Excellence in Clinical Leadership

2009 CLINICAL LEADERSHIP PROGRAM

Project Summaries
Introduction

The Clinical Excellence Commission (CEC) is committed to making healthcare in NSW demonstrably better and safer for patients and a more rewarding workplace for healthcare workers. To achieve this will require effective and supportive clinical leadership at all levels of the system, where those in positions of leadership have both the skills and support to carry out their roles in a compassionate, safe and effective manner.

The importance of investing in clinical leadership programs has been noted in recent reports, both the statewide Garling report and the National Health and Hospitals Reform Commission report. Recognition of the link between leadership, patient safety and governance is also supported, where it is recognised that patients and staff are at the heart of healthcare.

Since the CEC Clinical Leadership Program was launched in 2007, over 600 participants have completed either the executive modular or statewide format of the program.

An integral component of the Clinical Leadership Program is the undertaking of a clinical improvement project designed to improve patient safety and clinical quality. Participants are supported in the development of their clinical practice improvement through workshops which are provided by the CEC, and through support from local Clinical Governance units.

In this booklet, we outline the projects undertaken by participants in the 2009 Clinical Leadership Program. The projects address important quality improvement initiatives in a broad range of clinical areas, from access to service delivery, networking and redesign. In addition to highlighting the benefits of the Clinical Leadership Program to the NSW health system, it is hoped the projects will encourage others to apply the findings or develop them further.

The results of many of these projects clearly demonstrate a strong commitment to clinical practice improvement through effective clinical leadership.

I am pleased to commend this booklet and encourage its use in the health system.

Professor Clifford Hughes AO
Clinical Professor
Chief Executive Officer
Clinical Leadership Program

The CEC is proud to present a summary of the projects presented by the 2009 graduates of the Statewide (foundational) and Modular (executive) Clinical Leadership Programs. The program continues to build a cohort of effective clinical leaders who progressively become the “critical mass” needed for patient-centred system change.

The Clinical Leadership Program is offered in two different modes: Statewide and Modular. The Statewide (foundational) program is a multidisciplinary program, targeting clinicians at a middle management level. It is delivered by local area facilitators within an area health service. The Modular (executive) program targets senior clinical managers, and is delivered as five intensive modules in Sydney. Participants attend modules which focus on the personal and professional attributes of effective leaders.

Overview of CPI methodology

The model for the Plan, Do, Study, Act cycle was based on the work of Nolan, James, Berwick and Shewart and many other proponents of quality improvement. This diagrammatic representation of the process was developed by G. Rubin and B. Harrison for NSW Health (for the Clinical Practice Improvement Steering Group) 2000.

Both programs require the identification of a clinical service challenge and completion of a clinical improvement project which provides the opportunity for participants to apply the skills and knowledge they have gained from the program. The challenge also enables the strengthening of links between effective governance, core leadership competencies, a culture of safety and quality and continuous improvement. The importance of the prospective design of health care processes can not be underestimated and is the corner stone of effective leadership in quality and safety systems.

Clinical Practice Improvement (CPI) methodology is a key learning area of the program as it provides a model upon which the clinical improvement project can be based. This methodology requires the participants to identify a problem in their clinical area which directly impacts on the quality and safety of patient care. In addition participants are encouraged to engage with patients, relatives and consumers of health services in their projects.
Clinical Leadership Program

Publication of this book has a twofold purpose. One is to present some of the clinical projects, their methods and outcomes; the other is to encourage the sharing and application of the projects more broadly throughout the health system.

In this book there is a list of all projects undertaken by the 2009 CLP participants and we congratulate them on their achievements and the broad scope of issues addressed. The projects chosen for inclusion in this booklet were selected due to the quality of the participants’ submissions to the CEC.

The CEC acknowledges the contribution and cooperation of the participants, their facilitators, managers, the Clinical Governance and Clinical Redesign Units within area health services, and the considerable expertise provided by an extensive external faculty of trainers. Our thanks to everyone for their ongoing involvement.

Ms Bernie Harrison
Director, Organisation Development & Education
Clinical Excellence Commission

If you would like more information about the Clinical Leadership Program or would like further details about any of the projects please contact:

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The Modular program

Thirty five senior clinician managers successfully completed the 2009 Modular (executive) program.

All participants completed a clinical service challenge as part of the program, with a view to equipping them to act as patient safety advocates and to integrate health system improvement into their everyday clinical practice.

As indicated in the following pages, the clinical service challenges encompassed a broad array of topics, ranging from improvements to patient safety in specific clinical areas, networks and organisational systems.

Participants presented a summary of their projects to fellow participants and CEC representatives prior to graduation.

2009 Modular Clinical Leadership Program – Project and Certificate Presentation day, 23 April 2010

Left to right standing: Gillian Bishop SSW, Claire Harris SSW, Simmone Locke AMB, Craig Boutilis SESI, Rob Davies NC, Dion Forstner SSW, Jens Kilian SSW, Michael Parr SSW, Andrew Bailey NC, James Cameron HNE, Deborah Zador JH, Allan Kerrigan GW, Amanda Hugman NSCC, Graeme Malone AMB, Cameron Dart HNE, David Smith NC, Sergio Diez Alvarez HNE, Stephen Nolan NSCC, Fiona Mackie SESI

Seated L to R: Kay Wright CEC, Trevor Chan SESI, Joanne Rogerson AMB, Marcia Fogarty, SW, Cliff Hughes CEC, Bernie Harrison CEC, Ralph Stanford SESI, Karen Waters CHW, Susan Piper NSCC

Absent: Maura McCambridge, HNE, Carmelo Aquilina SW, Paul Middleton AMB, Daniel Challis SESI, David Winlaw CHW, Terry O’Shea NC, Andrew Bisitis, HNE, David Greenberg JH, David Furrows, NC, Antonella Ventura JH, Nicholas Wilcken SW
The Statewide program

The Statewide CLP is a decentralised program, delivered within an area health service level by local facilitators. As part of the program, participants undertake an improvement project to improve patient safety and clinical quality within their local team. A summary of projects is presented to area management, sponsors and CEC representatives as part of the program.

Over 160 people successfully completed the program in 2009, with all participants undertaking an individual, pair or group improvement project. In addition, 15 rural health professionals completed the NSW Institute for Rural Clinical Services and Training ‘Clinical Team Leadership Program’ which was modelled on the CLP and also included undertaking an improvement project.

As with previous years, program improvement projects represented a broad range of topics, from specific clinical areas to broader system and workforce development initiatives.

Support from program facilitators and CEC staff helped ensure the scope and delivery of the projects were appropriate to the program goals and timeframes.

A list of all projects undertaken by the Statewide and Executive Modular cohorts is provided in the back section of this book, with a selection of projects showcased in the following pages.

Professor Cliff Hughes, CEO CEC, Bernie Harrison, Director CEC, The Hon. Carmel Tebbutt NSW Minister for Health and Professor Janice Reid CEC Board at the Modular CLP Presentation day, 23 April 2010

Greater Southern Area Health Service 2009 Statewide Clinical Leadership Program Graduation day Left to right: Jacinta Elphick, Kathy Grady, Conie Bostock (CLP facilitator), Ken Hampson (Central Sector A/General Manager), Jodie Bloomfield, Alison Kincaid, Mid Battye, Cheryl Duncan, Amanda Baker (CLP facilitator), Catherine Walker Absent graduates: Brigid Horne, Fiona Renshaw, Jenny Bateman, Sarah Roach, Mark Gibbs
2009 Clinical Leadership Program - Selected Project Summaries

Introduction of an area wide approach to air resuscitation of newborn infants
Dr Allan Kerrigan
Paediatrician, Orange Base Hospital, Greater Western Area Health Service

Sustaining the detection of deteriorating patients at small rural facilities
Andrew Bailey
Acting Executive Officer / Director of Nursing, Macksville Health Campus, North Coast Area Health Service

Assessing satisfaction with Mental Health services among elderly consumers and their carers
Dr Carmelo Aquilina
Director, Aged Care Mental Health Services, Cumberland Hospital, Sydney West Area Health Service

Reducing the number of healthcare associated Staphylococcus aureus bacteraemias and intravenous device-related infections
Dr Craig Boutlis
Director, Infection Management & Control Service, Southern Hospital Network, Wollongong Hospital, South Eastern Sydney Illawarra Area Health Service

Safe Maternity Care (SMaC) – A responsive multidisciplinary adverse events review system
Dr Daniel Challis
Clinical Director of Obstetrics and Maternal Fetal Medicine, Royal Hospital for Women, South Eastern Sydney Illawarra Area Health Service

Improving pre-treatment assessment and early intervention in Head & Neck cancer patients with the establishment of a Multidisciplinary Pre-treatment Clinic
Dr Dion Forstner
Director Training, Radiation Oncologist Liverpool Hospital, Sydney South West Area Health Service

Right dose, right time, every time
Dr Fiona Mackie
Senior Staff Specialist in Nephrology Sydney Children’s Hospital, South Eastern Sydney Illawarra Area Health Service

Improving version control for paramedic clinical practice protocols
Graeme Malone
Manager Clinical Professional Development, Ambulance Service of NSW

Reducing Emergency Department Overcrowding
Dr James Cameron
Staff Specialist – Emergency Department, John Hunter Hospital Hunter New England Area Health Service

Improving prescribing habits of parenteral anticoagulants
Dr Jens Kilian
Director Cardiology, Bankstown Hospital, Sydney South West Area Health Service

Looks Good, Sounds Good – Reducing medication errors by improving cross-checking prior to administration
Joanne Rogerson
Patient Safety Officer, Clinical Operations, Ambulance Service NSW

Expediting adenotonsillectomy
Dr Karen Waters
Head Respiratory Support Service The Children’s Hospital at Westmead

Reducing exit block from intensive care
Dr Michael Parr
Director Intensive Care Unit, Liverpool Hospital, Sydney South West Area Health Service

Protocol P1 – providing essential care to ambulance patients outside routine paramedic practice
A/Professor Paul Middleton
Senior Medical Adviser, Ambulance Service of NSW
To decompress all cervical spinal cord trauma in SESIAHS within 24 hours of injury
Dr Ralph Stanford
Orthopaedic Surgeon, Prince of Wales Hospital, South Eastern Sydney Illawarra Area Health Service

Growing and spreading Local Clinical Practice Improvement strategies
Simmone Locke
Divisional Clinical Support Manager Ambulance Service NSW

There’s no place like home’ – care for acutely unwell children without hospital admission
Dr Susan Piper
Medical Director, Wyong Paediatric Ambulatory Care Unit, Northern Sydney Central Coast Area Health Service

Improving compliance with the febrile neutropenia guidelines
Dr Trevor Chan
Staff Specialist, St George Emergency Department, South Eastern Sydney Illawarra Area Health Service

Improving the client journey in the Mandarin–speaking sex worker clinic at Sydney Sexual Health Centre
Dr Lynne Wray
A/Director Clinical Services Sydney / Sydney Eye Hospital, South Eastern Sydney Illawarra Area Health Service

Delivering improvements in family centred care at the time of a diagnostic assessment
Dr Jacqueline Small
Senior Staff Specialist, The Children’s Hospital at Westmead

Mum’s mental health matters: improving Shoalhaven’s post natal depression screening rates
Sandra Gilkes Nursing Unit Manager Wollongong Hospital, Jackie Townsend Clinical Nurse Consultant, Wollongong Hospital, Helga Humbert Speech Pathologist, Illawarra Child Development Team, Sallie Fredricks Service Manager, Palliative Care, Port Kembla Hospital, Nolie–Anne Harper Clinical Nurse Specialist, Wollongong Hospital South Eastern Illawarra Area Health Service

Unseen – Unheard: a drug & alcohol clinical redesign project
Anne Walsh Clinical Nurse Consultant, Drug & Alcohol, Marilyn Harris Clinical Nurse Consultant, Silverwater, Jeanette Toole Nursing Unit Manager, Community, Jennifer Terry Nursing Unit Manager, Kempsey, Michelle Blair Diversional Therapist, Forensic Hospital, Justice Health

Starting a clinic from scratch
Delwyn Oliver
Clinical Nurse Consultant, Diabetes Education and Management North Coast Area Health Service

Improving paediatric medication chart documentation: Mount Druitt & Nepean Hospitals
Nicola McKay
Clinical Nurse Consultant, Paediatrics Mt Druitt Hospital, Sydney West Area Health Service

Getting dressed for Rehab
Michelle Williams
Manager Occupational Therapy Ryde Hospital, Northern Sydney Central Coast Area Health Service

Occupational Therapy: Enhancing the care of mild to moderate Traumatic Brain Injury patients presenting to the John Hunter Hospital
Lisa Channon
Occupational Therapist, John Hunter Hospital, Hunter New England Area Health Service

Have you checked the children? Increasing access to COPMI child care plans
Jennifer Drinkwater
Psychologist, Child and Adolescent Mental health Service, Hunter New England Area Health Service
Introduction of an area wide approach to air resuscitation of newborn infants

Dr Allan Kerrigan
Paediatrician, Orange Base Hospital
Greater Western Area Health Service

Problem/Background

In late 2008 NSW Health introduced a policy directive advising that Australian Resuscitation Council (ARC) guidelines on neonatal resuscitation should be adhered to in NSW Public Health facilities. This involved two issues which were not being met in Greater Western Area Health Service (GWAHS) facilities: firstly, the use of air, as opposed to oxygen, for initial resuscitation of term newborn infants; and secondly, not drying, but “bagging” very preterm infants. (Infants less than 28 weeks gestation must not be dried, before wrapping in heat resistant polyethylene bags or polyethylene wrap to maintain normothermia.)

Aim

The aim of the project was to identify the barriers, and solutions to overcome the barriers, in order to produce an area wide policy for the resuscitation of newborn infants using air, in accordance with the ARC recommendations and in keeping with best practice in Newborn Centres across NSW.

Problem identified

Intermittent positive pressure ventilation has been described since biblical times and its use in neonatal resuscitation entered the modern medical literature in 1754 when Benjamin Pugh published “A Treatise of Midwifery”. Oxygen was first identified by Priestly in 1775 and was being reported in neonatal resuscitation by 1780. Recent research has identified an increase in morbidity and mortality (RR 0.71) with 100% O2 compared to room air. Neonatologists caution against discarding O2 altogether and propose a graded response to air resuscitation.

GWAHS has four Base hospitals providing level 3–5 maternity services and four district hospitals providing level 3 services. The resuscitation equipment is mainly old and may not be appropriate for the proposed policy. Replacement of the equipment may have financial implications.

Current training and education have not addressed air resuscitation in the past. Recent workshops by the NSW Perinatal Network have addressed this issue and created an impetus for change. Current training with the Fetal welfare, Obstetric emergency, Neonatal resuscitation Training (FONT) program does not specifically address air resuscitation.

Changes made

1. Policy. A discussion paper of the recommendations was distributed to paediatricians within the area. Feedback was collated and a final algorithm published. This has been accepted by the Maternity Clinical Stream of the GWAHS Maternal, Child and Youth Network. Feedback has been given by the NSW Perinatal Network and Neonatal Emergency Transport Service (NETS). The policy has been forwarded to the Area Standard of Practice Committee to be accepted for progressing implementation.

2. A survey was sent to all Maternity Unit Managers (MUMs), and input in the MUM meetings encouraged reporting of the status of resuscitation equipment. Direct phone contact was made to complete the inventory. Equipment has been evaluated (by paediatricians and midwives at three of the Base Hospitals) and recommendations to standardise specific equipment have been sent to biomedical engineering after consensus was obtained following trials. A business case has been presented to the Area Executive. A Failure Modes Effect Analysis (FMEA) was used to underpin the case.
3. Potential champions in each facility have been identified (having completed the Perinatal Networks training). The FONT neonatal training has been reviewed and the project officer at NSW Health contacted regarding an upgrade of the teaching. Paediatricians who developed the policy will visit and support peripheral units as well as their own units.

4. Opportunities to monitor the introduction of the policy are being explored using ObstetriX and the Perinatal Network’s Neonatal Database.

**Measurement/process measures**

1. The policy has been accepted and its introduction is in place.

2. A standard approach to technology for Neonatal Care across AHS has been achieved.

3. Compliance to the policy will be monitored. The MUM group will report on individual units’ problems.

4. The Maternity Clinical Stream has recommended that when two Area Clinical Nurse Specialists (CNS) in Obstetric risk management (already funded) are appointed, that one of these will have a specific remit to Neonatal Care, and this policy will be a priority.

**Plans to sustain change**

Process measures will link in, and regular reporting to the Maternity Clinical Stream and the Maternal, Child and Youth Network will be a responsibility of the CNS in Neonatal Care risk management.

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**Sustaining the detection of deteriorating patients at small rural facilities**

**Andrew Bailey**  
*Acting Executive Officer / Director of Nursing*  
*Macksville Health Campus*  
*North Coast Area Health Service*

**Problem/Background**

The recognition and management of the deteriorating patient has been identified as an international patient safety issue and a key priority area for NSW Health\(^1\)\(^2\). This project focuses on the recognition and management of deteriorating patients in the rural district hospital setting. Macksville Health Campus was a rural pilot site for the Clinical Excellence Commission’s Between the Flags (BTF) program. The Modified Early Warning System (MEWS) chart, extensive education and communication support tools such as ‘Situation, Background, Assessment, Recommendations’ (SBAR) were piloted to support staff in the early recognition and management of the deteriorating patient.
**Aim**

To reduce all deteriorating patient Severity Assessment Code* (SAC) 1s and SAC 2s by 100% at Macksville Health Campus’ General Floor within 12 months and sustain this outcome in the future, through:

- Recording all observations on the MEWS chart
- Referring all patients for medical review if the observations demonstrate a MEWS score of 4 or above
- Medical reviews occurring within the escalation protocol time frames
- The escalation policy being followed after-hours and signed by the treating doctor within 24 hours of the review.

**Problem identified**

A review of 11 serious clinical incidents at Macksville Health Campus during 2007 and 2008 identified themes associated with the recognition and management of deteriorating patients.

The literature acknowledges that there are many factors that contribute to the failure to identify and manage the deteriorating patient, such as frequency of vital signs, significance of changes in vital signs, delays in response, skills of medical and nursing staff, poor communication and handover, patients managed in units without specific expertise (outliers) and in the rural setting with limited access to on-site medical staff.

The diagnostic phase consisted of:

- Running focus groups with nursing, allied health and ancillary staff
- Meetings with senior medical staff
- Conducting a reliability audit of observations recorded
- Reviewing the literature and tools used in other hospitals.

**Changes made**

A local implementation team was formed, which consisted of medical, nursing, allied health and management, to take ownership of the implementation of the pilot program.

A suite of solutions was developed to recognise and manage the deteriorating patient which included, but was not limited to:

- Introduction of the MEWS chart – a track and trigger tool to support the recognition of the deteriorating patient
- Staff education on the use of the MEWS chart
- Staff education using COMPASS on the recognition and management of the deteriorating patient
- Development of a local escalation protocol in collaboration with local General Practitioners (GPs) for patients who were identified as at risk of deterioration using MEWS
- Commitment from GPs for medical reviews to occur within the escalation protocol time frames and for completion of medical review documentation within 24 hours of clinical review
- Implementation of a communication tool to aid transfer of patient information between members of the nursing staff and the medical team, i.e., Identification, Situation, Background, Assessment, Recommendations (ISBAR)

**Severity Assessment Codes rated 1-2**
- Implementation of a clinical handover checklist to support nurse-to-nurse handover.

**Measurement/process measures**

IIMS data were accessed for the years 2007–2009 to determine the number of SAC 1-2s occurring for each year. Data were used to demonstrate the impact of the new protocol at the Macksville Health Campus. In 2007 and 2008, prior to the implementation of the new protocol, there were a total of 11 SAC 1 and SAC 2 incidents.

**Outcome**

Since the implementation of the BTF pilot program in 2008, there have been no SAC 1 or SAC 2 incidents associated with the recognition and management of the deteriorating patient. This has been sustained through the transition to the five components of the State BTF program.

**Plans to sustain change**

The transition from being a pilot site to being part of normal practice has been supported through the statewide rollout of the BTF program.

The transition from using the MEWS chart to the implementation of the State Adult General Observation (SAGO) Chart has been well-handled by staff.

The observation chart audit tool has been established and commenced.

Training in the DETECT program for 100% of staff is to be completed by July 2010.

The escalation protocol has been aligned with the SAGO chart, including the ISBAR communication tool.

An audit process for Rapid Response has been established.

The new escalation process has now been modified and adopted for:

- Bellingen District Hospital
- Dorrigo Multipurpose Service
- Maclean District Hospital.

**References**


*Severity Assessment Codes generally relate to the severity of patient outcome and the frequency of occurrence:

SAC1 – Serious adverse outcomes
SAC2 – Moderate adverse outcomes
SAC3 – Minimal patient impairment
SAC4 – No patient impairment

Assessing satisfaction with Mental Health services among elderly consumers and their carers

**Dr Carmelo Aquilina**

Director, Aged Care Mental Health Services
Cumberland Hospital
Sydney West Area Health Service

**Problem/Background**

Consumer feedback is an important part of service delivery within Mental Health. Currently there is not a system in place across the state to assess the experiences and/or satisfaction of elderly mental health consumers or their carers with that service. Consumer feedback systems typically do not provide feedback regarding concrete issues to local services, and therefore translating feedback into meaningful service change is challenging.

**Aim**

The aim was to create an open-ended, easy to use, feedback survey for consumers of Mental Health services and their carers. The intent is to encourage good response rates and provide both local service-specific feedback as well as to identify broader themes for the service as a whole.

**Problem identified**

The two inpatient units, Specialist Mental Health Services for Older People (SMHSOP), had varying systems which collected feedback from consumers but not from
Clinical Leadership Program

A literature review demonstrated that consumers and carers had different opinions of the service provided and certain common themes of consumer and carer concerns were identified. The implementation group designed the survey instrument in conjunction with carer and consumer representatives. There were two pilot phases in the survey development – the first pilot looked at the whether or not people could use the survey instrument, and the second was a ‘dry run’ of the whole survey process to test its utility. Staff education on the survey was provided in the form of a presentation which demonstrated the aims and tasks for staff in explaining the how to use the feedback form to consumers and their carers. A modified version of the survey form and the explanation process were implemented as a result.

Changes made

A literature review demonstrated that consumers and carers had different opinions of the service provided and certain common themes of consumer and carer concerns were identified. The implementation group designed the survey instrument in conjunction with carer and consumer representatives. There were two pilot phases in the survey development – the first pilot looked at the whether or not people could use the survey instrument, and the second was a ‘dry run’ of the whole survey process to test its utility. Staff education on the survey was provided in the form of a presentation which demonstrated the aims and tasks for staff in explaining the how to use the feedback form to consumers and their carers. A modified version of the survey form and the explanation process were implemented as a result.

Measurement/process measures

New information leaflets for participating teams and units have been designed to include information about the project. These are provided at the start of service contact. Eighty percent of all consumers have been given the information leaflet. Those who were excluded were left out on the basis that they were incapable of completing the form, or they opted out.

The survey asked four questions, including what people liked / disliked about the service and whether they had any suggestions for improving the service.

They were also asked to rate their overall satisfaction with the service on a scale of 1 - 5. Feedback rates from the people who have completed the survey have varied.

Feedback was received from consumers or carers (direct relatives).

Overall the satisfaction has been in the “good” and “very good” range. Team and/or unit specific feedback was provided, which allowed for immediate improvements to be made as a result, (e.g., having showers in a ward fixed).

The thematic analysis of feedback is being undertaken, but preliminary results show that certain issues have been identified, such as the need for more time with staff and improved staff communication and interaction.

Plans to sustain change

The project will be submitted to the Mental Health network for approval with a view to a more extensive rollout to the whole SMHSP. The aim is to provide feedback forms to all older consumers and their carers at the point of discharge. Individual teams will be expected to respond to specific feedback about their service and the SMHSP operational group will look at collated themes from the feedback across the area on a quarterly and annual basis.

In the future, consumer and carer representatives will be part of the analysis of the data, and other avenues of feedback will be explored (e.g., through focus groups or on the internet). This may include extending the questions to staff and translating the survey for use in different language groups.
Reducing the number of healthcare associated Staphylococcus aureus bacteraemias and intravenous device-related infections

Dr Craig Boutlis
Director, Infection Management & Control Service
Southern Hospital Network,
Wollongong Hospital
South Eastern Sydney Illawarra Area Health Service

Problem/Background
Healthcare associated Staphylococcus aureus bacteraemias (HCA-SABs, i.e., bloodstream infections) and intravenous (IV) device-related bacteraemias cause considerable harm to hospitalised patients. In nearly all cases a HCA-SAB should be preventable. In addition, HCA-SABs prolong hospitalisation, increase the number of diagnostic and therapeutic procedures, and lead to potentially unnecessary antibiotic treatment. Avoidable patient morbidity is compounded by a 20-30% mortality rate and each case results in additional costs of approximately $25,000 per patient episode.

Aim
The aim was to reduce the number of HCA-SABs and IV device-related bacteraemias across the Southern Health Network (the lower third of SESIAHS) by 50% over a 12-month period (comparing the 12 months from 01 April 2009 to 31 March 2010 to the previous 12 months, 01 April 2008 to 31 March 2009).

Problem identified
Microbiologists identified all HCA-SABs and IV-related bacteraemias, which enabled the project team to identify 54 cases of each type over the 12 months to 31 March 2009 (22 patients were common to both groups). Almost all of these cases occurred in the network’s three largest acute care hospitals (Wollongong, Shoalhaven, and Shellharbour). Hand hygiene interventions beginning in early 2008 had led to reductions compared to previous years. The project team sought to further reduce these infection rates by 50% over the subsequent year.

Changes made
The core intervention was to thoroughly review every HCA-SAB prospectively, to identify causative factors that could lead to developing preventative strategies. To close the loop on this audit process, the project team ensured that very detailed results of the team’s investigation were fed back to those caring for each patient, including the medical specialist, registrar, resident medical officer and the nurse manager for the ward. This feedback included a personal letter from the project co-ordinator that specified whether the case was thought to be preventable, potentially preventable, or largely unpreventable. Staff were encouraged to provide their own feedback on the investigation and to make changes in practice that would reduce repeat episodes.

Summary data were fed back more broadly to all specialists, nurse managers and the executive through regular quarterly reports.

After identifying that many HCA-SABs and IV device-related bacteraemias were due to IV devices being left in longer than intended, a spot audit of wards in regard to IV management was conducted by our infection control link nurses, and results were fed back broadly to staff. Concurrent strategies included ramping up our hand hygiene initiative through audits with feedback, an ICU-led central IV device program, employment of a new IV device Clinical Nurse Consultant (CNC) and targeted education that flowed on to medical students.

Dr Craig Boutlis with The Hon. Carmel Tebbutt, NSW Minister for Health at the Clinical Leadership Program presentation day 23 April 2010.
Measurement/process measures

There were 25 HCA-SABs across the network in the 12 months following implementation of the project, a reduction in number (and also in the rate relative to hospital activity, which was similar year to year) of 54%. There was a lesser reduction in HCA-SABs that were due to IV-device related infections of 38% from one year to the next. Unfortunately, data collection was incomplete for the overall number of IV-device related bacteraemias (due to all organisms) beyond the first 6 months of the project and although the trend was downward, it is not likely that the 50% targeted reduction was met. In the first 6 months, there were 23 IV-device related bacteraemias compared to 54 in the year previous.

Plans to sustain change

The case review process for HCA-SABs has become embedded within the core business and day-to-day work of our unit, with all of our infection control practitioners, infectious diseases doctors, and IV-device CNCs contributing to the investigative review process. Interest in preventing HCA-SABs (through its leadership in hand hygiene improvement) has led to the CEC developing an investigative review process that is intended to be applicable in a variety of hospital and infection control service settings.

Our data and experience has helped inform this process. By reinvesting some of the money that has been saved in preventing SABs, in employing another infection control professional, we aim to increase our capacity to investigate all IV device-related infections in a similar manner to the process for HCA-SABs.

Safe Maternity Care (SMaC) - A responsive multidisciplinary adverse events review system

Dr Daniel Challis
Clinical Director of Obstetrics and Maternal Fetal Medicine
Royal Hospital for Women
South Eastern Sydney Illawarra Area Health Service

Problem/Background

There was recognition within the maternity service that the system for dealing with adverse events was slow and not responsive to the needs of the division; it was mostly medically driven and dealt only with major problems. This system did not comply with current department risk management policy directives in maternity.

Aim

The aim was to institute an effective multidisciplinary adverse events reporting and response system for the Maternity Service at the Royal Hospital for Women.

Problem identified

The previous Adverse Events System involved identification of cases by Medical Records, who coded triggers such as post-partum haemorrhage or unplanned readmissions. Cases were reviewed by a medical officer, and no further action was taken if the care was thought to be appropriate or if only minor issues were identified. Only major issues were discussed at a hospital-wide patient care
committee, and then acted on if major systemic or individual performance issues were noted.

Medical and midwifery staff within the maternity division identified some major problems with the system:

- There was limited involvement by midwifery or junior medical staff;
- Assessment of “appropriate care” was only by one doctor;
- There was a very long response time – most patients were already discharged and forgotten;
- Most staff were unaware of the process and system;
- No positive feedback was provided for staff giving very good care;
- There was limited opportunity for issues or problems to be raised by the general medical and midwifery or allied health staff – cases were only identified by coders in Medical Records.

**Features of SMaC program**

Key features of the new system:

- Cases are identified by daily review in clinical areas
- Any staff member can submit a case for review
- A wider range of “incidents” is reviewed
- Case histories are summarised by the midwifery manager for the committee
- There is a review by a multi-disciplinary team
- Weekly meetings allow timely response to patients while they are still in hospital and while incidents are fresh
- A team approach to adverse outcomes has developed
- All cases referred are entered into IIMS
- A database has been established to ensure actions are done, to “close the loop”, e.g., managers provide feedback to their own staff immediately
- “SMaC letters” acknowledging performance are sent out when difficult cases are handled well;
- Cases identifying major system or performance issues are referred on to administration for action;
- Identification of minor adverse events is enabled, and systems issues in multiple areas are able to be addressed;
- All staff are now comfortable in reporting issues to the committee, which results in more timely identification of problems.

**Plans to sustain change**

The SMaC process is now being generalised through all maternity units in SESIAHS via the area Clinical Midwife Consultant’s (CMC) risk management program.

The plan is to rotate staff through the committee, as there is some fatigue associated with the volume of work.

Staff are proud to see our system adopted by other organisations.
Improving pre-treatment assessment and early intervention in Head & Neck cancer patients with the establishment of a Multidisciplinary Pre-treatment Clinic

Dr Dion Forstner
Director Training, Radiation Oncologist
Liverpool Hospital
Sydney South West Area Health Service

Problem/Background

Head & Neck cancer patients with advanced disease can be cured with surgery and/or radiotherapy and chemotherapy, but treatment results in significant side-effects both in the short and long term. It was identified that these patients receive variable pre-treatment assessment, support and education from allied health professionals (speech pathologists, dieticians, social workers and nurses).

The current assessment pre-treatment is unco-ordinated and does not utilise validated tools. The Head & Neck cancer clinic at Liverpool Hospital has a history of a heavy clinical load with minimal resources, no history of research, and deals with an ethnically diverse patient group of generally lower socio-economic status with poor social supports.

Aim

The aim of the project was to implement a comprehensive, timely, multidisciplinary pre-treatment clinic for:

- assessment of function
- early intervention
- education
- support for 100% of patients with Head & Neck cancer and their carers.

The clinic is intended for the group of patients who have been recommended to receive extensive surgery and/or high dose radiotherapy with or without chemotherapy.

The aim was that by January 2010 there would be a functional clinic, which could then be sustained.

Problem identified

A clear clinical problem was identified in the Head & Neck cancer clinic and in the Head & Neck tumour stream meetings. Best practice guidelines, National Institute for Health and Clinical Outcomes (NICE 2004), were not being met. There were minimal objective assessments of swallowing function, nutritional status, distress, and quality of life using validated tools.

In the cases where the assessment was documented, the documentation was inconsistent, making information retrieval difficult. There was limited pre-treatment assessment to compare with post-treatment outcomes in order to determine toxicities associated with new treatment techniques (radiation, surgical and chemotherapy drug treatments). There was evidence of unplanned admissions as a consequence of not being referred to allied health services prior to treatment. Each allied health staff member was able to demonstrate that in 2008 and 2009 the number of patients seen pre-treatment was low, resulting in a low level of pre-treatment patient education.

The patients had unmet health needs as demonstrated in a previous study in Sydney South West Area Health Service and Hunter New England regions.

The intervention identified was to have a multidisciplinary clinic of allied health staff to assess these patients pre-treatment.
Changes made

A weekly multidisciplinary allied health clinic for Head & Neck cancer patients and their relatives was commenced in January 2010. The clinic is run by a cancer nurse co-ordinator, a speech pathologist, a dietician and a social worker. Patients are primarily identified by the nurse co-ordinator but can be referred by any member of the Head & Neck cancer team. The patients have objective assessments using validated tools with results documented in the electronic Medical Record (eMR) in such a way they can be easily extracted as a report.

Measurement/process measures

- Patient satisfaction has been measured and will continue to be measured for at least the first six months of the clinic. An initial survey showed 90–100% of patients are either satisfied or very satisfied across four different domains (i.e., usefulness, support, education and information provision).
- There will be regular audits of the eMR for completion of the pre-treatment assessments.
- Already there is a significant improvement in the number of referrals seen prior to treatment, as outlined in Table 1.

Plans to sustain change

The clinic:

- is resource neutral for speech pathologist, dietician and nurse, but allows for an objective co-ordinated assessment. Some of this has been achieved by reducing review during treatment, due to improved assessment and education prior to treatment.
- has increased efficiency for social work staff over that of seeing the patient individually, and results in more patients being seen. This is appropriate, because there is evidence to demonstrate high levels of distress in this patient group.
- is providing research opportunities for staff who usually find it hard to undertake research, as data extraction is now easier.
- has in-built redundancy – the clinic can run with two of the four clinic members temporarily, and the majority of assessments still occur.

Challenges

- A high number of culturally and linguistically diverse background patients are seen, and not all assessment tools are validated in this setting.
- Equipment to objectively assess swallowing/speech function is limited.
- Staff absences – the clinic has proven it can function with staff absences, but if one staff member was absent for a prolonged period this would be difficult to sustain.
- Outcome measures – measuring the benefit of co-ordination is difficult.

Table 1 - Services and referrals

<table>
<thead>
<tr>
<th>Service</th>
<th>Referrals 08–09 seen prior to treatment</th>
<th>Referrals January 2010 seen prior to treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech Pathology</td>
<td>10%</td>
<td>90% (100% had partial assessments performed)</td>
</tr>
<tr>
<td>Dietetics</td>
<td>24%</td>
<td>60% (but 100% had some assessment performed)</td>
</tr>
<tr>
<td>Nurse Co-ordinator</td>
<td>82%</td>
<td>100%</td>
</tr>
<tr>
<td>Social work/psycho-oncology</td>
<td>4%</td>
<td>60% but 100% were assessed</td>
</tr>
</tbody>
</table>
Clinical Leadership Program

Right dose, right time, every time

Dr Fiona Mackie
Senior Staff Specialist in Nephrology
Sydney Children’s Hospital
South Eastern Sydney Illawarra Area Health Service

Problem/Background
Following renal transplant, a condition known as ‘BK nephritis’ can develop in patients receiving high dose immunosuppressive therapy. The disease is caused by the Polyomavirus.

In our service two patients developed BK nephritis soon after kidney transplantation. This disease responds to reduction of immunosuppression, and both patients were receiving high levels of immunosuppressants at that time. It has recently been recommended that viral loads of BK are monitored in renal transplant recipients, and this policy needed to be implemented in our patient population.

Aim
The aims of this project were twofold:

1. To ensure that, within six months, 100% prescription compliance with immunosuppressive medications (correct dosing for size, and appropriate level monitoring) post paediatric kidney transplant was achieved.
2. To develop and ensure 100% compliance with viral surveillance protocols post transplant. Where variation from either of these paths occurs, the rationale for variation will be documented 100% of times.

Problem identified
All members of staff, senior and junior, medical and nursing, participated in the process. A detailed map of the patient’s journey through the stages of renal transplantation was developed. This focussed particularly on points where prescription of immunosuppressants occurred and on the process of viral blood test monitoring.

A number of areas where problems could arise in the process were identified. Many of these related to staff factors, problems with protocols and documentation on a flow sheet. Independent voting on these issues meant that they were prioritised; interventions were proposed and agreed upon.

Changes made
Interventions have included expansion of the junior staff orientation process; updating of information; and streamlining of protocols. A new flow sheet to encourage medication dosing according to changing body surface area and weight was developed, as well as a memory aide with all doses and viral surveillance tests required, and both were placed in an easily accessible position. An intradepartmental electronic calendar system was developed to assist in tracking time post transplant and doses according to immunosuppression protocols as well as due dates for viral tests. New parent information sheets, as well as a policy to encourage parents to contact the team for results, were developed. Feedback on the sheets and the policy will be sought from selected key stakeholders.

Measurement/process measures
Interventions have only recently been implemented and it is expected that significant change will take longer to achieve. In a small sample, reviews from a time point prior to the process and again in April, suggest a decrease in the number of patients with one immunosuppressant not concordant with the protocol, from 50% to 40%. A regular audit of compliance with the protocol, as well as an audit of the standard of flow sheet documentation by medical staff will be undertaken six-monthly as part of the morbidity and mortality meetings of the department.

Plans to sustain change
There are plans to present these changes to the ward nursing staff in conjunction with the nurse educator, and to provide further education to sustain change. Local presentations of this project within the area health service are planned. This will be part of our ongoing departmental quality assurance activities.
Improving version control for paramedic clinical practice protocols

Graeme Malone  
Manager Clinical Professional Development  
Ambulance Service of NSW

Problem/Background

A clinical risk assessment undertaken as part of the service's Clinical Governance framework identified several key risk areas impacting on protocol version control, distribution, audit and compliance.

The current distribution process of the protocol package had resulted in complaints from paramedics, operational and corporate management who expressed frustration in the frequency of protocol variation. This variation is considered to be largely due to the complexity of protocols; printers' inability to meet service timelines; and incomplete data regarding station full time equivalent (FTE) establishments and vehicle numbers.

The issues identified support the hypothesis that existing processes do not ensure that paramedics are holding the current protocol versions, thereby exposing paramedics, patients and the service to increased clinical risk.

Aim

To develop an improved organisational framework for the development, dissemination, implementation, and audit of protocols, and of compliance with protocols, to ensure 100% of paramedics are holding the current versions of paramedic clinical practice protocols within the next 12 months.

Problem identified

1. Significant issues were identified that were arising from the frequency and complexity of changes to protocols during the preceding 12-month period. Many paramedics experienced difficulty with regards to the maintenance of their protocol and pharmacology folders.

2. A major inadequacy of the current protocol system is demonstrated by the fact that there is inadequate version control over the protocols.

3. Historically, when new protocols are implemented, a protocol number is allocated in a progressive number sequence by Finance and Data Services, and not the clinical department responsible for protocol development. Given the growing number of protocols, this practice does not allow for grouping of protocols in logical clinical systems.

4. The current ad-hoc manner in which new or amended protocols are implemented poses major clinical risks for the service. There is inconsistency in the policy that articulates the process for requisitioning, distribution, compliance and transitional arrangements to guide officers during periods of change in clinical practice.

Changes made

Policy development

Chief Executive approval was sought and gained for the introduction of a clear policy articulating levels of responsibilities, and audit and compliance requirements. A business case was successfully submitted to the senior executive to enhance the units’ FTE to include a dedicated Coordinator for Clinical Policies.

Version control

To address this inadequacy, protocols now display unambiguous version control information throughout the document. One member of staff has been authorised to have access to change electronic formats.

Paramedic

To minimise clinical risk, an annually produced and distributed complete, fixed /bound set of protocols with a colour coded binding which changes each year is supplied.

Protocols are categorised into colour-coded body / physiological sections.
Communication

Two months prior to the change, an administrative bulletin was sent to paramedics informing them of pending change. An intranet site was established for staff to enable them to review drafts and provide comment. A senior medical adviser provided comprehensive clinical rationale for changes. Feedback and suggested changes will be introduced to the protocol form.

Measurement/process measures

The outcomes of the solutions implemented are demonstrated by the following data. This confirms the increased compliance among operational managers and paramedics, as well as a reduction in overall annual cost of production and distribution of protocols.

Furthermore, the one-off annual protocol distribution process has decreased opportunities for paramedics to misplace or lose their personal protocol issue. A further advantage is that there are no loose pages to contend with, and the introduction of a colour-coded spine for the protocol book allows managers and trainers to visually affirm staff compliance with their carrying the most recent version.

Operational managers were prepared in September 2009 with an email reminder of the requirement to comply with the audit compliance date of 1 October 2009.

Measurement: The audit compliance rate as at 1 October 2009 was that 84% of paramedics had verified receipt of their personal protocol package.

In February 2010 a further audit requirement notice was sent to operational managers in order to improve compliance status.

Measurement: The audit compliance rate as at 1 March was that 94% of paramedics had verified receipt of their personal protocol package. This represents an increase of approx 12% in compliance.

Feedback from paramedics regarding the new framework was received and analysed.

Measurement: Of the number of paramedics (n=3500) receiving protocols, the project team received less than 1% negative comments (n=23) ranging from the size of the protocol folder to the number of changes in clinical practices. This is a significantly lower rate than in previous years.

Recurrent funding is required to support the irregular distribution of protocol amendment packages.

Measurement: This year’s distribution of the fixed plastic colour spiral binding (the coloured binding to change each year providing a quick visual version-control feature) cost $58K, which was $7K less than the previous year.

Plans to sustain change

The team acknowledges that this project is a “work in progress”. One of the challenging aspects to facilitating change can be attributed to the dispersed nature of ambulance operations, meaning that implementation, auditing and monitoring systems are not as direct as in a hospital setting.

The strategies to sustain improvements will be tested between April and August 2010 when a protocol amendment package containing a small number of protocols with significant patient safety considerations are distributed. This includes:

- A communiqué to staff explaining the requisitioning process, rationale for changes and monitoring staff email feedback on the website.

- Alignment of the protocol distribution process to coincide with the commencement of the two-year certification / training cycle.

- A dedicated medical adviser appointed to support and advise on the process.

- A dedicated clinical policies coordinator appointed to oversee the ongoing process of protocol development, version control and distribution.

- A revised format, with a view to move towards algorithm guidelines to replace current linear protocols.

- A formalised paramedic educator in-service to induct training staff through face-to-face and telephone sessions prior to paramedics receiving protocols.
Reducing Emergency Department Overcrowding

**Problem/Background**
Overcrowding is a daily reality in our Emergency Department (ED), with patients sometimes waiting for hours in the ambulance holding bay and waiting room before getting to a cubicle to be seen. Studies in Australia and overseas have shown that if you arrive at the ED at a time of overcrowding your mortality rate is increased by 30%, with length of inpatient stay increasing 10-20%. A lengthy stay in the ED for patients waiting to be admitted is the main cause of ED overcrowding.

**Aim**
To reduce overcrowding in the ED, the Federal Government is proposing the introduction of a four-hour target for length of stay. Currently, only around 50% of John Hunter Hospital ED patients are discharged or admitted within four hours.

**Problem identified**
At John Hunter Hospital between July and December 2009, around 80% of those patients discharged home from the ED left within six hours. Around 45% of admitted patients moved from the ED to the ward in that time. In November 2009 patients admitted under a medical specialty constituted one third of admissions, however two thirds of those patients stayed in the ED for more than eight hours. The more than eight-hour length of stay was partly due to patients waiting for review by the inpatient team, and partly due to waiting for an inpatient bed. Medical patients were staying in the ED an average 11 hours and 15 minutes.

Historically, all transfers to John Hunter Hospital are reviewed in the ED prior to transfer to the ward. As the ED was not originally designed for this, the practice has placed a strain on both physical space and the ED staff.

Doctors’ rosters in the ED were assessed in response to a perceived lack of doctors on night duty. Night staff frequently had 15-20 patients waiting to be seen when they started.

**Changes made**
1. Moving ‘admitted’ patients on from ED beds when no ward bed is available.

The transit lounge (previously known as the discharge lounge) is now regularly used to hold patients who have been seen in the ED and admitted by inpatient teams, but for whom a bed is not yet available. The transit lounge is covered by nursing staff.

2. Direct admissions of medical patients.

Under this process, patients are fully assessed, investigated and treated by the ED as normal, but rather than await Medical Registrar review in the ED, admission is agreed with the Staff Specialist and the patient is transferred to a ward for registrar review.

This cultural shift has required significant involvement in the process from the General Manager and the Division of Medicine.

3. Inter-hospital transfers.

A change in policy for John Hunter now means that inter-hospital transfers from inpatient beds is direct to the inpatient ward and never via the ED, unless the patient unexpectedly deteriorates en route.

4. Emergency Doctor rosters.

These have been changed to move the evening shift one hour later, to run from 4pm to 12am. This reduces inefficient overlap with day staff, and helps limit unseen patient numbers handed over to night staff. Also, three doctors now start a ten-hour shift at 10am, to better match doctor presence with patient attendances.

5. Increased use of the Emergency Short Stay Unit (ESSU).

More patients are now moved to the ESSU to await investigations, multi-disciplinary assessments, and for periods of treatment and observation.
Measurement/process measures

The initial practice of the direct medical admissions showed an average ED length of stay of five hours for these patients, i.e., leaving the ED six hours sooner. The next phase of implementation will start on 10 May 2010, and will involve direct medical admissions in office hours only. Other measures being looked at include departmental census at different times of day, and triage to bed times.

Plans to sustain change

The next steps include extending direct admissions in Medicine to 24-hours a day, seven-days a week. The policies of no ED review of inter-hospital transfers and the new doctor roster are now well established. Direct admissions are to be established in Surgery, Orthopaedics, Paediatrics, Psychiatry and Adolescent Psychiatry. Increased ‘front loading’ of investigations is planned to streamline ED time for all patients.

Improving prescribing habits of parenteral anticoagulants

Dr Jens Kilian
Director Cardiology, Bankstown Hospital
Sydney South West Area Health Service

Problem/Background

Anticoagulants are frequently used for the treatment of a variety of common conditions on cardiac wards. An inherent risk associated with the use of these therapies is bleeding. Much of the bleeding morbidity and mortality (M&M) on cardiology wards is caused by incorrect prescribing of anticoagulants. This is, in part, related to the complexities of parenteral anticoagulant dosing.

Two types of parenteral anticoagulants are used at our institution: unfractionated heparin (UFH), which is given intravenously, and enoxoparin, which is a low molecular weight heparin (LMWH), and is administered subcutaneously. LMWH is generally preferred due to superior efficacy, but its use is contraindicated in patients with severe renal impairment (creatinine clearance < 30ml/min). Dose adjustment and monitoring is needed in mild and moderate renal disease, and dosing regimes are weight-based.

Aim

We aimed to achieve 100% accurate dosing of LMWH in cardiac patients through a combination of proactive pharmacy surveillance, education, improved documentation and visual aids.

Problem identified

The problem was initially flagged during our cardiology department’s regular morbidity and mortality meetings where a recurrent theme of iatrogenic bleeds related to poor LMWH prescribing was noted. As a result the ward pharmacist was asked to audit LMWH prescribing and dosing.

An audit of 30 patients demonstrated poor documentation in 97% of cases, when measured against the Indicators for Quality Use of Medicines in Australian Hospitals (2007) Indicator 1.3. Three out of 30 patients had inappropriate (unsafe) doses of LMWH prescribed. The project team identified the following key areas where improvement was needed and where intervention was deemed to hold some promise:

- Patient weight was rarely documented on the drug chart.
- The presence of renal impairment was often missed by the prescribing team.
- The indication for anticoagulation was rarely documented on the drug chart, making it impossible for the pharmacist to assess whether or not an appropriate dose had been prescribed.
- Occasionally, intravenous UFH was inadvertently co-prescribed with LMWH because IV and SC medication charts are prescribed on separate forms.
Changes made

The project team decided on a number of interventions to form part of the quality initiative:

- Brightly coloured stickers were created, which alert the prescribing team to the presence of severe renal impairment. These are attached to the drug charts.
- A similar sticker was devised to alert the presence of an intravenous UFH infusion to prevent inadvertent LMWH prescribing.
- Junior medical staff received education sessions with the ward pharmacist aiming to reinforce the need to properly document a patient’s weight and indication for the anticoagulant.

Measurement/process measures

The ward pharmacist repeated the initial audit at four and six weeks respectively, following the start of the project. The result showed a complete abolition of unsafe dosing of LMWH during follow-up. Unfortunately, documentation of weight and indication remained unsatisfactory (see table). Indeed documentation worsened after a slight initial improvement, probably because there was a change-over of junior medical staff.

Plans to sustain change

In order to continue to improve further on our results, and maintain an improved record of safe anticoagulant prescribing, we will keep using the visual aids as outlined above and also introduce a system of regular feedback to the prescribing teams.

This will take the form of:
- Weekly documentation audits
- Public announcement of the results according to treating team at the end of each week at the departmental meetings.

It is hoped that this will create a sense of friendly competition and will serve as a stimulant to further improvements in prescribing habits.

The project team plan to monitor the incidence of bleeding complications over the next 12 months and compare this with prior M&M records in the hope that there will be an overall reduction in bleeding morbidity.

Table of data collected

<table>
<thead>
<tr>
<th></th>
<th>Baseline Data</th>
<th>4 weeks</th>
<th>6 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cases reviewed</td>
<td>30</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Weight documented</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Indication documented</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Dose inappropriate</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Looks Good, Sounds Good – Reducing medication errors by improving cross-checking prior to administration

Joanne Rogerson  
Patient Safety Officer, Clinical Operations  
Ambulance Service NSW

Problem/Background
Medication errors occur in all health care settings.

The Ambulance Service of NSW (ASNSW) clinical development department gathers information through:

- incidents reported on the Incident Information Management System (IIMS)
- cases reviewed at the Clinical Review Group (CRG)
- incidents requiring a Root Cause Analysis (RCA).

From the information gathered, incidents can be categorised and common trends identified.

It was identified from these data that medication errors were occurring out in the field. The most common error involved the patient receiving the incorrect drug and/ or dose.

Further investigations in relation to the cause of some of these errors revealed that the process of paramedics cross-checking drug/ doses prior to administration was not always followed.

Aim
To reduce the number of identified medication errors arising from drug/ doses not being cross-checked by 80% within the next six months.

Problem identified

- The Clinical Review Group (CRG) meets fortnightly to review variations to clinical practice. To date 1272 incidents have been reviewed at the CRG since its commencement in late 2003.
- Of these reported cases, 322 (25%) of the reviewed incidents related to medication.
- 165 related to administration errors or variation to practice.
- 40 (12%) of the incidents revealed that the medication was not always cross-checked prior to administration.

A multi-disciplinary team was formed to review the errors with ASNSW representatives from Pharmacy, Professional Development, Patient Safety, Education and on-road Paramedics.

Utilising the principles of Clinical Practice Improvement, issues were prioritised and interventions were implemented by the team by way of the “Plan, Do, Study, and Act” (PDSA) approach.

A survey was randomly distributed to on-road paramedics asking for their feedback in relation to why they thought medication errors were occurring, with 40 out of the 100 responses reporting that the main problem was that medications were not being cross-checked.

The team also reviewed the current skill procedure steps in medication checking and administration. It was decided to try to increase the opportunity for cross-checking, by introducing another step in the process of the pre-medication check.

Two ambulance stations were selected due to recent reported incidents in relation to medication errors and also a willingness of local paramedics to participate in the project. The plan was to introduce a device to trial at these selected stations. The device was a “check clip.” The check clip is a disposable plastic clip, designed to attach to multiple sizes of disposable syringes for checking medication administration.

The ampoule/vial is attached directly onto the syringe which enables quick and easy checking, and increases the unobscured view of ampoules and syringes.

Cross-checking is made easier as the ampoule containing all the drug details remain with the syringe at all times.

‘Check Clip’ on syringe  
(Photo supplied by Qlicksmart)
Changes made

- A meeting with the product specialist representative was arranged and samples of check clips were acquired.
- After a team meeting it was decided to introduce the check clip device as a trial at the two ambulance stations.
- A check clip evaluation form and clips were sent out to the selected stations with the assistance of an educator.
- Stations were monitored and feedback was received.

Other initiatives implemented in relation to medication errors:

- A “lessons learned” page was developed on the ASNSW staff intranet highlighting medication errors.
- An article was prepared and published on the staff intranet in relation to medication error awareness, called LOOKS GOOD, SOUNDS GOOD.

Measurement/process measures

Regular measurement of the process ensured that the implemented changes were in fact being carried out. The stations trialling the device will be further monitored allowing the team to determine whether the implementation continues to achieve the desired results.

Since the introduction of the check clip, to date there have been no incidents reported in regards to medication errors from the stations using the device.

Plans to sustain change

- The New Clinical Interventions Procedure Committee (NCIPC) agrees that the device is simple yet effective, and awaits results of the trial.
- There is planned ongoing training and education of staff.
- The device may be introduced to all ASNSW stations pending the results of the trial, with the inclusion of an appropriate step in ASNSW protocols/procedures/skills manual in relation to the check clip.
- Measurement and review will be undertaken to ensure that the change becomes part of routine practice.

Expediting adenotonsillectomy

Dr Karen Waters
Head Respiratory Support Service
The Children’s Hospital at Westmead

Problem/Background

The most common indication for adenotonsillectomy in children is obstructive sleep apnoea (OSA). Overnight sleep studies show the severity of OSA, and that children with severe OSA suffer repeated hypoxia and sleep disruption. From the sleep unit, children with severe OSA are commenced on nasal mask continuous positive airway pressure (CPAP) to relieve their airway obstruction. They are then referred to the Ear, Nose and Throat (ENT) surgeons. A review of cases found that although these children were notified to the surgeons with an expectation that they would have surgery within 30 days, the delay to surgery was often several months.

Aim

To achieve adenotonsillectomy within 30 days of referral for children with a diagnosis of severe OSA.

Problem identified

Retrospective audits in November 2007 and November 2009 found the number of children with severe OSA whose management from the Sleep Unit required review by the ENT surgeons had increased from 7 to 63; the new case incidence increased from 1 per month to 3.1 per month. Over the same time period, the proportion of children on
the ENT waiting list was unchanged from 61% (n=662) to 63% (n=588), although the wait time increased by approximately one month, from 154 ±112 days to 182 ± 132 days.

A series of meetings was held with representatives from each step of the patient pathway. This included staff from the Sleep Unit, patient bookings, day stay, in-patient ward areas, theatre bookings, intensive care, ENT surgeons and anaesthetists.

Two main problems were identified that needed to be addressed:
1. Identifying and reviewing diagnoses of severe OSA in children
2. Reducing the overall ENT waiting list.

It was concluded that children with severe OSA were simply reflecting overall problems with ENT waiting lists.

Poor communication created additional delays for children with severe OSA, as it was not always clear that they had been identified as being severe, despite their positive sleep study diagnosis, with the result that some of those children did not appear on surgical waiting lists.

A major block to overall ENT waiting list reduction was identified in relation to day stay surgery. The criteria from the Anaesthetics department were so restrictive that day stay surgery was precluded for many of the children with OSA, either through their disease being too severe, or the child being considered too young to be suitable for day stay surgery.

Overnight sleep studies are only performed on a limited number of patients, so the literature was examined to try to identify other ways of accurately screening children, to exclude those with severe OSA. No reliable test has been identified.

Changes made

The possibility of increasing day stay surgery numbers was raised as an option to reduce waiting times overall.

For children with severe OSA, additional delays were reduced by introducing a number of simple measures:
- A trainee in sleep medicine was assigned the task of screening recent sleep study patients to ensure there were no delays in identification of those with severe OSA.
- The Clinical Nurse Consultant (CNC) from ENT became the contact person when patients were identified with severe OSA.
- The CNC began attending the weekly sleep team meetings so that there was an opportunity for handover of patients when they were diagnosed.
- A list of the children with severe OSA was established on a shared drive so that any team member could add or review patient names.
- Referrals will be reviewed each three months to ensure that all children with severe OSA are being appropriately managed.

ENT waiting list reduction is to be addressed prospectively.

Measurement/process measures

1. Children with severe OSA:
In April 2010, the number of children with severe OSA requiring review was reduced to 17, of whom 9 (53%) did not yet have a date for surgery.

2. ENT waiting list reduction:
A prospective study has been planned to monitor children undergoing adenotonsillectomy. The primary goal is to examine simple screening measures, or a combination of measures, to identify children who are suitable for day stay adenotonsillectomy. The necessary equipment and ethics approval have been obtained. Over six months, data will be collected prospectively, before and after surgery for children undergoing adenotonsillectomy. Data collection will commence in July 2010, and will involve a cross-disciplinary team derived from members of the original collaborative group.

Plans to sustain change

1. Children with severe OSA:
A weekly meeting of representatives from ENT and sleep medicine ensures that all children with severe OSA are placed on appropriate surgical waiting lists as soon as possible after they are diagnosed. The progress will be reviewed each quarter.

2. ENT waiting list reduction:
Prospective data collection will occur from July to December, 2010. These data will be used to examine our current processes and outcomes. In 2011, we will use the data to establish new criteria for day stay adenotonsillectomy.
Reducing exit block from intensive care

**Dr Michael Parr**  
Director Intensive Care Unit, Liverpool Hospital  
Sydney South West Area Health Service

**Problem/Background**

Exit block refers to the inability to transfer a patient who has been discharged from the ICU to a ward bed in a timely manner.

On average, 1–2 beds in Liverpool ICU are occupied on a daily basis by patients who no longer need to be there. Transfer is often delayed for more than 24 hours, and may run into days.

The consequences of exit block are:

- The prevention/delay of access to the ICU for critically ill patients, which may lead to the inter-hospital transfer of patients
- The prevention/delay of access to the ICU for patients undergoing major surgery requiring a post-operative ICU/HDU bed.
- An increased incidence of transfer from ICU to the ward areas outside normal working hours, which is recognised as being associated with increased patient risk.
- The addition to excessive occupancy, and the consequences of that for other sick patients in the ICU.
- An increase in hospital length of stay compared to patients who do not have ICU exit block.

**Aim**

The aims of the project were that:

- By April 2010 no patient should remain in the ICU for more than 24 hours after they have been discharged to ward care; and
- An overall 50% reduction in exit block numbers would be achieved by April 2010.

**Problem identified**

Meetings of stakeholders from ICU, medical administration, nursing, demand management, and clinical governance identified multiple causes for exit block.

Weekly data on exit block are collected by ICU staff and presented to hospital administration. The key causes were considered to be:

- Inadequate hospital bed numbers for the services provided
- Lack of ‘bed rules’ to prioritise movement of patients from ICU when discharged
- Difficulties in discharge planning for ward patients.

Potential solutions were identified as:

- Generating bed rules, particularly in response to the inability to provide beds for elective cardiac surgical patients, and submitting to the Area executive as part of an options paper related to cardiac surgical services
- Improving discharge processes and promulgating them to senior medical and nursing staff through medical administration.

**Changes made**

The suggested bed rules have not currently been adopted. Improved discharge planning is ongoing, with the active engagement of stakeholders.

**Measurement/process measures**

There is no current improvement in ICU exit block, but increases in overall hospital activity and surgical activity have taken place. We have managed to maintain the current situation, which has not become worse in spite of the higher volume of hospital activity.

**Plans to sustain change**

Ongoing discussion with key stakeholders will continue, particularly as Liverpool hospital is currently undergoing a redevelopment. This will see a large increase in ward bed numbers by Nov 2010 and provide an opportunity to plan for process changes.
Protocol P1 – providing essential care to ambulance patients outside routine paramedic practice

A/Professor Paul Middleton
Senior Medical Adviser
Ambulance Service of NSW

Problem/Background

All NSW paramedics are governed by a set of numbered, didactic protocols, which provide a framework for the treatment of patients with disparate conditions. These protocols, together with a defined formulary of medications and a group of skills which are specific to the grade of paramedic, determine how all patients attended by the Ambulance Service of NSW are assessed, prioritised, treated and transported. There are some patients who fall outside these protocols, however, and whose underlying conditions are urgent enough to need immediate treatment, often before any more routine interventions are made.

The most apparent group of these patients are also the most vulnerable for other reasons: children with adrenal gland dysfunction due to a range of different underlying problems. Children with adrenal dysfunction may sustain what would otherwise be a trivial injury or minor infection, but because the essential function of the adrenal glands is disabled, they become seriously ill, or even die, with devastating suddenness. Unfortunately, not all health care professionals are aware of the urgency behind the treatment of these patients, when an intramuscular injection of a steroid (hydrocortisone) is often all that is needed to save their lives.

To attempt to ensure that this highly vulnerable group of patients are appropriately and adequately supported by the Ambulance Service, and to ensure that paramedics are equipped and enabled to provide these simple life-saving treatments, the ASNSW, in collaboration with staff at Sydney Children’s Hospital, have undertaken to improve the system by developing processes and training around a generic “authorised care” protocol known as P1. Under this protocol, paramedics may administer medications that are not part of their routine formulary, and may perform interventions that are not routinely part of their standard training. Furthermore, a system is being constructed that will allow transport of these patients to the hospitals where their specialist care is available, if this is needed as part of the plan.

Aim

The aims of the project were to:

- Empower parents and carers to urgently highlight the need for alternative or non-routine treatment for these children
- Educate paramedics about identifying these children and empower them to urgently treat such children with the appropriate medications
- Put mechanisms in place which underpin these aims and ensure that there is a systemised awareness of the location, diagnosis and treatment needs of these children.

Problem identified

The problem was identified between Sydney Children’s Hospital and NSW Ambulance Service.

Changes made

In response to the problem, measures that will be taken to redress the issue are:

- The provision of an appropriate letter, signed by the Senior Medical Adviser to the Ambulance Service of NSW, to parents and carers to show to paramedics as required. The
letter details the problem and the vital immediate actions required.

- The provision of a script to parents and carers to deliver when they call ‘000’, to ensure that appropriate dispatch is made and appropriate actions are followed.
- Training of paramedics in delivery of the medication by the necessary route.
- Training of operations centre senior staff to recognise and respond appropriately to P1 calls via ‘000’.
- The provision of technological support to ensure that paramedics dispatched to a potential P1 case are given all details of the case and the patient by means of an electronic message, termed a “caution note” via the Mobile Data Terminal present in all ambulances.

In addition, it is planned that a specific child-friendly Ambulance alert band will be sourced and distributed to be worn by these children, to identify the risk and the necessary immediate treatment needed.

**Measurement/process measures**

Measurement will involve the tracking of all children who have a diagnosis of adrenal insufficiency. The key outcome measure will be the proportion of these children who have received the appropriate injection according to the P1 protocol.

**Plans to sustain change**

It is planned that the changes to be made will be sustained through:

- Formalisation of processes and procedures as part of new Operations Centres planning process and procedures
- Formalisation of treatment protocols into the new Clinical Protocol release
- Formalisation of alert processes as standard operating procedures throughout Ambulance Service NSW.

“The very essence of leadership is that you have to have a vision.

Theodore Hesburgh
To decompress all cervical spinal cord trauma in SESIAHS within 24 hours of injury

Dr Ralph Stanford  
Orthopaedic Surgeon  
Prince of Wales Hospital  
South Eastern Sydney Illawarra Area Health Service

Problem/Background

Acute referrals to Prince of Wales Hospital Spinal Cord Injury Unit (POWH SCIU) have been refused or delayed for non-clinical reasons in the past. There is published evidence that for patients suffering from acute traumatic tetraplegia, having decompression of the cervical spinal cord within 24 hours of injury leads to improved neurological recovery and reduced complications.

Data from the POWH SCIU shows that patients admitted directly to POWH have improved outcomes compared with those patients for whom admission was delayed. Since August 2008 South Eastern Sydney Illawarra Area Health Service (SESIABS) policy (PD-162) has specified “Timely admission means as soon as is practically possible, with an ideal being direct and immediate and a suitable goal being less than 24 hours following injury.” Amongst clinicians at POWH there is unquestioned support for the principles of early admission and intervention for acute traumatic spinal cord injury. The issues with management of spinal referrals are believed to be systematic rather than reflecting lack of clinician commitment.

Aims

The aims of this project were to:

- expedite early transfer of traumatic spinal cord injured patients to POWH SCIU.
- achieve surgical decompression of cervical spinal cord trauma within 24 hours of injury in SESIAHS.

Problems identified

Knowledge of difficulties arranging transfer of patients to POWH SCIU was based on feedback from referring hospitals and personal experience of spinal specialists on-call at POWH. Data kept at the SCIU showed that the time to admission and surgery was often longer than 72 hours. The reasons for delayed access to POWH SCIU were identified by the SESIAHS Spine Subcommittee (surgeons and physicians) at POWH to provide direct, consultant-led decision-making regarding spinal trauma referrals.

Changes made

1. A draft policy of ‘non-refusal’ for acute spinal cord injury was developed in collaboration with the co-Directors of Acute Care at POWH, as it impacted on their service and they had influence on hospital executive decision-making. The policy defines the criteria for appropriate patient referral and places a high priority on service provision to those patients. The policy requires decision-making by consultants in spinal surgery, rehabilitation and intensive care. Urgent transfer to POWH SCIU

2. Handling of referrals by junior medical staff. By default, all spinal referrals were put through to surgical registrars who did not always appreciate the level of care the patient required, and took unilateral decisions that did not always favour optimal care of the patient. Consensus was obtained from all spinal specialist consultants (surgeons and physicians) at POWH seeking a policy of ‘non-refusal’ at POWH for spinal cord trauma.

3. Lack of consistency regarding the mechanism for managing referrals.

A team meeting of all personnel involved in managing referrals to POWH SCIU analysed the referral pathway, identified problems and developed solutions. The team members were surgeons, spinal physicians, the intensive care consultant, the bed management team leader and the switchboard team leader.
is then expedited by the bed-management service using an agreed protocol. In the event of a genuine lack of resources at POWH there is liaison with Royal North Shore Hospital. This policy was accepted and endorsed by POWH executive in June 2009.

2) Switchboard operators agreed to direct all spinal referrals to the consultant spine surgeon on-call at all times. In turn, the consultant surgeon has direct access to the intensive care and spinal physician consultants. If there is agreement on the need for admission to POWH, then the ‘non-refusal’ policy is activated and all affected parties notified of the impending admission.

3) The SESIAHS Trauma Committee has discussed the changes in policy at POWH. The SESIAHS Trauma Service is based at St George Hospital (SGH). Agreement was reached in March 2010 to network spinal cord injury in SESIAHS between SGH and POWH.

**Plans to sustain change**

1) Feedback to switchboard staff, all participating clinicians (senior and junior) and the Intensive Care Unit at POWH will be provided.

2) The networked spinal trauma service within SESIAHS will be further developed by presentation to the SESIAHS Trauma Committee and visiting referring hospitals in SESIAHS.

**Measurement/process measures**

Table A  Monthly averaged time to admission in all cases – Spinal Cord Injury Unit

Table B  Monthly averaged days to surgery after cervical injury – Spinal Cord Injury Unit
Growing and spreading local Clinical Practice Improvement strategies

Simmone Locke  
Divisional Clinical Support Manager  
Ambulance Service NSW

Problem/Background

There are 46 Ambulance stations within the Sydney division. These are clustered into nine zones, which in turn feed into three geographical sectors.

One of the key responsibilities of the Clinical Support Manager is to provide timely, accurate and relevant reports pertaining to Patient Safety & Clinical Quality (PS&CO) Key Performance Indicators (KPIs).

These reports demonstrated large disparities in the results obtained by each sector, zone and station, particularly in the Performance Indicator: Minimum Standard of Cardiac Care.

Aim

To reduce the variation in sector results obtained for the clinical KPI Minimum Standard of Cardiac Care by one third within six months.

Problem identified

In December 2008 the Ambulance Management Qualification was introduced to support all operational managers with the skills, competencies and confidence to manage their teams and operational requirements successfully, in a rapidly changing and challenging environment.

The curriculum for this qualification included the completion of a Clinical Practice Improvement (CPI) project at their station or zone.

Performance data suggested that there was evidence of successful local CPI strategies; however this appeared to be occurring in isolation. In June 2009 there was an 83 percentage point difference between the two Ambulance stations for the indicator: Minimum Standard of Cardiac Care.

Examination indicated a lack of a standardised report and associated framework that identified both results and the strategies implemented to achieve these results.

Changes made

1. A standard reporting template – The Zone Clinical Reports – was introduced.

The Zone Clinical Reports:

- Display 12 months of rolling results (data & graphs) for each station, zone, sector.
- Provide a snapshot of the best performing stations, zones, sectors and divisions in NSW.
- Contain a free text section for documenting current strategies.
- Allow for the analysis of strategies with their associated results.
- Provide information regarding the indicator’s rationale.
- Provide the treatment and documentation requirements that form the basis of the results for the indicator.

2. A reporting framework was introduced.

- The Zone Clinical Reports are compiled by the Clinical Support Manager from data already made available on a monthly basis.
- The Zone Clinical Reports are disseminated down to the station managers via the manager of the sector to the manager of the zone.
- The station managers analyse the success of their strategies and have the opportunity to look at the strategies and subsequent results of other stations.
- The station manager and manager of the zone discuss and document current improvement strategies.
- The report is returned to the Clinical Support Manager, via the manager of the sector, for endorsement.
**Measurement/process measures**

- As indicated in the table (right) in June 2009 there was a 23.4 percentage point difference between the performances of the sectors in the indicator Minimum Standard of Cardiac Care.

- Within 6 months of introducing the Zone Clinical Reports and the associated reporting framework this had reduced to a 5.5 percentage point difference between the least performing sector and the best performing sector.

These results appear to indicate that improvements are not only growing but spreading as managers review successful strategies their colleagues have introduced and replicate these at their own location.

As an adjunct to the sharing of information in the reports and the introduction of the framework, all 46 stations within the division showed an improvement in performance, one station improving its performance by 63.9 percentage points.

Feedback from managers also suggested that the inclusion of indicator rationale resulted in a perceived shift in paramedics’ understanding of the relationship between patient, indicator and wider health initiatives such as the State Cardiac Reperfusion Strategy.

**Performance variance between sectors for indicator: Minimum Standard Cardiac Care**

<table>
<thead>
<tr>
<th></th>
<th>Best result</th>
<th>Least result</th>
<th>Percentage point difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2009</td>
<td>58.8%</td>
<td>35.4%</td>
<td>23.4</td>
</tr>
<tr>
<td>January 2010</td>
<td>69.2%</td>
<td>63.6%</td>
<td>5.5</td>
</tr>
</tbody>
</table>

**Plans to sustain change**

Zone Clinical Reports will be implemented for other applicable PS&CQ KPIs.

- A summary document outlining previous strategies and their level of success will be created and disseminated. The purpose of this is to guide and support managers who could benefit from lessons already learnt.

- The rationale of PS&CQ indicators, and how these ‘fit’ with wider health initiatives such as Between the Flags and the State Medication Management Plan, will continue to be communicated.

- There will be an analysis of the Incident Information Management System (IIMS) database to ascertain evidence that the increased performance of the division has had an associated decrease in severity of IIMS reports associated with the indicator.

“We are what we repeatedly do. Excellence then is not an act, but a habit.”

Aristotle
‘There’s no place like home’ – care for acutely unwell children without hospital admission

Clinical Leadership Program

Dr Susan Piper
Medical Director, Wyong Paediatric Ambulatory Care Unit
Northern Sydney Central Coast Area Health Service

Problem/Background

There is no on-site paediatric inpatient unit at Wyong Hospital. WyPAC (Wyong Paediatric Ambulatory Care) provides a ‘hospital in the home’ service for acutely unwell children. Over the past three years that the service has been operating, there has been a reduction in the admission rate of paediatric presentations to the Emergency Department (ED). Approximately 400 paediatric hospital admissions were avoided in the last year.

WyPAC staff were aware that there was still a significant number of children being admitted to hospital with conditions that would have been suitable for ambulatory management.

Aim

The aim of the project was to reduce avoidable paediatric admissions from Wyong ED by 50% in three months.

Problem identified

An audit of paediatric admissions from Wyong ED (May – July 2009) confirmed our impression that there was a significant number of children (~10–15 per month) being admitted to hospital with conditions suitable for ambulatory management.

A group of staff, including representatives from WyPAC and the ED, and the Central Coast Paediatric Clinical Nurse Consultant, met to undertake process mapping of the ED / WyPAC referral processes. Many issues were identified that were suitable to be targeted for improvement. A focus group was held with additional ED nursing staff to identify areas for improvement from their perspective.

Priority areas for improvement were:

- referral forms and referral processes
- staff knowledge and understanding of the WyPAC model of care
- changing the workplace culture of inpatient admission as the norm for some medical conditions which are suitable for ambulatory care.

Changes made

- An Emergency Department Information System (EDIS) licence was obtained for a computer in WyPAC. This allowed WyPAC staff to be aware of activity in the ED and to proactively seek out patients suitable for ambulatory management.
- WyPAC medical staff made regular rounds of the ED.
- Referral forms and processes were reviewed and simplified and made available on the ED intranet, which covers Wyong and Gosford Emergency Departments.
- Staff education sessions were held in Wyong ED and with Gosford paediatric junior medical staff (who receive admission calls from Wyong ED).
- A WyPAC paediatrician was made available after hours for phone advice to Wyong ED or Gosford paediatric registrars, with a single number for contact.

Measurement/process measures

A further medical record audit was conducted (Jan – Mar 2010) after the above changes were made. This showed a significant increase in the number of avoidable admissions, resulting in fewer admissions.
Other outcomes

- The WyPAC team has become more proactive in ED
- The availability of WyPAC referral forms and information on the intranet has led to referrals from Gosford ED as well as Wyong
- After hours phone calls to the paediatricians were audited from Jan – March to ensure the associated workload was not onerous (only a few calls per week were received)
- A medical record audit identified other areas to target for improvement (e.g., back referral to WyPAC of children admitted to the inpatient unit at Gosford).

Plans to sustain change

The biggest challenges to sustaining improvement are the highly transient ED medical workforce and the large numbers of staff needing education to understand the model of care. Strategies to combat this include:

- Maintaining current referral forms and WyPAC information on the ED intranet
- Creating ED medical and nursing ‘champions’ – the ED registrar is currently rotating through WyPAC with further rotations planned for later in the year.

Future plans include:

- Creating a WyPAC / ED liaison nursing role based in ED
- Extending WyPAC operating hours to cover evenings, as this is the peak time for paediatric ED presentations.

The WyPAC model of care provides an alternative to inpatient admission for acutely unwell children. Some components of the model (e.g., daily acute review clinics) could be put in place in existing inpatient units without requiring a lot of additional resources. We plan to publish the model of care and ‘spread the word’ in the hope that paediatric ambulatory care services will be developed to complement existing traditional inpatient models of care. This will enable more children to be cared for at home, and reduce the number of children requiring hospital admission for acute illness.
Clinical Leadership Program

Improving compliance with the febrile neutropenia guidelines

Dr Trevor Chan
Staff Specialist
St George Emergency Department
South Eastern Sydney Illawarra Area Health Service

Problem/Background

Patients who have received cytotoxic chemotherapy are at risk of rapidly progressive sepsis because of their potential to be neutropenic. Delay in the commencement of therapy may result in septic shock and death. A Root Cause Analysis (RCA) was conducted after the death of a patient who was found to have neutropenic sepsis. The RCA recommended action in regards to the early identification of potential patients and a review of the current febrile neutropenic guidelines.

Aim

The aim of the project was to achieve 90% compliance with the Febrile Neutropenic Patient Guidelines within six months.

Problem identified

A recent review of data of Emergency Department (ED) patient presentations given the diagnosis of neutropenia from October 2007 to September 2008 showed an average time from presentation to IV antibiotics of 3 hours and 41 minutes, and a median time of 2 hours 24 minutes. The guideline recommends that patients diagnosed with neutropenia following presentation to the ED received antibiotics within 1 hour of presentation.

Only 14% of this patient group received antibiotics within 1 hour of presentation.

Changes made

A project team was established which included members of Haematology, Oncology and Emergency Departments as well as guidance support from the Hospital Executive and Clinical Practice Improvement Unit (CPIU). A flow chart of the existing process was developed and team members contributed ideas as to where and why problems may have occurred. The cause and effect diagram highlighted the areas of triage, beds, staffing, the febrile neutropenic guideline, the antibiotics and department factors as important. Three main issues were highlighted and a plan was developed for each of these:

1. Patient not identified as being at risk for neutropenic sepsis
   Haematology and Oncology departments continued with the roll out of at-risk cards.
   Nursing in-servicing on febrile neutropenia was provided by Haematology Clinical Nurse Consultant (CNC) and Emergency CNC and Nurse Educator, with emphasis on triage nurses.

2. Senior doctor in ED not notified of patient’s presentation
   Senior Medical Staff (Staff Specialist and Registrars) were given education on the new febrile neutropenic guidelines and this was incorporated into the regular teaching program and orientation. The triage nurse was asked to contact the senior doctor once a patient was identified as being at risk, either via the admitting phone (carried by Staff Specialist 16 hours/day) or via the use of the overhead PA system. The senior doctor was then able to fast track the decision to antibiotics, chart them and organise IV access and blood specimen collection.

3. Delays in the nursing administration of the antibiotics
   Nursing in-service was conducted by the Haematology CNC, Emergency CNC and Nurse Educator on febrile neutropenia and the importance of early antibiotic administration. Additional nurse in-service was provided for accessing central venous devices. The need to ensure availability of nursing staff to administer antibiotics was highlighted.
**Measurement/process measures**

Interim results as at three months showed the average time from presentation to IV antibiotics was 1 hour and 11 minutes and the median time was 52 minutes. 58% of patients received antibiotics in less than 1 hour.

The alert card was shown to triage staff in 39% of presentations and not shown to triage staff in 37% of presentations. It was unclear from data collected whether the card was shown in 24% of presentations.

If patients had shown the alert card and were flagged to the Senior ED doctor, then 72% received their antibiotics in less than 1 hour. When it was unclear whether or not the card was shown at triage, but the patient was still flagged to the senior ED doctor, then 68% of these patients received antibiotics in less than 1 hour. Further analysis is continuing for the six month time frame.

**Plans to sustain change**

Strategies for sustaining the improvement include:

- Auditing of Oncology/Haematology patients to identify the percentage of patients at risk with an ID card
- Spread of the card to privately treated patients who may present to the ED after hours
- Electronic alert identification via eMR
- Ongoing education of new medical and nursing staff
- Increased senior staff to ensure that once notified, action will occur
- Increased training for accessing central intravenous line devices
- The possible development of a Nurse initiated protocol for the administration of antibiotics by increased training.

“Leaders are people who model good practice, challenge poor practice and inspire others”

Health Foundation
Improving the client journey in the Mandarin-speaking sex worker clinic at Sydney Sexual Health Centre (SSHC)

Dr Lynne Wray  
A/Director Clinical Services  
Sydney / Sydney Eye Hospital  
South Eastern Sydney Illawarra Area Health Service

Problem/Background

Client surveys in 2006 and 2008 identified that the quality of clinical services at the sex worker clinics at SSHC was high, but clients felt doctors and interpreters had judgmental attitudes towards them.

Initial staff surveys in 2009 identified that poor communication, congested clinics and long waiting times were key problems in our sex worker clinics.

As sex workers are identified as a priority population in the NSW Health STI Strategy 2006–2010 it is important to provide and facilitate access for sexual health care.

Thus, at the SSHC Organisational Planning Day in May 2009 it was decided to focus a key project on improving the client journey in the Mandarin-speaking clinic, with the expectation that improvements made would also flow on to the Korean and Thai clinics.

Aim

There were several aims:

- To improve the client journey in the Mandarin-speaking sex worker clinics by enhancing staff training and skills in working with Culturally and Linguistically Diverse (CALD) clients.
- To develop a clinic model with reduced waiting times leading to increased client satisfaction with the clinic experience.
- To improve the clients’ understanding of the process of the clinic visit.
- To improve the quality of communication of staff and interpreters with our sex worker clients.
- To reduce client complaints by 50% in the next 12 months.

Problem identified

Clinical practice improvement methodology formed the foundation for a systematic and rigorous approach to this project. A series of interventions occurred in 2009–2010, which included:

- Cultural diversity training; enhanced orientation of new staff to working with CALD clients; IMS monitoring and access to the Suggestion Box; a Triage Tool to facilitate access of clients to clinical services; a new clinic information sheet; and a review of reasons for clinic attendance data, to monitor what services clients required.

Changes made

- Enhanced staff training was introduced as part of an annual in-service program, to ensure staff are comfortable working with cultural diversity, marginalised groups and with interpreters.
- Orientation was provided to interpreters working with marginalised client groups.
- A triage tool was developed to facilitate access of clients to clinical services outside the two clinic sessions per week, where face-to-face interpreter services were provided.
- Suggestion box forms were provided in Thai, Korean and Mandarin so clients could give feedback on the service.
- Enhanced use of telephone interpreters was implemented to enable greater access to the clinics’ services throughout the clinic day.
- A new information sheet was produced to describe the journey of the client through the clinic visit so that clients would understand why they were waiting.
- A review of reasons for attendance was conducted and showed that 80% of first visits were for asymptomatic screening and 30-40% of follow-up visits were for results only. This meant that congestion in the clinics could be relieved by developing an express service model to enable computer-assisted history collection and self-collected specimens by clients to reduce waiting times and increase access (higher client numbers able to be seen). This also allowed for complex problems to be given more time by the clients seeing the doctors with the interpreters present.

Measurement/process measures

1. The triage tool enabled a 30% increase in the number of Mandarin-speaking clients to be seen each week in the first three months of operation. This led to the introduction of triage to the Thai and Korean speaking clients as
well, to enable increased access, and increased choice of clinician and time of appointment.

2. Review of occasions of service has led to the development of a computer-assisted history proforma in community languages to enable an express clinic format to be implemented later in 2010.

3. The Suggestion Box is being used by CALD clients, and they are now able to express their feedback about the clinic.

4. IIMS monitoring has shown a decline in client complaints over the last six months from the sex worker clinics.

5. Staff evaluation of enhanced training in cultural diversity has been positive. Key staff are also contributing to training of other teams.

5. A glossary of sexual health terms in 12 community languages has been developed to assist clinicians, clients and interpreters in their communication, and will be introduced into the clinic in mid-2010. This glossary of terms could be of use to other clinical services in SESIAHS.

6. Key staff will contribute to training of other services in providing responsive clinical services for CALD and marginalised clients.

7. The project has been cost neutral – all changes have been made within current budget and are sustainable.

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**Plans to sustain change**

1. An annual review of occasions of service is to be conducted to monitor the sex worker general and express clinic formats and make changes if needed.

2. An annual in-service training of all staff will be given to maintain standards of care in response to the annual turnover of junior medical staff.

3. A review of client feedback from the 2010 NSW Health patient satisfaction survey will be undertaken to monitor whether interventions have achieved the desired impact...

4. Evaluation of the new client information sheet will occur once it has been in operation for six months.

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“Leadership and learning are indispensable to each other.”

John F. Kennedy
Delivering improvements in family centred care at the time of a diagnostic assessment

Dr Jacqueline Small
Senior Staff Specialist
The Children's Hospital at Westmead

Problem/Background

There is little doubt that the process and period of diagnosis is a critical time for families with a child who has a significant developmental problem. Previous projects have identified that the journey from detection or confirmation of a developmental problem to diagnosis of a disability can be complex and confusing for families, particularly when the suspicion or concern arises after early infancy. Research also suggests that the capacity for families to engage in recommended intervention is influenced by the experience at the time of Diagnostic Assessment (DA) and, in particular, correlation between the concerns of the professionals and those of the family is seen to be important.

Aim

To improve the support provided to families of children undergoing diagnostic assessment of developmental problems.

Problem identified

Consultation with colleagues in early intervention services highlighted that the provision of support to parents was a vital component of DA. Where this was lacking, parental grief seemed to be exacerbated. A previous project by the Disability Specialist Unit (DSU) illustrated that support both before and after DA was important. Due to staffing limitations, little progress has so far been made. A staff vacancy on DSU was able to be filled, with key duties involving peri-DA support.

Changes made

A new team member commenced in DSU, a social worker, in order to better support families through DA. Her primary duties involved contacting all carers of new referrals for DA prior to assessment, and after assessment. In consultation with team members, the social worker developed a semi-structured questionnaire to guide the telephone interviews and ensure that key issues were raised.

Measurement/process measures

A formal review of this family support model will occur once it has been in place for six months. To date, however, initial feedback from parents has indicated that it is a very useful initiative. Some parents reported that they have not previously had such an opportunity to discuss their concerns. Issues that have impacted DA have been discovered, e.g., the need for an interpreter, or the need for enhanced support for an isolated parent.

Plans to sustain change

This project is part of a larger project exploring provision of support to families at the time of diagnosis. The steering committee comprises staff in the diagnostic team, early intervention services and Service Improvement Unit, CHW. This collaborative approach was possible due to the consistent focus on best outcomes for the child and their families, and the respect held for each professionals/services’ contribution to the overall diagnostic process. Funding was provided by the Early Childhood Intervention Coordination Programme (ECICP) for a facilitator of focus groups comprising early intervention staff; and an online survey was conducted.

These research projects highlighted areas of need, common concerns, and an interest in improved collaboration. There are plans for further work to address the identified needs, one of which is ensuring that systems are in place to develop greater connectedness between diagnostic and intervention services. Staff education, a yearly forum, educational resources, and further reviews of DSU processes are all proposed. We have been encouraged by the interest from colleagues in non-government agencies and other government departments.
Selected Project Summaries

Mum’s mental health matters: improving Shoalhaven’s post natal depression screening rates

Sandra Gilkes  
*Nursing Unit Manager*  
Wollongong Hospital

Jackie Townsend  
*Clinical Nurse Consultant*  
Wollongong Hospital

Helga Humbert  
*Speech Pathologist*  
Illawarra Child Development Team

Sallie Fredricks  
*Service Manager, Palliative Care*  
Port Kembla Hospital

Nolie-Anne Harper  
*Clinical Nurse Specialist*  
Wollongong Hospital

South Eastern Sydney Illawarra Area Health Service

### Problem/Background

Early detection and intervention of post natal depression (PND) crucially contribute to maternal mental health (Hewitt & Gilbody, 2009). Prior to our project’s commencement, 50% of women in the Shoalhaven were screened using the Edinburgh Postnatal Depression Scale (EPDS) by Child & Family Health Nurses (CFHNs) during their 8-week postpartum health check. Our aim was to improve the screening rate by 25%, narrowing the gap between this and NSW Health’s benchmark (100%).

### Aim

To increase the rate of post natal depression screening using the EPDS for women in the Shoalhaven region from 50% in June 2009 to 75% by November 2009.

### Problem identified

A survey showed that the CFHNs had sound knowledge, accepted the screening tool as reliable, and were competent in administering it. Despite this, a medical record audit demonstrated that they screened only 50% of mothers attending the 8-week health check. This health check is a 30-minute appointment. The EPDS and any referrals to other agencies are also dealt with at this appointment.

A focus group with members of the CFHNs identified the barriers to screening. The barriers were themed and then ranked from most to least important, through multi-voting. Pareto analysis of the themes identified the four barriers contributing most significantly to the problem:

1. Not enough time
2. Mother has other concerns
3. Referral issues
4. Privacy

### Diagnostic Phase  Fishbone Analysis

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>System/structure</th>
<th>Cliniician values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td><strong>tool</strong></td>
<td><strong>Referral system &amp; follow up</strong></td>
<td><strong>National</strong></td>
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<td></td>
<td><strong>Privacy/others present</strong></td>
<td><strong>User friendly</strong></td>
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<tr>
<td></td>
<td><strong>Not enough time</strong></td>
<td><strong>For all mothers</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Fits in w previous session</strong></td>
<td><strong>Keeps staff focussed</strong></td>
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<tr>
<td></td>
<td><strong>Interruptions</strong></td>
<td><strong>Clinicin initiative</strong></td>
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<tr>
<td></td>
<td><strong>Protocol Distractions</strong></td>
<td><strong>Communication with mother</strong></td>
</tr>
<tr>
<td></td>
<td><strong>EDS done elsewhere</strong></td>
<td><strong>No rapport with client</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Not completed as referred on</strong></td>
<td><strong>No consent; client avoids EDS</strong></td>
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<tr>
<td></td>
<td><strong>Interpretation of score + flu</strong></td>
<td><strong>Work in partnership with client</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Clear protocol</strong></td>
<td><strong>Not skilled enough to use tool safely</strong></td>
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<td></td>
<td></td>
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<tr>
<td><strong>client</strong></td>
<td><strong>Tool</strong></td>
<td><strong>Inform staff</strong></td>
</tr>
<tr>
<td></td>
<td><strong>No other concerns</strong></td>
<td><strong>Emotional health of client is priority</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Aware of tool</strong></td>
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</tr>
<tr>
<td></td>
<td><strong>Inaccurate answers</strong></td>
<td><strong>Can use more time</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Mo able to focus</strong></td>
<td><strong>Need more sessions</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Mo uncomfortable EDS</strong></td>
<td><strong>Language issues</strong></td>
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<tr>
<td></td>
<td><strong>EDS done elsewhere</strong></td>
<td><strong>aboriginal</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Not completed as referred on</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>Interpretation of score + flu</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Clear protocol</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Protocol knowledge</strong></td>
<td><strong>skill</strong></td>
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</tbody>
</table>

= high impact factor  
 Txt = positive factor  
 Txt = negative factor
We developed, implemented and evaluated three strategies targeting the first three barriers:

1. Appointment time extension from 30 to 45 minutes to allow time for EPDS, referrals if required, and for mother to discuss any other concerns.

2. Referral issues: Laminated reference sheets with referral pathways and contacts were developed for clinic use in collaboration with both the SESIHS Safe Start Coordinator and Project Officer and the SHN PND Working Party.

3. Development of the SESIHS Procedure for Administering the Edinburgh Depression Scale.

**Changes made**

1. The procedure GL001 “Administering the Edinburgh Depression Scale” was developed.

2. A laminated resource tool was distributed to each Early Childhood Health Clinic.

3. A new appointment schedule was devised.

**Measurement/process measures**

EPDS screening rates increased by 35% from November 2009. This was evidenced by a medical record audit of all mothers who attended Nowra Early Childhood Health Centre for their babies’ 8-week health check. The EPDS screening rates were sustained at 83% at subsequent medical record audits in January, February and March 2010.

Increased screening rates and a better referral system mean improved access to follow-up for more women with mental health problems. Thus, access to early intervention will be available to more women. Early diagnosis and intervention will also help prevent more intensive and costly health care needs associated with a late diagnosis.

**Plans to sustain change**

Collaboration with the PND Working Party will lead to activities sustaining current improvements. Both EPDS screening and mental health issues are now standing agenda items at CFHN meetings. The NSW data collection system intends to provide more accurate data electronically and extract reliable screening data for the Southern Hospital Network. This information will be fed back to the CFHNs.
Unseen – Unheard: a drug & alcohol clinical redesign project

Anne Walsh
Clinical Nurse Consultant, Drug & Alcohol

Marilyn Harris
Clinical Nurse Consultant, Silverwater

Jeanette Toole
Nursing Unit Manager, Community

Jennifer Terry
Nursing Unit Manager, Kempsey

Michelle Blair
Diversional Therapist, Forensic Hospital

Justice Health

Problem/Background

This project addressed the question of why the primary health nurses in MSPC and MMTC Health Centres were not triaging patients who presented with Drug & Alcohol (D&A) problems.

Patients who presented with a D&A problem in Metropolitan Special Purpose Centres (MSPCs) and the Metropolitan Medical Transport Centre (MMTC) were being placed on the D&A Staff Specialist’s list even if the problem was within the scope of the nurses to manage. This resulted in complaints from patients that they had to wait many weeks to have their D&A problems addressed, and complaints from the staff specialist that they were seeing patients who could have been seen by a nurse. The staff specialist also felt they were unable to see those patients who really needed their expertise.

Aim

The goal was to minimise the risk to the patient and the organisation by providing best practice care for patients with drug and alcohol problems in the Metropolitan Special Programs Centres (MSPC) 1, 2, 3 and the Metropolitan Medical Transport Centre (MMTC).

Problem identified

Justice Health cares for over 28,500 inmates and detainees annually; a health community that is unique in NSW. The Justice Health Drug & Alcohol Clinical Redesign Project focuses primarily on overcoming the points of fragmented care in the patient’s journey that originate in: the fact that there are more than 10,000 movements in the NSW gaol system per year; variable communication between health professionals; silos of care (determined by clinical stream); and health professionals not necessarily working to their level of seniority and expertise in drug and alcohol.

Discussions with NUMs and nurses revealed the key issues appeared to be staff perceptions of role; lack of confidence in how to do a D&A triage (reinforced by a previous culture of an earlier D&A Staff Specialist being happy to do all the work); and limited access to patients (interagency issue).

It was difficult to engage the nurses in discussing this process – there was a low level of interest and some senior nurses felt they simply would not be able to change the process.

Changes made

The project gained approval from the D&A Clinical Director for the CNC D&A to run D&A Nurse Clinics in each of the MSPC and MMTC Health Centres, with the aim of ensuring that patients are triaged and treated immediately if necessary, or put on the D&A staff specialist’s list. The D&A CNC was given permission to hold nurse clinics to ensure that all patients were triaged and treated appropriately and in a timely manner. Working on the floor provided an opportunity for the CNC to put the team’s values into action: putting the needs of the patients first; respecting the nurses and acknowledging their current workload; taking the opportunity to...
provide informal education; working with the nurses to increase their confidence in their own D&A skills.

The project development and implementation by the Project Team was limited to July–November 2009. The project needed to become “owned” by the NUMs and nurses to extend beyond the life of the project group (July–December 2009). Ongoing involvement of the CNC D&A in this project (as part of the over-arching D&A Clinical Redesign Project) was approved until September 2010.

Measurement/process measures

Within three months the team developed and assisted nursing staff to establish a process that enabled them to assess patients with drug and alcohol problems.

**Long term outcomes addressed:**

- The D&A nurse clinics ensured that the patients were triaged, treated and appropriately followed-up by the staff specialist within a reasonable timeframe.
- The improvements in D&A service provision were self-evident and the organisation created a specialist D&A nurse position in May 2010, as a result.

**Plans to sustain change**

There will be ongoing involvement of the Drug and Alcohol team in the nominated Health Centres.

The project is part of the D&A Clinical Redesign Project, which itself is part of the Justice Health Models of Care Redesign, and therefore subject to continuous evaluation by management, and support from the D&A Clinical Stream.

The D&A Clinical Stream has submitted a proposal to senior management to extend the use of this model to other Justice Health centres.

“While all changes do not lead to improvement, all improvement requires change.”

Institute for Healthcare Improvement
Problem/Background

Children with a first diagnosis of Type 1 diabetes in the Tweed Valley are admitted to hospital. They have access to paediatricians, diabetes educators and dieticians while in hospital.

On discharge the children either receive follow up care with the paediatrician in their private rooms, or some parents elect for their children to be reviewed at a multidisciplinary clinic which requires them to travel to Brisbane.

To access allied health professionals at Tweed Community Health, children and their parents had been required to make outpatient appointments. These appointments were often missed. Reasons for this included:

- The children were required to be taken out of school to attend these appointments, and
- Parents do not always find time to make another appointment due to other stresses in life.

Tweed Valley Area children had not been able to access six-monthly outreach paediatric diabetes clinics provided by NSW Children’s Hospitals Network (Westmead Children’s, Sydney Children’s, and John Hunter Hospitals), as outreach clinics within NCAHS.

In contrast, other Diabetes Centres within NCAHS provide the following:

- Six-monthly outreach paediatric diabetes clinics in collaboration with the NSW Children’s Hospitals Network, and
- Six-monthly public outpatient clinics with the local participating paediatricians, supported by allied health professionals on a regular basis.

Clinical guidelines state that all children with diabetes should be reviewed by specialist services every three months, and earlier if there are problems, and should have a full clinical complication screening every 12 months, (‘Children and Young People with Diabetes, NSW Healthcare Plan 2007 – 2011’).

Aim

To provide a no-charge-to-patients, accessible, multidisciplinary one-stop clinic to all children in the Tweed Valley with Type 1 diabetes.

Problem identified

- There were no public outpatient appointments for children with Type 1 diabetes in the Tweed Valley. There were no clinic rooms available to run a clinic. The service to the community did not match with the NCAHS mission statement of goals:
  - To keep people healthy
  - To provide the health care that people need
  - To deliver high quality services.
- The service provided was not coordinated nor was there a holistic management plan for children with Type 1 diabetes.
- There were extended hospital stay admissions.
- There was a loss of school attendance due to staggered appointments.
- A survey of parents indicated that they would support the clinic concept.
- Parents new to the area compared the service to other services that they had used in other areas.
Changes made

Meetings between all the relevant stakeholders were held every 2 or 3 weeks and a brief describing the clinic structure was submitted to the executive. An MOU was drafted for understanding between the visiting Medical Officers and Area Health.

Clinics were set up using the existing rooms utilised by the dietician and diabetes educator. A room not used on clinic day from another service was secured for the visiting paediatricians.

General office staff at reception meet and greet the children and their families. Patients are reviewed by the diabetes educator and their current management practice is reviewed, including HBA1c attended. Blood glucose levels from their meter are downloaded, and their height and weight is measured. Complication screenings attended between clinic dates are collected for review.

This well-coordinated service provides a ‘one-stop shop’ instead of the previously disjointed services. The clinic:

- Improves services to the children and their parent/s, providing a one-stop holistic service.
- Improves child health by providing a coordinated approach to management.
- Reduces admissions and readmission rates of children with diabetes.
- Improves communication between all health care professionals caring for children with Type 1 diabetes in the area.
- Improves time management by allowing staff to case conference.
- Improves education opportunities to staff, clients and carers.

Measurement/process measures

Since the commencement of the clinics there has been a monthly clinic held. This has provided appointments for six children to be seen by the team on each occasion. Data on HBA1c has been collected for correlation later this year. A survey to the parents has been distributed and results of this have been positive.

Plans to sustain change

A review clinic function is to be conducted 6 and 12 months after commencement.

- At six months, the usage rates, client satisfaction, etc will be reviewed, and
- At 12 months, the admission/readmission rates will be reviewed.
- The clinic is now a pilot for general paediatric outpatient services at Tweed Hospital.
Improving paediatric medication chart documentation: Mount Druitt & Nepean Hospitals

Nicola McKay
Clinical Nurse Consultant, Paediatrics
Mt Druitt Hospital
Sydney West Area Health Service

Problem/Background
A recent audit showed 100% of the charts reviewed identified errors in meeting the prescriber requirements, particularly in:

- Verification of patient ID
- Documented drug reactions
- Legibility

Aim
The aim of the project was to improve paediatric medication chart documentation accuracy (Mt Druitt & Nepean) to an overall rate of 80% compliance by the end of February 2010.

Problem identified
In March 2009 an audit of Paediatric medication chart completions indicated the following rates of error or omission:

- Record of weight missing 19%
- Dosages (mg/kg/dose) missing 89%
- Indications missing from PRN charts 19%
- Medications ceased incorrectly 85%
- Duplicated orders 52%
- Verification of patient ID not completed 16%
- No documentation of drug reactions 19%
- Dates/times/signatures for giving medications missing 30%

The risks to patients receiving a drug error can include: death, major permanent loss of function, increased levels of care. There are also risks to the staff with medication errors which can include de-registration, increased levels of stress, financial risks, increased medical costs.

Changes made
A multidisciplinary team was assembled and included senior staff from disciplines such as learning and development, midwifery, nursing, pharmacy and paediatrics.

To redress the issue of incomplete medication charts, an implementation strategy was developed that comprised:

- Competency based education twice yearly for review and sign-off, targeting some key documentation issues each time
- Use of the roll-out of the Paediatric National Inpatient Medication Chart (PNIMC) as a model
- A pilot e-learning project
  An extension of the Orientation Pharmacy Education program
- Introduction of the PNIMC SWAHS all-users package for Paediatrics

Example of e-learning package for PNIMC
Measurement/process measures

Currently there is a National Paediatric Inpatient Medication Chart being developed, to:

- Provide a standard medication chart across all NSW Health inpatient facilities;
- Reduce medication prescribing, dispensing and administration errors and therefore reduce associated patient harm; and
- Standardise training for staff on safe medication management processes across the state, including prescribing, dispensing and administration.

The errors indicated from the audit highlighted that the issues can be extrapolated across all charts. Despite having the best designed chart to reduce medication prescribing, dispensing and administration errors, user practices still account for the majority of the errors.

Key Outcomes:

- An overall rate of 80% compliance of paediatric medication chart documentation accuracy
- Decrease in IIMS reporting for medication errors
- Influence change in user culture

Plans to sustain change

- Regular e-learning training/education to all groups.
- Regular audits and feedback to staff to show the impact of training.
- Competency based education twice yearly for review and sign-off, targeting some key documentation issues each time.
- PNIMC to be incorporated as an essential part of all RMO training, continually every six months, or within every rotation.
- PNIMC to be utilised as a training tool to teach new staff how to complete and use the medication charts appropriately and correctly. Those staff associated with medication errors will also be re-educated using the e-learning package.
Getting dressed for Rehab

Michelle Williams
Manager Occupational Therapy
Ryde Hospital
Northern Sydney Central Coast Area Health Service

Problem/Background

It has been shown that patients dressing in hospital gowns have a less functional recovery and potentially a longer hospital stay than patients dressing in day clothes.

Aim

1. To decrease length of stay in a rehabilitation unit through earlier achievement of rehabilitation goals.
2. To improve rehabilitation outcome measures.

Problem identified

Current literature indicates that getting dressed can have a great impact on a person’s self-esteem, level of activity, and participation in the rehabilitation process. In the Rehabilitation Assessment Unit prior to this project, no patients were getting dressed in their day clothes, instead they remained in their pyjamas or hospital gown.

Staff acknowledged that wearing hospital gowns or pyjamas perpetuates the sick role. Physiotherapists reported that they were unable to complete safe mobility training when patients do not have appropriate footwear. Occupational Therapists reported they were unable to complete dressing re-training and home assessment safely when patients do not have day clothes and footwear.

Changes made

A brochure was developed for patients and their families to inform them of the types of clothing appropriate for the rehabilitation unit. The rehabilitation registrar agreed to distribute the brochure upon acceptance to the rehabilitation unit. Nursing and therapy staff encouraged patients to dress in their day clothes each day.

Measurement/process measures

Functional Independence Measure (FIM) Scores:

Upper body FIM scores improved by an average of 3.4 points or 49%.
Lower body FIM scores improved by an average of 3 points or 43%.
39% of patients achieved full independence in upper and lower body dressing (i.e. Score of 7 out of 7).

Length of stay measures:

The average length of stay did not decrease during the three months of the dressing program. This project did not control for other variables that impact on length of stay, including diagnosis, co-morbidities, other treatments, or social situation.

The Carer Support Unit conducted interviews with patients. After getting dressed in their day clothes, patients commented that they felt more human, less like a sick person and ready to exercise. Staff also noted patients were less likely to return to bed if dressed.

Plans to sustain change

Information regarding dressing requirements for rehabilitation will continue to be provided to patients by the rehabilitation registrar at the time of acceptance to the rehabilitation unit.

Therapists and nursing staff on the rehabilitation unit will include dressing as part of each patient’s rehabilitation goals and program.
Occupational Therapy: Enhancing the care of mild to moderate Traumatic Brain Injury (TBI) patients presenting to the John Hunter Hospital (JHH)

Lisa Channon
Occupational Therapist
John Hunter Hospital
Hunter New England Health Area
Health Service

Problem/Background
Determining the length of Post Traumatic Amnesia (PTA) following a head injury is the best method for predicting the development of post concussion symptoms (Reed, 2007), however the most commonly used tool to assess duration (the Westmead PTA Scale) required a minimum of four days of testing to ensure emergence from PTA.

Concerns arose that patients with mild to moderate TBIs were being discharged before appropriate assessment and management of their cognitive injuries had occurred, often due to critical pressure on beds. While, where possible, patients’ families were educated to complete the testing, this practice is not evidence-based and places significant pressure on unsupported family. Conversely, we were aware that a risk of bed block can be created if patients remain in hospital until cognitive testing is completed.

Aim
To provide appropriate assessment and education to patients presenting to the John Hunter Hospital with mild to moderate Traumatic Brain Injury (TBI), with the result of improved inpatient management to facilitate access to follow-up and a safer discharge.

Problem identified
Quality projects through retrospective chart audits and analysis of statistical data demonstrated that 62% of patients were discharged without full testing being completed. This is of concern given the NSW Motor Accidents Authority data (2009), which identified that 10–15% of such patients experience symptoms beyond 12 months. Medico-legal implications also arise as eligibility to funded rehab schemes cannot be facilitated without a documented length of PTA.

The results of a 2005 trial conducted at the JHH (Shores et al, 2008) were examined, and this determined that an abbreviated tool (the Abbreviated Westmead PTA Scale) could accurately identify cognitive impairment in patients with mild TBI within 24 hours of injury. This tool has only recently been supported in published guidelines from the Motor Accidents Authority (2009). Communication with other Occupational Therapy departments occurred via our professional network, which indicated that this tool had not yet been implemented anywhere within HNEH, with only a couple of sites in Sydney having also begun to investigate the use of this tool.

Planning also commenced with a community service to investigate capacity for follow up of patients discharged prior to completion of testing, to identify alternative management plans to improve safety of discharges.

Changes made
Two projects arose:

Project A: Implementation of the new abbreviated assessment tool for use with mild TBI presentations within the first 24 hours of admission. This project was piloted in the Emergency Short Stay Unit, before being extended across the surgical wards of the hospital.

Project B: Joint venture between the JHH Occupational Therapy Department & the HNEH Community Acute/Post Acute Care (CAPAC) Service, targeting patients who required assessment with the standard tool. This project allows patients to have their testing completed at home if they are discharged early from hospital, to ensure they have successfully emerged from PTA and that any residual symptoms are appropriately managed.
Measurement/process measures

Project A Outcomes:

- Better identification of patients safe for discharge compared to those requiring an extended admission to provide further intervention. Findings showed 83% of patients successfully cleared from PTA on the day of referral, while 8% failed the assessment tool.

- 56% of assessments occur within emergency medicine, which is important given that responsiveness in patient assessment and timely throughput in Emergency Departments is a key part of the NSW Health Priority Plan.

- Improved length of stay (LOS) (2.2 days) for those assessed with the abbreviated tool.

  - This compared to average LOS of 3.7 days for concussion and 5.5 days for loss of consciousness of brief duration (Australian Government Institute of Health and Welfare 2004-5 data, Helps et al, 2008)

  - This difference in LOS represents an approximate cost benefit of between $45,517 and $84,966.

The pilot venture for Project B only commenced in May 2010, with a full assessment of the benefits to be determined at the end of the year.

Plans to sustain change

- Ongoing education with surgical/orthopaedic teams on TBI and management issues is planned.

- Referral mechanisms have been established with the Emergency Short Stay Unit team leader and trauma team to ensure early identification of appropriate patients.

- There will be ongoing audits and evaluation of the use of the assessment tool and associated outcomes.

“A true leader is one who designs the cathedral and then shares the vision that inspires others to build it.”

Jan Carlzon
Have you checked the children? Increasing access to COPMI child care plans

Jennifer Drinkwater
Psychologist
CAMHS
Hunter New England Area Health Service

Problem/Background

National and international research has indicated the importance of Children of Parents with Mental Illness (COPMI) child care planning. Mental health clinicians need to be aware of the existence of the children of adult mental health (AMH) consumers and the children’s needs at times of crisis or acute mental illness of parents.

A previous snapshot survey indicated poor documentation of the existence or needs of children of AMH consumers.

The Young People - Children of Parents with Mental Illness (YP-COPMI), Child and Adolescent Mental Health Service (CAMHS) team were working with current AMH consumers and their families, and completing child care plans on paper. Plans were not being accessed by adult mental health staff when needed and most clinicians were unaware of their existence.

Aim

To introduce the COPMI child care plan in electronic template form for 50% of YP-COPMI consumers of Lake Macquarie Mental Health Service (LMMHS). 100% of child care plans to be linked to an electronic child care alert on each parent’s Community Health Information Management Enterprise (CHIME) file.

Problem identified

Research has indicated the importance of COPMI child care planning in working with families, protecting children, and guiding treatment of AMH parent consumers. YP-COPMI clinicians have been using a paper COPMI child care plan which is then left with the family, and also, often, with the local doctor and other involved clinicians.

Informal feedback and a snapshot survey of YP-COPMI consumers in November 2009 indicated that the paper version of the COPMI child care plan is not routinely completed nor easily accessible at the time of most need.

A survey of LMMHS staff and Psychiatric Emergency Centre staff found that the majority had not seen plans and/or did not know how to access them.

A tally sheet of reasons why the paper plans were not accessed, indicated problems including: mental health staff not checking on parental status of the AMH consumer or their child care responsibilities; being unaware of the existence of such plans; not looking in the child’s file; not looking at old notes; the child care plan being in paper form at their home; the child care plan being lost, or in an adult paper file, or at a GP’s practice.

Changes made

A new child care plan template was designed and sent out to a review team for review and suggestions. The template was subsequently revised.

The child care plan was trialled with three families. Feedback was gained from the family and the case manager for each AMH consumer.

The template was placed in an electronic record system, CHIME, and staff were requested to ‘blind-access’ an AMH consumer record and provide feedback on any alert which appears. Discussion took place to determine whether more or less information was required in the alert, resulting in modification of the alert.

YP-COPMI, in consultation with AMH consumers and adult case managers, began to complete the child care plan for families.
Measurement/process measures

Staff in the initial project site have reported an increased understanding of parental needs of their AMH consumers; satisfaction in being more involved in whole family care; and increased understanding of COPMI needs.

AMH consumers have reported feeling recognised as parents. Some particularly liked identifying child carers and discussing with the potential carer. Children have reported enjoying the process of completing the child care plan and the recognition of the importance of their needs.

Older siblings have reported that they feel some easing of the weight of responsibility to provide information about their younger siblings.

Some adult mental health staff are now actively promoting the child care plans with their AMH consumers, and have identified the parental responsibilities that were previously unknown or undocumented.

Plans to sustain change

- All mental health staff will be encouraged to recognise the opportunity to be family focused as an essential part of recovery for AMH consumers who are parents. The COPMI child care plan and accompanying alerts are now being rolled out across the three geographically located adult community mental health teams in Lake Macquarie, Hunter Valley and Newcastle areas.
- The electronic alerts which appear for some parent AMH consumers whenever their record is accessed by health staff, serve as a reminder to all staff to ask the questions of all AMH consumers.

What the participants said about the 2009 program

Executive Modular Program:

“I have gained a better understanding of and greater confidence in myself, better understanding of the system, realising that being a leader is an everyday thing, not a podium thing.”

“The program has given me a greater confidence in assessing problems of delivery of care; greater understanding of process; greater insight into own capabilities; broader approach to problem.”

Statewide Program:

“I believe I am a better leader and better at my job because of the program. In my view the project we planned, implemented and evaluated had a better outcome because it was worked on as part of the program.”

“One of the greatest outcomes has been the development of the quality project. The project that I have led is now making a significant impact on the management of patients admitted to our hospital with a mild to moderate traumatic brain injury.”

“The Clinical Leadership Program develops a sense of self reflection and awareness of interactions with others in the workplace. This enables changes and improvements to be made to enhance teamwork and service delivery.”
2009 Clinical Leadership Program - Project Listing

Ambulance Service of NSW ________________________________ 55
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Ambulance Service of NSW

*Indicates project summary is included in this book

**Statewide CLP (Greater Southern Area Health Service)**
Sector Clinical Forum

**Modular CLP**

Improving version control for paramedic clinical practice protocols* Graeme Malone
Looks good, sounds good - reducing medication errors by improving cross checking prior to administration* Jo Rogerson
Growing & spreading local Clinical Practice Improvement strategies* Simmone Locke
Protocol P1 – providing essential care to Ambulance patients outside routine paramedic practice* Paul Middleton

**Children’s Hospital at Westmead**

*Statewide CLP*

Review of current nursing transfer process Adrienne Woods; Gabrielle O’Grady
To reduce cancellations on day of surgery for patients for elective tonsillectomy John Currotta
Improving quality and timeliness of reports for samples referred to NSW Biochemical Genetics Service via Private Pathology Laboratories Kevin Carpenter
Laminectomy – achieving consensus around care Melissa Mroz
Strabismus screening clinic trial Sue Silveira
Intrahospital transport Anthony Jackson
Pain management and assessment of isolated limb injuries at triage Nadine Griffiths
Improving patient attendance at Lymphoedema clinic Jo Newsom
Age at commencement of treatment of primary congenital hypothyroidism Veronica Wiley
Reduction of waiting times following referral to occupational therapy from outpatient hand clinics Nadia Vigna
Improving access for patients requiring emergency surgery at Children’s Hospital at Westmead Jason Simpson

55
Delivering improvements in family centred care at the time of a diagnostic assessment*  
Jacqueline Small

Improving outcome potential for children with Phenylketonuria (PKU)  
Rosie Junek

First line intravenous antibiotics in the febrile oncology patient  
Nadine Mari

**Modular CLP**

Expediting adenotonsillectomy*  
Karen Waters

**Greater Southern Area Health Service**

**Statewide CLP**

The client journey. Meeting the goals of SWBIRS adult clients engaged in centre based and/or outreach programs  
Cheryl Duncan

Implementation of clinical handover  
Kathleen Grady

Improve discharge / transfer of care planning at Cootamundra Hospital  
Mid Battye

Putting domestic violence in the picture  
Fiona Renshaw

Dosing of methadone clients at Tumut Hospital  
Catherine Walker

Improving the quality of care for clients with mental illness and drug and alcohol issues admitted to local hospitals  
Jacinta Elphick

Multidisciplinary communication enhancement project on Medical Ward  
Sarah Roach

Psychotropic medication learning package  
Brigid-Christie Horne

The road to timely and appropriate referrals from hospital to community health  
Jodie Bloomfield

Sugar Road: Bega Valley Diabetes Type 2 self management information sessions  
Jenny Bateman

Increasing completed vaccination schedules in Sexual Health Clinics  
Alison Kincaid

**Greater Western Area Health Service**

**Statewide CLP**

Reducing waiting times Bathurst Base Hospital fracture clinic  
Elizabeth Lennon

Improving professional communication among Blayney MPS nursing staff  
Deborah Higgs; Melissa Humphris

Depression screening of cardiac patients at a GP Practice  
Gillian Hindmarsh

Student orientation package for Community clinical placements  
Lynette Bullen

Identification and assessment of inpatients with co-existing mood disorders  
Anna Britton

Ensuring competency in the utilisation of the Ultrasonic Cardiac Output Monitor  
Dawn Williams

Exercise information handout to postnatal women in the Broken Hill Base Hospital.  
Leanne Plummer

Complimentary therapies in the clinical practice of aged care residents  
Jenny Blake

**Modular CLP**

Introduction of an area wide approach for air resuscitation of newborn infants*  
Allan Kerrigan

*Indicates project summary is included in this book
Hunter New England Area Health Service

**Statewide CLP**

Improving the process of reporting of pressure areas via IIMS notification  
Neralee Horwood

Improving the preplanning and communication between services for paediatric cerebral palsy clients undergoing botulinum toxin intervention  
Rosemary Day

Have you checked the children? Increasing access to COPMI child care plan  
Jennifer Drinkwater

Identification of all new admissions to hospitals in Mehi, Tablelands, Peel and McIntyre clusters, who are carers or have a carer and provision of carer support information to the carers  
Michelle Goodwyn

Implementation of Multi-Resistant Organisms (MRO) Surveillance in the acute care unit  
Michelle Keir

In Charge Nurse design in the intensive care unit  
Natalie Gilmour

Timely electronic access by C&FHN to ObstetriX maternal and infant discharge information for continuity of care  
Sheryl Davis

Discharge summaries  
Jan Fawcett

Psychological assessment at CAMHS-HV  
John Mowatt

Occupational Therapy: enhancing the care of mild to moderate Traumatic Brain Injury patients presenting to John Hunter Hospital*  
Lisa Channon

**Modular CLP**

Acute patient flow across the Hunter  
Cameron Dart

Reducing Emergency Department overcrowding*  
James Cameron

Improving patient care by improving communication  
Maura McCambridge

Redesigning the ICU/HDU model of care at Armidale Referral Hospital  
Sergio Diez Alvarez

Improving sense of continuity of care  
Andrew Bisits

*Indicates project summary is included in this book
**2009 Clinical Leadership Program**

**NSW Institute of Rural Clinical Services and Teaching Rural and Remote**

- Improved care for eating disorder patients presenting to the Emergency Department in Tamworth - HNE
  - Miriam Grotowski, Deanne Harris
- Improving clinical management of Bariatric Maternal Patients - HNE
  - Scott Finlay, David Quirk
- A Community based approach to the assessment of malnutrition in the elderly - HNE
  - David Sanders, Renae Hamilton
- Clinical Handover Project, Bellingen Hospital Emergency Department and the Ambulance Service of NSW - NCAHS
  - Rufina Lam, Jacinta Young
- Ensuring pain control satisfaction for palliative care patients on admission to Murwillumbah Hospital - NCAHS
  - John Moran, Robyn Yabsley, Susan Noom
- A Rural initiative for case load midwifery - GWAHS
  - Greg Whittaker, Rachael Morgan
- Active management in the home environment for patients in Coonamble - GWAHS
  - Angela Yates, Michelle Baird

**Justice Health**

*Statewide CLP*

- Unseen – Unheard: a drug & alcohol clinical redesign project*
  - Anne Walsh (Program Lead); Jeanette Toole; Marilyn Harris; Jennifer Terry; Michelle Blair

*Modular CLP*

- Effectiveness of court liaison services in improving health and legal outcomes
  - David Greenberg
- Civilian patient access
  - Antonella Ventura
- Improving multidisciplinary care of patients with drug and alcohol problems in the custodial setting
  - Deborah Zador

*Indicates project summary is included in this book
North Coast Area Health Service

**Statewide CLP**

*“Smile Wide with Pride”*  
Ward based in-service program  
Roshan Abraham  
Kerrie Barber

*Estimated Date of Discharge in a Medical Assessment and Planning Unit (MAPU)*  
Individual Treatment Summary  
Kerry Bartlett  
Sonia Bisson

*Free from Disharmony*  
Transferring with Rhythm  
Jill Branford  
Michelle Carter

*Nursing performance review – reflective and projective*  
“Hospital 2 Home”  
Howard Clare  
Avril Cornwall

*Develop SMS notification system for vacant shifts*  
Development of a Hospital Orientation Package  
Debbie Dawes  
Debbie Dreoni

*To Tell Or Not To Tell. Implementation Of Clinical Bedside Handover At Grafton Base Hospital*  
Implementation of Between the Flags  
Tyrone Dungey  
Lisa Estreich

*Oncology Social Work referral and response improvements*  
Screening Tool for the Identification of Elder Abuse  
Louise Finnegan  
Liz Flack-Forrester

*“Tell all, All the Time”*  
Introduction of keyhole surgery at the Kempsey Health Campus Hospital  
Jo Giese  
Sue Gilmore

*Develop seclusion/restraint policy*  
Integrate the Port Macquarie Mental Health Units  
Cheryl Green  
Christoph Groger

*Emergency Physiotherapy- putting physio in the A&E*  
Leading for better patient outcomes through education  
Chris Hanna  
Linda Hanna

*Physiotherapy assessment of patients presenting to the Emergency Department after a fall*  
Physiotherapy assessment of patients presenting to the Emergency Department after a fall  
Kevin Hansell  
Denise Harrison

*Gums and Pregnancy*  
Information strategy for Aboriginal clients  
Shellie Hayman  
Elizabeth Hodgson

*“Happy Feet”*  
Self driven education for improved job satisfaction  
Birgitta Inglis  
Monique Johns

*The “Stepping On” Program*  
Reducing medication errors  
Monique Johns  
Janet Latham

*Establishing Extended Day Only Unit*  
Integrate policies, procedures and guidelines for Intensive care across two sites, creating a critical care network  
Helen Lennon  
Mary MacNamara

*Bridging the gap between Acute and Extended Public Mental Health Services*  
Alison Maiden

*Indicates project summary is included in this book*
Improving palliative care admission processes
Starting a clinic from scratch: Improving access to Diabetes Type 1 services for children in the Tweed Valley
Effective use of the Clinical Rehabilitation Checklist
Improving outcomes for Warfarinized patients at a rural base hospital
Improving skill levels of nursing staff
Improving communication in nurse practicum education
Staff appraisals for Community Nurses
Implementation eMR-Surginet
“A Footprint in Time”
The Slick PICC
Mental Health Complaint and Adverse Event Management System
DVD – “My Chest pain @ Tweed”
Design a learning package to improve clinical handover
“It’s all in the timing”
The Final Journey – A pathway to quality of end of life

Modular CLP
Sustaining the detection of deteriorating patients at small rural facilities
Dementia care in Port Macquarie Base Hospital
Emergency department electronic medical record implementation
Body substance exposure

Annie Morley
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Deanna Tune
Debra White
Andrew Bailey
Terry O’Shea
Rob Davies
David Smith

*Indicates project summary is included in this book
Northern Sydney Central Coast Area Health Service

**Statewide CLP**

Proper administration of oxygen  
Liza Abapo

An insulinised discharge  
Tania Bennett

RNSH social work electronic information management  
Arthur Crage

Management of Ward 6B inter-hospital transfers  
Maura Farrell

Patient flow in the OT and implications for Recovery Room nursing rosters  
Margo Gibbons

Pharmacy technicians’ roles  
Kylea Lane

The 11D Hospital On to Placement (HOP), Safe transparent efficient and patient -centred (STEP) Discharge  
Christine Lowndes

Re-opening of Ryde Falls Clinic and services  
Penny Mawer

PIIMs - Paediatric Incident Information System  
Angela Monger

Reducing emergency dept length of stay for medical assessment unit patients  
Rachel Nash

Nutrition a la carte  
Joanne Prendergast

Smarter data: physiotherapy dreaming  
Gary Rolls

Streamlining of 12D booked admissions  
Christen Stubbs

Getting dressed for Rehab*  
Michelle Williams

Speech pathology in nursing homes - a new model of care  
Julie Wright

**Modular CLP**

‘There’s no place like home’ - care for acutely unwell children without inpatient admission  
Susie Piper

Improving the safe delivery of chemotherapy to Haematology inpatients  
Amanda Hugman

Reducing the Emergency Department length of stay for Medical Assessment Unit patients  
Stephen Nolan

*Indicates project summary is included in this book
2009 Clinical Leadership Program

South Eastern Sydney & Illawarra Area Health Service

**Statewide CLP**

Improving the IIMS feedback process to clinicians across inpatient services at TWH

Jason Phillips, Erica Laity, Gareth Lucas, Marc Johns

Mum’s mental health matters: improving Shoalhaven’s post natal depression screening rates

Sandra Gilkes, Jackie Townsend, Nolie Harper, Sallie Fredericks, Helga Humbert

CRAGS Communication with GPs Project

Lynelle Bartram; Suzanne Bonassi

Increase the access to psychosocial intervention for mothers accessing the early childhood health service

Carol Sutton

Improving the identification of patients infectious status in operating theatres

Penny Weatherstone

Improving the client journey in the Mandarin-speaking sex workers clinic at Sydney Sexual Health Centre (SSHC)*

Lynne Wray

**Modular CLP**

Reducing the number of healthcare associated Staphylococcus aureus bacteremias and intravenous device-related infections*

Craig Boutlis

SMaC – Safe Maternity Care: a responsive multidisciplinary adverse events review system*

Daniel Challis

Right dose, right time, every time*

Fiona Mackie

To decompress all cervical spinal cord trauma in SESIAHS within 24 hrs of injury*

Ralph Stanford

Improving compliance with the febrile neutropenia guidelines*

Trevor Chan

Sydney South West Area Health Service

**Modular CLP**

Improving pre-treatment assessment and early intervention in Head and Neck cancer patients with the establishment of a Multidisciplinary Pre-treatment Clinic*

Dion Forstner

Improving prescribing habits of parenteral anticoagulants*

Jens Kilian

Reducing exit block from intensive care*

Michael Parr

Improving Emergency Access Performance

Gillian Bishop

N-Sync: A project to synchronize nursing care, facilitating improved patient journey, staff satisfaction and communication

Claire Harris

*Indicates project summary is included in this book
Sydney West Area Health Service

**Statewide CLP**

Standardised process and template for Clinical Case Review within SWAHS Community Health & Primary Care Network

Introducing a woman centred model of care at Blacktown Hospital

Improving the quality of therapeutic clinical services

Increasing the number of OPERA patients discharged home

Integrating acute in-patients and acute community mental health resources

Improving breast feeding rates on discharge from postnatal services to Community Services

Drink driving recidivism

Reducing the waiting time for initial phone contact for new babies

Transition of children with complex bio-psycho-social care needs from hospital to home, utilising a collaborative cross-agency approach

Improving paediatric medication chart documentation: Mt Druitt and Nepean Hospitals*

Performance and Professional Development for Physiotherapists (Eastern Cluster)

STI follow-up for victims of sexual assault

Reducing CVAD maintenance activity in the Westmead Cancer Care Centre ambulatory setting and increasing access to community care

The development and implementation of an effective quality control tool to assist in reducing the incidence of CRS processing errors

**Modular CLP**

Assessing satisfaction with Mental Health services among elderly consumers and their carers*

Redesigning inpatient psychiatric rehab service

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Acknowledgements

CLP Modular Area Health Service Program Sponsors - 2009

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Frank Horn ___________________________________________ The Children's Hospital at Westmead
Joe McGin __________________________ Greater Southern
Jenny Coutts __________________________________________ Greater Western
David Dixon ___________________________________________ Hunter New England
Alison Stevens ________________________________________ Justice Health Service
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