

**CANTERBURY  
DISTRICT HEALTH  
BOARD QUALITY  
AND INNOVATION  
AWARDS**

**Project Summaries  
for 2006 Entries**

Quality and Patient Safety  
Council



# TABLE OF CONTENTS

<b>INTRODUCTION</b>	<b>3</b>
<b>2006 COMMUNITY BASED SERVICES ENTRIES</b>	<b>4</b>
<b>IMPROVING PATIENT CARE – CLINICAL INDICATORS BENCHMARKING PROJECT</b>	<b>4</b>
<b>NEW MEDICINE MANAGEMENT IN COMMUNITY PHARMACY</b>	<b>5</b>
<b>2006 CLINICAL/DIAGNOSTIC; HOSPITAL &amp; SPECIALIST SERVICE ENTRIES</b>	<b>6</b>
<b>CANTERBURY DRIVING ASSESSMENT TOOL (CANDAT™) – INCREASING THE SAFETY AND ACCURACY OF DRIVING ASSESSMENT OF PEOPLE WITH BRAIN DISORDERS</b>	<b>6</b>
<b>DECREASING THE PHYSIOTHERAPY OUTPATIENT WAITING TIMES –</b>	<b>7</b>
<b>THE IMPLEMENTATION OF A CIRCUIT TRAINING PROGRAMME</b>	<b>7</b>
<b>DESIGN &amp; IMPLEMENTATION OF INTERDISCIPLINARY CARE GUIDELINES FOR HOSPITAL MANAGEMENT OF AMPUTEES IN CHRISTCHURCH</b>	<b>7</b>
<b>NURSE LED FEMOSTOP AUDIT</b>	<b>8</b>
<b>SPECIALIST LED 'MIRENA' INSERTION CLINIC – IMPROVING TECHNICAL SKILLS OF GP'S IN THE COMMUNITY</b>	<b>9</b>
<b>WAHINE ORA/ FEMALE HEALTH</b>	<b>9</b>
<b>2006 SYSTEMS IMPROVEMENT ENTRIES</b>	<b>11</b>
<b>A NURSE-LED MODEL IN ELECTIVE ORTHOPAEDIC ADMISSION PROCESSES</b>	<b>11</b>
<b>ESTABLISHMENT OF AN ACUTE STROKE UNIT IN CHRISTCHURCH HOSPITAL</b>	<b>12</b>
<b>EXPLORING THE HOSPITAL/COMMUNITY INTERFACE</b>	<b>12</b>
<b>FRONT DOOR PHYSIO</b>	<b>13</b>
<b>INTRODUCTION OF A CONTEMPORARY AUDIT OF GENERAL SURGICAL PRACTICE AT CHRISTCHURCH PUBLIC HOSPITAL</b>	<b>14</b>

# INTRODUCTION

The Canterbury DHB Quality and Innovation Awards are sponsored by the Canterbury DHB's Quality and Patient Safety Council. This Council was established in 2002 to promote quality improvement within the DHB, thereby ensuring the provision of patient centred, evidence based, systems minded, safe, sustainable health care to the population served by Canterbury DHB. The Council also promotes the sharing of information and establishment of best practice across the DHB. The Council's membership is by invitation, (through the Chief Executive), and includes representatives from the Canterbury DHB operating division and community based services.

The awards programme was first introduced in 2003 and is designed to recognise and publicly acknowledge the excellent quality, innovation and improvement initiatives generated by Canterbury DHB staff and our community based services.

A number of the projects entered in past Canterbury DHB Quality & Innovation Awards programmes have gone on to enjoy success at national and international levels. We encourage you all to consider entering your projects in external quality awards programmes. The Corporate Quality & Risk team are happy to assist and support you through the entry process and can also provide information on external programmes and key dates.

The 2006 programme comprised of 3 categories, Community Based Services, Clinical Diagnostic; Hospital & Specialist Service and Systems Improvement. A total of 13 projects were received and the categories for each project were confirmed as part of the assessment process.

Congratulations to all those who took part. It is great to be able to recognise, publicly acknowledge and share the valuable quality initiatives and improvements which are taking place. We hope you have found this a valuable process and encourage you to submit quality improvement and innovation projects into future awards programmes.

We would also like to take this opportunity to encourage you to provide us with feedback on the process so we can continue to enhance the programme in the future.

This booklet has been produced by the Corporate Quality & Risk team to provide you with a brief overview of the project entries.

# 2006 COMMUNITY BASED SERVICES ENTRIES

## **Improving Patient Care – Clinical Indicators Benchmarking Project**

Joint project between the Nurse Maude Hospital & Rannerdale Veterans Hospital

One of the outcomes of the Nurse Maude Association Quality Health New Zealand accreditation process in 2003 was a recommendation to benchmark with "like organisations." The subsequent outcome of achieving this objective was the collaboration between the Nurse Maude Association and Rannerdale Veterans Home and Hospital. This joint project aimed to develop and benchmark a range of clinical indicators for aged care Hospital residents. The project commenced in April 2005 and aimed to;

- Develop comparisons of clinical performance relating to chosen indicators,
- Explain any differences between the data of these two not-for-profit organisations,
- Use this information to review clinical practice in each organisation with the aim of jointly determining best practice approaches that would result in improved quality of care,
- Innovate new practices using evidence based decision making,
- Create partnerships between the organisations and their staff to improve the quality of services, networking and sharing experiences and ideas.

The first benchmarked data covering a limited range of clinical indicators became available in March 2006. These benchmarked comparisons have highlighted some areas for further work, particularly in the relationship that would appear to exist between falls and the use of restraint.

In addition to the value the calculation and comparison of benchmarked indicators has brought, this collaboration has also highlighted several opportunities. Systems have been aligned for collecting data and peer review, and other areas for joint participation have been identified. For example a joint falls risk assessment and management tool and an infection surveillance reporting tool for use in each of the organisations has been developed.

Although the project is still at a fairly early stage both Nurse Maude and Rannerdale staff feel their collaboration in this project has been a success and are enthusiastically looking to advance the project to the next level. Although the full value of the collaboration lies further down the track, it is already clear that benchmarking has considerable benefits for both organisations and, ultimately, for the patients/residents of the two organisations. It is envisaged that the benefits will become increasingly apparent as work underway at present is completed, and can be expected to grow as the project continues to provide new opportunities for Nurse Maude and Rannerdale to work together to improve clinical practice.

*Contact Person: Sheree East, Director of Nursing, Nurse Maude Association*

## **New Medicine Management in Community Pharmacy**

**Participating Pharmacies: Unichem Brighton Village Pharmacy, Burwood Pharmacy, QEII Pharmacy, New Brighton Pharmacy, Eastern Pharmacy Aranui, Eastern Pharmacy Wainoni and South Brighton Pharmacy**

This joint project was initiated by Strategic Health Investment funding which was approved by Canterbury DHB in mid 2004 to pilot a service to assist vulnerable people in the community to comply with the medicine regimen prescribed to them. The pilot was based in the New Brighton area and, after the fourth quarter of running had reached 120 people. The pilot was for a 12 month duration and was due to finish in February 2006 but was then extended for a further six months.

The aim of the project was to establish and evaluate a Medicine Management Service targeted at people living in the community with complex medicine regimens that will promote patients' responsibilities and appropriate use of medicines through education and monitoring. Thus preventing, detecting, and resolving medicine related problems. Hence by utilising the collaboration between Community Pharmacists, could potentially reduce the number of GP visits for medicine related issues, reduce unplanned use of secondary services, improving quality of life and health outcomes for patients and help older people to continue living independently in the community for longer.

A number of key objectives of the project were identified:

- To promote the safe and effective use of medicines as part of the overall management of at risk patients in the community setting
- To promote independent living
- To improve patient adherence to prescribed medicines regimens
- To improve patient knowledge of medicines and provide support for better self management of medicines
- To identify medicine related problems experienced by patients with chronic disease and to implement strategies to address these problems
- To enhance the team approach to medicines management

The Medicines Management Service tested in New Brighton has had a proven positive impact on the people it has served. Overall the pilot had excellent results and all six objectives were met within the first quarter of the pilot. The pilot was assessed as averting a major risk to optimum health in 37.5% of patients and assessed as averting both minor and major risks to optimum health in 83.75% of patients. One of the most significant results has been to see the importance of the Pharmacist's role in the primary healthcare team.

The Canterbury DHB has recommended that the service be funded and implemented in Canterbury and the pilot has already been extended to the Ashburton area.

*Contact Person: Carolyn Oakley-Brown, Project Manager, New Brighton Medicines Management Project, Unichem Brighton Village Pharmacy*

# 2006 CLINICAL/DIAGNOSTIC; HOSPITAL & SPECIALIST SERVICE ENTRIES

## **Canterbury Driving Assessment Tool (CanDAT™) – Increasing the Safety and Accuracy of Driving Assessment of People with Brain Disorders**

Joint project between the Christchurch Neurotechnology Research Programme, Christchurch Hospital, Department of Occupational Therapy, Burwood Hospital and Christchurch School of Medicine and Health Sciences, University of Otago

This joint project worked with a battery of computerised tests that had been developed at Christchurch Hospital to quantify sensory-motor dysfunction for assessment of driving abilities in patients with neurological disorders. The sensory-motor tests formed the off-road component of the Driving and Vehicle Assessment Service (DAVAS) at Burwood Hospital. While the sensory-motor tests quantify perceptual-motor deficits well, they were limited with respect to quantifying deficits of higher mental functions important to the driving task.

The first aim was to design and validate novel computerised tests of cognitive functions critical to the driving task. Computerised cognitive function tests of sustained attention, visual search, decision-making, impulse control and planning were designed. The tests were designed to be contextually close to the driving task to optimise prediction of driving performance in persons with brain disorders. The second aim was to determine the predictive value of the newly combined battery of sensory-motor and cognitive tests (*SMCTests*™) for driving in subjects with brain disorders. *SMCTests* and a car-rig apparatus form the Canterbury Driving Assessment Tool (*CanDAT*™). A major project was undertaken to determine the accuracy by which *CanDAT* is able to predict driving ability in patients with brain disorders.

*SMCTests* and a blinded on-road driving assessment were applied to 50 people (35 males and 14 females) with brain disorders referred to the Driving and Vehicle Assessment Service at Burwood Hospital (35 stroke, 4 traumatic brain injury, 4 Alzheimer's disease, and 7 other).

Binary logistic regression was used to build a model equation to predict on-road driving ability based on *SMCTests* performance. Binary logistic regression correctly classified 94% of referrals as on-road pass or fail. Leave-one-out cross-validation estimated that the model would correctly predict the classification of 86% of an independent referral group as on-road pass or fail.

*CanDAT* is the only assessment system available which is able to comprehensively and objectively assess both sensory-motor and higher cognitive functions related to driving. *CanDAT* is able to predict driving ability with an unsurpassed level of accuracy. This minimises the need for on-road assessment of patients who would inevitably fail and, in the process, put themselves and others in unsafe situations. In addition, a less expensive portable version of *CanDAT* has been developed for manufacture and sale to driving assessment therapists elsewhere in New Zealand and overseas, as well as a screening model of *CanDAT* for GPs.

*Contact Person: Associate Professor Richard Jones, Christchurch Neurotechnology Research Programme, Van der Veer Institute for Parkinson's and Brain Research*

## **Decreasing the Physiotherapy Outpatient Waiting Times – The Implementation of a Circuit Training Programme**

Brain Injury Rehabilitation Service – Physiotherapy, Burwood Hospital

Limited resources and an increasing waiting list provided an opportunity to review the service delivery of physiotherapy outpatients at the Brain Injury Rehabilitation Service. This review identified the opportunity to develop a group (once a week for eight consecutive weeks) circuit-training programme. The aim of this project was to determine if the programme would improve lower limb functional outcome measures (balance, speed, endurance and strength), improve quality of life scores, and thereby ascertain the value of such a programme.

The implementation of this project commenced in May 2005 and was completed in January 2006.

The results demonstrate highly positive findings for clinical outcomes, quality of life and value of the programme, reflecting those which are documented in the literature. Unexpectedly, this programme also decreased participants' risk of falling and 50% of participants became 'community walkers'. Thus enhancing a participants ability to function more effectively and independently in their community. From these findings, it can be concluded that a group circuit-training programme has a definite positive effect on patient outcomes and is a cost-effective method of reducing physiotherapy outpatient waiting times, thus improving service delivery for this population.

*Contact Person: Allyson Calder, Physiotherapist, Brain Injury Rehabilitation Service,  
Burwood Hospital*

## **Design & Implementation of Interdisciplinary Care Guidelines for Hospital Management of Amputees in Christchurch**

Joint project between the NZ Artificial Limb Board & Canterbury DHB

This project, supported and funded by the New Zealand Artificial Limb Board and part of the New Zealand Positive Ageing Strategy, sought to examine and improve current procedures in the treatment and rehabilitation of predominantly older amputee patients in Christchurch. The vision of this project was to develop a comprehensive, seamless and timely approach to amputee management. Thereby aiming to achieve the following objectives:

- Amputee patients and their family/whanau were well informed at the time of the operation;
- Staff working with amputee patients were trained and knowledgeable in amputee management;
- The amputee patient's physical, psychological and cultural needs were best met.

With a great deal of support and enthusiasm from the interested parties dealing with amputee patients, both within and outside of Christchurch Hospital and The Princess Margaret Hospital, many guidelines were reviewed, updated or introduced. New resources were created and new procedures set up. All of these aspects contributed to achieving the vision of this project.

Through achieving the set objectives, the effects of this project are that amputee patients and their families/whanau and the staff working with them now have a greater understanding of what is involved in the rehabilitation process for amputees. This in turn has lead to the amputee patients' physical, psychological and cultural needs being met to a much more satisfactory degree than prior to the project. In addition to

the increased knowledge of the staff, communication between different groups of health professionals regarding an amputee's rehabilitation has been improved considerably through the review and introduction of various guidelines.

This project has been a starting point for optimising amputee management within Christchurch. It is clear that through its achievements, amputee patients face a much less daunting prospect for their future after an amputation operation and that staff involved in treating these patients are more knowledgeable in amputee management.

*Contact Person: Debbie Hockely, Physiotherapist, The Princess Margaret Hospital*

### **Nurse Led Femostop Audit** **Cardiology, Ward 12, Christchurch Hospital**

This project was a nurse led audit of the current nursing practice of arterial sheath removal post percutaneous coronary intervention (PCI) using the FemoStop device to obtain haemostasis. Nurses had initiated the use of the FemoStop device to remove sheaths in May 2004 because the traditional method of hand pressing the artery was perceived to have fewer benefits for the patients and the staff. The question of drug administration at sheath removal was reviewed.

All nurses removing sheaths were first educated in the FemoStop use, and followed a detailed protocol. An audit form was developed by the nurses to accurately record the data.

Patients were assessed for discomfort prior to and during sheath removal. Sheath site prior to sheath removal, time to haemostasis, mobilisation time, and complications over the following 24 hours were documented.

The 93 patients audited were all anti-coagulated pre PCI, and all had heparin during the procedure. 81% of patients found the FemoStop device comfortable. 18% reported some discomfort at initial application of pressure. Of these, 4% required intravenous pain relief. Overall, 96% did not require drugs at sheath removal – in comparison to previously 100% of patients being given drugs at sheath removal.

78% were reported as having no complications the following day, 3% had bleeding, 6% had a haematoma, and 14% had bruising. There were no pseudoaneurysms. There was one vasovagal event.

Haemostasis time averaged 23 minutes. 57% took 15 minutes. 71% of patients were mobilised at six hours with no problems. Nurses found the FemoStop user friendly and its use eliminated muscular strain previously associated with digital pressure.

Overall the project found that with expert education the Femostop device is a user friendly, safe method of arterial sheath removal that is comfortable for the patient and has few complications.

*Contact Person: Margaret Cumming, Clinical Charge Nurse, Christchurch Hospital*

## **Specialist Led 'Mirena' Insertion Clinic – Improving Technical Skills of GP's in the Community**

**GP Liaison Service & Gynaecology Service, Christchurch Women's Hospital**

The goal of this project was to improve the community pool of General Practitioners (GPs) who have the skills and availability within their practices to insert Mirena IUCD devices and perform uterine endometrial biopsies on suitable women patients. This would have the effect of making available alternative service providers for many women who had been referred to gynaecology outpatients for these procedures in the past. It was recognised that the opportunity to insert the devices into real patients, coupled with the chance to learn how to take an endometrial (lining of the womb) sample would be of benefit to the GP community. It was decided to set up a dedicated clinic in order to give GPs this opportunity at the same time offering this treatment to suitable patients. Thereby aiming to achieve the following objectives;

- To improve the community pool of GP who are available to insert Mirena IU devices and perform (pipelle) endometrial biopsies
- Reduce the number of patients who need to be seen at Gynaecology Outpatients for these procedures

At the completion of this project 38 GPs had attended the upskilling clinic. 26 of them were willing to be on a resource list of GPs who were happy to accept referrals from their colleagues for the purpose of inserting IUCD devices and/or performing endometrial biopsies. This has enabled the gynaecology outpatient service to improve the alternative options available to women who are referred to them for these procedures, thereby improving access to first specialist clinic appointments for the community.

Offering a supportive clinical teaching session in order to improve skills of interested GPs is an excellent way of increasing treatment provider options for the wider community within the CDHB. A second outcome is the ability to increase primary/secondary provider knowledge and respect for one another by the small group teaching situation. This project has had a measurable, lasting impact within the gynaecology service and the wider community.

*Contact Person: Dr Clare Healy, GP Liaison, Christchurch Women's Hospital*

## **Wahine Ora/ Female Health**

**Colposcopy Department, Christchurch Women's Hospital**

“Among other adverse health effects, women who smoke have double the chance of developing cervical cancer compared with women who do not smoke” (Szarewski & Cuzick, 1998). This project focused on the finding that there was a gap in the literature available to women concerning the link between smoking and the cervix. Research relating to the harmful effects of cigarette smoking on the cervix has been documented for many years and is widely available in medical literature. This project set out to inform women about the link between smoking and cervical abnormalities.

The project focused on the finding that the motivation to quit smoking can be higher when a link to a health threat is explained and the necessary behaviour modification to alter that is offered in an appropriate manner, (Hall, Weinman & Marteau, 2004). When women are presented with the knowledge that smoking doubles the risk of cervical abnormalities, and that for those women with low-grade cervical abnormalities who stop smoking there is a regression of the lesion, the likelihood of smoking cessation will be higher.

The project highlighted the issue that in New Zealand, Maori women have been identified as having the highest rates of smoking and cervical cancer. Therefore a pamphlet was designed and produced in consultation with Maori, for Maori. Hence the overall aim was to benefit the Maori consumer by respecting cultural and lifestyle differences. Subsequently the information and design of the pamphlet had an emphasis on being culturally appropriate. This project has made a contribution to improve health outcomes for women by encouraging women to make a decision to quit smoking. The pamphlet has been well received and at a later date it is planned to commence planning for a pamphlet for Pacific Island women.

*Contact Person: Jill Lamb, Nurse, Colposcopy Department, Christchurch Women's Hospital*

# 2006 SYSTEMS IMPROVEMENT ENTRIES

## **A Nurse-Led Model in Elective Orthopaedic Admission Processes** Elective Surgical Orthopaedic Service, Burwood Hospital

This project was created in response to the problems encountered due to the reduction in the number of House Surgeons. Part of the role of the House Surgeon in the admission process was to clerk the patient on the day of admission. During 2005, the number of House Surgeons (junior medical staff) available for the orthopaedic run was frequently reduced from the normal three down to two and sometimes only one, as a result of Board-wide shortage of House Surgeons. This problem was most acute in the winter quarter. Consequently, this compromised the delivery of elective orthopaedic surgery and resulted in expressions of job dissatisfaction for a variety of staff.

To cope with the reduced numbers of House Surgeons available for the admission process the nursing staff of the elective orthopaedic unit reviewed the medical duties that needed to be covered. Thus determining which duties traditionally performed by House Surgeons could be safely undertaken by Registered Nurses with medical back up and support.

Patients undergoing minor surgery, under 70 years of age and with a BMI of <35, were selected from the total patients being admitted for elective surgery under the ACC contract, for a nurse-led pre-admission process. The nurses relied primarily on the admission questionnaire, medical consultation notes, and previous clinical records, if they were available.

During the 6-month study, 331 patients were categorised into three streams. 253 patients (76%) underwent a nursing-admission process without the need for further consultation with a House Surgeon or an Anaesthetist. The median age was 38 years. The remainder underwent the process with a House Surgeon.

The nurse-led admission process was safe. The Surgeons and Anaesthetists were satisfied with the process as it reflected safe admission practices contemporary with practices in the private sector. The House Surgeons described theatre job satisfaction, as being able to attend theatre sessions, education opportunities and working more closely with the Consultant.

This pilot study was extremely successful and the concept of nurse-led admission process has been operationalised and expanded to include all patients who have not been through a preadmission process and are having elective surgery on site.

- (1) By working smarter, we have been able to cope with the shortage of House Surgeons while improving the job satisfaction for the House Surgeons working on the elective orthopaedic run at Burwood Hospital.
- (2) Extended the skill base, nursing knowledge and expertise for the nurses involved in nurse-led admission.
- (3) Increased patient satisfaction due to streamlining of the admission process.

This pilot study has improved the elective orthopaedic surgical patients' journey by changing the admission process with the collaboration of all health professionals involved.

*Contact Person: Jenny Truscott, Anaesthetic Nurse Co-ordinator, Burwood Hospital*

## **Establishment of an Acute Stroke Unit in Christchurch Hospital**

### **Acute Stroke Unit, General Medicine, Christchurch Hospital**

This project aimed to improve outcomes for patients suffering a stroke and as a result the Acute Stroke Unit (ASU) at Christchurch Hospital opened on the 4th of October 2004.

This project thereby aimed to achieve several objectives. These included;

- To have a streamlined service to link with the Stroke rehabilitation Unit at the Princess Margaret Unit and Burwood Inpatient Rehabilitation Service,
- To establish an acute stroke unit in conjunction with the latest New Zealand Guidelines that “all people admitted to hospital should expect to be managed in an acute stroke unit,
- Patients should be managed by a team of health professionals who are enthusiastic and have expertise in stroke and rehabilitation,
- To fulfil the vision of Canterbury DHB which is “working together for the best health and well being for the people of Canterbury.

During the first year, 656 patients were admitted to ASU. Of those admitted, 45% returned to the community directly from the unit, 7% died and the rest needed rehabilitation at either The Princess Margaret Hospital or Brain Injury Rehabilitation Service.

The introduction of the ASU was associated with:

- An average of 0.4 days less in length of stay, equating to 296 bed days/yr freed up for other patients
- Reduction in mortality by 4% (30 fewer deaths/ year)
- An extra 4% returning to their own homes (30 extra people home /year)
- An increase in institutional care use by 2%
- A dramatic improvement in the quality and consistency of care processes, as assessed by the Royal College of Physicians of London stroke audit package
- An increase in use of acute stroke thrombolysis
- Increase in nursing education

The establishment of the ASU has lead to improved and more consistent care of stroke patients, with overall improved outcomes and reduced length of Hospital stay. It is also anticipated that further gains will be made as the ASU team develops and associated systems are refined.

*Contact Person: Christine Pithie, Clinical Nurse Specialist, Christchurch Hospital*

## **Exploring the Hospital/Community Interface**

### **Joint project between the Emergency Department, Christchurch Hospital, Nurse Maude Association and Pegasus Health**

This project represents a contribution to the knowledge base necessary to address issues around the Emergency Department such as, over crowding, in-patient ‘bed block’ and facilitating smooth transition between Community and Hospital level care. It was developed in response to a number of specific hypotheses, and represents a collaborative model for identifying current issues and outlining potential responses to these.

There were several distinct phases associated with this project, commencing with an initial assessment of current ‘best practice’ knowledge around services which focus on the Community / Hospital interface. A series of audit, ‘spot reviews’ and analysis of

existing data followed, with the aim of identifying specific areas that could benefit from intervention or service development.

An overview of current community based services was formulated into a preliminary database, identifying scope of services, access and capacity. This is seen as an ongoing piece of work, which will continue to be refined as further data is added. The pilot study suggests that opportunities might exist for the better utilisation of existing community care options and for the creation of new options. The project made a series of recommendations around potential service development and the need for further targeted research. In addition to this, the importance of increased awareness and discussion has been triggered by the presentation of data gathered at a number of forums.

*Contact Person: Sandy Richardson, Campbell Ballantyne Fellowship Nurse Researcher, Emergency Department, Christchurch Hospital*

## **Front Door Physio**

### **Physiotherapy Department, Christchurch Hospital**

This project was designed to Improve the Patient Journey by addressing the group of patients who waited in Emergency Department (ED) / Emergency Observation Area (EOA) for a Physiotherapy assessment prior to discharge and, therefore, contributed to the congestion and overcrowding in ED / EOA. The initiative is targeted at peak patient number times in ED / EOA and aimed to provide efficient attention to patients clinical needs in an interdisciplinary team environment. The project involves implementation of a full time physiotherapy service to the ED/EOA/OOPD areas of Christchurch Hospital. This service is 7 days a week with time of delivery matched to patient demand.

Specific success indicators were set to determine the influence of the Front Door Physio on patient flow and patient care. These were:

- Length of Stay in ED/EOA
  - Target: 50% of LOS for current LOS for patients referred to Physio but not seen Standard: 95% of referred patients seen within 30 minutes in ED/EOA
- Discharged from ED/EOA
  - Target: 75% (for musculoskeletal) and 50% (for general medicine) discharged from ED/EOA or transfer of care to another facility
- ED/EOA staff satisfaction with the service:
  - Target: High level of staff satisfaction with the Physio in ED service
- Patients leaving ED without been seen by a Physio
  - Target: 50% reduction in the number of patients leaving ED without seeing a Physio

A fulltime physiotherapy service was in place from 18 July 2005-23 December 2005. 1108 patients were seen. All of the above targets were met.

The project achieved a 30-minute interval from referral to physiotherapy intervention in 97.5 % of patients seen during the pilot study, achieving a reduction of patients waiting times.

An average of 63% of medical patients and an average of 95.2 % of musculoskeletal patients were discharged. The staff satisfaction survey 'Did the service presence in ED/EOA/OOPD make a difference?' the staff rated a unanimous 100% vote. It showed that the service had helped to reduce the workload of the ED & EOA staff by providing a smoother transition to patients moving through the department. Only 16% of patients are leaving ED without physiotherapy input compared with an initial 32%

(of those who could have benefited from input). A full-time physiotherapy service in the ED/EOA/OOPD has reduced pressure on ED facilities, prevented unnecessary Hospital admissions, provided safe and effective discharge from ED and provided a link between the acute setting and the community.

In conclusion the Front Door Physio has positively influenced patient flow and care, thus improving the patient journey within Christchurch Hospital.

*Contact Person: Katie Croft, Senior Physiotherapist, Physiotherapy Department, Christchurch Hospital*

## **Introduction of a Contemporary Audit of General Surgical Practice at Christchurch Public Hospital**

### **Department of General Surgery, Christchurch Hospital**

The aim of this project was to produce a contemporary electronic system, which enabled useful data to be collated and audited, examining both adverse events and benchmarking local practice with international standards. Audit is a vital part of medical practice and traditionally had been performed retrospectively with very little useful information gained from the process.

A weekly meeting was instituted within the Department of Surgery at Christchurch Hospital. Voluntary reporting of adverse events was performed and data collected on an electronic database. Key topics to benchmark unit standards were identified and prospective data collected and reviewed. External validation of data capture was also performed.

Over a nine-month period 56 deaths and 239 adverse outcomes were reviewed. 12% of these resulted in further action with either a change at a local level or letter to Hospital risk management. Subsequent external validation indicated 100% voluntary reporting of mortality occurred however morbidity was likely to have been under reported (66% of returns to theatre discussed), however this was closely linked to lack of attendance by consultants at the meeting. The implementation of prospective data collection and review of unit outcomes identified major deficiencies in the standard of care received. Subsequently plans to improve the quality of care delivered were put forward to and accepted by senior management.

This project has overhauled a non-productive, time consuming and uninformative system into a dynamic, contemporary, educational system, which provides a useful benchmark to the quality of surgery, provided at Christchurch Hospital. Therefore the implementation of a contemporary audit project into the Department of Surgery has been overwhelmingly successful. It continues to evolve and other health boards have looked to implement a similar system.

*Contact Person: Saxon Connor, Consultant Surgeon, Department of Surgery, Christchurch Hospital*