

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

**Project Summaries  
for 2007 Entries**

Quality and Patient Safety  
Council



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# INTRODUCTION

The Canterbury DHB Quality and Innovation Awards are sponsored by the Canterbury DHB Quality and Patient Safety Council. This Council was established in 2002 to promote quality improvement within the DHB, thereby ensuring the provision of safe, patient centred, evidence based, systems minded, sustainable health care to the population served by the Canterbury DHB. The Council also promotes the sharing of information and establishment of best practice across the Canterbury 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, publicly acknowledge and share the excellent quality improvement and innovation initiatives generated by Canterbury DHB staff and by community based services.

A number of past entries in the awards programme have gone on to enjoy success in national and international awards. We hope those with current entries will consider entering their projects in external quality awards programmes. The Corporate Quality & Risk team can be contacted for information on external awards programmes and they are happy to give assistance and support through the entry processes.

The 2007 awards programme is comprised of 3 categories; Community Based Services, Hospital & Specialist Service and Systems Improvement. A total of 15 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 these valuable quality and innovation initiatives. We hope you have found this a valuable process and we encourage you to submit further 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. Please refer to the Canterbury DHB Corporate Quality and Risk intranet or internet site for further information:

*[http://inraweb.cdhb.local/corp-quality/promoting/quality\\_and\\_innovation\\_awards.htm](http://inraweb.cdhb.local/corp-quality/promoting/quality_and_innovation_awards.htm)*

*<http://www.cdhb.govt.nz/quality/patient-safety/awards.htm>*

# 2007 COMMUNITY BASED SERVICES ENTRIES

## **Baxter Bear**

### **Asthma Canterbury**

By international standards New Zealand children and adolescents have high rates of severe asthma symptoms. The rate of hospital admissions in New Zealand due to asthma is highest in children, with about one third of all admissions occurring in children under 5 years and one quarter in the 5 to 14 year age group. In Canterbury, asthma is the most common cause of child admissions to hospital, especially for Maori and Pacific children.

This project developed a free education kit, targeted at pre-school children newly diagnosed with asthma, to assist them and their parents/whanau with the management of their condition. The kits contain resource material specific to their population group, information to assist with good breathing techniques, a list of additional support services, a space chamber with a child mask for teaching correct spacer use and a soft toy bear.

The project aimed to create a supportive environment where children (and their families/whanau) have the opportunity to play with the equipment being used in their treatment. These sessions also provide a good opportunity to clarify the information which has been received from the GP or through the hospital and to help reduce any anxieties or fears that may exist.

Enabling children, through play, to be an active participant in their treatment helps them to maintain a sense of control. It is important for young children to understand their asthma and know that taking their medicine will make them feel better and keep them healthy and well.

'Baxter Bear' education sessions are complimentary to general practice and are part of the continuum of care. Access to health care is vital and 'Baxter Bear' gives parents and families an opportunity to talk with health professionals in a friendly, relaxed, interactive and informative way. This education package is a free service which increases its uptake and provides the opportunity to deliver quality education to all of those in need.

The results of the project to date and feedback from parents have been extremely encouraging. Increased knowledge and confidence in dealing with the symptoms of asthma have improved health outcomes and have resulted in fewer unscheduled doctor's visits, fewer days off school and work, and fewer hospitalisations.

*Contact Person: Jillian Mitchell, Manager, Asthma Canterbury*

## **Child Health Summit 2006**

**Joint project between Mana Whenua ki Waitaha, Early Start Project, Sport Canterbury, Maori SIDS, Immunisation Advisory Centre and Community and Public Health, Canterbury DHB**

The Child Health Summit was held on 11 & 12 October 2006 in Christchurch. The purpose of the Summit was to raise the profile of the importance of investing in the first 5 years of a child's life. Over the two day period, experts from across New Zealand presented the latest information on key child health issues for this age group with a focus on how to improve child health outcomes over time. The Summit also included workshops on day 2 which were centred on identifying the best outcomes for children and how best to achieve them.

The interest in this summit was overwhelming with people from all over the country, including Māori and Pacific peoples, expressing an interest in participating and attending. A total of 450 people attended over the two days.

Overall, the Child Health Summit was a great success. Participants reported that they were impressed with the 'high calibre' of speakers, the 'information shared', the 'low cost to attend' and the 'no frills' approach taken. An overwhelming 99% of the participants surveyed rated the Child Health Summit as being better than any other similar event previously held in New Zealand focusing on children's health and wellbeing.

There was also a high demand for a similar event to be held in the future which is an excellent indication of the summit's success. In addition, the information gathered from the summit has been fed directly into the Ministry of Health as part of their Well Child/Tamariki Ora Review.

*Contact Person: Linda Goodwin, Project Coordinator, Community and Public Health, Canterbury DHB and Jan Egan, Clinical Manager, Early Start Project*

## **Establishing a Nurse Led Outreach Specialist Sexual Health Clinic for Young Street Sex Workers**

**Christchurch Sexual Health Centre, Christchurch Hospital**

The Business Plan for the Christchurch Sexual Health Centre has a goal to provide services for "hard to reach clients". One of these groups of "hard to reach clients" is young street sex workers. In order to meet the sexual health needs of this group the Clinical Nurse Specialist of the Christchurch Sexual Health Clinic established a Nurse Led Outreach Clinic. This is the first time in New Zealand that a Nurse Led Outreach Clinic has been used to target this particular group of at risk youths.

The clinic is a collaborative initiative and it involves working very closely with community based services, in particular the Youth Cultural Development and Christchurch branch of the New Zealand Prostitutes Collective. The clinic aims to provide Sexual Health Care for young Street Sex Workers, and their peers, by reducing the barriers to accessing care and providing a positive health care experience. It is envisaged that by creating a positive health care experience, this will increase the likelihood of this client group, and their wider social network, accessing other health providers.

The design of the nurse led outreach clinic is completely client focused and as such functions quite differently from traditional health clinics. The Clinical Nurse Specialist attends the Youth Cultural Development “Drop-in” to offer Sexual Health Care and information to young Street Sex Workers. Establishing a clinical service of this nature required considerable negotiation initially and the development of clear guidelines and reporting processes. Gaining acceptance by the client group was identified as key to the success of this project.

Results indicate that there is acceptance by the client group of the Nurse Led Outreach Specialist Sexual Health Clinic. Feedback from stakeholders of the trial is highly favourable and the decision has been made to continue and develop the clinic.

The improved access to sexual health resources for this group is a significant result and will have important implications for them, their social network and the wider community at large. The public health impact of this project is considered far reaching.

*Contact Person: Lyn Familton, Clinical Nurse Specialist, Christchurch Sexual Health Centre*

## **More Than Brief Relief: The Rural Canterbury PHO Brief Intervention Coordination (BIC) Service**

### **Rural Canterbury PHO**

The Rural Canterbury Primary Health Organisation Brief Intervention Coordination Service is a new initiative which aims to improve the services available for consumers with mild to moderate mental health concerns within the Ashburton, Waimakariri and Banks Peninsula Districts.

The Brief Intervention Coordination Service provides adults with mild to moderate mental health concerns with up to five sessions of free psychological intervention with the possibility of onward referral to an appropriate community agency (eg assisted access to secondary services, Presbyterian Support Services, Stopping Violence etc). Referrals to the Brief Intervention Coordination Service come from rural general practice teams.

This project evaluated the effectiveness of the Brief Intervention Coordination Service during the first 15 months of its operation, (March 2006 to May 2007), using key outcome measures. The evaluation involved: checking whether consumers were seen within one month of their GP’s referral; looking at clinical outcomes and whether there had been a decrease in the consumers’ distress category as measured by the Kessler 10 (a self rating scale, which measures non specific psychological distress); surveying consumers and GPs to assess their overall satisfaction with the services’ delivery; and checking that appropriate linkages with community agencies had been developed.

Results indicate that even with high service demand, consumers were seen within one month of the date of referral. Kessler scores at the end of 3 or more Brief Intervention sessions were significantly lower for both the moderate and severe distress groups. Overall, both consumers and GPs groups were very satisfied with the service including the quality of care and access. Consumers rated the service particularly highly in terms of being treated with dignity and respect and being listened to. All parties wanted the Brief Intervention Coordination Service to be continued.

Service improvements include the more consistent use of the Kessler 10 by the Brief Intervention Coordinators as a clinical outcome measure and better reporting of community linkages. Finally, annual satisfaction surveys for clients and GPs will take

place to assist with ongoing service evaluation and the identification of opportunities for quality improvements.

*Contact Person: Paul Wynands, Project Manager and Consultant Clinical Psychologist, Rural Canterbury PHO*

### **The Avenue: Specialised Palliative Care Unit** Radius St Helenas Care Centre

This initiative aimed to provide an improved service for patients requiring palliative care by providing a specialised dedicated service within the facility. The vision was to create a 6 bed unit, housed in a separate wing of the existing building with its own dedicated palliative care team. The focus is on quality of life, wholeness and not fragmentation, along with relief from distressing symptoms such as nausea, pain and anxiety. Psychological and emotional support is offered to both the resident and the family members involved. The paramount consideration, dignity, is the lynchpin in the provision of all services.

'The Avenue' opened on 1 May 2006 and has 6 private rooms with full ensuites, a nursing office, storage, visitors' facilities including a toilet, a lounge with a kitchenette and a quiet room for private time. Staff were specifically recruited to work in 'The Avenue' and undertook palliative care courses and a Graseby pump certification course. A multi-disciplinary contact group was formed to assist the unit as required and policies and procedures for the unit were developed. Two GP's have been recruited who are both well experienced in palliative care and these physicians have agreed to be on call 24/7 for any medical needs that might arise.

An evaluation of the new facility was conducted in May 2007 and the results demonstrate the project has realised its objectives. 'The Avenue' provides a supportive environment for patients and their families and is in line with both the Canterbury DHB and the Ministry of Health's strategy regarding treating people in community based settings. Within the first 12 months 53 residents have been cared for at 'The Avenue'. This equates to 1612 bed days having been freed-up in Christchurch Hospital or other facilities.

Through creative thinking, careful planning, effective implementation and on-going assessments, a successful dedicated and specialised palliative care service has been established.

*Contact Person: Felicity Gannaway, Unit Coordinator, Radius St Helenas Care Centre*

# 2007 HOSPITAL & SPECIALIST SERVICE ENTRIES

## **Bridging the Gap Through Education**

### **Canterbury DHB Palliative Care Service**

Patients speak of their fear of being unable to obtain palliative care if admitted to hospital in crisis at a stage in their illness where they do not wish to have further highly technical interventions. Some interventions can be invasive with unwanted side effects and a high cost relative to the benefits gained. Instead, palliative patients want medical care that is consistent with dying peacefully. The increased complexity of their needs requires excellent decision making, open disclosure with sensitive truth telling and the goal of care shifted towards that of palliative care.

A large number of people face life-limiting illness and die in the acute care setting or Residential Care Facilities. These patients and their families/whanau need dignity, respect and support in conjunction with expert clinical care whether they are in an acute care setting, in residential care facilities or in their own home.

The goal of this project was to provide health professionals with the skills necessary to recognise patients with palliative care needs due to life limiting disease, to assess these needs accurately, to provide appropriate and timely care and to advocate wisely on behalf of these patients and their families/whanau.

To help achieve the project's goal a Palliative Education Resource Group programme was established in 2000. Initially the programme was a single course which was held once a month for nursing staff, however, following continuous reviews and feedback from participants, the programme has continued to evolve. Each course now consists of a monthly 90 minute meeting and the programme has been opened up to a wider multidisciplinary audience. Participants are provided with recent articles of interest and lecture notes to take back to their workplace where they are required to establish a 'resource folder'. The resource folder also contains a copy of the Canterbury DHB Palliative Care Clinical Guidelines and relevant literature which helps ensure consistency in managing the needs of patients requiring palliative care.

The course is evaluated every year through surveys of participants and to date 935 people have attended the course. In June 2007 an extensive survey was conducted to summarise, reflect and learn from the work-to-date and the project journey. The outcome of the survey confirmed the significant impact the educational programme is having on palliative care treatment in the acute, residential care and community settings. The course increases the knowledge of staff and empowers them to advocate on behalf of patients to improve continuity of care between settings and reduce the need for admission into the acute setting.

*Contact Person: Anne Morgan, Palliative Care Nurse Consultant, Oncology Department, Christchurch Hospital*

## **Development of an Infection Control Staff Policy Handbook** Canterbury DHB Infection Control Service

Infection control is an essential component of the services provided by the Canterbury District Health Board across its 14 hospitals. An Infection Control programme is a requirement for accreditation and certification in accordance with the New Zealand Infection Control Standard (NZS 8142:2000) and Health & Disability Sector Standard (NZS 8134:2001) and is essential to ensure the safety of staff, patients and visitors.

The aim of the Infection Control Service is to minimise healthcare associated infections in patients, visitors and healthcare workers through co-ordinated processes and through a high standard advisory service.

Ensuring that all staff in all hospitals are fully aware of Canterbury DHB Infection Control policies and procedures, an important element of safe working practice, can prove a difficult task. The purpose of this project was to introduce the Infection Control policies and procedures in a format that is easily accessible.

The core Infection Control policies and procedures were identified and placed in a handbook that sits along side the Infection Control Manual. This new handbook has resulted in easier access for new and existing staff to the key information they are required to know in respect to Infection Control. The handbook was introduced and distributed to all clinical staff in October 2006.

A questionnaire was sent to randomly selected staff in February 2007 to evaluate the effectiveness of the new Infection Control Handbook. The outcomes of the questionnaire suggest that it has had a positive impact on patient care and that staff would recommend it to others. It was considered particularly useful to new staff that are otherwise required to read large numbers of policy manuals/documents on orientation to the Canterbury DHB.

This handbook is the first of its kind in New Zealand and reflects the multi-prong approach of the Canterbury DHB Infection Control team to developing ways of improving access to important information and thus improving outcomes for patients in our healthcare system.

*Contact Person: Jane Barnett, Clinical Nurse Specialist, Infection Control, Christchurch Hospital*

## **Improving the Management of Children with Gastroenteritis and Dehydration** Paediatric Department, Christchurch Hospital

Gastroenteritis is a common seasonal illness. After injury and poisoning it is one of the most common reason for children to be admitted to hospital in Canterbury. Oral Rehydration Solutions are recommended by a number of national and international agencies, including the World Health Organisation, as the appropriate first line treatment for gastroenteritis and mild to moderate dehydration. It is a low cost, safe and effective intervention that avoids painful and invasive procedures. Alternative rehydration techniques involve the use of intravenous lines or nasogastric tubes. Both of these are effective but involve invasive and often painful procedures with associated risks. Despite this there has been a poor uptake of Oral Rehydration therapy in developed countries.

September 2002 was the peak of a particularly busy gastroenteritis season. 12% of the 700 presentations to the Children's Acute Assessment Unit at Christchurch Hospital were children under the age of 5 with gastroenteritis and dehydration. There was a perception that Oral Rehydration Therapy was being under-utilised and this issue was identified as one worth investigating.

The initial plan was to audit current practice against international guidelines. As significant deficiencies were identified in an audit in 2002 a local guideline was developed along with a serial audit program in an attempt to increase the use of Oral Rehydration Therapy and reduce the use of painful interventions in children under our care.

Following re-audit in January 2005 (of patients admitted July-September 2004) it appeared that this initiative had been partially successful but there remained significant scope for improvement. An Oral Rehydration Proforma was developed as a cheap and simple tool to help overcome the barriers to using this therapy.

Repeated audits in November 2005 (patients admitted August-September 2005) and January 2007 (patients admitted August-September 2006) have shown a significant trend to improved outcomes, and this has been sustained without further intervention. Use of invasive rehydration techniques has been reduced by over 20% and length of stay has also been reduced by 30%.

*Contact Person: James Hector-Taylor, Paediatrician, Paediatric Department, Christchurch Hospital*

## **Mātaamua: Hauora Māori Clinical Training Programme**

### **Ranga Hauora, Burwood Hospital**

The Mātaamua: Hauora Māori Training Programme was primarily developed for all Burwood Hospital staff to ensure that the mana (prestige/respect) and tapu (sacredness) of tangata whenua (people) is paramount in the learning environment. It provides an integrated programme of education using marae-based learning sessions (wanaga), cultural support, and recognition of achievement and contribution.

There was strong community involvement from Māori consumers and Kaumātua. They provided insight into the design and delivery of the programme in order to ensure patient / whānau needs were met. The programme is also congruent with the Whakatataka Tuarua (Māori Health Action Plan).

The programme provides Māori staff with a safe learning environment to support their personal growth, gain confidence and competence to use their cultural knowledge in clinical situations and work alongside Ranga Hauora staff in the care of patients/whānau. For non-Māori staff the programme provides an additional opportunity to enhance their learning and insights into Te Ao Māori and Hauora Māori.

The effectiveness of the programme was evaluated by surveying the participants on the October 2005 Wānanga. The results of the survey showed a very high level of participant satisfaction in all key aspects of the programme. The overall satisfaction level was rated at 98%, the marae dimension of the programme was rated at 100% and staff confidence in applying the knowledge they gained from the programme was

rated at 93%. In addition, a very high level of confidence was retained by participants 18 months after the delivery of the programme.

There was also an increase in the number of staff showing an interest in attending the Programme and/or receiving in-service training and cultural supervision from Ranga Hauora. This programme also supports staff in their competency maintenance for the Canterbury DHB Professional Development and Recognition Programme and for the Health Practitioners Competence Assurance (HPCA) Act 2003.

*Contact Person: Mere Hibbs, Pou-Whakaako, Ranga Hauora, Burwood Hospital*

### **Reduction of Seclusion and Assault within PSAID Inpatient Unit** **Psychiatric Service for Adults with an Intellectual Disability, Intellectually Disabled Person's Health Service, Specialist Mental Health Service, Canterbury DHB**

The Psychiatric Services for Adults with Intellectually Disability (PSAID) unit at Hillmorton Hospital provides a 15-bed inpatient unit, outpatient work and community housing. The inpatient unit provides care for adults with the dual diagnosis of intellectual disability and psychiatric illness. The philosophy of the unit is that people with intellectual disability are entitled to a mental health service which comprehensively and appropriately meets their needs.

A review of clinical practice within the PSAID inpatient unit identified that the utilisation of calming and de-escalation methods had not been in-step with contemporary clinical practice.

This project aimed to significantly reduce the seclusion of patients who were exhibiting challenging behaviours when their arousal levels were high; dramatically reduce the number of assaults on staff and other patients in the unit; up-skill staff leading to an advancement of nursing practice; and improve patient care/support outcomes.

The project team used a number of initiatives to achieve the objectives of this project. These initiatives included advancement in nursing practice, an environmental change, developing a multi-disciplinary team approach, development of a Clinical Nurse Specialist team, support and training programmes for staff and putting in place a monitoring and audit programme.

All of the project goals have been realised. There has been a reduction in seclusion hours, lower levels of patient-to-patient assaults have been recorded and the assaults on staff have reduced by more than 70%. The best practice evaluations from this project have also led to an increase in the full-time equivalent Registered Nurse allocation to the unit and a move towards establishing a Centre of Excellence for Intellectual Disability Nursing in the South Island / New Zealand.

*Contact Person: Dawn Nolan, Clinical Nurse Specialist, Rural Team*

## **Setting Up and Delivering an Acute Non-Invasive Ventilation Service – A Ward-Based Initiative**

### **Ward 25, Christchurch Hospital**

Prior to June 2005, all patients presenting to the Christchurch Hospital Emergency Department with chronic obstructive pulmonary disease in acute type 2 respiratory failure were only able to receive Non-Invasive ventilation if they were admitted to the Intensive Care Unit. This limited the number of patients able to access this treatment due to the limited resources of the Intensive Care Unit.

It was recognised by both the Intensive Care team and the Respiratory Department as a deficit in the treatment of this patient group. The ability to safely deliver non-invasive ventilation outside of an Intensive Care Unit has been well documented.

An assessment of the chronic obstructive pulmonary disease admissions to Christchurch Hospital gave an estimate of the overall patient numbers that could be expected to require the non-invasive ventilation treatment in one year. A working group made up of staff from Respiratory Services met regularly to plan and develop this new acute non-invasive ventilation service, to be delivered in an acute setting on the respiratory ward (Ward 25).

The Acute Non-Invasive Ventilation Unit commenced operation in June 2005, and has now been running for 2 years. There were a total of 69 admissions to the service in the first year (June 2005 – May 2006), primarily from the Emergency Department. This increased to 94 admissions in the second year of operation.

Non-Invasive ventilation in patients with chronic obstructive pulmonary disease and type 2 respiratory failure does not always succeed in stabilising patients. Overseas studies have shown treatment failure rates of between 5-40%. This is most often due to the patient not tolerating the treatment, or that the non-invasive ventilation therapy (along with other treatment such as antibiotics, physiotherapy, and bronchodilators) fail to reverse the respiratory failure. With the development of nurse's skills and knowledge in delivering the non-Invasive ventilation treatment and the introduction of changes to the way the therapy is delivered, the acute unit treatment failure rate has improved from 41% in the first year of operation to 29% for the second year.

The British Thoracic Society Guidelines (2002) recommend that any hospital likely to admit this patient group should have an acute service available. With the establishment of the Acute Non-Invasive Ventilation Unit, Christchurch Hospital is now able to provide patients with chronic obstructive pulmonary disease with the level of care recognised internationally as being expected from a tertiary hospital.

*Contact Person: Robyn Beach, Clinical Nurse Specialist, Ward 25, Christchurch Hospital*

## **“Welcome to the C.I.C.U” DVD**

### **Department of Intensive Care, Christchurch Hospital**

The Cardiothoracic Intensive Care Unit, or CICU, is part of the Intensive Care Unit within Christchurch Hospital. The 6 bed Cardiothoracic Intensive Care Unit has an excellent reputation as an intensive care area. It provides post-operative care and treatment of cardiac surgical patients and certain other post operative acute and elective surgical patients.

A growing body of research supported the idea that improved patient and family education provides positive health outcomes for patients, and decreases the overall costs of care. This project involved reviewing the current processes for delivering preoperative cardiothoracic education for patients and families. As a result of the review an educational “Welcome to the CICU” DVD was developed to be piloted on the unit.

This project aimed to reduce preoperative patient anxiety and apprehension by empowering the patient/family with knowledge and understanding of postoperative care and give patients/family an opportunity to ask questions at the end of the session as well as after they return home. It also aimed to provide reassurance to the preoperative patient that their surgical information will not be disclosed without their consent and that confidentiality and dignity for postoperative patients within the CICU is upheld. A reduction in the nursing time spent in organising and presenting the preoperative education was also expected.

The results of a patient and families/whanau survey showed that 80% reported a reduction in anxiety after watching the DVD and 100% of patients felt that showing this DVD as a private session would help ensure patient confidentiality.

The results from the nursing survey showed that 83% of nurses had noticed a reduction in the amount of time they spent organising and presenting pre-operative education during the DVD pilot and while there were some questions from patients these were not related to the DVD. In addition the nurses in the Cardiac ward and the Cardiothoracic Intensive Care Unit found that the DVD had resulted in a reduction of interruptions to the delivery of patient care.

The “Welcome to the CICU” DVD project initiative has shown how the effectiveness of a collaborative team approach at the ‘coal face’ can make a difference to the experience of a cardiothoracic patient.

*Contact Person: Gill Robinson, RGON, Department of Intensive Care, Christchurch Hospital*

# 2007 SYSTEMS IMPROVEMENT ENTRIES

## **Community Stroke Rehabilitation Service Pilot 2006**

### **Older Persons Health Service**

Internationally, there has been a consistent move towards greater community based (largely home based) health service delivery. Home based stroke rehabilitation has the benefits of being community integrated, of promoting participation, of being appropriate in context and of increasing the patient's sense of control.

This community stroke pilot was set up using an existing Day Hospital team and aimed to establish the feasibility of providing specialist stroke rehabilitation in the patient's own home, or usual domicile. The project also aimed to ensure comparability of outcomes with existing Day Hospital rehabilitation services and determine any clinical issues and barriers which might prevent full implementation of the Community Stroke Rehabilitation Service.

In working to establish a Community Stroke Rehabilitation Service, the project team chose to pilot a scaled down version of the service and generate evidence of effectiveness from this pilot. The pilot has shown that home based specialist stroke rehabilitation is feasible to implement in Christchurch. The team were able to provide rehabilitation that is comparable to that provided by the Riley Day Hospital service.

The results showed that patients in the Community Stroke Rehabilitation Service were seen significantly earlier after discharge from hospital, with the total duration of intervention being similar. While visits were less frequent, each individual therapy session was longer. Patient outcomes were positive, with gains in relation to impairments and activity levels similar to a comparable Riley Day Hospital group. The results from self rated patient outcomes suggested a favourable integration back into their own community, without any increase in carer strain.

These results give the project team confidence that a stroke specific home based rehabilitation team is feasible. After some adjustments to staffing levels an expansion of the service is planned to include all older stroke patients needing home based rehabilitation.

*Contact Person: Carl Hanger, Consultant Geriatrician, Older Persons Health Service*

## **Pharmacy Service Pilot Study in the Mabel Howard Clinic**

### **Psychiatric Services for the Elderly, Older Persons Health Service, The Princess Margaret Hospital**

The Mabel Howard Clinic is based at The Princess Margaret Hospital and is a service that offers assessment, treatment and support to older people with a range of psychiatric illnesses. The Mabel Howard Clinic works in partnership with General Practitioners and family/whanau and carers.

In January 2007 the Psychiatric Services for the Elderly commenced a pharmacy pilot within the Mabel Howard Clinic with the purpose of looking at the impact active pharmacy involvement could have on reducing the readmission rate to hospital.

It was envisaged that by providing pharmacy information and advice to Mabel Howard Clinic consumers there would be a positive impact on medication compliance. The pharmacy information was to include better explanations on the roles of medications, on self-medication systems and on dealing with the common side-effects of medications. It was planned to provide this information and pharmaceutical advice to the attendees/consumers of the clinic and their families. The impact of establishing links with local pharmacies was also studied to provide better current medication information and reduce confusion for consumers.

The results showed that medication reviews conducted by the pharmacist have been useful in providing updated information on client medications and assisted in identifying medications and doses that may be causing adverse side effects as well as assisting in ensuring the accuracy of medications. The information about over-the-counter medication has prevented unwanted interactions between the over-the-counter medications and prescription medications. In addition, communication between community pharmacies and the Mabel Howard Clinic has improved, which reduces the likelihood of therapies continuing when they have been discontinued or new therapies not being incorporated when they have been commenced.

The value of the Pharmacy team being involved as part of the interdisciplinary team has been seen as a positive impact for consumers attending the Mabel Howard Clinic, especially those leaving the ward environment. It has also improved the patient journey with the strengthening of links with the community pharmacies.

Direct pharmacy input into the clinical care of clients has raised consumer and family awareness about medications and has increased the wellbeing of the consumers. The pilot has been running for six months and the introduction of pharmacy input has improved the overall quality of care and support provided to consumers within the Psychiatric Services for the Elderly. The pharmacist is now seen as an integral member of the interdisciplinary team. The success of the pilot has been acknowledged with the continuation of funding for the pharmacy service involvement in the Mabel Howard Clinic.

*Contact Person: Nicky Jonker, Pharmacist, Pharmacy Department, The Princess Margaret Hospital*

## **The Acute Medical Assessment Unit** **Department of General Medicine, Christchurch Hospital**

Christchurch Hospital is the largest tertiary teaching and research hospital in the South Island and provides a full range of emergency, acute, elective and outpatient services. It has the busiest Emergency Department in Australasia with over 72,000 attendances yearly, of which approximately 48% are subsequently admitted.

The Department of General Medicine handles over 9,000 admissions per year and has a bed base of 137. It is the “default” admitting service for the hospital which means that if there is any doubt about which service a patient should be admitted to then the patient is accepted by General Medicine.

The increasing demand for Christchurch Hospital’s services has lead to an overcrowded Emergency Department; hospital gridlock occurring frequently (this is where hospital in-patient space is at capacity resulting in inability to transfer patients to other wards); an inability to care for patients in their “home wards”; and delays in patients accessing diagnostic and assessment services. This project is part of the Canterbury District Health Board’s Improving the Patient Journey initiative. It focuses

on setting up the inpatient facility to manage the assessment phase of acute medical patients and evaluates the effectiveness of the new unit.

The Acute Medical Assessment Unit opened on Wednesday the 21<sup>st</sup> June 2006. A number of goals had been identified for the unit relating to improved patient flow, improved patient care and improvements to systems with associated staff satisfaction benefits.

Over the 6 month period of July-December 2006, 863 bed days were saved which equates to a financial saving of \$215,000.

The results to date have shown that the Acute Medical Assessment Unit is achieving its aim of improving and maintaining patient flow. There has been a reduction of 3.4 hours waiting time for patients in the Emergency Department. Patients are also being appropriately discharged out of the unit thereby maintaining patient flow. A high proportion of patients, 31%, were appropriately discharged home from AMAU. Early access to Allied Health professionals to facilitate coordinated discharge planning has also had a positive impact on discharge rates, length of stay and readmission rates. There has also been a reduction of 0.6 of a day for the overall length of stay in hospital.

In conclusion the Acute Medical Assessment Unit has been a successful part of the Improving the Patient Journey project because it has demonstrated an improvement to the patient flow of a large number of patients through the Emergency Department. This systems improvement has resulted in improved staff satisfaction. The Acute Medical Assessment Unit has also improved the patient care of a large number of patients through the early assessment and intervention by the Medical Physicians and multi-disciplinary team.

*Contact Person: Irena de Rooy, Quality Facilitator, Christchurch Hospital*

# 2007 NEW ZEALAND HEALTH INNOVATION AWARDS: CANTERBURY DHB FINALISTS

Following the submission of 'Expressions of Interest' in January 2007 four projects from the Canterbury DHB were invited from over 100 entries nationwide to submit a finalist application into the 2007 New Zealand Health Innovation Awards. A team from the New Zealand Business Excellence Foundation (NZBEF) assessed the entries and made their recommendations to the Ministry of Health and ACC. These recommendations were reviewed against the Health Innovation Awards criteria and 22 national finalists were then selected for the 7 award categories. The 7 categories for 2007 are:

- Innovation
- Process Improvement
- Excellence in Quality Improvement
- Excellence in Primary Health Care
- Excellence in Prevention (injury or health promotion)
- Excellence in Rehabilitation (injury or long-term condition management)
- Excellence in Treatment

Following the finalist project submissions in April 2007 three of the projects from the Canterbury were selected for site visits by the Assessment Teams, which took place in August/September 2007. The four Canterbury DHB projects will display their entries at the New Zealand Health Innovation Awards Expo before attending the Gala Dinner in Wellington on 10th October 2007.

The four finalist projects from the Canterbury DHB are:

## **A Group Circuit Rehabilitation Programme Improves Accessibility to Physiotherapy Services (*Excellence in Rehabilitation category*)**

**Brain Injury Rehabilitation Service, Physiotherapy Department, Burwood Hospital**

Limited resources and an increasing waiting list provided an opportunity to review the delivery of physiotherapy to outpatients at the Brain Injury Rehabilitation Service (BIRS) at Burwood Hospital. A group circuit training programme was implemented (once a week for eight consecutive weeks) to determine if it would improve lower limb functional outcome measures (balance, speed, endurance and strength) and improve patient's quality of life scores.

The results demonstrate highly positive findings for clinical outcomes, quality of life and value of the programme (to patients, BIRS and Physiotherapy staff and service delivery). The results in the Burwood programme reflected those documented in literature. Unexpectedly, this programme also decreased participants' risk of falling and 50% of participants became 'community walkers'. 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. With these impacts the programme is improving service delivery for this patient population. This project also won the 'Hospital and Specialist Services' category in the 2006 Canterbury DHB Quality and Innovation Awards.

*Contact Person: Allyson Calder, Professional Practice Fellow, School of Physiotherapy, University of Otago*

## **Front Door Physio – A New Physiotherapy Service in the Emergency Department (*Excellence in Treatment category*)**

**Physiotherapy Department, Christchurch Hospital**

This project was designed to address the group of patients who waited in the Emergency Department (ED) / Emergency Observation Area (EOA) for Physiotherapy assessment. In an already congested environment this group of patients further contributed to the congestion and overcrowding in ED and the Emergency Observation Area (EOA).

Audits of weekend and weekday patient activity indicated that 30 – 40 patients per 8-hour period (peak time) would have been referred to a Physiotherapist, had one been available.

The process used to be that the majority of these patients remained in the EOA for an extended period of time and were then discharged without having a physiotherapy assessment and with no community care referral for physiotherapy. Of this group, some patients were admitted to Christchurch Hospital.

The initiative was targeted at peak-time patient numbers in ED / EOA and aimed to provide efficient attention to patients' clinical needs in an interdisciplinary team environment. The project involved implementation of a full time physiotherapy service within the ED/EOA/OOPD areas of Christchurch Hospital. This service was 7-day a week with time of delivery matched to patient demand.

A full-time physiotherapy service was piloted from July to December 2005. During which several success indicators were recorded, these included; a reduced length of stay in ED/EOA, increased discharge rates (from ED/EOA), decreased numbers of patients leaving ED without been seen by a Physiotherapist and high level of staff satisfaction with the physiotherapy service provided. Following these successful results, approval was given in January 2006 to implement a permanent full time physiotherapy service in the ED/EOA and the Orthopaedic Outpatient Department (OOPD) area with a 1.4FTE allocation. This project also won the 'Supreme Award' and 'Systems Improvement' category at the 2006 Canterbury DHB Quality and Innovation Awards.

*Contact Person: John Kenny, Quality and Risk Manager, Mental Health, Older Persons Health and Rehabilitation Services*

## **Improving the Management of Children with Gastroenteritis and Dehydration (*Excellence in Quality Improvement category*)**

**Paediatric Department, Christchurch Hospital**

Gastroenteritis is a common seasonal illness. After injury and poisoning it is one of the most common reason for children to be admitted to hospital in Canterbury. Oral Rehydration Solutions are recommended by a number of national and international agencies, including the World Health Organisation, as the appropriate first line treatment for gastroenteritis and mild to moderate dehydration. It is a low cost, safe and effective intervention that avoids painful and invasive procedures. Alternative rehydration techniques involve the use of intravenous lines or nasogastric tubes. Both of these are effective but involve invasive and often painful procedures with associated risks. Despite this there has been a poor uptake of Oral Rehydration therapy in developed countries.

September 2002 was the peak of a particularly busy gastroenteritis season. 12% of the 700 presentations to the Children's Acute Assessment Unit at Christchurch Hospital were children under the age of 5 with gastroenteritis and dehydration. There was a perception that Oral Rehydration Therapy was being under-utilised and this issue was identified as one worth investigating.

The initial plan was to audit current practice against international guidelines. As significant deficiencies were identified in an audit in 2002 a local guideline was developed along with a serial audit program in an attempt to increase the use of Oral Rehydration Therapy and reduce the use of painful interventions in children under our care.

Following re-audit in January 2005 (of patients admitted July-September 2004) it appeared that this initiative had been partially successful but there remained significant scope for improvement. An Oral Rehydration Proforma was developed as a cheap and simple tool to help overcome the barriers to using this therapy.

Repeated audits in November 2005 (patients admitted August-September 2005) and January 2007 (patients admitted August-September 2006) have shown a significant trend to improved outcomes, and this has been sustained without further intervention. Use of invasive rehydration techniques has been reduced by over 20% and length of stay has also been reduced by 30%.

*Contact Person: James Hector-Taylor, Paediatrician, Paediatric Department, Christchurch Hospital*

## **Improving the Patient Journey (Process Improvement Category)** **Christchurch Hospital**

This project is facilitated by the Business Development Unit (BDU) whose vision it is to support operational staff within the Hospital and Specialist Service group to achieve key service objectives, by providing specialist project and operations management resources. The unit operates in both a project management and advisory role, ensuring projects are completed on time, within budget and integrated into the daily management activity of the Divisions.

The 'Improving the Patient Journey' programme was formally launched in October 2004. It is a single, unifying banner for quality and performance improvement within the clinical and patient processes of Canterbury DHB. While the 'Improving the Patient Journey' programme encompasses all clinical areas of the Canterbury DHB, initial focus has been on the health services provided at Christchurch Hospital (medical and surgical divisions).

Since its launch the 'Improving the Patient Journey' programme has improved the flow of patients by reducing 'bottlenecks' in the processes and increased the capacity of the services to more efficiently match capacity to demand. Other key results to date have been the reduction in patient wait times in ED, the introduction of 3 additional acute theatre sessions and the implementation of a night team coordinator to support clinical staff. For further information about the 'Improving the Patient Journey' programme please refer to: <http://intrawebqa/bdu/ipj.htm>

*Contact Person: Mary Gordon, Executive Director of Nursing, Richard Hamilton, Business Development Manager*