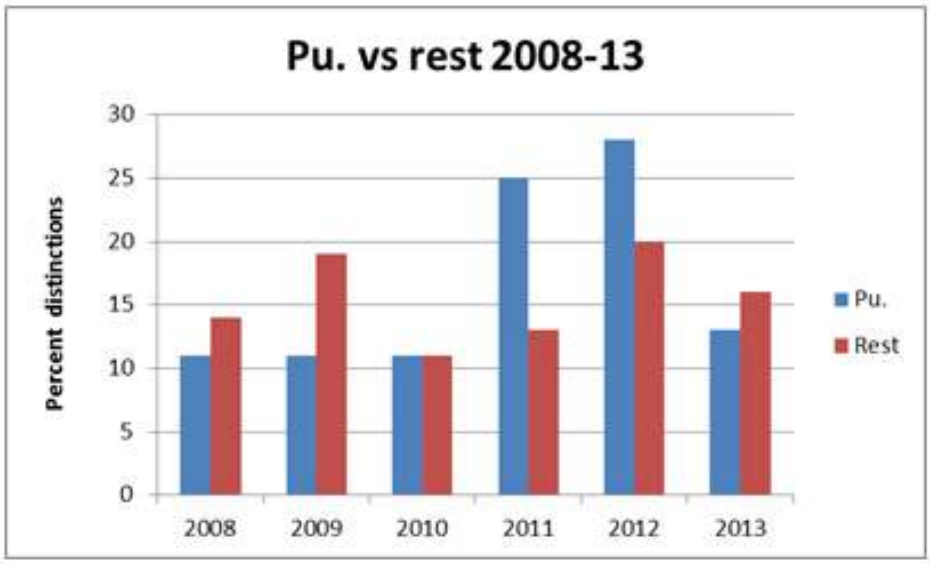
- **Percentage who achieved distinctions and the number of failures in final clinical grades**
  - combination of clinical exam grades and grades from clinical attachments according to rubic.

- **Percentage who achieved distinctions and the number of failures in final written exam grades.**

Results

Distinctions (per cent)

	Rest of class (n=910)	Pukawakawa (n=124)
Overall grade (%Dist)	15.4	16.1
Clinical grade (%Dist)	22.6	22.6
Written exam (%A+<A)	25.3	29.0



Numbers of failures

	Rest of class	Pukawakawa
Overall grades	7	1
Clinical grades	4	1
Written exams	4	0

The study had limitations as there were small numbers of students to sample so none of the differences were statistically significant. There was some selection bias in that the selection process for the programme may be selecting students who do well in written examinations. However the difference between Pukawakawa and the body of Auckland students appears to be not significant.

Performance of Pukawakawa students in fourth year

	Rest of Class	Pukawakawa students
Overall grade (%Dist)	13.2	16.8
Clinical grade (%Dist)	10.9	10.4
Written exam (%A+,A)	27.1	33.6

They concluded that in their academic outcomes students in the Pukawakawa programme do as well as students in the in the rest of the class and this finding is consistent with the literature from rural programme for medical undergraduates.

A search of the literature shows eight references from several different countries which conclude that academic performance in rural programmes is as good, if not better than, that in urban programmes and no references were found that came to a contrary conclusion.

Despite this academic equivalence we need to pay attention to the "qualitative" experience *(Denz-Penhay and Murdoch)*

These findings challenge the orthodoxy of a tertiary hospital education being the gold standard for undergraduate medical education *(Worley, Esterman and Prideaux)*

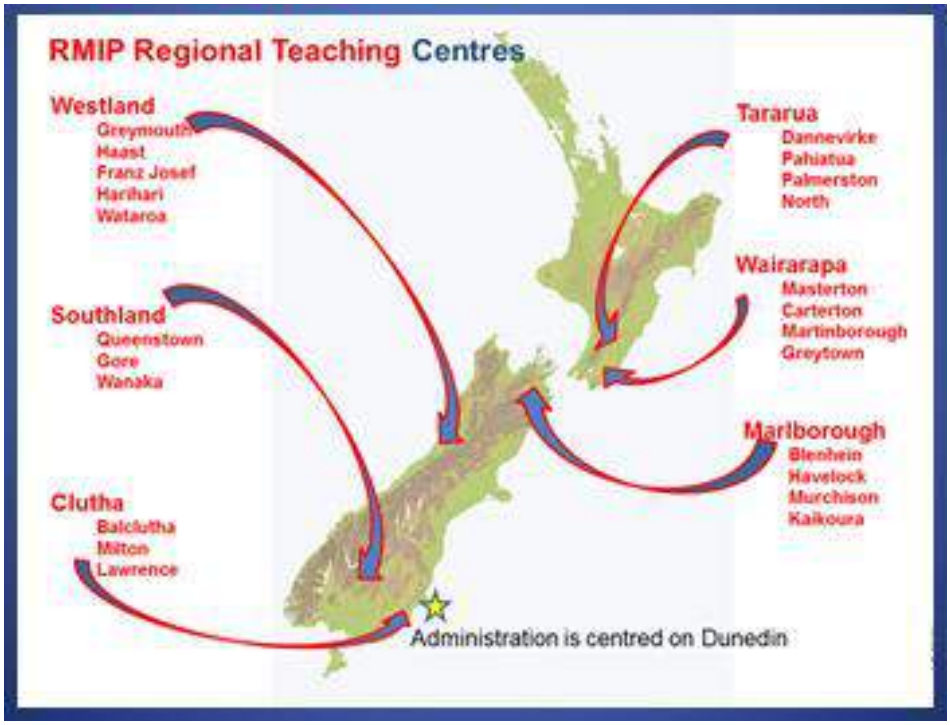
Group Discussion

- The next step post the Pukawakawa programme.
- There is a positive influence of rurality on future choices especially after a good rural experience. This is already a powerful factor and perhaps we should focus on selecting students of urban origin to so influence more people to choose rural.
- The rural programmes are becoming the Gold standard and the students do well versus urban programmes.
- There is however the cost of running two programmes parallel to each other.
- We need our professionals to be able to flow in and out of each programme, New Zealand is a small place and people move around a lot – a question of balance.

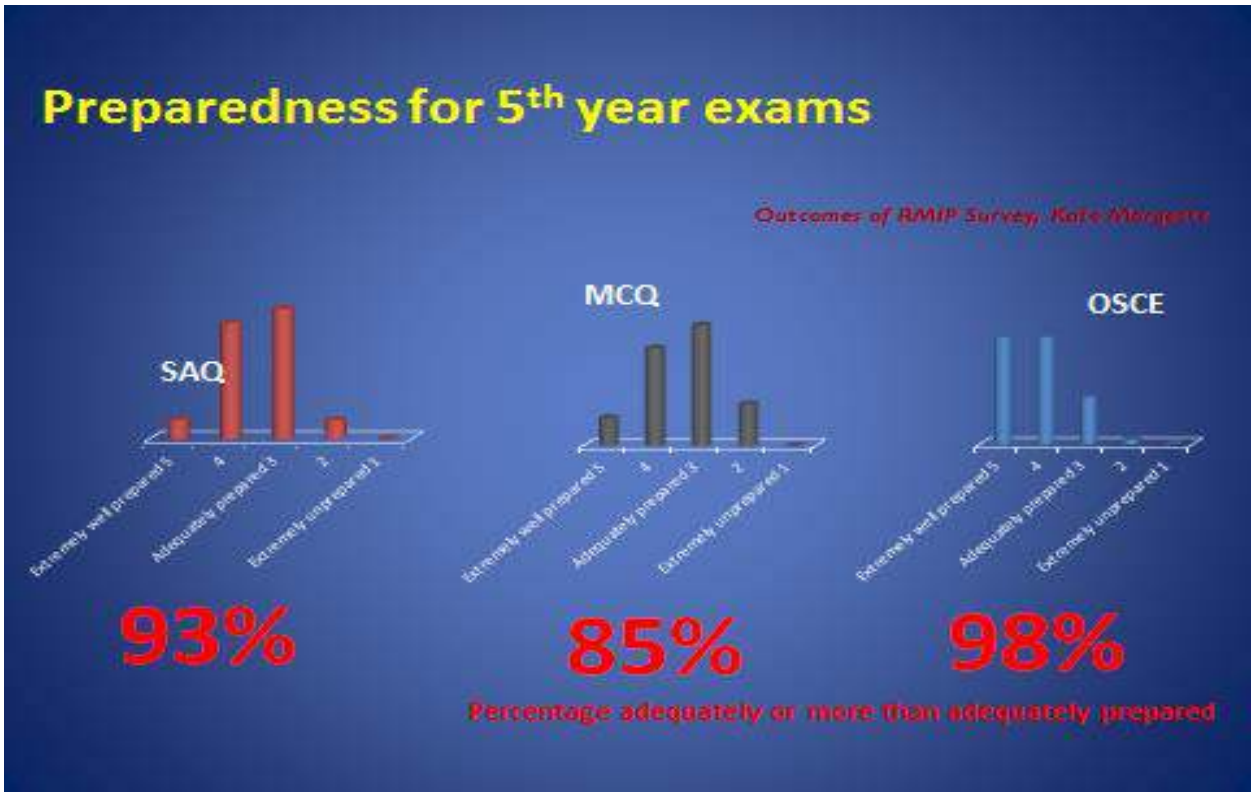
Outcomes of the Rural Medical Immersion Programme (RMIP)

Branko Sijnja – Director

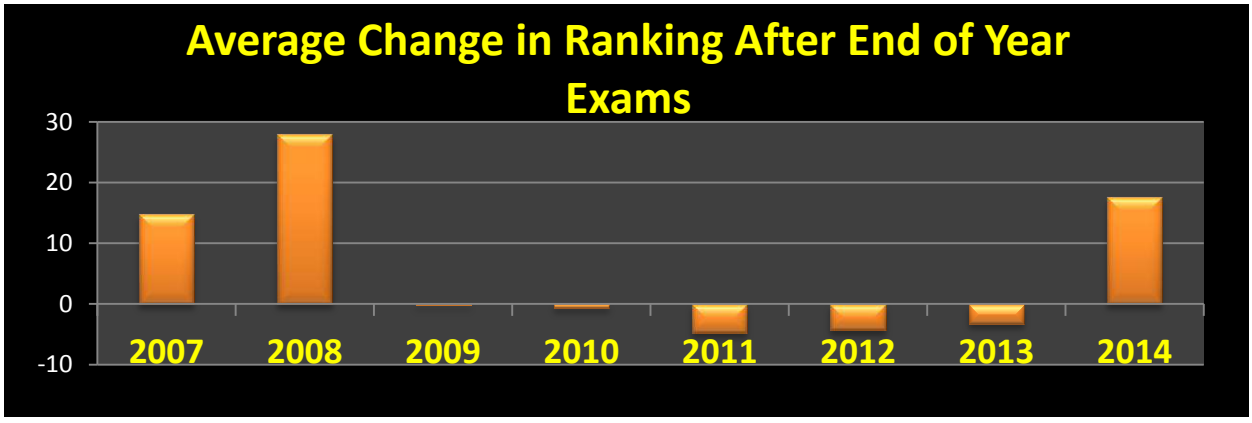
The RMIP programme is a year long 5th year medical student immersion programme with apprenticeship like attachments in six centres (Tararua, Wairarapa, Marlborough, West Coast, Southland, and Clutha).



The programme is aimed at providing 50% general practice and 50% hospital based input for its students with much one on one patient contact and hands on experience. Learning is based on self-directed learners working in small groups or one on one in provincial, rural hospitals and practices working with specialists, medical officers, general practitioners, nurses, physios, midwives, ambulance personnel and others. The students are selected on the basis of their enthusiasm, ability as self-directed learners, being good team workers, flexible, good communicators and not afraid of hard work. They experience a massive amount of patient contact. They are assessed quarterly to ascertain progress. At the end of the year the students sit the common exam and post exam they report that they in general felt well prepared for the exam and their TI year. In fact some have commented that going into the TI year was like a step back.



Outcomes were measured by comparing position in class after the common end of year exams with those attained in their 3rd year end of year exams. It was shown that there was a great variation to movement of position of individual students in the class but overall the class averaged a slight improvement in ranking. There have been no failures to date in the RMIP cohort.

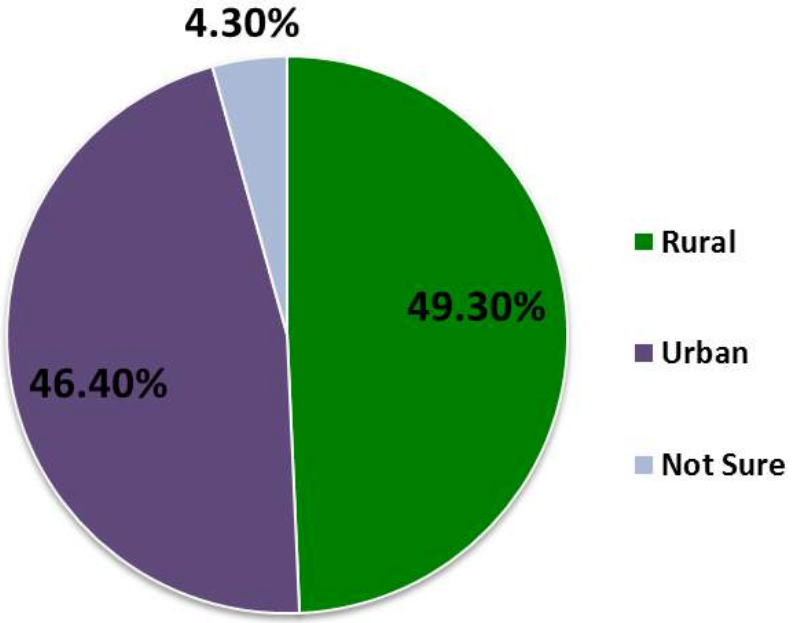


The RMIP programme attracts and develops the self-directed learner. In this way the programme is setting the student up for the entirety of their working life recognising that all doctors of necessity must be self-directed learners throughout their careers.

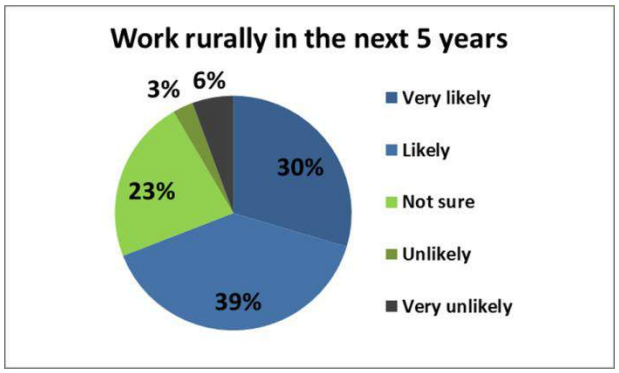
It is an expensive programme and costs vary from centre to centre. Costs per student range from $20,000 to $35,000 per annum (average $27,854). This variation is an outcome of the funding at the facility on which the students are based with the more expensive being entirely private provider based in the case of Clutha Health First and Dannevirke while the least expensive are largely District Health Board based in Southland, Marlborough, West Coast and Wairarapa.

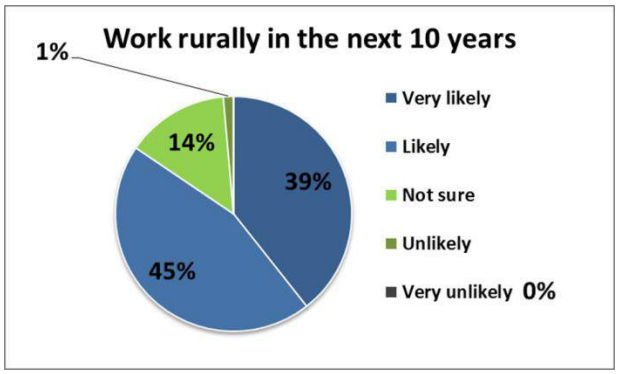
Demography

There is a mix of students with 46% of students being from urban origin and 49% of students from rural origin.



It is encouraging that 88% of rural origin students indicate they are very likely or likely to work rurally post programme and even more encouraging is the 75% of urban origin students who say the same.





Kate Margetts 2012

Teachers report an enjoyment of teaching within the programme because they find:

- They can pass on knowledge or experience;
- it is interesting and stimulating;
- it is an enjoyable thing to do;
- it is nice to work with young people and;
- they feel they can contribute to the students' future/help them/see development.

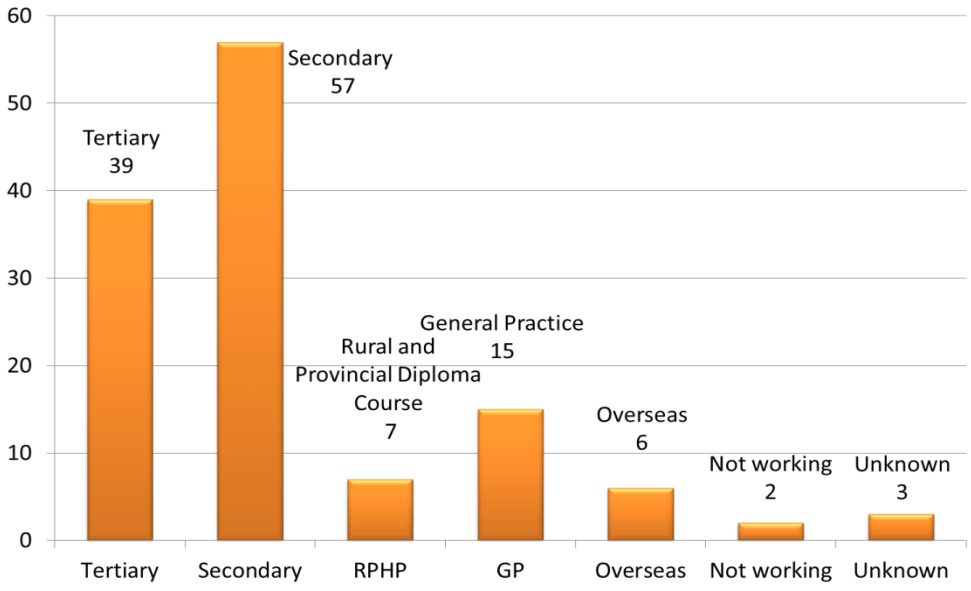
William Parkyn 2013

The teachers report learning from teaching, from the students and from reading up to teach.

Keeps "on toes" *Keeping up to date …Communication skills development … Personal satisfaction … People appreciate it …Good for community …Encourage rural doctoring … Good for practice*

It is facilitated by having a supportive employer/colleagues/organisation, space and time recognising the need for facility and the slow-down factor.

We have studied the outcomes and at the end of 2013 the students who had been in RMIP up to end of 2012 were graduated and working in the following situations:



Stacey Goodson

Significant numbers are working in secondary facilities which are more provincial and rural which is encouraging and twenty two are training for or working in general practice. That only six students out of 129 are overseas signals a good level of retention of RMIP students.

The Student Experience in RMIP

Jonathan Penno

Class Rep 2014 RMIP Class

Jonathan described his experience immersed in Balclutha

He reported on the experience of a group of three students living and working there in the integrated family health centre with 15 beds, GPs, physios, community services, x-ray and lab all in the one facility.

Good things	Bad things
– Lots of patient contact – Enhanced confidence with patients – Better clinical skills – Feel like more of a part of patientsgrated – Feel part of the team – Good study environment – Part of community	– Can be socially isolating – Some difficulty getting time with specialist services (paeds, O+G, some theatre) – Apprehension for exams – Intra-group conflict – Things happening at home school – Community involvement can be awkward – Finally fall in love with place, then have to leave

Group Discussion

- The coming together of the group throughout the year.

- How the students are elected onto the programme – special consideration given as to matching the student to an area.

- The financial viability of studying/participating in the RMIP programme.

The Electronic Platform for Psychiatry

Dr Frederick Sundram MBBCh PhD,
Senior Lecturer and Consultant Liaison Psychiatrist & Year Five Psychiatry Academic Programme Coordinator

Fred, a liaison psychiatrist of North Shore Hospital and Academic Coordinator for Year 5 Psychiatry programme presented an overview and background of the development of the electronic learning platform for Psychiatry, the content contained therein and how the experience to date.

- Old teaching format versus the new teaching format
- Needs and challenges of the Psychiatry programme
- Teaching format
- Small group teaching sessions
- MyPsychiatry website
  - Variety of Zones
  - Core Modules
  - Tutors corner
  - Supervisors Corner

Fredrick presented a "Live" demonstration/snapshot of the MyPsychiatry website to the group highlighting its modules and key attributes.

Group Discussion

- They are continuing to expand the site and resources. How useful would it be to have it linked into the clinical scenarios.

Primary HealthCare and General Practice Module in Trainee Intern Year

Sue Pullon – HoD Primary Healthcare and General Practice
UOW 6th Year Placements
Primary HealthCare GP Module in Trainee Intern Year

The TI year is 48 weeks teaching professional skills, attitudes and ethics in various branches of medicine.

Medicine - 6 weeks

Surgery - 6 weeks

Emergency & Acute Care - 6 weeks *(of which 1 week is urgent primary care)*

Obstetrics & Gynaecology - 4 weeks

Psychological Medicine - 4 weeks

General Practice – 6 weeks

Paediatrics - 4 weeks

Elective - 12 weeks

The TI students spend seven weeks within the community – six weeks with General Practitioners and one week in urgent primary care. Challenges present with undergraduates and funding. It can also be challenging when students do not hold a current full drivers licence.

Student feedback from 2013 and 2014:

- *Extremely friendly and supportive, really willing to teach*
- *I had the most fantastic week. I got to work autonomously but felt very supported at the same time (UPC)*
- *Good module, I learned heaps of dermatology and ophthalmology; more than what I have learned in medical school in the past 5 years in this ~6 weeks.*
- *Great opportunities. This placement gave me great confidence and hands on experience*
- *Valuable…own room, own patient list…terrifying [yet] good*
- *…decisions on patient management plan…doctors agree…surprise*
- *put through paces with supervision…move to next level*
- *I had a great time, I learnt a lot, and it has inspired me to definitely consider GP as a future career*

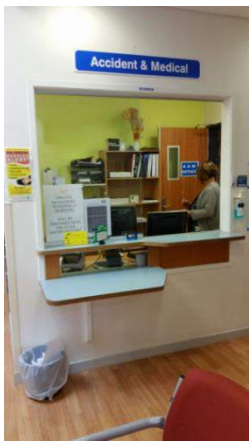
Challenges going forward relate to the increased numbers of medical undergraduates coming through for clinical placements and funding such placements.

Kaitaia – “Tell me what you want, what you really really want! We can probably deliver..."

Sarah Clarke

Clinical Leader Kaitaia Hospital, FDRHMNZ and FRNZCUC

Kaitaia Hospital is a 26 bed facility and a maternity unit which covers 165 maternity events with 90 births per year. The remainder of births occur at Whangarei. The theatre is performing minor ENT procedures and has the services of a full time anaesthetist.





Kaitaia Hospital cares for a good variety of patients in the discipline of paediatrics, surgery, medicine and general practice. They have a comprehensive list of visiting specialists in Paediatrics, General Surgery, Orthopaedics, Cardiology, ENT, Dietician, Oncology, Rheumatology, Obstetrics and Gynaecology, Family Violence and Mental Health.

Group Discussion

- Ownership: DHB facility outreach from both the PHO and the community. Staffing levels and retention is generally good

- Accommodation could become a bottle neck if placing extra students/PGY1 Doctors.

Rural Generalism – A Registrar's Journey

Joel Pirini – RHM Registrar and RHM MOSS for Kaitaia Hospital

Ko wai ahau? Which water am I

Gave a personal account of his journey through to being a medical officer in Kaitaia:

- Journey through med school
- What drove me
- The attraction of Rural Medicine
- What helped? What were/are the barriers?
- Gaps in training
- Opportunities to attract people

Joel is a Rural Hospital Medicine Registrar working as a medical officer in Kaitaia, he is father of four.
Joel introduced himself and gave us an oversight of his journey through which he has come to be where he is now.

The Journey - Part 1

- Born Pawarenga/Pangaru (North Hokianga)
- Joined Rural-Urban Drift
- To Whangarei
- Felt Rural Imposter
- Whangarei Boys High School
- University of Auckland – BSc
- Worked in film Industry
- Back to University of Auckland – post grad Maori and Pacific Admission Scheme /MAPAS

He experienced rural medicine as an undergraduate and postgraduate and in Whangarei till he became a rural GP where he now remains. He calls this reverse migration, moving back to his rural roots.

The Journey – Part 2

- Undergraduate Rural Exposure
  - Rawene - Rural GP (4th Year)
  - Kaitaia - Rural GP (5th Year Selective)
  - Te Kuiti – Rural GP (6th Year)
- Post Grad
  - Whangarei Base Hospital (surgery, orthopaedics, general medicine x 2, renal medicine, relief, paediatrics, Emergency Department x 2, ENT, anaesthetics, ICU)
  - Rural (PGY2) – Kaitaia, Rural GP
- Far North - Kaitaia Jan 2014

"What drove me?"

1. Friends
   Challenged me to consider this as realistic career option
2. Family
   Challenged me to come back his as
3. Mentors/Role Models
   Set an example and illustrated how rewarding rural practice is
4. Opportunity to improve health outcomes

The Attraction.....

- Work
  - Using clinical skills with limited investigations (POCT, USS, iPhone a friend)
  - Working as part of the MDT
  - Managing acute presentations
  - Continuity
  - Independence
- Life
  - Raising my children (Outdoors/Reo/Tikanga/Rural/Country Values)
  - Being part of a community

Helpful. ...

- Recognition of prior learning
- Educational Facilitators
- Freedom to tailor training to suit life/family
- Training in the base hospital that I refer my sick patients to
- Voluntary Bonding Scheme

Not so helpful ...

- Pukawakawa starting in 2008...
  - Instead of 2007 when I was a 5th year
- Lack of understanding
  - New specialty
  - Other specialties need exposure
- Funding for Rural Hospital Registrar jobs
  - I still don't know where it is/goes

The Gaps....

- Obstetrics
- Anaesthetics
- Surgery
- General Practice
- Governance and Teaching Skills
- Dictated by the context
- What the community wants/needs

Attracting Others....

- Exposure
- Variety of work possible
- Breaking down historical stereotypes
  - Isolation
  - Lack of recognition/respect
- Training hubs
  - Northland is a good example
- Opportunities outside of NZ
  - Cooks
  - ?Australia

Self Selection....

- How do we expose, and capture the hearts and minds of the non-rural people
  - Make it compulsory
  - Graduated exposure over the 3 clinical years
  - Role Models/Mentors/Facilitators
  - Positive experiences outside of the practice setting
  - Engage with the community and ask them to look after the students

Feedback

- Health Outcomes
- More doctors working in rural/regional areas
- Danger of focussing on the destination and missing out on the journey
- Lots of intangible outcomes along the way
- What do our rural communities want?
- Social Accountability is part of Rural Generalism
  - Building hospitals in developing countries
  - Improving health outcomes for at risk children

Group Discussion

- A married student with a young family – how was it for you?
- good integration into the community with a wife and children
- good support while training with a young family
- Coordinated multidisciplinary assessments – if it works well in rural health it should work well everywhere.
- Should we persist with teaching obstetrics as there may be a future for its return to General Practice?
  - Shared antenatal and postnatal care would be beneficial – *it was the best part and a joy to look after a pregnant women*
  - Not sure how to get the service back
  - Can be detrimental when a Doctor has been called into a complex case not knowing the patients history
- General Practitioners with interest: (Funded/Unfunded)
  - Skin Clinics
  - Ultrasounds
  - Orthopaedic Clinics
  - Fracture Clinics

Pukawakawa – Hokianga - 2008 – 2014

Kati Blattner – Rural Clinician Hokianga Health

Hokianga Health

- Community owned and governed.
- NGO, Maori Health provider, Whanau ora model of care.
- Provision of an integrated range of primary care, public health, acute hospital, 24/7 emergency service, maternity, oral health mental health, disability support.
- Base hospital services are provided 130km away at Whangarei Hospital.
- Tertiary services 280 km away in Auckland.

Hokianga Health "What do we do?"

- Comprehensive primary care – peripheral clinics
- Related secondary level hospital in-patient care
- Emergency care 24/7
- Extended scope in one or more areas of focused practice as required to sustain health services eg – obstetrics, mental health , emergency medicine
- Working as part of a multi-professional and multi-disciplinary team of colleagues both local and distant
- Provide services within a system of care aligned and responsive to community needs

Rawene Hospital

- Serial observations, and repeated clinical exam
- ECG
- Plain X-ray Mon-Fri
- POCT
- Minor procedures & surgery
- Clinician -performed Ultrasound

What do we see acutely?

- Majority - multiple medical chronic illness, normal chronic diseases (Diabetes Mellitis, Chronic Renal Failure, COPD, Ischaemic Heart Disease, Congestive Heart Failure) with something that has tipped the balance eg : angina, hyperglycaemia, dehydration , gastro, Urinary Tract Infection etc
- Infection
- Most undifferentiated at presentation
- Trauma, orthopaedics
- Surgical -abdo pain , urology
- Paediatrics - infections, respiratory
- Obstetric care including intra-partum
- Palliative care
- Mental health

Challenges

- Smallness and isolation can mean strength but also fragility
- Staff - short, close up and personal
- Time – 24/7 call
- Space – not enough
- Social
- Professional isolation

What can we offer?

- Students for seven weeks is a short time …
- Living in and being part of our community /health service
- Clinical medicine - generalism
- Rural Health – generalism
- Disparities

Medical Student's Perspective of the Hokianga

Andrew Duffin,

Medical Education Fellow Auckland University, ex Pukawakawa student

Detailed a survey given at end of attachment looking at likes/dislikes, relevance of different aspects (Hospital, midwife etc.), asked for comments, areas for improvement and what made a good day on the ward/in clinic? Forty six students had been through the programme and thirty seven responded, a rate of 80%.

Limitations of then study

- Different scales on relevance questions

  Not relevant _____Sometimes relevant_____Very Relevant

  1 10

  - Converted all answers to numeric scale (1-10)
  - Grouped into categories of relevance
- Open questions
  - Wide range of response
  - Grouped into common themes
- Varying numbers in each year/some not returned
- Kaikohe/Prison visits ended in 2012

Likes

26 students commented on things relating to excellent learning environment

Ability to see/examine patients independently:

- *It was a great hands on experience…I loved seeing patients on my own'*
- *'Level of involvement and responsibility in patient care'*
- *'Front line work with undifferentiated patients'*
- *'Immersion therapy'*

Continuity of care/diversity of patients

- *'The integration between peripheral clinics and the Hospital and being able to follow up patients'*
- *'Whole range of medicine'*

Independence of learning

- *'Doing what we thought was important for our learning'*

Getting to know/involved in MDT

- *'Getting to know everyone – Dr's, nurses, admin, reception staff, midwives, cleaners etc. It has felt like a real community'*
- *'Felt involved in a team'*

Keen to teach/care about education

- *'Everyone is willing to teach'*

Northland Community

- *Experience of provision of health in a rural community'*
- *'Community! Awesome feeling part of the place'*
- *'Getting to know the Hokianga'*

Dislikes

Clinic/ward issues (14 comments)

- Afternoons without direction/quiet on the ward (6 comments)
- On call over weekends/long hours (3 comments)
- No room/set Doctor available (4 comments)
- Ward rounds when not involved (1 comment)
- No teaching (1 comment)

Kaikohe clinic (7 comments)

- No supervising doctor
- Too many students
- Travel time too long

Accommodation issues (3 comments)

- Slow internet
- Isolated location
- Kitchen

What makes a good day in clinic (n=15)

- Seeing own patients (13 comments)
- Approachable doctors (6 comments)
- Tasks to do/feeling useful (3 comments)
- Variety (2 comments)
- Continuity (1 comment)

Seeing own patients:

- *'Having own consult room to see patients and attempting diagnosis and management and then talking this through with the doctor'*

Continuity of care:

- *'It was great to have a continuity of care and see patients at their next visit'*

What makes a good day on the ward?

- Tasks to do (9 comments)
- Talking to/examining patients on ward round (8 comments)
- Teaching regarding patients seen (7 comments

Tasks to do (9 comments)

- *'I liked having a few jobs to do after round – made me feel useful and involved'*

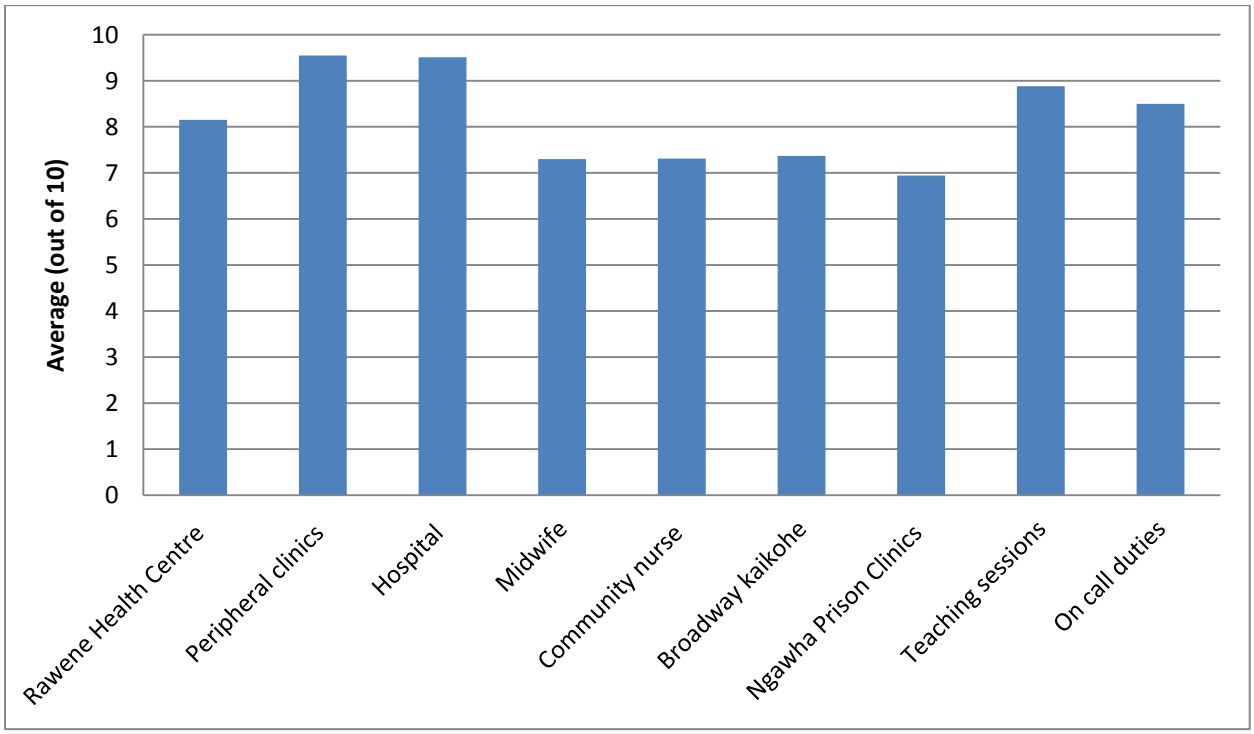
Talking to/examining patients on ward round (8 comments)

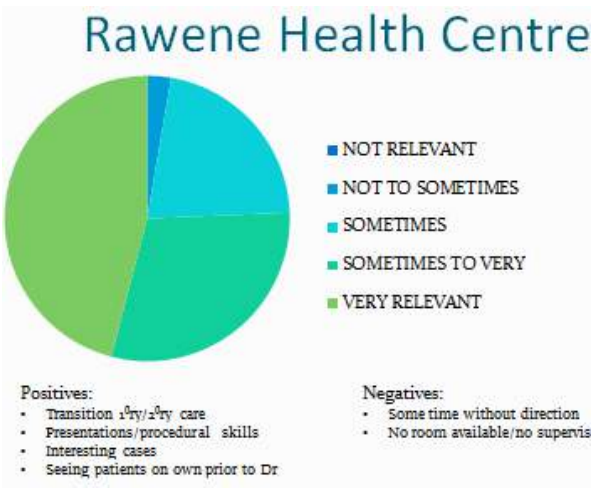
- *'Getting to run the ward round and examine patients was very beneficial to my learning'*

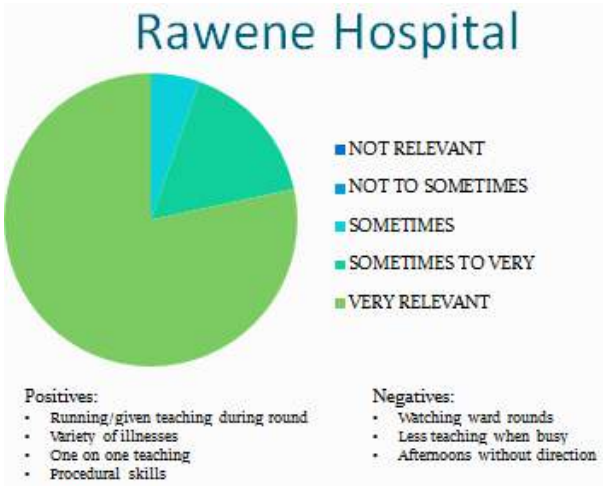
Areas for improvement

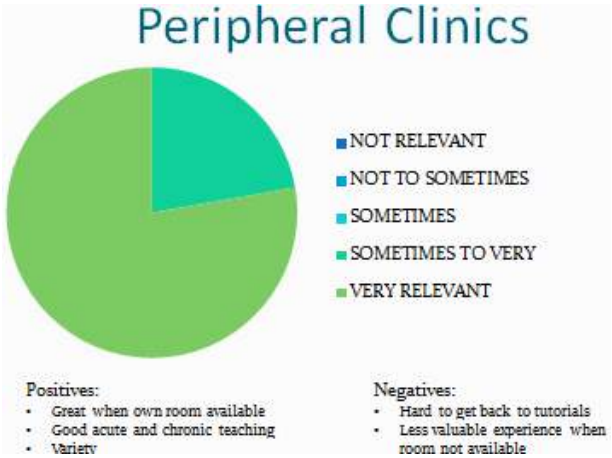
- On call system (6 comments)
- Internet speed (6 comments)
- Increased study/teaching time (4 comments)
- More structured afternoons on ward (3 comments)
- Study room/computer for students at hospital (2 comments)

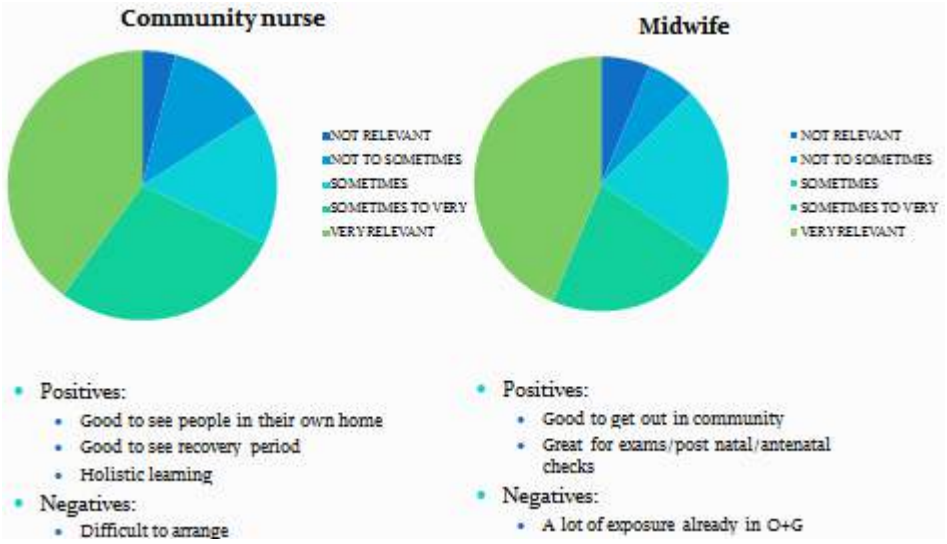
Relevance of attachment











Conclusions

- Hokianga from students' perspective
  - Excellent learning environment
    - Ability to 'practice' practising medicine
  - Highly relevant to their learning
    - Has remained relevant (if not more so) over time

- All aspects of attachment relevant
    - ‘Medical’ aspects rated most highly
- Appreciation of unique rural environment

Her account of her experience

Anna Gray

Current Pukawakawa student

“I am standing here today talking on behalf of the many students who have had the opportunity to study in the Hokianga. Whilst I am sure we have all had different experiences, there will be similar common themes that I hope I do justice to in the talk. In particular, I am going to talk on behalf of myself and my classmate, who accompanied me there, as she is a large part of my story with the area. It is very difficult to summarise these 7 weeks, and the significance I feel they have had on our education.

I think in order to understand our experience on this placement; you need to understand the place from which me and my classmate Rachael come from. Both of our families currently live in Auckland- mine for the last 10 years, Rachael’s for the last 20. We were high achievers at our respective high schools, and came to medicine through the traditional straight out of school pathway. We are both Pakeha. We both have medicine in our families. In many ways, we are absolute setters for a city-led career, working our way through the various Auckland institutions.

However, a key point to note is that through our involvement in Grassroots Rural Health Club in our pre-clinical years, we had both begged to be a part of Pukawakawa programme. Something in our nature had lead us to rural health. We had chosen to go to Rawene, Rachael because of her family connections- myself because of a visit I had undertaken as a pre-clinical to Opononi School to talk to the students there. Prior to this placement- despite having no real experience with the area, we were very keen and interested in rural health

Working within a community, in which Maori were the majority and in which tikanga Maori was incorporated into our daily lives was a treasure. This was a journey for both of us, and having the chance to work alongside local staff, attend events such as tangi for patients we knew, and be taught a lot by our patients. I think in summary it was a chance for us to put into practice some medical practices that both of us really related to- whanau ora but perhaps had not yet seen in our other placements. We were given kind guidance, role models in the doctors and health professionals who worked there and responsibility for our own learning.

However most of this learning probably took place outside of the formal medical attachment- and rather when we spent time around the local communities.

This is the most valuable part of our learning. I think this is what we need in order to be good doctors for all New Zealanders, not just those that can afford, or are able to, or even want to engage with our health services. These are patients that have particularly stuck with me, - there are perhaps 5 to 10 Hokianga patients which I don't think I could ever forget even if I wanted to. However, I think it was also our interaction with the community outside of the hospital I wanted to talk a little about this, as it underpinned a lot of our experiences.

My last name is Gray, Rachael's mother's maiden name was also Gray, Rachael's grandfather was a Dr Gray, who was one of the original Rawene doctors. Her mother grew up in Rawene. This is Dr Jack Gray at Rachael's wedding last month. I think he looks pretty stoked. This turned out to be absolute serendipity- because my last name was Gray- naturally people assumed I was the granddaughter.

This resulted in both of us having a special connection with people and being treated extra specially by the locals - Rachael deservedly because of her family connections, me because I was mistaken for Rachael. I often didn't have the heart to tell patients I wasn't the granddaughter, so learnt quite a lot of her whakapapa in the process and had being a part of her Gray family down by the end of the run.

What is unique?

Our **involvement** in the local hospital was unparalled in comparison to any previous attachment I have been a part of. As I discussed we spent a week as a nurse aid, which was a valuable way to start our attachment. I started with three weeks on clinics- Taheke, Waimamaku and Broadwood- all chosen because they were unique in their own rights. Three weeks on the ward also include being the ward phlebotomist,

Connections- everyone knew us at the hospital (if not by name, at least by face, role and the term Gray sister). This is incredibly valuable when you are a medical student. It is difficult to describe how stressful each day can be, when you constantly have to introduce yourself and build rapport with a new set of staff each day, as is the case in other locations. I am sure even those in my class who thrive on attention find this a difficult task. Not knowing your place, not knowing your expected place within a team. By the end of our attachment we felt like we had a place, we had connections and a team to support our learning

Community - We would travel to clinics in Broadwood, Taheke and Wamamaku on our clinic weeks, whilst the three other weeks were spent on the ward. This gave us both the valuable chance to see community GP, and rural hospital medicine- differing specialities but with complementary aspects. The

all-encompassing nature of the Hokianga Health Trust, meant patients we would see in clinic were often those that would be seen later in hospital or vice versa, hence creating a very real chance for us to follow patients through their whole journey. There have also been instances where I have met up with Hokianga patients in Whangarei hospital itself- I recently saw the baby of a lady who I had been following prenatally in club foot clinic

It's not often that patients chose to have the student doctor, because they want to catch up with the local gossips that there are some "new docs" in town

It's not often that patients thank you in fish, watermelons and delicious roasted macadamia nuts
I will also talk a little of the time spent with the midwives- and the chance we had to attend local births. Spending 24 hours with a whole whanau as they wait for their moko, all 12 of them who were eventually present for the birth was pretty unique and special.

It's not often that if it's too much, or you need a break, you can get a cup of tea and morning toast from the kitchen and go sit with the ward cat.

Local sailing club let me commandeer one of their lasers one Sunday- then proceeded to fail to mention local conditions which meant they all thrashed me in afternoon competitions. I was very keen to go out with the kids but unfortunately the teaching season had just finished. My clinic supervisor tried to get out of his responsibilities that day by hoping that I would accidentally spend the next month floating towards Australia.

We played in the annual Hokianga golf fundraiser tournament. I don't think any other golf club in the world would have let us near their greens- neither us had ever tried hitting a golf ball before, let alone finish a round of golf. We put some very nice pits in the lovely grass. Particular **highlights** we felt we won at were- the hangi, the refreshment cart that came around at half time and that we had to go on a run in the forest the next day to collect all the golf balls we put in there.

Negatives- Rachael wanted me to tell you it was near impossible to be on a wedding diet in the Hokianga. The fry bread and Wardies pies are too good, and all the ladies in town thought she was too skinny so fed us delicious kai."

Group Discussion
Kati highlighted to the group that having a Pukawakawa student was a reciprocal relationship. We are working within an aging workforce and having medical student's makes you lift your game and can be very positive both ways. It is a great investment to have these students. Grassroots

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Conclusion

Tony Egan
Senior Teaching Fellow, Medical Education Group

Summarising my observations of the major themes that emerged during the presentations and discussions:

Students and faculty described learning with and from each other. This took place in many different contexts. At times the setting was formal (tutorials, consultations, on the ward) and at other times it was informal, involving participation in community activities or simply flatting with other students from different healthcare professions. Participation and engagement seemed to characterise many of the learning experiences.

It quickly emerged that whatever and wherever the learning, *relationships* were crucial. At a micro level, flatting, joining a practice team (in the community or a rural hospital), working in with other professionals, participating in community events were all responsible for valuable learning about healthcare and its relationship to context. At the macro level, relationships between healthcare professional groups, with district health boards, regulatory bodies and professional organisations were all important in facilitating learning opportunities and professional development. At times the lack of such relationships created barriers or tensions, limiting access, creating competition rather than synergies and collaboration. The healthcare professions often face capacity issues and the increasing pressure for care in the community requires better communication and collaboration between the various parties if it is to be safe and effective for patients and provide good learning opportunities for students. An audit of what are the available placements and how they might be optimised for student learning would be a start to resolving some of the organisational issues.

The student experience figured large in many presentations. Joining a rural community and being useful (in whatever ways) was rewarding and motivating. Experiences varied from episodic exposure to total immersion in clinical work and the level of student participation varied accordingly. Longer placements allowed greater student involvement resulting in a deeper understanding of continuity of care and the importance of enduring relationships. The opportunity to reflect on their experiences and share them with colleagues was an important phase of the learning process. Another critical phase was the introduction and orientation of the students to the practice setting which set the tone for the remainder of the student experience.

It was clear from all the students' comments that joining and participating in the community of practitioners and in the rural community more generally was confidence building and contributed to a growing sense of their identity as healthcare professionals.

Questions and Answer Session and Wrap Up

- There is much to be gained from learning from each other both formally and informally
- Relationships micro level, macro level
- Social Accountability

Challenges to the group:

1. What do we mean by rural health, rural medicine, rural generalism?
2. What is at the core of what we are on about?
3. What is the purpose of this group?
4. Who are the stakeholders and what do they want?

Group Discussion

- Students experience in a small community based practice and the educational experience in that context is relevant to public and clinical health
- Do you experience it or do you teach it – some students are not yet exposed to Public Health teaching
- Rural health is often misconstrued as location, 'place'; it is more than just bricks and mortar.
- Relationships – being part of the community's infrastructure is one of the features that defines rural practice.
- The Community in many situations has ownership of health services
- Self-reliance/confidence of the General Practitioners is an important asset for rural practice

5.

Group Discussion

- About undergraduate students and the value of their ongoing involvement within this group
- To deliver an outcome where students become doctors within both general and hospital practices in the communities.
- It is desirable that the two universities work in parallel with each other
- There is real identity within the group
- For the people already working in the field – there needs to be a line of succession
- Useful to share experiences and to discuss common issues
- Useful to have a 'Stocktake' of the Community's health services
- There are differences between general practice and health service providers. Having a speaker from the latter is a good idea.

Where to from here:

- Looking for an identity for the group
- Direction forward, what are the aims?
- A community of educators with a common purpose, facilitating education in caring for the wellbeing of the patients
- Leadership is needed to make the group useful and give it input to the health education system
- Possible future agenda items could look at the other side, the opposing view, a different perspective.

- Look at the barriers as to why students do not advance into rural health and stay within the urban areas.
- The richness of experiences that are available and learning from each other, what works – what doesn't work?

Staying mutually supportive and engaged with each other will lead to more of a sense of direction and a stronger political influence. We are keen to keep the group undifferentiated as opposed to focussed on specific issues

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Editor Dr Branko Sijnja

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