

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

**Project Summaries
for 2004 Entries**

Quality and Patient Safety
Council



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INTRODUCTION

The Canterbury DHB Quality and Innovation Awards are sponsored by the Canterbury DHB's Quality and Patient Safety Council. The council was established in 2002 to provide advice to the Chief Executive on quality issues and a forum for the wider DHB (community providers and operating division) to discuss quality issues and thereby facilitate on-going improvement of the quality of health delivered to the population served by the Canterbury DHB. The council includes representatives from the Canterbury DHB operating division and community providers. Membership is by invitation through the Chief Executive.

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

Categories were introduced into the 2004 awards programme to further encourage participation. The categories are Community & Contracted Providers, Hospital & Specialist Services and Primary Care.

A total of 22 projects were entered in the 2004 awards, 18 in the Hospital & Specialist Services category and 4 in the Community & Contracted Provider category.

Congratulations to all those who took part. It is great to be able to recognise, publicly acknowledge and share the valuable quality initiatives and improvements which are taking place.

A number of the projects entered in the 2003 Canterbury DHB Quality & Innovation Awards went on to win awards in national programmes. We hope that you will consider entering your projects in external quality awards programmes. For information on key dates for external quality award programmes please contact the Corporate Quality & Risk team.

We hope you have found this a valuable process and encourage you to submit quality improvement and innovation projects into future award programmes.

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 website (www.cdhb.govt.nz) for further information.

2004 COMMUNITY & CONTRACTED PROVIDER ENTRIES

Mana CD – Make a Noise Aotearoa

Hauoroa Matauraka (Maori Health Team), Community & Public Health

Music has a huge influence on the behaviour and attitudes of young people. The issues that will be addressed in the CD are issues that have been attributed to the alarming rates of Maori youth suicide. The majority of the artists committed to this project are hip hop/rap artists or have featured on the top 40 hits in Aotearoa/New Zealand. This is an opportunity to provide uplifting positive messages through a powerful medium, a stark contrast to some of the messages that our rangatahi are currently exposed to.

Contact Person: Matiu Te Huki, Maori Mental Health Promoter

Palliative Care Education for Health Carers

Hospice Palliative Care Service, Nurse Maude Association

Due to the constant demand for inpatient care it is not possible for hospices to provide long term care for patients unable to return home. Rest homes and long stay hospitals are, therefore, playing an increasing role in the provision of longer-term palliative care. Care assistants (carers) working in residential settings are responsible for providing much of the direct hands-on care for terminally ill and dying patients yet seldom have any formal palliative care education.

The Centenary Hospice Palliative Care Service has recently developed a palliative care course for carers. The course is offered as a series of four seminars and aims to increase palliative care knowledge and understanding. Ten courses were run between May 2002 and April 2004, during which time 281 carers completed the programme. Written evaluations were received and collated. 76% of participants gave an overall course evaluation of excellent; the remaining 24% rated the course as very good overall. Demand for the course has been ongoing.

Educational initiatives, such as the one outlined in this submission, are an important way of influencing the provision of palliative care in rest homes and long stay hospitals.

Contact Person: Raewyn Jenkins, Palliative Care Liaison & Education Nurse

Residential Care: A Choice and Advocacy Model

Bethany Village Home and Hospital, The Salvation Army

One of the most valuable guides to care is based on the needs of the individual. The psychologist, Abraham Maslow, developed a hierarchy of needs. He believed that individuals operate on ascending levels in which the needs on one level must be at least partially met before the person is ready to consider the needs on a higher level.

This theory has significant applications for those working in aged care. As professional nurses we recognise that during times of stress such as illness or as individuals advance in years, there is a tendency to regress i.e. operate on a level closer to the base of the hierarchy than at the "self actualising" level.

With this in mind Bethany management team have developed a model of care based on Maslow's Hierarchy of needs, which coexists with the Salvation Army ethos of holistic care. Matching residents to their current level of need on admission and assisting them, as part of our care philosophy, to move to a higher level is the basis of our care management, care planning and service delivery.

Contact Person: Sandra Moore, Manager, Bethany Village Home and Hospital

Syringe Driver Competency Programme for Registered Nurses

Centenary Hospice Palliative Care Service, Nurse Maude Association

The Nurse Maude Centenary Hospice Palliative Care Service has developed a syringe driver competency programme for Registered Nurses working in rest homes, long stay hospitals and rural communities. The programme which was developed following consultation with the above providers aims to assist Registered Nurses to obtain the theoretical and practical knowledge, skills and confidence required to manage subcutaneous infusions using syringe drivers in their own practice setting.

The programme involves completion of a distance learning pack, attendance at a two hour workshop during which a practical competency assessment is completed and a written test paper. Following successful completion of the programme a certificate is issued.

35 workshops were held between July 2002 and April 2004, during which time 313 Registered Nurses successfully completed the programme. Written evaluations were received and collated. The evaluations indicate that the nurses who completed the programme appear to have improved both their knowledge base and their clinical skills. All participants reported increased confidence setting up syringe drivers. The project has, therefore, achieved its aim.

Contact Person: Raewyn Jenkins, Palliative Care Liaison & Education Nurse

2004 HOSPITAL & SPECIALIST SERVICES ENTRIES

Active Rehabilitation in a Medium Secure Environment: Balancing the Scales

Te Whare Hohou Roko, Regional Forensic Psychiatric Service, Mental Health Services

Te Whare Hohou Roko (TWHR) is a medium secure unit, which is home to nine patients who have a complex range of symptomatology. Since the opening of the unit three years ago, the staff and patient team have worked towards identifying workable approaches of rehabilitation, that compensate for disabilities often exaggerated by the restrictive environment. This project documents the process of identifying and implementing these approaches and ways of measuring ensuing progress.

Results indicate success in maintaining levels of adaptive behaviour and improving physical health. These are two important aspects of care in a medium secure psychiatric setting. The identified outcome measures to date have also identified some further areas for address in the rehabilitation programme. The current lack of aggregate data pertaining to patient perspective on quality of life, risk and functions of maladaptive behaviour is highlighted as a future need, which requires further resources, including staff training.

Contact Person: Dr Lorraine Childs, Clinical Psychologist

Aiming for Safety and Efficiency in the Management of Chest Pain Cardiology, Ward 26, Christchurch Hospital

The assessment of chest pain places a significant burden on resources within any Emergency and Cardiology Department and misdiagnosis can have catastrophic results. The major aim of this project was to safely decrease the average length of stay for patients assessed as having chest pain of a non-cardiac cause.

The literature was searched for overseas attempts to improve the delivery of chest pain care, particularly in relation to setting-up dedicated Chest Pain Assessment units (CPAUs) which aim to not only streamline the process of assessment but also to minimise incorrect diagnoses. Following the analysis of data on recent admissions with chest pain, final diagnosis and length of stay, protocols and algorithms were written to rapidly identify those at high risk of Acute Coronary Syndromes, to enable them to receive early and appropriate investigation and treatment.

Consistent with the aims of the project, the protocols have the ability to identify those at low risk of adverse events after a streamlined assessment process. Proposals were written and accepted for a six-month trial period. Education and staff training prior to implementation of the CPAU resulted in few problems during the trial period. Analysis of the data following the trial period found that the average length of stay had been reduced from 39.4 hours to 22.3 hours. The CPAU is now an integral part of the Cardiology Department at Christchurch Hospital.

Contact Person: Wendy Cuthill, Clinical Charge Nurse, Ward 26

Collaborative Framework for the Delivery of Nursing Care **Department of Nursing, Christchurch Hospital**

Nurses have always endeavoured to ensure nursing resources are efficiently deployed. However evidence of this efficiency has been minimal and fiscal constraints have led to increasing calls for nurses to demonstrate their worth. The organisation of nursing work should be based on the best available evidence, yet empirical studies comparing nursing care models are rare and provide little evidence of the most effective and efficient way to allocate nurses to patients.

The main model of nursing care delivery used at Christchurch Hospital was patient allocation whereby a nurse was allocated several patients for the duration of a shift. Within this model, nurses tended to work separately from each other. It can be argued that while nurses may be allocated to care for a specific number of patients, their work invariably extends to assisting colleagues, providing advice and undertaking an educative role. Therefore by its very nature, nursing is collaborative and recognition of this needs to be evident with any model used.

A collaborative framework for the delivery of nursing care at Christchurch Hospital was developed and trialed on four wards. The change process for the trial was managed following “the seven steps to plan change: an eclectic approach” (Sullivan and Decker 1992) which is based on the nursing process.

A combination of quantitative and qualitative methods were used to evaluate the trial including satisfaction surveys, use of nursing and quality indicators, focus groups and documentation from meeting minutes and communication books.

The evaluation of the trial indicated evidence of a favourable impact on the way nurses deliver care. The development and trial of the Collaborative Framework has commenced a conceptual shift in the way nursing care is delivered, moving away from nurses working in isolation to nurses working together to clinically support each other.

Contact People: Yvonne Williams & Sam Powell, Project Facilitators

Development of a Consumer Information Kit and a Family/Whanau/Carer Information Kit for Adults Using Mental Health Services

Development & Advisory Unit, Mental Health Division

Many consumers and their family/whanau would arrive at our inpatient and community based outpatient mental health services, not just feeling upset/concerned/disoriented about what they were mentally experiencing, but anxious and feeling poorly informed about what was 'going to happen to them' within our services. The Consumer Advisors to the Mental Health Division (MHD) clearly articulated a need for a user friendly information resource to assist in alleviating these experiences.

Working in partnership with clinicians, consumers, family/whanau, and management, a Consumer Information Kit and a Family/whanau/carer Information Kit were developed. The information kits work as an empowering and informative resource for consumers and their family/whanau. They also work effectively as a clinical tool, and as a means of consolidating the clinical relationship between a consumer, their family/whanau and their case manager. In addition their use complies with the National Mental Health Sector Standard (NMHSS).

The use of the information kits is now firmly embedded into clinical practice within the adult services of the MHD. The development of the information kits has not just met a local need but a national one as well.

Contact Person: Gabrielle Martin, Planner & Quality Analyst

Diabetes Inpatient Education Programme

Diabetes Centre, Christchurch Hospital

The aim of this project was for the Diabetes Nurse Educators to commence education for inpatients with Diabetes as soon as possible after admission. This would enhance meeting patient, staff and institutional needs.

There were three expected project outcomes. Firstly that Christchurch Hospital inpatients who have diabetes would have their length of stay evaluated using statistical evidence. Secondly that ward staff would have access to a Diabetes Nurse Specialist for advice and for their own education. This would be evaluated by asking Charge Nurses their opinions of the programme based on feedback from their staff. Thirdly that all inpatients who have diabetes would have access to a nurse specialist for education on managing their diabetes. This would be evaluated by asking patients for their opinions of the programme.

A programme was piloted in the Emergency Observation and Assessment Unit and the two medical admitting wards, 23 and 24, for three months from the 25th August until 29th November 2003.

For the three months prior to the programme, the average length of stay for inpatients with diabetes in the Emergency Assessment and Observation Unit, Wards 23 and 24 was 2.75 days. This length of stay was compared with people who do not have diabetes.

Although the statistical evidence did not show that the length of stay for inpatients with diabetes was reduced, the project provided some extremely positive outcomes in the Quality of care for the target group of patients and the staff providing that care.

Contact Person: Deb Wilson, Diabetes Centre Manager

Discharge Letter Process Review

Department of General Medicine, Christchurch Hospital

The Department of General Medicine, Christchurch Hospital provides an acute inpatient service for 7,500 patients every year and for most patients a typed discharge letter is sent to the General Practitioner following discharge. For many years the department has been unable to find a solution to the problem of getting discharge letters out to GP's in a timely manner.

Traditionally letters were dictated in the department after notes had been coded. For a variety of reasons the whole process sometimes took weeks or months and there were often long delays waiting for Registrars to dictate the letters. A trial was approved to have letters dictated on the Ward within three days of discharge. This required a complete culture change which was largely achieved by raising awareness of the issues and providing statistics on where we were and what we wanted to achieve.

Audits undertaken during the project showed that timeframes from discharge to posting the letter were up to 153 days (average 37.8 working days). We were able to reduce this to maximum 55 days (average 25.7 working days) in May 2004. We were able to show from our audits that we had significantly improved timeframes and that our 10 working day guideline for posting letters out to GP's was achievable.

A culture change is a difficult thing to achieve and maintain with a large group of people, especially with the added challenge of Registrar runs changing every four months. A new culture carefully nurtured with one group then has to be transferred and developed with another group. Strategies have been put in place to deal with this issue and to move the project forward and build on the positive results already shown.

Contact Person: Lyn Clark, Clerical Supervisor, General Medicine

Establishing a Nurse Led Pre-assessment Clinic for Cardiology Patients Cardiology Day Unit, Christchurch Hospital

Nurse led pre-admission assessment clinics are one of the ways nurses can utilise health assessment skills and integrate them into everyday practice. A nurse led pre-admission assessment clinic was established in July 2003 in the cardiology day unit (CDU) Christchurch Hospital for patients undergoing specific cardiology procedures. The aims of the clinic were to provide a quality pre-admission service with the emphasis on improving the quality of factual information given about the procedures, reducing waiting times for patients and an improvement in the documentation process.

In the nine month period since July, two nurses have conducted pre-admissions on an average of four-five patients per week. Benefits of the clinic have been an improvement in the quality of the factual information given to patients regarding the procedure, with increased time available for questions, and improvement in the pre-admission documentation. Junior doctors from the cardiology wards have had more time available to complete documentation for ward patients.

The clinic has extended the scope of nursing practice and utilised the expertise of senior nursing staff. Health assessment of adults has become part of the educational culture of CDU. Management support the clinic as it has been established within existing staffing levels. The collaboration and support from the Electrophysiology and Pacing consultants has been pivotal to the success of the clinic. Evaluation of the clinic is in the form of a questionnaire directed at patients, medical and nursing staff and is currently in progress.

Contact Person: Carmel Harris, Staff Nurse Cardiology Day Unit

Ethnicity Data Gathering: Consistency, accuracy and monitoring of Ethnicity Data Collection to improve health outcomes and reduce health inequalities

Older Persons Health Service, The Princess Margaret Hospital

Between 2003 and 2004 a project team at the Older Persons Health Service, The Princess Margaret Hospital worked to design and implement a plan that would result in a 97.02% Ethnicity Data Collection rate by February 2004. This achieved the 3% “not stated” benchmark set by the process team. The team worked on the assumption that low completion rates were the result of lack of understanding of concepts in ethnicity and reasons for collection of such data.

In addition, the project aimed to improve accuracy of ethnicity data by reducing the number of “other” results. “Other” reduced from 6.57% to 3.75%. The self-maintained Continuous Quality systems put in place demonstrated that very

little time and effort was necessary to maintain systems when they were integrated into existing or new Quality processes. However, work is ongoing as “face-to-face” ethnicity verification audits indicate that 10% remain inaccurate.

Contact Person: Tricia McGuinness, Quality Co-ordinator

Healthy Body, Healthy Mind

Recreation and Leisure Service, Mental Health Services

The objectives of this project were to provide an operational and safe fitness room and programme as per consumers needs, to provide the continuum of physical and mental well being for consumers while in an inpatient setting, and to provide a step towards community integration by educating consumers about fitness.

Benefits to the consumers have shown a physical and psychological improvement. Consumers and staff have reported improved confidence, self esteem, commitment, weight loss, anxiety reduction, motivation and improved quality of life. Measurable goals are documented on a fortnightly basis and include fitness levels, flexibility, strength and muscular endurance. Other benefits visible by staff within the Recreation and Leisure Service are appropriate use of equipment, nutritional benefits such as water intake, eating health food before and after exercise, wearing appropriate clothing and footwear, and reduction in smoking while training.

The fitness room is an effective way for consumers to continue with their current fitness programme in a safe environment, and also provides a step towards integrating consumers into the community by educating how to safely and appropriately assess and use fitness equipment.

Contact Person: Gina Stewart, Recreation Officer

Implementing a Safe Handling Programme into Burwood Hospital

Occupational Health and Safety Unit, Burwood Hospital

Accident statistics from 2001 demonstrated that a significant proportion of reported staff injuries at Burwood Hospital were caused by manual handling (more than 60%). A workforce culture existed that accepted high rates of injury as a natural consequence of the manual handling tasks in a hospital environment and an accepted risk to the occupational group. The majority of the incidents requiring time off work at Burwood Hospital resulted from manual handling injuries (85%).

Burwood Hospital Occupational Health and Safety Unit staff, with support from senior management developed a primary prevention programme focusing on preventing manual handling injuries in the hospital. It was anticipated this

programme would benefit three distinct stakeholder groups within the hospital, staff, patients and hospital management.

Since the inception of the Safe Handling Programme the acceptance that manual handling injuries are an accepted risk for staff has changed. An implementation plan for the programme has been developed based on recommendations in the New Zealand Patient Handling Guidelines. Training in new handling techniques has occurred and is being integrated into clinical areas.

Significant cost savings have occurred through reduced numbers of manual handling incidents (40%), and injuries resulting in lost time (60%). The programme has also resulted in a reduction in the severity of those injuries equating to a reduction in lost time hours (90%) away from work and reduced associated direct and indirect costs.

Contact Person: Laura Clifford, Rehabilitation Co-ordinator

**Intensive Care Outreach and Follow-up Service – ICOAF Programme,
Establishing a Service in Christchurch Hospital**
Intensive Care Unit, Christchurch Hospital

The Intensive Care Unit has been developing an Intensive Care Outreach and Follow Up Service. The aims of the service are primarily to ensure early identification and intervention for patients whose condition is deteriorating upon the wards and thereby to improve outcomes. Intensive Care has also developed a system of following all discharges from Intensive Care, providing additional support to home teams where appropriate. This system has become robust and hospital wide.

To date Intensive Care has introduced a referral system to the majority of surgical services in Christchurch Hospital. The service is equally accessible by nursing and medical staff. The outreach service has received very positive feedback from both nursing and medical staff.

Our primary aim is to improve the liaison between the Intensive Care Unit and the wards and thereby improve the quality of care and outcome for our patients.

Contact Person: Helen Tregenza – Clinical Nurse Co-ordinator

Investigation of utility of four clinical measures of outcome for assessing Forearm Tendon Transfer surgery in persons with tetraplegia
Burwood Spinal Unit, Burwood Hospital

Many centres world-wide are performing forearm tendon transfer (FTT) surgery on persons with tetraplegia yet there appears to be a lack of consensus regarding the clinical measures of outcome that should be used to determine the functional consequences of the individual over time. The first step in measurement of outcome is to determine which measures are reliable, valid and responsive enough to use with this population of spinally injured persons where small improvements in function can lead to significant improvements in activity and participation.

The study design involved a comparison of various measures of impairment, activity limitation and participation of persons with tetraplegia: 14 who had FTT surgery performed at Burwood Spinal Unit (BSU) and 12 who had not had any surgery performed. The objective was to determine if the clinical measures chosen were reliable, valid and responsive enough to show clinically significant differences in function between the two groups of persons with tetraplegia.

Validity, reliability and responsiveness of the clinical measures were shown to be high. Acceptance and utilisation of clinical measures with good psychometric properties allows for standardised and objective measurement of interventions. As the clinical measures showed good psychometric properties they have now been incorporated in the pre- and post- operative assessment of upper limb surgery patients at the BSU.

Contact Person: Jennifer Dunn, Physiotherapist

Midwifery Rotation Project
Maternity Service, Christchurch Women's Hospital (CWH)

The aim of this project was to introduce a rostering system for midwifery staff that would take into account the needs of the Women's Health Division (WHD) and if successful act as a benchmark for future rotational projects within the organisation.

The key objectives of this project were to create an environment that supports staff in achieving their competencies, to support staff attainment of registration under the Competency Based Practising Certificate scheme; to provide CWH Midwives with a further opportunity for professional development; to assist the WHD strategic objective of improved recruitment and retention of staff; and to provide an effective contribution in the delivery of consistent midwifery care throughout CWH.

Twelve months into this project, rotation has become a routine event. The key objectives of the project have been met and feedback from staff has, in general, been positive. Increasingly, new and prospective midwifery staff have indicated their desire to be able to move between work areas. The establishment of the rotation roster has made this possible as well as providing staff with further opportunity for professional development.

Contact Person: Jane Waite, Maternity Service Manager

Rapid Influenza Diagnostic Testing

Virology Section, Microbiology Unit, Canterbury Health Laboratories

Influenza is a disease that affects the Canterbury community annually. To assist with patient management during periods of influenza activity, the Virology section aimed to provide a 24-hour/ 7-day rapid influenza testing service. The service was offered to the Emergency Department (ED), Emergency Observation Area (EOA) and Children's Acute Assessment (CAA) at Christchurch Hospital. A commercially available test, the Binax-NOW Influenza A&B test, was evaluated by the Virology Section prior to implementation. This test allows a one hour turn-around time from receipt of specimen to a laboratory result becoming available. Patients returning positive for Influenza by the rapid diagnostic test were less likely to be admitted to hospital and had fewer additional pathology tests performed. This finding was more pronounced in patients less than 60 years of age. Children were less likely to be unnecessarily prescribed antibiotics. Canterbury Health Laboratories (CHL) met the turnaround time of one hour for the 24-hour/7-day service for 96% of rapid testing requests. The rate of confirmed nosocomial influenza infection dropped from 12% in 2002, to 6% in 2003. It is likely that the use of the rapid influenza test contributed to this observed decrease. Our findings suggest the rapid influenza service aided patient management, reduced hospital admissions, and rationalised pathology test requests.

Contact Person: Virginia Wells, Medical Laboratory Scientist, Virology

Recognition, Assessment and Ankyloglossia Release and its Impact on Breastfeeding Outcome

Maternity Service & Neonatal Service, Christchurch Women's Hospital

Over the past three years at Christchurch Women's Hospital, paediatricians have been releasing a tight frenulum (tongue-tie) where breastfeeding has been compromised. The aim of this project is to highlight the process of identifying infants who are developing breastfeeding problems and work in a collaborative manner to effect positive change for the mother and infant alike.

As there was minimal objective literature to support the practice of freeing the frenulum of babies, it was decided to audit the effect the surgery has on breastfeeding. The objectives of the audit were to identify if the procedure is

effective and warranted; to identify common difficulties with breastfeeding associated with ankyloglossia; and to assess any ill effects to babies following the procedure.

This procedure is offered to mothers with an affected baby who has a persisting documented problem with breastfeeding. The impact on breastfeeding was significant with a 30% increase in babies fully breastfeeding after just 7 days. Of the women who had needed to breast express prior to release, over 80% were now not expressing.

Contact Person: Dawn Hunter, Lactation Co-ordinator

Reducing Over-sedation in Critically Ill Patients Intensive Care Department and Medical Physics & Bioengineering Department, Christchurch Hospital

Critically ill patients in the Intensive Care Unit frequently require sedation to help with pain management and anxiety relief. However this sedation is inconsistently applied often resulting in patients receiving more sedation than is necessary. This results in poorer patient outcomes, longer stays in ICU and increased costs.

A team drew together clinical and engineering skills to develop a two stage plan. In the first stage a standardised system of working out the drug doses was developed. This was deployed into the ICU to achieve the goal of a *standardised* method. Meanwhile a custom device was designed and built to automate much of the complexity of the standardised method. This device – the *Infuse-Rite* – was introduced to make the method *simple*.

Nurses in the ICU were surveyed to assess the effectiveness of the *Infuse-Rite* as well as benchmarking the Christchurch department against a similar unit. The survey results showed there was a substantial improvement with the introduction of the new system.

Benchmarking against a similar Intensive Care Unit showed the Christchurch patients were ventilated for a *shorter time*, and sedated at *lower dose rates*, resulting in improved patient outcomes. Combining a shorter time ventilated with lower dose rates means substantially less total sedation drug per patient. This has direct cost benefits (around \$70,000 pa in drugs) and indirect benefits in 10% more ICU bed space available.

The *Infuse-Rite* project has introduced a new nursing practice into the ICU that gives patient benefits, nursing benefits and cost savings.

Contact Person: Richard Dove, Biomedical Engineer

The Development of the Christchurch Hospital HAZMAT Plan Department of Emergency Medicine, Christchurch Hospital

This plan was developed to respond to individual and mass casualty hazardous materials incidents ('HAZMAT' and covers chemical, biological and substances). From 1999 it was recognised that chemical spills and resultant casualties were presenting regularly to the Christchurch Hospital Emergency Department (ED).

The risks of not having a response plan were assessed and a plan was developed from chemical industry data, (also using toxicology expertise and good measures of commonsense). Liaisons have been developed with the NZ Fire Service, the Southern Disaster Planning Coordinator, NZ Police and the Hazardous Substances Technical Liaison Committee.

Our plan has undergone regular review and improvement with new challenges. It has been rigorously tested both in exercise and in actual incidents. Over the past three years we have had 50 patients with HAZMAT exposures. These have been managed successfully without staff morbidity.

The plan currently meets standards advocated by the American Hospital Association and the National Health Service, UK and has been used as a template by other centres in NZ.

Contact Person: Dr Paul Gee, Emergency Specialist

The Purpose and Goals of Energy Management Maintenance & Engineering Department, Christchurch Hospital

The Overall Purpose of Energy Management at Christchurch Hospital is to ensure that the needs of patients, staff and all stakeholders are met in a sustainable manner at the least cost to Christchurch Hospital and with the lowest impact on the environment. Our overall goal is to have a sustainable Energy Management System that meets internal and external drivers.

The project has resulted in the development of a fully comprehensive energy management strategy for Christchurch Hospital. This together with a detailed monitoring and targeting regime, has ensured that the performance indicators for energy continue to improve despite rapid growth of the site and weather severity factors. The strategy has concentrated on the low hanging fruit (low cost or no cost of implementation) to kick start the project and now the energy savings are being channelled back to fund higher cost opportunities with longer payback criteria.

The project has demonstrated that energy savings can be achieved and maintained in a hospital environment, without compromising basic comfort and safety for patients and staff. By customising plans for each area of the hospital depending on function, it is possible to reduce the energy used and hence reduce the total energy spend. This ensures that taxpayers dollars are not diverted away from patient care which is the core business of the hospital.

Contact Person: Alan Bavis, Maintenance Manager