Physician assistant staffing in a rural New Zealand hospital

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Abstract

Uptake of the physician assistant role has been slow in Australia and New Zealand despite the completion and positive evaluation of several pilot projects.

Delays have resulted from “slow” governmental action as well as absence of “models” that can be readily adopted by health care delivery systems. This paper describes the successful model of PA emergency department utilisation in the small rural hospital in Gore on New Zealand’s South Island.

The town of Gore is 64 kilometres northeast of Invercargill and 70 km west of Balclutha – Dunedin. Gore is a service town for the surrounding farm communities.

Operated by Gore Health, the Gore Hospital provides a broad range of services. A busy 24-hour emergency room is a key feature of Gore Hospital which has often relied on locum tenens doctors for staffing. Gore’s location on New Zealand’s South Island is shown below.
In 2013 Gore Hospital’s emergency department was chosen to participate in the Ministry of Health’s pilot project to bring US PAs—on two year contracts—to small New Zealand communities to demonstrate how PAs could expand health care access in New Zealand’s remote communities and small cities. At the completion of the 2 year pilot, Gore Hospital maintained the PA role and has sequentially hired 3 other PAs to provide emergency care.

The paper describes the service needs of the Gore Hospital, and considers the development and acceptance of the PA role from the viewpoint of patients, the emergency room staff and the community. Details of the education, past medical experience and clinical skill set for each PA is be reviewed. The recruitment and selection processes is described along with salary and benefit considerations, relocation support and orientation activities.

The paper provides detailed information on the utilisation of the 4 PAs including productivity, types of patients seen, scheduling, supervision, and interface with other hospital departments. The paper also describes PA communication with ER physicians in the larger Invercargill regional hospital for consultation and transfers.

Finally, the paper considers the “learnings” from the Gore PA experience and provides recommendations for the development of PA roles and staffing patterns in similar rural hospitals throughout New Zealand and Australia. These include (1) recruitment of PAs with rural E.D. experience; (2) orientation and development of the PA role; (3) inclusion of the medical and nursing staff in development and support of the PA role; and (4) retention issues.

Context

As the physician assistant (PA) profession has grown internationally, both Australia and New Zealand have considered and explored the utilisation of US trained PAs to expand access and improve the efficiency of care. The South Australia project involved 3 PAs in surgery and pediatrics. The Queensland project recruited 5 PAs in one-year contracts for rural practice (Cooktown and Mt. Isa) one urban practice in Brisbane. Two PA pilots were conducted in New Zealand—a one-year surgical/hospitalist project—with 2 PAs—sponsored by Middlemore Hospital on the outskirts of Auckland, and a Ministry of Health sponsored 2-year pilot project involving 7 US-trained PAs in small cities/towns on the North Island and one rural hospital emergency room in the town of Gore on the South Island. The pilot had the strong support of the New Zealand Medical Association (NZMA) and worked closely with the Medical Council of New Zealand to explore possible regulatory models.

Each of these pilots included a separate evaluation process designed to describe the pilot, to collect and to analyse data on the performance of the PAs, and their “acceptance” by doctors, nurses, and patients. The Ministry of Health PA pilot was evaluated by Synergia an Australasian research, consulting and evaluation group. With the assistance of an interprofessional advisory group, Synergia conducted a mixed-methods evaluation which included: site visits, 360 evaluations, utilisation data and input from the advisory committee. (Specific citations from the Synergia report are included after each quotation/entry).

This paper provides an overview of the findings from the New Zealand pilot and specifically focuses on the experience and subsequent hiring decisions of the Gore Hospital. Utilisation data on PA practice is reviewed and discussed.
Health Workforce New Zealand’s PA Pilot

Developed by Health Workforce New Zealand (HWNZ) a component of New Zealand’s Ministry of Health was established in 2009 to provide national leadership on the development of the country’s health and ...

With technical assistance and support by a US PA educator/clinician/health workforce expert, Health Workforce began a process of needs assessment, creation of a governance document, recruitment of preceptors/clinical sites, the development/implementation of a recruitment/screening/hiring process, and the selection of an evaluation firm and an advisory committee. There was also extensive work with “the sector” to disseminate information about the PA role and to gain input from doctors, nurses, hospital leaders, patients, and other community members.

Four health systems were chosen to participate in the pilot, Gore Health on the South Island, and Midlands Health, Radius, and Raukura Hauora o Tainui on the North Island. Gore was the only hospital based ER chosen with the other sites being ambulatory primary care sites of varying structures.

The two-year PA contracts were listed on PA Job Source, the employment site for the American Academy of Physician Assistants with a requirement for five years of primary care experience—ideally in a rural or small town setting. Each candidate wrote a personal statement about their experience, their “fit” with small community health care systems, and their commitment to pioneering the PA role in a country where it did not exist. While the applicant pool was large—60+ applicants for the 7 positions—many PAs were interested in specialty jobs and were therefore not eligible for the pilot. Almost all of the applicants expressed interest in “experiencing New Zealand” and a number of them had previously visited New Zealand and focused their time on outdoor activities.

The projects’ external consultant screened the eligible applicants through personal phone calls and provided additional information about the specific jobs and communities. Skype technology was used to interview the candidates in sessions involving the designated preceptors, the clinical nurse manager, a representative of Health Workforce New Zealand and the external consultant. Once hiring decisions were made, the details of salary and housing arrangements, visas, travel arrangements and relocation funds were handled by the clinical nurse managers who were generally accustomed to similar interactions with locum tenens doctors coming to New Zealand for short-term contracts.

Upon arriving in New Zealand—and throughout their contracts—the PAs participated in a planned orientation process beginning with an introduction to the New Zealand health care system, information on medical terminology, lab values, and medications specific to New Zealand, and community based cultural competency experiences. A Gore staff member planned, coordinated, and facilitated these sessions based on similar work done with locum tenens doctors.

Overall findings

The Synergia report was positive overall about the pilot and began by recognising the value of the orientation and the success of the selection process:

“The initial orientation support from the existing health workforce, and the ongoing support and training from HWNZ, were key factors in supporting the integration of the PAs into the New Zealand health system. The background and experience of the PAs were also cited as factors that supported their orientation and settlement in New Zealand. “ Synergia Pg. 14
Reviewing the overall project at its completion, the Synergia evaluators called out the contribution that PAs can make to the health workforce in terms of roles, distribution and sustainability.

“there are two key potential contributions of the PA role. Firstly, in geographic areas where workforce shortages remain, and are likely to continue to do so in the future; this is particularly relevant in many regional and remote areas in New Zealand. Secondly, value continues to be seen in PAs in contributing to a more financially sustainable health system.” Page 20

Synergia also reviewed how PAs can increase health care access, support general practices, and create an attractive new health professions role.

“PAs are seen as being able to address workforce distribution issues in New Zealand. There are pockets of areas, particularly rural and semi-rural areas which struggle to attract physicians and are likely to remain this way. There are also some shortages in general practice settings. PAs provide an option to increase the clinical workforce in these areas. It is hoped that as physician extenders they will increase the access to medical care without increasing the number of physicians. They provide an opportunity to develop a new career pathway that makes optimum use of skills across the spectrum of care, increase productivity and free up general practitioners and specialists for more focused roles. This may have the additional benefit of making rural practice more attractive to some physicians. Synergia Pg. 27

Synergia devoted a significant portion of their evaluation studying how patients felt about the PAs who cared for them:

“Patient satisfaction with PAs was high across all trials. An evaluation of PAs across four settings in Queensland found that 91% of patients were very satisfied and 6% were fairly satisfied with the quality of care they received from the physician assistant.” Synergia Pg. 24

Synergia was also interested in the quality of care provided and studied this issue as well as reviewing the international literature on this topic.

“There appear to be no concerns over the quality of care that physician assistants provide, and the growth of the PA role in overseas jurisdictions can be seen to support the view that PAs are clinically safe.” Synergia Pg. 24

The Advisory Committee was especially interested in getting the opinions of New Zealand co-workers about working with the PAs. In each setting there was an adjustment period where the PAs explained and demonstrated their role and their co-workers taught them about the New Zealand health system.

“When PAs were first introduced to their individual practices, there was a learning period for existing staff to understand their role. Synergia Pg 46

As everyone “settled in” and worked together the co-workers valued the PAs in their specific clinical setting:

“Specifically, the staff survey indicates that most of the staff either agreed or strongly agreed that the PAs that they worked closely with:

- are adaptable and flexible, depending on the requirements of the practice (98%).
- have a good rapport with patients (98%).
- are accepted by patients (98%).
- are accepted by the clinical team (97%).
- are accepted by administrative staff (98%).
- are good at communicating with clinical and administrative staff (98%)” Synergia Pg. 46
The evaluation model involved the collection of data from co-workers throughout the pilot project.

“Overall, the colleagues of PAs at all the sites indicated that the PAs were making a valuable contribution to their clinical settings. For example, there was also a generally positive response from staff in the following areas:

- improved throughput of patients (96% agreed or strongly agreed)
- reduced the workload of existing staff (97% agreed or strongly agreed)
- adding something that is distinct from existing roles in the clinical setting (89% agreed or strongly agreed)” Synergia Pg. 9

Administrators and managers specifically noted the value that the PAs added to “the bottom line.”

“People in senior management roles in the host organisations all pointed to the cost-effectiveness of the role, in terms of the PAs ability to deliver similar quality medical care (within the scope of the PA) at a lower cost than GPs or other doctors.” Synergia Pg. 10.

The Administrators and Managers also valued the adaptability of the PAs to adapt to their specific health care settings.

“Overall, the PAs have generally integrated with the business models of their host organisations, and worked in with the existing clinical structures and models at host sites. For the most part, the practice models have generally not changed, with the PAs operating in their clinical settings in a similar capacity to doctors.” Synergia Pg. 64

In all of the clinical sites, doctors, nurses, pharmacists agreed on one key issue:

The lack of prescribing rights was the most commonly cited challenge to the integration of the PA role at the different settings, and particularly at the practice settings. Allowing PAs to prescribe was also the most frequently cited recommendation for the future development of the role in New Zealand in the staff survey. Synergia (Appendix 2). Page 12

The absence of prescribing rights is a major barrier to recruitment, maximum utilisation and retention. The PAs all stated that their return to New Zealand for practice was dependent on this one significant issue. Without prescribing, the PAs felt that they were practicing at lower level than they were used to in the US. They also felt that they were losing an important skill that would make them less employable upon their return to the US.

Gore Hospital’s experience with physician assistants

Gore Health prides itself on its leadership in advancing new technologies and processes for rural hospitals. Meeting the future healthcare needs of rural communities and ensuring accessible and appropriate health services for people living in rural areas requires ongoing innovation in approaches to health service delivery and health workforce development. In 2011 Gore Health progressed to developing an overall IT and workforce development strategy aimed at improving the health outcomes of their community. An E-framework was developed which forms part of their wider strategy to bring people, processes and technology into a coherent whole of systems approach. Along with the physician assistant trial, Gore Health has also piloted mobile scheduling technology in community nursing, healthcare robotics, psycho-social interventions to improve medication adherence, and various telehealth initiatives.

The background of the PAs

Four US trained PAs have been employed sequentially in the Gore Emergency Department including the PA in the Ministry of Health’s pilot. Two are women and two are men. Three of the four were
educated in PA programs with a specific emphasis on rural medicine. All had extensive experience practicing emergency medicine in remote sites including the Intermountain West (rural Idaho and Wyoming), Antarctica and US State Department international clinics. In the recruitment and hiring process, the Gore administration became aware that there are a significant number of US PAs with these types of experiences who would consider similar jobs in New Zealand and Australia depending on the development of regulatory and prescribing practice that would allow them fully utilise their skill set and experience.

The PA in the ED site contributed a substantial portion of the overall volumes of the ED, accounting for 28% of all the patients seen in the ED over the course of the evaluation. This proportion is comparable to the full time Medical Officer, and higher than a number of the other doctors working at the ED.

**Rostering**

At Gore Hospital, the PA working in ED is rostered on with a Medical Officer who provides oversight and supervision as required for Monday to Friday day shifts (0800hrs to 1700hrs). If the PA is rostered on an After Hours on call shift (1700hrs to 0800hrs) in ED, there is always a Medical Officer second on call to provide oversight as required. Generally, the PA’s at Gore only work in ED and do not cover Internal or Family Medicine.

The PA working at Gore had a substantial effect on the working hours of the other clinicians at the site. Since the PA started working at Gore, the average hours worked per week for MOs reduced from 72.3 hours per week to 54.8 hours per week. The hours of the weekend MOs reduced from 53.8 hours per week to 48.5 hours per week.

**Figure 1 Average hours worked per week (Gore ED):**

“*When the PA started, we were able to reduce the hours the medical officers were working. They then reduced to an average of four days and one night (reducing from 70 hours to 47 hours) with the weekend MO’s having Saturday nights off (reducing from 63 to 48 hours). The roster is now more maintainable, allowing our medical officers regular time off and reduces patient risk from tired and overworked doctors. This has greatly reduced the pressure and stress on our medical officers and has ensured the long term sustainability of our workforce. It has also reduced our reliance on locums*” Synergia pg. 60
**Prescribing**

As PA’s are not a regulated workforce in New Zealand they are unable to sign prescriptions. At Gore ED when a PA is on duty, for prescriptions there is direct oversight and sign off by the on duty Medical Officer. There is a certain number of drugs that can be issued under standing orders e.g., can be issued for pain relief.

**Economic advantages**

Outlined below are the proposed savings each PA job brings based on the Gore Health experience:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Officer salary (including CME)</td>
<td>$180,000</td>
</tr>
<tr>
<td>Physician assistant salary (including CME)</td>
<td>$115,000</td>
</tr>
<tr>
<td><strong>SALARY SAVINGS</strong></td>
<td><strong>$65,000</strong></td>
</tr>
<tr>
<td>Agency fees saved</td>
<td>$25,000</td>
</tr>
<tr>
<td>Projected locum fees saved</td>
<td>$90,000</td>
</tr>
<tr>
<td><strong>TOTAL SAVINGS</strong></td>
<td><strong>$180,000</strong></td>
</tr>
</tbody>
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**Benefits**

From the standpoint of the Gore Hospital, PA employment brings significant benefits:

- better patient outcomes, reduce waiting times, greater patient satisfaction, greater efficiencies, providing “better, sooner, more convenient services”, through ensuring the ED workforce meets service demand and Ministry of Health targets of “Shorter Stays in ED Departments”
- improved working environments for our doctors leading to increased job satisfaction—this will assist with attracting and retaining doctors
- reduced workload and the level of on-call commitments for ED doctor
- greater workforce stability—a possible solution to assist in alleviating the shortage of doctors
- reduction in labour costs and dependence on expensive locums in a time of fiscal constraints
- workforce diversity and flexibility and more efficient coordination of the workforce
- increased time for doctors for teaching and learning opportunities
- provides a potential career pathway for other health professionals seeking greater responsibility and job security.

**Summary and recommendations**

1. Promote the PA role in small hospital emergency departments throughout New Zealand and Australia as a strategy for increasing health care access, retaining doctors, and increasing efficiency and sustainability. Recruit and retain PAs with prior emergency department/generalist experiences in rural, remote and other isolated settings.

2. Encourage the development of PA regulatory processes—including prescribing rights—in recognition of the value of PAs, especially in rural and remote generalist and emergency department roles.
3. Aside from Queensland (James Cook University) there are currently no PA educational programs in New Zealand or Australia. Present information about PA benefits and training models to Deans of Australasian Medical Schools with the goal of creating PA programs with a rural focus on admissions, curriculum, clinical training and deployment.

Bibliography

Resources

Presenters
Ruth Ballweg is a US physician assistant leader who has been worked with the Ministry of Health in New Zealand and Queensland Health to develop and implement physician assistant pilot projects. Ruth is currently the Director of International Affairs for the National Commission on Certification of Physician Assistants (NCCPA). She is also Professor Emeritus of Family Medicine at the University of Washington in Seattle, where she was the Director of the MEDEX Northwest Physician Assistant for 29 years. A main focus of her career is rural health access, including a “grow your own” community-based approach to health workforce needs in small, rural and remote communities. She has worked extensively in Alaska with the Alaska Native Tribal Health Consortium (ANTHC) and community health centres to develop and implement new models of primary health care. As a clinician Ruth has worked in family medicine, public health, with emergency medicine evacuation and transport.

Karl Metzler is CEO of Gore Health Ltd, the company responsible for managing the delivery of health services at a rural community hospital and health hub in Gore, Southland, New Zealand. Karl’s vision, inspiration, and empathy for health has seen Gore Health become a leader in rural healthcare in New Zealand. At the Westpac 2013 Southland Business Awards Karl won the Business Personality of the Year award. Karl is very familiar with the challenges of delivering healthcare in a rural community and his innovative approach to healthcare delivery has seen several new technological and workforce initiatives aimed at alleviating some of the many issues facing rural healthcare being piloted at Gore Health. Karl is passionate about health and patient-centred care. He received a MA/MSc in Clinical Psychology at the University of Stellenbosch, South Africa in 1994. He immigrated to New Zealand in November 1998, joined the SDHB as a clinical psychologist and then joined the darkside to become Manager of Community Mental Health Services. He completed a Diploma in Business Management at Waikato University in 2004. Karl is married to Ann and has three children. Trout fishing and a Sky Sport subscription are his closest allies!