CANTERBURY DISTRICT HEALTH BOARD QUALITY IMPROVEMENT AND INNOVATION AWARDS

Project Summaries for 2008 Entries

Quality and Patient Safety Council

Canterbury
District Health Board
Te Poari Hauora ō Waitaha

TABLE OF CONTENTS

INTRODUCTION 3

2008 COMMUNITY BASED SERVICES ENTRIES 3

WALKING IN ANOTHER'S SHOES: DEMENTIA EDUCATION IN COMMUNITY DEMENTIA RESTHOMES 3
SUPPORTED EARLY DISCHARGE: A COMMUNITY NURSING RESPONSE TO HOSPITAL PATIENT FLOW: THE 'MEET AND GREET' SERVICE 3
QUALITY IMPROVEMENT INITIATIVE TO ASSIST LONG TERM CARE FACILITIES TO MANAGE AND CONTAIN BOTH NOROVIRUS OUTBREAKS AND MULTIDRUG-RESISTANT ORGANISMS WITHIN THEIR FACILITIES 3
THE PANDEMIC SURVIVAL ROADSHOW 3

2008 HOSPITAL & SPECIALIST SERVICE ENTRIES 3

IMPROVING THE IN-PATIENT MANAGEMENT OF ACUTE PANCREATITIS USING EVIDENCE BASED GUIDELINES 3
PLAY WITH A PURPOSE 3
THE SOUTH ISLAND REGIONAL PROJECT FOR THE TREATMENT OF EATING DISORDERS: 'A QUART FROM A PINT POT' 3
THE BURWOOD ORTHOPAEDIC SCREENING TOOL: "SCREENING JOINTS NOT SCREAMING JOINTS" 3
SAFER FOR SURGERY, LIGHTER FOR LIFE 3
PET THERAPY: A THERAPEUTIC INTERVENTION FOR DEMENTIA INPATIENT CLIENTS 3
NUTRITION SUPPORT: A MULTI-DISCIPLINARY TEAM APPROACH 3
OUTPATIENT UROLOGY SERVICE: LOCAL SERVICE FOR LOCAL PEOPLE 3
ENHANCED GYNAECOLOGY AND OBSTETRIC OUTPATIENT SERVICES 3

2008 SYSTEMS IMPROVEMENT ENTRIES 3

PROJECT RED: REJUVENATING THE EMERGENCY DEPARTMENT 3
CHRISTCHURCH HOSPITAL AFTER HOURS PROJECT: EVALUATION OF STAGE ONE OF THE CHRISTCHURCH HOSPITAL AT NIGHT TEAM PROCESS 3
THE 'JOINT' APPROACH: STREAMLINING THE ELECTIVE HIP AND KNEE PATHWAY 3
POWERSCRIBE SPEECH RECOGNITION FOR CANTERBURY DISTRICT HEALTH BOARD RADIOLOGY SERVICES 3
ESTABLISHING DEDICATED EDUCATION UNITS FOR UNDERGRADUATE NURSING STUDENTS 3
AN INTEGRATED MODEL OF CARE FOR THE ASHBURTON HEALTH SERVICES: 'DOING IT DIFFERENTLY' 2005 3

INTRODUCTION

The Canterbury DHB Quality Improvement 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 also gone on to enjoy success in national award programmes. 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 2008 awards programme is comprised of 3 categories; Community Based Services, Hospital & Specialist Service and Systems Improvement. A total of 19 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://intraweb.cdhb.local/corp-quality/promoting/quality_and_innovation_awards.htm

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

2008 COMMUNITY BASED SERVICES ENTRIES

Walking in Another's Shoes: Dementia Education in Community Dementia Resthomes

Psychiatric Service for the Elderly, Older Persons Health Service

The prevalence of dementia continues to increase in New Zealand and so too has the demands on residential services to provide dementia care. Caring for people with dementia requires specialist skills and expertise and the investment in staff training and education is recognised as a key factor in ensuring a high quality and more efficient model of care in this environment.

The Psychiatric Service for the Elderly identified the opportunity to develop and provide a dementia education programme for staff working in dementia rest homes. The aim of the education programme is to compliment existing programmes and provide further clinical education and support resulting in an overall improvement of service delivery and quality of care. This would be achieved through; skill development opportunities for staff, increased interest in the clinical area and improvement in employee retention through the enhancement of job satisfaction experienced by staff.

A Dementia Educator role was introduced in October 2007 and the unique education programme 'Walking in Another's Shoes' commenced in February 2008. Some of the unique features of this programme include; group cohesion and an acknowledgement of staff needs, structured peer group discussion and reflection, experiential learning and 1:1 work place sessions with the educator.

Participants worked individually with the educator to meet learning objectives which often related to particular clients or situations in their work place; they received resources and assistance to problem solve and consider alternative approaches. This element of the programme resulted in numerous success stories.

Whilst the programme is in its infancy, quantitative and qualitative results indicate positive outcomes for both staff and patients with increasing numbers of dementia rest homes accessing the programme. This growing interest in the programme has resulted in the creation of an additional dementia educator position.

All participants who completed the first programme have requested ongoing input from the dementia educator and to continue to come together as a group. As participants develop their ability to *Walk in Another's Shoes* they are significantly impacting on the wellbeing of people living with dementia in residential care.

Contact Person: Maria Scott, Dementia Co-ordinator, Psychiatric Service for the Elderly, Older Persons Health Service

Supported Early Discharge: A Community Nursing Response to Hospital Patient Flow: The 'Meet and Greet' Service

Nurse Maude, Healthcare of New Zealand and Christchurch Hospital

To support the Canterbury DHB's 'Improving the Patient Journey' programme, the *Meet and Greet* initiative was established in March 2007 to facilitate acute secondary settings access at Christchurch Hospital (specifically the Emergency Department (ED), acute medicine inpatients and orthopaedic outpatients) to community nursing services.

The primary objectives of the *Meet and Greet* service were to: provide immediate access to community nursing support for patients in the Emergency and Orthopaedic Outpatient Departments who would otherwise be admitted to Christchurch Hospital, facilitate early supported discharge for inpatients who would otherwise have an extended length of stay in hospital and provide the patient with a seamless and safe transition from hospital to home.

The service is resourced by Registered Nurses from Nurse Maude and Healthcare of New Zealand. Both Nurse Maude and Healthcare of New Zealand are, individually, responsible for supporting the operational performance of *Meet and Greet*. The service involves the on-call Community Nurse receiving a handover prior to the patient's discharge and the patient being met on arrival home from hospital.

This unique service has been proven popular with patients and staff, has successfully met its primary objectives, and has created many additional benefits for patients and service providers. Key results data for the initiative include: nearly 900 patients (data to end of June 2008) have received services via *Meet and Greet*, more than 50% of the *Meet and Greet* patients were transferred back to GP care within 3 days of discharge from hospital (therefore, did not require admission for community support) and 2.3% of patients were re-admitted to hospital (benchmark for this indicator has not been established but this level of readmission is considered low). Additionally, the initiative has assisted Christchurch Hospital in better managing hospital gridlock and has reduced unnecessary length of stay for patients. Patient satisfaction data indicates a very positive response to the service with 100% of respondents stating that they would be 'happy to be treated by *Meet and Greet* in the future'.

Conservative estimates, based on one bed day saved per patient utilising the service, indicate at least 30 bed days saved per month from the Emergency Department, Acute Medicine and Orthopaedics. This equates to 4500 bed days saved through this initiative in 15 months.

Increasingly clinicians in other departments of Christchurch Hospital are requesting expansion of *Meet and Greet* to include their patients – clearly recognising the value of *Meet and Greet*.

Contact Person: Sheree East, Director of Nursing, Nurse Maude. Angie Dredge, Nurse Manager, Healthcare of New Zealand

Quality Improvement Initiative to Assist Long Term Care Facilities to Manage and Contain both Norovirus Outbreaks and Multidrug-resistant Organisms Within Their Facilities

Medlab South Infection Control Service

It is increasingly important that Management and Staff of Long Term Care Facilities have a sound understanding of Infection Control principles and practices.

Medlab South's Infection Control Service exists to provide expert professional advice and consultation to all clients on matters pertaining to infection prevention and control.

The objective of this project was to develop user friendly documentation in relation to the management of norovirus and multidrug-resistant organisms for Long Term Care Facilities in Canterbury.

A review of the Ministry Of Health *'Guidelines for the Control of Multidrug-resistant Organisms in New Zealand'* 2007 and epidemiology and scientific research information on Norovirus outbreaks in Long Term Care Facilities in Canterbury was

undertaken. A focus group of staff from facilities that had experienced outbreaks in 2007 was convened and feedback was collated.

Pamphlets in relation to Norovirus, Methicillin Resistant Staphylococcus Aureus, Extended Spectrum Beta Lactam Producing Organisms and Vancomycin Resistant Enterococcus were produced for Management and Staff and Residents and Relatives of Long Term Care Facilities. These were delivered to these facilities in conjunction with education sessions.

Following this initiative a survey of the initial focus group demonstrated they had an improved understanding of the requirements for the management and containment of Norovirus and Multidrug-resistant Organisms. Importantly this group also reported an increase in confidence in relation to accepting transfers from Acute Care facilities and both Acute and Community Care staff reported improved communication between the two settings.

This project remains ongoing, however, to date it has demonstrated that with written documentation, education and ongoing support the relationships between the acute and long term care facilities is an important factor in maintaining and enhancing the quality of care delivered to residents of Long Term Care Facilities in Canterbury.

Contact Person: Alison Carter, Nurse Consultant-Infection Control, Medlab South

The Pandemic Survival Roadshow

Community and Public Health and Civil Deference and Emergency Management

Community resilience is a major priority of all agencies involved in civil defence emergency planning. A community which is prepared, adaptable and supportive is far more likely to recover quickly from any civil defence emergency than one which totally relies on outside agencies.

Nowhere is this more important than in an influenza pandemic, where evidence has shown that community initiatives are essential in reducing overall mortality.

The Pandemic Survival Roadshow was developed as a means of educating communities in Canterbury about the risk of an influenza pandemic and providing them with the tools to build community resilience for all civil defence emergencies. With the technical assistance of the "Science Alive" museum, and the virology section of Canterbury Health Laboratories, five interactive displays were built based on the mnemonic CHIRP: **C**ough/sneeze etiquette, **H**ygiene/handwashing, **I**solation, **R**educing germs and **P**reparation. Each interactive display was designed not only to educate, but to stimulate conversation about preparedness among the participants.

The exhibition was launched by Sir Kerry Burke in Waiau in March 2007 and has subsequently been viewed in Amberley, Rangiora, Kaikoura, Oxford, Hanmer, Ashburton, Timaru, Wellington, The Canterbury A&P Show, Nelson, ECAN, Christchurch Hospital, The Princess Margaret Hospital, Community & Public Health, Christchurch City Council, Bromley Waste treatment plant, Greymouth and Hokitika. In each centre the displays have been coordinated by Canterbury Civil Defence Emergency Management and hosted by local health professionals who all provided a brief introduction to the exhibition based on training provided by the Medical Officer of Health. The audience targeted initially was community leaders, so that they can host the exhibition themselves on its return to their community.

A measure of the exhibition's success has been the number of requests for its return. A systematic analysis of viewers of the exhibition revealed that all visitors considered the exhibition "good" or very good" with handwashing and cough etiquette best remembered from the exhibition.

An independent survey commissioned by the Ministry of Civil Defence and Emergency Management also showed that 12% of Cantabrians were aware of the pandemic threat as opposed to the 6% national average.

The Pandemic Survival Roadshow is making a valuable contribution to improving community resilience to pandemics and other civil defence emergencies in the Canterbury region.

Contact Person: Alistair Humphrey, Public Health Physician, Community and Public Health

2008 HOSPITAL & SPECIALIST SERVICE ENTRIES

Improving the In-patient Management of Acute Pancreatitis using Evidence Based Guidelines

Department of General Surgery, Christchurch Hospital

Acute Pancreatitis, a sudden inflammation of the pancreas, is a common surgical condition which accounts for a large proportion of acute inpatient admissions to Christchurch Hospital. The diagnosis and management of this condition involves a range of hospital resources including laboratory and advanced radiological investigations, surgical procedures and specialist intensive care services in patients with severe disease.

International guidelines and standards for the management of acute pancreatitis have been published by The British Society of Gastroenterology (BSG). To improve compliance against these guidelines it is suggested that auditing the use of such standards should be undertaken by tertiary centres. Despite these being successfully implemented in international tertiary centres, no such audit has existed at Christchurch Hospital.

Using the BSG Guidelines, a Pancreatitis Proforma was developed within the Department of Surgery at Christchurch Hospital. The Proforma was developed as a tool to use in conjunction with an audit of the management of acute pancreatitis at Christchurch Hospital, to compare the management of this condition against current international guidelines.

Data from the Pancreatitis Proforma was prospectively collected from 01/06/2005 – 30/09/2007. The time period was broken into two groups of 9 months (pre-feedback) and 18 months (post-feedback) duration. A statistical analysis of the differences between the two periods was then undertaken with results highlighting the effectiveness of the pancreatitis proforma and feedback of audit results to reinforce clinical practice.

The Pancreatitis Proforma has positively impacted on clinical practice and continues to be used in Christchurch Hospital as a diagnostic and management tool.

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

Play with a Purpose

Child Health/Child Acute Assessment Unit, Women's and Children's Health Service

There is much evidence and increasing awareness in recent years of the benefits of play therapy in the health care setting. In a joint Play Specialist and Nursing project a four month trial was conducted in the Children Acute Assessment Unit (CAAU) at Christchurch Hospital involving giving a 'Play with a Purpose' pack to children aged between 6 months and 6 years on admission to the CAAU. These packs consisted of bright coloured bags with handles containing four or five age related play items specifically chosen to prompt coping behaviours and a card with information for parents/caregivers on how to help support and comfort their child during this stressful time.

This project was inspired by a similar, very successful pilot project conducted at Emerson Hospital in Concord Massachusetts.

The objective of the trial was to assist the child and their families to cope with hospitalisation and thus maximise diagnosis and compliance with treatment by; encouraging communication, cooperation and participation; making CAAU a more child friendly environment; providing an outlet for the child's frustration; and providing distraction from anxiety and distress.

A satisfaction survey was given to patients and their caregivers before the packs were introduced and this was repeated during the trial. The results of the two surveys were compared. A staff survey was also conducted during the trial.

Survey results indicate this project has been an overwhelming success with children, their parents and staff.

The project's aims have been met. The reduction in anxiety of both the child and parent has enabled clearer reporting on the history of illness leading to improved diagnosis. Children have also been better able to comply with medical investigations and treatments.

The decision has been made to introduce these packs permanently into the CAAU and it is envisaged that the packs may be deployed for children in other Canterbury DHB services in the future.

Contact Persons: Dorothy Lavelle, Team Leader Hospital Play Specialists, Playroom, Christchurch Hospital. Raewyn Millar, Staff Nurse, Children's Acute Assessment, Christchurch Hospital

The South Island Regional Project for the Treatment of Eating Disorders: 'A Quart from a Pint Pot'

South Island Eating Disorders Service, Specialist Mental Health Division

Eating Disorders, are devastating mental disorders affecting mainly young women. Adolescents are increasingly affected. They have the highest mortality rate of any psychiatric condition. Treatments are specialised, medical and psychological in nature and may be prolonged.

Treatment provision in New Zealand is sparse and uneven. The only inpatient beds in the country are in Christchurch which has had an excellent but local service since 1972. Population based funding demanded that services now be made available to the entire South Island from existing resources.

The South Island Eating Disorder Service, based in Christchurch was faced with the challenge of providing equitable and transparent access to treatment to a population of one million people in a widely distributed geography.

An innovative new hub and spoke model of service provision has been implemented which is able to meet standards of best practice as defined by the UK National Institute for Health and Clinical Excellence and American Psychiatric Association Standards.

The project was underpinned by; an electronic clinical management system; the service model; technology for effective communication and wide stakeholder collaboration. As agreements were reached they were incorporated into the Service

Provision Framework to identify the expectations of the District Health Boards in a concrete format.

The objectives of the project were outlined in the South Island Regional Mental Health Strategy 2002 and included the development of; clear protocols for access to the regionally provided Regional Specialist Services to ensure that all areas have equitable, appropriate and timely access to the beds as required; regional specialist services to provide a specialist consultation liaison and education service to local Community Mental Health Teams to ensure that there is appropriate local support; capacity within the District Health Board Community Mental Health Teams to deliver local services that complement the regionally delivered services; a regionally co-ordinated cross-sectorial; and integrated mental health service with linkages for people with high and complex needs.

Key aspects of the remodelled service include regional liaison clinicians, weekly video conferencing for case management and education, district visits biannually for workshops and education days in Christchurch.

A culture of cooperation and trust has developed amongst the stakeholders of the South Island Eating Disorder Service. A survey of the regional liaison people strongly indicates that the objectives outlined in the South Island Regional Mental Health Strategy are being successfully met. The service now provides more equitable and transparent access to inpatient and outpatient treatment for people with eating disorders through out the South Island while acknowledging, strengthening and supporting existing Multi Disciplinary Teams who are thus empowered.

Truly a quart from a pint pot!

Contact Person: Yvonne Curtis, Clinical Manager, South Island Eating Disorders Service

The Burwood Orthopaedic Screening Tool: "Screening Joints Not Screaming Joints"

Physiotherapy Department, Burwood Hospital

A central government funded Orthopaedic Initiative in 2005 provided the Canterbury DHB with the opportunity to streamline its Orthopaedic Journey for primary hip and knee replacement surgery. A condition for funding relied on complying with a maximum wait of 6 months from General Practitioner referral to First Surgical Assessment (FSA) and 6 months from waiting list placement to day of surgery.

As part of the new orthopaedic journey Burwood Physiotherapy researched and developed an Orthopaedic Screening Tool (BOST) to be delivered early in the pathway prior to the patient's first surgical assessment. The vision was to develop a reliable, clinically acceptable assessment tool to allow delineation of primary hip and knee replacement patients. It needed to ensure a timely and transparent patient centred journey for those orthopaedic patients proceeding to FSA.

The tool comprises of a twelve question subjective score (maximum 60 points) and an eight task functional score (maximum 40 points) delivered as a one off forty minute assessment. This gave a score out of 100 that would enable the Orthopaedic Department to delineate need and ability to benefit from orthopaedic intervention.

As well as aiding delineation, the BOST allowed the development of specific individual care plans which includes alternative treatments including: immediate provision of mobility aids, (walking sticks, crutches and frames), general advice, Arthritis NZ pamphlet, Green Prescription information packs, Body Mass Index (BMI) assessment

and referral to Early Dietetic Intervention as appropriate, assessment of falls risk and referral to Falls Prevention Programme and recommendations for Physiotherapy, Hydrotherapy and Occupational Therapy.

Since implementation of the BOST the conversion rate from FSA to surgery has improved from 54% to 90%. Of the 2000 BOST completed to date all patients have received a minimum of one intervention they otherwise would not have had. Unexpectedly the tool has given rise to 2 other initiatives at Burwood; measurement of the patients BMI has precipitated a business case and pilot for Early Dietetic Intervention and the assessment of falls risk has led on to referrals to the falls prevention programme in the community.

From these findings it can be concluded that the BOST has had a measurable affect on patient flow management and prioritisation, and has contributed to a timely transparent and clear journey through the orthopaedic primary hip and knee pathway. The tool has been ratified by the Ministry of Health after comparison against their own tool, and has received ongoing funding.

Contact Person: Deidre Crichton, Clinical Manager, Physiotherapy Department, Burwood Hospital

Safer for Surgery, Lighter for Life

Nutrition Services, Burwood Hospital

In 2006 and 2007 42% of patients referred for hip and knee replacement surgery at Burwood Hospital were classified as obese. In order to reduce the risk of complications and to provide a consistent and transparent approach for these patients, guidelines were jointly produced by the Orthopaedic and Anaesthetic Departments. The guidelines outline the patients' management dependant on their Body Mass Index (BMI). Patients are not accepted for surgery if morbidly obese (BMI>40) or have significant co-morbidities with a BMI 35-39.

The Early Dietetic Intervention (EDI) project was conceived to provide support for the patients deferred and requiring to lose weight prior to surgery. The EDI vision is to achieve safe surgery through lifestyle changes and weight loss which are sustained after surgery to reduce long term health risks and maximise quality of life.

The introduction of a physiotherapy led Orthopaedic Screening Tool, which includes BMI measurement several months prior to surgery, enables timely referral of patients to the dietician. Personalised support focusing on lifestyle changes and the inclusion of the patients' significant others has produced positive results.

The results of the Early Dietetic Service to date include; all patients have lost weight and 23/69 (33%) of the morbidly obese patients have reached their goal weight, BMI <40 with 18/23 (78%) receiving surgery. For the remaining 5 surgery is pending. There have been significant improvements in co-morbidities and patients have reported significant improvements in their quality of life, even though they have severe osteoarthritis. A post intervention questionnaire has also indicated that patients have made positive dietary and lifestyle changes which will increase the chance of sustaining weight loss, a very common failure of conventional dieting.

The success of this initiative has resulted in the EDI becoming an integral and permanent part of the elective Orthopaedic Journey at Burwood Hospital.

Contact Person: Shelley Hargadon, Dietitian, Burwood Hospital

Pet Therapy: A Therapeutic Intervention for Dementia Inpatient Clients

Ward K1, Psychiatric Service for the Elderly

Ward K1 at The Princess Margaret Hospital is a 20 bed inpatient facility for people over the age of 65 years with a confirmed or suspected primary organic psychiatric disorder, or aged 50 years or over, with a proven age-related organic psychiatric disorder. The interdisciplinary team on K1 provides a comprehensive assessment of the cognitive, mental and physical health of the older person. The ward aims to optimise the patients' level of functioning, offering specialised treatment, care, support and education. The ward philosophy is to provide person-centred individualised interventions to achieve the best possible outcomes for the patient, and to facilitate this in partnership with family, whanau, caregivers, community and cultural networks.

Pet therapy is an innovative intervention which was introduced to K1 at the beginning of 2008 to increase patients' quality of life by making the ward environment more normal and homely. International literature indicates a range of potential benefits for the use of pet therapy for people with dementia. Two volunteers and their dogs were recruited and assessed for their suitability to interact with K1 patients, and take turns to visit the ward once a week for up to an hour.

A recently conducted survey of K1 patients, family members, staff and the volunteers revealed overwhelmingly positive responses to the initiative from all of the respondents. Reported benefits of the pet therapy from the survey included: improved social interaction and alertness of patients during pet therapy visits; sensory stimulation for the patients; providing an opportunity for reminiscence; and meeting the patients' basic needs for love and belonging. Overall, the visits were reported to improve the quality of life for patients on the ward, and to provide job satisfaction for staff in seeing the happy responses of patients during the visits.

Contact Person: Laura Haslam, Occupational Therapist, Ward K1, The Princess Margaret Hospital

Nutrition Support: A Multi-Disciplinary Team Approach

Nutrition Support Team, Christchurch Hospital

The department of General Surgery at Christchurch Hospital assesses and treats approximately 10,000 outpatients and 6600 inpatients per year.

Surgical patients frequently require specialised nutritional support with alternative methods of feeding. Parenteral Nutrition, a complex fluid given intravenously, is indicated for certain surgical patients. However this method carries a greater risk of complications and is considerably more expensive than enteral feeding (straight into the gastrointestinal tract) or oral nutrition.

Through the formation of a multidisciplinary nutrition support team the aim of the project is to ensure the optimal use of parenteral nutrition in general surgical patients.

The project objectives were to; ensure patients receive the most appropriate mode and practice of nutrition support (oral, enteral or parenteral); reduce rates of complications associated with central venous access devises (e.g. line sepsis); ensure a consistent and high standard best practice approach to the treatment of parenteral nutrition and ensure the most cost-effective use of Canterbury DHB resources.

Following the formation of the nutrition support team in 2002, activity occurred to improve the practice of parenteral nutrition and then in 2005 the nutrition support team commenced a weekly ward round of all surgical patients who were charted parenteral

nutrition. A prospective database was maintained documenting the indications, interventions and outcomes achieved by the team.

The nutrition support team made 42 clinical decisions in 30 (24%) of the 123 patients seen. 26% of the time this resulted in a change from parenteral nutrition to enteral/oral feeding. Other clinical changes occurring included correcting electrolyte abnormalities and altering glucose management.

The current study has shown that the nutrition support team plays an important role in the management of patients requiring parenteral nutrition. This, combined with previous work carried out by the nutrition support tem, highlights the value of such a service to the Canterbury DHB and the importance of a nutrition support team to the provision of high quality patient care.

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

Outpatient Urology Service: Local Service for Local People

Ashburton and Rural Health Services

The Model of Care 'Doing it Differently' for the Ashburton District comprised a review of all health services across the district in 2005. The Urology Service is one of the services identified as being appropriate to provide from an Ashburton base rather than all patients being referred to the tertiary hospital of Christchurch Hospital.

A Planning team was identified and worked through the logistics of providing a service from an Ashburton base. This involved employing a locally based Clinical Nurse Specialist and developing skills specific to a urology service as much of the patient care and facilitating clinics with the Specialist Consultants will be the nurses responsibility in this service structure.

The Christchurch Urology Service identified 420 Patients from Ashburton were attending one of the Christchurch Hospital's Urology Service sub specialities. The service was set up in late 2007 and it has taken several months to redirect referrals into the service, market the service to local General Practitioners, train staff, purchase equipment and obtain contracted volumes to provide the various clinics for the service.

While the service is still in its infancy, 190 patients have been seen in the service saving local residents costs associated with travelling 34,000 km's and 570 hours of their time in travelling. Carbon emission reductions have also been identified with the reduction in utilisation of private motor vehicles and this bonus is noted to contribute positively to the environment.

This service is now targeted to grow with the months ahead as demonstrated by the increased contracted volumes and referrals now coming into the service for both new and follow-up patients from previous attendances at Christchurch Hospital. This, as well as the aged sector population increase identified in the forthcoming years gives the service potential for continual growth.

The project demonstrates this services sound quality benefits for the local Ashburton District residents requiring specialist Urology care referred from General Practitioner managed care by reducing the travel for ambulatory service. Another benefit of the project has been the development and maintenance of local skills in the Urology Service and the reduction in the waiting list at Christchurch Hospital.

The restructured Urology service identified as appropriate in the Ashburton community meets the intent of Canterbury DHB to ensure Ashburton people have access to an appropriate range of acute and non-acute services provided from Ashburton Hospital.

Contact Person: Margaret Jones, Quality Co-ordinator, Ashburton Hospital

Enhanced Gynaecology and Obstetric Outpatient Services

Ashburton and Rural Health Services

The Model of Care 'Doing it Differently' for the Ashburton District comprised a review of all health services across the district in 2005.

An enhanced gynaecology service and an obstetric outpatient service based at Ashburton Hospital was identified within the review as appropriate to provide the service locally. It would mean easier access to health care for many Ashburton District domiciled women, reduce the travel time & travel costs, and free up resources at Christchurch Women's Hospital.

A Planning team was identified and worked through the logistics of providing a service from an Ashburton base. Ashburton domiciled patients discharged from Womens Health Division were identified and this data was used as a base for the volume of service required for local women.

The project team found that Christchurch based Gynaecologists were keen to provide the service in Ashburton. With further discussions, it was agreed they would provide: additional gynaecology first specialist assessments; follow-up consultations; elective gynaecological procedures requiring a day/short stay; colposcopy procedures and obstetric outpatient consultations.

The team worked closely with Canterbury DHB Planning & Funding and Canterbury DHB Finance to secure the service volumes and operational budget required for the additional and new services.

This project demonstrates the services' quality benefits for the Ashburton Districts residents requiring Gynaecological and Obstetric Outpatient care by reducing the travel for ambulatory service.

During the short period (March to June 2008), the new and enhanced Ashburton services have been available, 322 patients have attended the service saving local residents costs associated with travelling 58,000 km's and 800 hours of their time in travelling. Carbon emission reductions have also been identified with the reduction in utilisation of private motor vehicles and this bonus is noted to contribute positively to the environment.

A successful outcome from this project resulted in a new service for obstetrical outpatient consultations, and enhanced gynaecological services, delivered from Ashburton Hospital.

Contact Person: Margaret Jones, Quality Co-ordinator, Ashburton Hospital

2008 SYSTEMS IMPROVEMENT ENTRIES

Project RED: Rejuvenating the Emergency Department

Emergency Department, Christchurch Hospital

The Emergency Department (ED) at Christchurch Hospital, is the acute assessment point for all secondary and tertiary care in the region. It receives in excess of 72,000 attendances yearly, making it one of the busiest Emergency Departments in Australasia.

Project Red; Rejuvenating the Emergency Department is a clinician-led initiative launched in May 2007 in response to the ongoing pressures and risk of ongoing crowding in the Department which was attracting adverse publicity. The Contributors to crowding are multiple and complex and include the high number of attendances, complex cases, hospital gridlock, limited space and inadequate facilities.

The project visions are to; develop and implement an innovative and comprehensive methodology able to address contributors to crowding; restore the reputation of the Emergency Department through excellent clinical care, improved patient flow, and reduced waiting times; and to improve the morale of staff and the confidence of the public.

The RED Team was established, consisting of clinicians and management with an appropriate mix of authority and expertise. The project was led by three senior ED clinicians, and supported by a project manager and facilitator. The RED Action Plan was constructed, allowing all of the many potential actions to be listed in one document. Each action was categorised under the headings of 'People', 'Processes', or 'Plant', and then graded according to considerations of urgency, importance, and time it would take for the action to be completed. The Action Plan records the expected time of completion and the people responsible for each action, and the RED Team meets regularly to update it.

Project Red has realised genuine collaboration between clinicians and management towards achieving agreed common goals. The methodology used has been highly successful to date. Performance measurements have shown improved patient flow, and reduced waiting times. Team rostering to ensure appropriate seniority and team work has been embedded and a staff role mapping project identifying new staff types (e.g. clinical support staff) has also been undertaken. The waiting room has also been reconfigured to enhance patient flow and improve observation of waiting patients. The ED has also been expanded to improve functionality and capacity from 39 to 55 total patient spaces. The redesign of the department according to well defined models of care, and the application of principles of Lean Thinking, have improved patient flow, timeliness of care, and supervision of patients. Project Red is successfully addressing the multiple and complex contributors to crowding in the Emergency Department at Christchurch Hospital.

Contact Person: Heather Manson, Project Facilitator, Christchurch Hospital

Christchurch Hospital After Hours Project: Evaluation of Stage One of the Christchurch Hospital at Night Team Process

Medical and Surgical Services, Christchurch Hospital

Following a study of after-hours activity at Christchurch Hospital between 2230 and 0800 hours in 2004, a recommendation was made to implement a Night Team

Coordinator (NTC) role in February 2007 to address long-standing concerns identified by staff working the night shift, in particular absence of teamwork, silo working approach, disproportionate work loads and lack of leadership at night. The NTC coordinates the generic clinical workload of the medical staff during the night shift including facilitating a formal handover from the evening to the night shift. The nature of the NTC role enables an overview of the hospital and workloads amongst registered medical officers (RMO's) working in the medical and surgical areas. By having an awareness of patients of clinical concern, the NTC facilitates assessment of these patients, enabling patient's needs to be met in a timely manner. The NTC also provides clinical advisory support for nursing staff.

The evaluation of the Hospital at Night Team Process involved a comprehensive re-audit using the same methodology as in the original 2004 audit; a survey of the opinions of key night shift staff and an analysis of reported incidents and adverse events/near misses. This evaluation has provided a great deal of information and has demonstrated that the Night Team concept has achieved the following: improved patient care through improved patient handover, risk assessment, co-ordination and prioritisation of work to match patient needs; enabled the matching of skills and expertise to the nature of the care required; provided opportunities to improve the working lives of staff at night and staff satisfaction; enabled better teamwork and the sharing of workloads.

This evaluation supported the implementation of the next stage of the after hours team concept involving weekend shifts. A trial commenced in July 2008 for a six month period.

Contact Person: Yvonne Williams, Project Manager, Christchurch Hospital

The 'Joint' Approach: Streamlining the Elective Hip and Knee Pathway

Elective Orthopaedic Service Group, Burwood Hospital

In 2004/5, a number of catalysts combined to provide the impetus to totally redesign the elective orthopaedic patient journey at Canterbury DHB. A new elective orthopaedic facility was due to be commissioned in 2007 requiring a review of patient flow to inform the new design, evidence efficiency, and provide a patient centric service. The Central Government funded Orthopaedic Initiative (2004) promised sustainable funding, doubling the intervention rate for hip and knee replacements by June 2008, and beyond. In addition different ways of working were needed to deliver roles traditionally undertaken by House Surgeons (RMOs) who were in short supply nationally.

This whole system re-design began with a detailed process mapping exercise from GP referral to discharge back to the GP. This work identified and informed seven priority areas; addressing the unmet need; ensuring equity of access ensuring a patient focus; a focus on quality to drive efficiency; a multidisciplinary team driven model; a contemporary facility designed for purpose and ensuring a sustainable, competent workforce.

A number of work streams were created to undertake projects to address these issues with patient and community representation included in each step.

Through the introduction of a new single referral gateway equity of access to the service has been ensured whilst the conversion rate from surgeon assessment to surgery has increased from 54% to 90%. Utilising a new transparent physiotherapy led assessment tool at the gateway has enabled patients to be objectively prioritised on their need for and ability to benefit from surgery.

A peri-operative nursing service is also evolving with multi skilled nurses providing a familiar face and continuity of care for patients during their journey. The peri-operative nursing service is based on a new competency framework and trained nurses now: screen and triage patients before they are placed onto the treatment list and promised surgery; coordinate early interventions with practice nurses and GPS for patients who are not fit or ready for surgery; provide a Nurse Led Anaesthetist Supported admission (NLASP) service and admit 70% of elective orthopaedic patients on day of surgery reducing RMO workload.

Forward planning has increased resourced theatre utilisation at Burwood Hospital by 40%. The boundary for improving services has now moved to the Primary Care interface with plans to introduce Musculoskeletal interface clinics operated by upskilled GPs in community settings. Communications with patients and community representatives is also being enhanced.

The new Canterbury DHB elective orthopaedic patient journey has resulted in vast array of positive outcomes, has attracted considerable interest nationally and is fast evolving into a world leading service.

Contact Person: Jan Edwards, Project Facilitator, Burwood Hospital

PowerScribe Speech Recognition for Canterbury District Health Board Radiology Services

Radiology Department, Christchurch Hospital

To optimally support patient care timely review and communication of radiology results to referring clinicians is critical. In 2006 Canterbury DHB Radiology Services identified that report turnaround times, in particular the delay that was occurring between report dictation and report transcription (typing) was unacceptably long. A speech recognition dictation solution (PowerScribe) was identified as a means by which transcription related delays could be eliminated and consequently the service provided to referring clinicians and patients improved.

The primary goal of the speech recognition initiative was to improve report turnaround time by reducing the delay between dictation of a report by a Radiologist, and that report being transcribed and therefore available for review by a clinician. The secondary goals were to; reduce the number of enquiries for results and associated interruptions to Radiology Services office staff and Radiologists in relation to reports that were dictated but not transcribed; reduce the risks associated with referring clinicians and radiologists not being able to view the reports of examinations waiting for transcription; acquire technology that would support dictation and transcription of reports by a Radiologist at any time independent of the availability of a typist, and to reduce costs associated with transcription, in particular overtime payments.

In the 6 months prior to the introduction of PowerScribe a total of 41,651 reports were issued with a mean delay from report dictation to report transcription of 25 hours 47 minutes. 20% of emergency and inpatient reports took greater than one day to transcribe, 12% greater than two days. In the corresponding 6-month period after the installation of PowerScribe a total of 38,802 reports were issued. 77% of these reports were generated using PowerScribe and were immediately available for review. For the 23% of reports dictated using the traditional digital dictation workflow the delay from report dictation to transcription reduced to 4 hours 52 minutes. The secondary goals of the initiative have also been realised including the financial goals with cost savings of approximately $120,000 per annum directly attributable to PowerScribe. More difficult to quantify are the cost savings to the wider Hospital associated with the more timely communication of results.

The implementation of PowerScribe has had a significant positive impact on report turnaround times. The more rapid availability of radiology reports has in turn realised benefits for patients and their referring clinicians as well as for Radiology Services staff. Other departments within the Canterbury DHB are now exploring the potential benefits of speech recognition technology.

Contact Person: Sharyn MacDonald, Radiologist, Christchurch Hospital

Establishing Dedicated Education Units for Undergraduate Nursing Students

A collaborative project between Canterbury DHB and CPIT

There has been growing concern that the current model of clinical teaching and learning (preceptorship) was becoming difficult to maintain given the current clinical environment of busy wards, high acuity patients and the staff mix of full time, part time and casual workers.

A group of Nurse Educators from the CPIT and the Canterbury DHB (The Project Team) began investigating the concept of Dedicated Education Units (DEUs) as an alternative model of clinical teaching and learning for undergraduate nursing students. The concept of DEUs was developed ten years ago at Flinders University, South Australia. It is the University's preferred model because it continues to meet the teaching and learning needs of students, nursing staff and lecturers by creating positive learning experiences. DEUs enable nursing students to be more supported during their clinical placements. The DEU model values peer teaching and acknowledges that repetition is essential for skill acquisition. Unlike the preceptorship model, all DEU staff offer support and learning opportunities to students.

During 2007 the Canterbury DHB was the first DHB in New Zealand to pilot the DEU model of undergraduate nursing student clinical education. DEUs were piloted in five sites which included acute respiratory care, Orthopaedic surgery, Spinal Unit, and two Rehabilitation areas. During the pilot period the DEU Project Team utilised action research methodology to gather data about the effectiveness of this model.

Research results have revealed positive feedback about this model. The Governance Group have recommended that the DEU model becomes the preferred model for teaching undergraduate nursing students within the Canterbury DHB. The overarching vision is to provide a positive learning experience for students which may in turn contribute to the retention of newly graduated nurses in the Canterbury area.

Contact Person: Teresa Kilkenny, Nurse Educator, Christchurch Hospital

An Integrated Model of Care for the Ashburton Health Services: 'Doing it Differently' 2005

Ashburton and Rural Health Services

A number of issues, requiring careful consideration, led to the comprehensive review of the Ashburton Health Services in 2005. Several strategic intentions were important to the review, providing both direction and impetus; the Ministry of Health's Rural Health Policy 1999, Canterbury DHB Rural Health Plan 2002 and the Canterbury DHB Core Directions statement 2004/2005. A collaborative way forward was needed to ensure sustainability in the provision of health care for the people of the Ashburton District.

The review encompassed the primary, secondary and community health sectors within the district in extensive consultation with the Ashburton community. The first phase of the review involved assessing and evaluating the needs of the local community in consultation with health providers and the community. This phase resulted in the 'Integrated Model of Care for the Ashburton Health Services: Doing it Differently' report which was approved by the Canterbury DHB.

The second phase of the review involved the implementation of the recommendations contained in the Integrated Model of Care report and ongoing consolidation of new strategies and services. A Steering Group was established with overarching responsibility to monitor and evaluate progress along with five work streams, each with an allocated project team.

This wide ranging quality initiative, the implementation of an Integrated Model of Care for the Ashburton Health Services, has achieved a large amount over the last three years. The model encompasses enhanced and increased ambulatory, outpatient, day and short stay services in Ashburton along with a greater emphasis on community care and collaboration between all local health providers. All of the recommendations implemented to date are reporting high levels of satisfaction associated with the new services. There is evidence of satisfaction from health consumers for the enhanced services provided and staff are indicating anecdotally they are pleased to be involved in offering these services for the local population.

Contact Person: Mary Ross, Business Manager, Ashburton Hospital