Poster 168

Development of National Guideline for Clinical Indicators and Reporting System to Support Patient Safety in Hospitals

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Background: A patient safety standard was developed by the Indonesian Hospital Accreditation Body in 2005 and introduced to trial hospitals in Indonesia. The standard will be used as the 17th standard for hospital accreditation. The standard required the hospitals set and monitor the achievement of patient safety indicators. In addition to this requirement, the government enacted that all public sectors including hospital have to show their achievement of accountability indicators. The ministry of health was working together with the Government Hospital Association to set clinical indicators for hospital minimal services.

Methods: A national guideline consisting of a set of clinical indicators and thresholds including the reporting system was developed by a small group consisting representatives form the ministry of health, the Government Hospital Associations, and the university. The guideline was introduced to 10 participating provincial and district hospitals and benchmarking activities during a period of three-month were conducted.

Results: Not all indicators set by the group can be incorporated in the participating hospitals, some adjustment were done especially in determining the threshold for achievement. The implementation of the indicators motivated the clinical staff to re-arranged their clinical practices, some patient safety indicators showed better achievement within three-month period of monitoring in the participating hospitals.

Conclusion: A national guideline for clinical indicators is necessary to develop but it should provide a room for adjustment. The implementation of clinical indicators motivated the clinical staff to improve their clinical practices.

Poster 175

Interprofessional Communication and the Quality of Care for Patients with Upper Gastrointestinal Bleeding

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Introduction: Upper gastrointestinal bleeding (UGIB) is a common, clinically significant condition with a high mortality rate. Management requires coordinated multi-specialty input from a range of hospital departments and health professionals, and early upper gastrointestinal endoscopy is recommended in published clinical guidelines. Variation in clinical practice from published guidelines may contribute to the high mortality rate in UGIB, and various process improvement interventions have been studied. We aimed to evaluate interprofessional communication and the process of care for UGIB patients, and identify predictors of time to endoscopy in our single tertiary care facility.

Methods: Admissions to a 900 bed teaching hospital during 2005 with symptoms of UGIB were identified from medical record coding and the endoscopic database, and underwent retrospective medical record review. The process of care for UGIB was assessed using established indicators. Regression analysis was used to identify factors predicting time from presentation to performance of upper GI endoscopy in patients with suspected UGIB.

Results: 225 admissions with symptoms of new-onset UGIB were identified (127 males, 98 females, median age 67, range 17-97). A blood transfusion was administered in 121 (54%). Upper GI endoscopy was performed in 160 (71%) and within 24 hours of admission in 91 (40%). Rebleeding occurred in 16 (7%), surgery was performed for bleeding in 5 (2%), and 20 (9%) died in hospital. The most common endoscopic diagnosis was peptic ulcer disease (n=43, 30%). Using regression analyses we identified process of care and communication variables which were predictive of whether an early upper GI endoscopy was performed. Results revealed that process of care factors and interprofessional communication behaviours are significant predictors of time to endoscopy in UGIB, and may be more important than traditional clinical variables.

Conclusions: Deficits in the quality of care for patients with UGIB as assessed using process indicators were evident, specifically time to endoscopy. These data support previous research[2] that process and logistical factors are important predictors of time to endoscopy in UGIB. In our tertiary centre, communication and institutional process of care variables are stronger predictors than clinical variables. These results have important implications for the development and implementation of quality improvement initiatives in this setting.

References:

1. Rockall et al. Gut 1996;38:316-321.
2. da Silveira et al. Gastrointest Endosc 2006;64(3):299-309.

Poster 200

Mental Health Clinical Collaborative – Making data meaningful

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Introduction: The Mental Health Clinical Collaborative (MHCC) was established in October 2005 with the aim of applying collaborative breakthrough series methodology (USA Institute of Healthcare Improvement) to improve the inpatient treatment of Schizophrenia in acute public mental health facilities across the state. Since this time all eligible public mental health sites have voluntarily joined the MHCC and worked together to develop clinical indicators to support service improvement initiatives, review service data and ultimately implement service improvement activities in their local areas. To date benchmarking data is available on 11 clinical indicators and member sites have commenced planning and implementing service improvement initiatives based on these indicators.

Methods: Across three state forums, 15 sites have participated in the development of 11 clinical indicators related to the acute inpatient treatment of Schizophrenia. Data on six of these indicators has been extracted from existing hospital databases. Two service audits, using scannable form technology, have provided data on another five indicators targeting psychosocial factors, for example length of time between discharge and follow-up community appointment. Reports on clinical indicators are available to members via a secure intranet site for members to access.

Results: Data from over 4500 hospital separations across 15 sites for the period October 1, 2005 to October 31, 2006 was analysed to provide benchmark information, across 11 clinical indicators, for the purpose of driving service improvement. The results indicated a state average length of stay range between 12-38 days with an associated 28 day readmission rate of 10.5-26%. In terms of prescribing practices across the state, Risperidone is the most frequently prescribed antipsychotic medication at discharge at an average dose of 4mg. Antipsychotic polypharmacy rates at discharge are on average around 13%. Information on psychosocial social indicators was also obtained. Although small numbers limit the ability to draw conclusions from the data. On average 73% of consumers, and 52% of carers, have documentation to indicate the provision of psycho education during an inpatient admission. Over 80% of consumers have a documented care plan but only a small percent sign these plans, and over 80% of services have discharge summaries sent to follow-up service providers at the time of discharge. Finally, on average consumers wait 7.8 days before receiving a follow-up appointment in the community with a mental health service.

Discussion: One year post implementation of the MHCC, member sites have been provided with access to clinically relevant information on 11 healthcare indicators. Across three MHCC forums members have enthusiastically come together to openly discuss service improvement challenges and ideas. As services have only recently begun planning and implementing service improvement activities it is too early to assess the impact of the collaborative on actual service improvement. However, to date the MHCC has demonstrated considerable achievements in the area of standardising data collection, improving data quality and engaging clinicians in collaboration for service improvement.

Poster 209

Smart Tools for Improving Patient Outcomes in Oncology

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Introduction: The electronic capture of clinical oncology data such as stage, investigations, diagnosis, treatment and outcomes will contribute to research, and planning and evaluating cancer services. To date, this data if captured at all, is collected by individual facilities for local use.

Methods: In partnership with multidisciplinary clinicians across the state, a state wide web-based application has been developed that integrates existing 'data silos' and makes available just-in time clinical information for multi-disciplinary case conferencing. This state wide clinical registry has been developed specifically for facilitating multi-disciplinary care and to capture clinical information fundamental to managing a cancer care service.

Results: The implementation of this system allows the linking of patient information and facilitates the sharing of information between clinicians and facilities, producing a single patient summary view across the state.

As a result of collecting this patient information, clinicians will be able to more effectively participate in audit, peer review and feedback activities as part of routine clinical practice. There is further hope that a strong partnership between public and private providers of oncology services will allow a greater focus on service improvement and safety

Discussion: The implementation of this system is currently in pilot phase at three major facilities, with other sites throughout the state being phased in. Other cancer modules are in development for Head and Neck, Breast, Lymphoma, Colorectal and a Generic module which will capture data for a variety of tumour streams.

Poster 210

Working Towards Engaging and Supporting Clinicians in Healthcare Delivery, Quality Improvement and Organisational Activities through Standardised and Automated Data Reporting

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Background:
In 2005 Ballarat Health Service embarked on a strategic approach to healthcare delivery improvements. The key elements were:

- to utilise existing data repositories and therefore minimise manual data collection
- automate data searches to minimise duplication and maximise outcome for clinician effort
- standardise communication of results and recommendations to minimise administrative functions
- support clinical peer review and professional development through Morbidity and Mortality Review
- support intra and multidisciplinary team clinical review processes
- participate in quality and clinical indicator programs (ACHS, college and professional bodies)
- report key performance indicators in line with BHS strategic and quality plans
- insure direct and progressively through from the individual discipline specific through to multidisciplinary, leadership, executive, board and external stakeholders.

Organisational Process:

- Consultation with stakeholders and adoption of clear reporting lines up and back through the committee structure
- Models, flow charts and template design to promote clarity and standardisation of communications
- Statuary Immunity and open 'no blame' discussions
- Release of clinicians from clinical duties for committee and reporting participation
- Progressive de-identification of sensitive information through aggregation of data
- Quality Coordinator personnel aligned to key service areas
- Administrative support for procedural functions
- Generation of monthly reports of lists of medical records of diagnosis specific interest to clinicians for review
- Electronic Templates giving automated presentation styles such as graphics, but also calculations such as percentages, averages, benchmarks, confidence bounds and trends.

Clinical Process:

- Senior clinical champions to lead and direct the Morbidity and Mortality Committee process
- Senior clinical champions and educators to examine and select from the automatic medical record lists for clinical relevance and review
- Educational process for Registrars and Interns to review and report on the medical records highlighted
- Team work, support and direct communication between Senior Clinical Champion, Quality Coordinator and Executive Leadership.

Outcomes:
Clinician participation in professional development, education and college indicator programs.
Organisational participation in ACHS indicators, evidence for accreditation purposes, resource planning for Healthcare Delivery and Quality Improvement projects
A motivated and engaging healthcare team that includes both clinical and administrative participants working together.

Poster 211

Multi-disciplinary Team (MDT) Review of Cancer Patients in Hospitals: Do They Make a Difference?

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Introduction: Local and international health services such as those in NSW and the UK have adopted multi-disciplinary teams (MDT) as the optimal model of care for cancer patients. As part of the 2005 Patterns of Cancer Care study, an attempt was made to determine the extent of MDT review in public hospitals and characterise the management and treatment patterns of patients reviewed by MDT.

Methods: Data from medical records and electronic sources of pathology and radiology information were collected for 1,534 residents diagnosed with breast, head and neck, colon, rectal and prostate cancers between June 2003 and December 2004 and admitted to a public hospital. Patients were regarded as having been reviewed by a MDT if a group of oncology specialists jointly discussed and managed their care. Patient care was evaluated using treatment utilisation rates, documentation of stage, and waiting times for specialist review, diagnosis and treatment.

Results:

* Only 19% of patients were reviewed by a MDT.
* 71% of patients reviewed by a MDT had a documented stage, compared to only 48% of patients who were not reviewed by a MDT.
* Patients reviewed by a MDT had higher rates of radiotherapy and hormonal therapy.
- There was no difference in overall treatment waiting period between MDT and non-MDT patients, however a greater proportion of MDT-reviewed patients were seen by a specialist within 14 days and diagnosed within 31 days of the first indication of cancer.

Discussion: MDT review is still relatively uncommon. Data from this study suggests that MDT could increase the range of treatment options available to patients and accelerate specialist review and diagnosis. By capturing important clinical data such as staging, MDT meetings could also provide the mechanism for evaluating patient outcomes and standards of care against both local and international benchmarks.

Poster 213

Documentation of Cancer Stage in Public Hospitals: Is There Enough Information to Assess Outcomes and Effectiveness of Treatment?

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Introduction: Stage is vital in cancer treatment decisions and its documentation is necessary in interpreting variation in treatment rates and outcomes. As part of the 2005 Patterns of Cancer Care study, the extent of stage documentation in public hospitals was determined.

Methods: Data from medical records from more than 1,500 public patients diagnosed with breast, head and neck, colon, rectal, and prostate cancers between June 2003 and December 2004 were collected and analysed. Where available, data from all medical records for patients admitted to multiple facilities (both public and private) were collected.

Particular effort was made to capture staging information. If stage was not documented in the medical record, where possible, it was inferred using descriptions recorded in pathology and radiology reports about the patient's primary tumour, nodal and metastasis status following the TNM Classification of Malignant Tumours (International Union Against Cancer, 2002).

Results: 52% of patients had either an explicitly recorded stage in the medical chart or enough documented information from which to infer a stage.

Discussion: There is a need to improve the documentation of stage and other clinical information necessary in the assessment of cancer outcomes and services. To this end, an innovative system has been developed that collects clinical information at multi-disciplinary case conferencing for service improvement, monitoring safety, quality, and research.

Poster 215

Patient Journey in Public Hospitals: How Long Do Cancer Patients Wait for Specialist Review, Diagnosis and Treatment?

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Introduction: The interval between the first appearance of symptoms and onset of treatment for cancer patients should be kept to a minimum. Waiting times for specialist review, diagnosis and treatment of cancer patients admitted to public hospitals were evaluated using U.K. National Health Service (NHS) standards.

Methods: Dates of referral, specialist review, diagnosis and treatment were collected for 1,534 patients diagnosed with breast, head/neck, colon, rectal, or prostate cancers between June 2003 and December 2004 and admitted to a public hospital. To measure the span of waiting times, the start of patient journey was defined as the earlier of two events: initial referral to a cancer specialist or confirmed diagnosis by either GP or screening service. Although watchful waiting is an accepted mode of care for prostate cancer patients, data on this form of care was not collected in this study, therefore these patients were excluded from the calculation of treatment waiting times.

Results:

- 42% waited longer than 14 days from the start of their journey to review by a specialist.
- 30% waited longer than 31 days from the start of journey to diagnosis.
- 22% waited longer than 31 days from diagnosis to first active treatment.
- 15% waited longer than 62 days from the start of their journey to first active treatment.
- 85% whose first treatment was radiotherapy waited longer than 31 days from diagnosis to treatment, compared to only 30% whose first treatment was surgery.
- More than 75% of prostate cancer patients waited longer than 14 days for specialist review and 31 days for diagnosis.

Discussion: At least one out of five cancer patients admitted to public hospitals may have waited too long for specialist review, diagnosis, and treatment. Delays in radiotherapy are a particular concern, as are prostate cancer patients' delays in obtaining specialist review and diagnosis.

Poster 222

Comparing voluntary sentinel event reporting with routinely-coded hospital-acquired diagnoses in Victoria, 2005/06

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Review of the literature on adverse events in hospital care suggests that, while Australian medical record coding standards are among the best in the world, routine patient abstract data may not be reliable for patient safety investigation and monitoring. On the other hand, the literature also shows that systems which rely on voluntary reporting of adverse events are vulnerable to a host of human and organisational factors that may impede full reporting of such events. Since 2005, State health authorities across Australia have required hospitals to report on any instance of the eight nationally-agreed 'Sentinel Events'. The adoption of this list for national monitoring of 'events in which death or serious harm to a patient has occurred' (Q+S Council Fact Sheet on Sentinel Events) was sponsored by the Quality and Safety Council, whose functions have been transferred to the new Australian Commission for Safety and Quality in Healthcare.

This paper reports on a comparison of two sources of data about sentinel events in hospital care: the nationally-mandated Sentinel Events collection for Victoria (VDHS, 2005) and coded equivalents extracted from the Victorian Admitted Episodes Database (VAED). Code lists were developed by two health information managers to identify ICD-10-AM codes which can be used to define each of the 8 national indicators, and an additional 14 subcategories of 'Other Catastrophic Events' reported in Victoria in 2005. These were translated into computerised algorithms to select cases in the VAED which matched the code sets for each of the 22 indicators.

We use the 'C-prefix' recorded in Victorian data to identify hospital-acquired diagnoses, and combine these diagnoses with information on separation mode (specifically, death in hospital), and on DRG-type (surgical cases) to define some indicators. Five indicators (1 'core' and 4 of the 'other') could not be replicated using data available in the VAED, and several others can be only partially replicated. Case counts for each indicator will be reported, and compared with those submitted through the Sentinel Events reporting system for 2005/06.

It is our hypothesis that coders, being further from the bedside, will be more likely to record adverse events in patient care when evidence of these appears in the medical record. The code sets reported here identify some 'events' that may be less serious than the ones hospital staff are encouraged to report, and in some cases will identify outcomes (e.g. death) which are only *related to*, but not directly *caused by* the identified adverse event. Nonetheless, we think the comparison is a useful way to improve both data sources, and potentially to identify data-triggers that could be used to stimulate hospitals to undertake further investigation.

Poster 223

Benchmarking as a Quality Improvement Tool in a local Mental Health Service from participation in a National Project

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The *National Mental Health Benchmarking Project* was developed as a collaborative initiative between the Australian and State and Territory governments. Improving service quality has been a continuing theme of the National Mental Health Strategy since it began in 1993 and was given special prominence under the Second National Mental Health Plan.

The current National Mental Health Plan (2003-2008) places significant emphasis on service providers to increase efforts to improve outcomes for people affected by mental illness. The critical role of information systems and data, as a foundation for quality improvement, has been emphasised in all national work undertaken to date. Under the National Mental Health Plan there is a focus on fostering a service delivery culture in which information is used to support decisions at all levels within a mental health service.

The main challenge for the future has been identified as engaging service providers the use of information to routinely to contribute both to improved clinical practice and service management and to enable benchmarking practices as the norm for services that will have access to regular reports on their performance relative to similar services. The information could then be used as part of the service quality improvement cycle. The Barwon Health Mental Health Service was one of services that participated in the adult section of the national project 2006-2007. The performance domains identified for the duration of the project are: effectiveness appropriateness, efficiency, accessibility, continuity and capability. The four objectives in National Mental Health Benchmarking Project were:

- to promote the sharing of information between organisations to better understand variations in data and promote acceptance of the process of comparison as a fundamental concept/principle;
- the identification of the benefits, barriers and issues arising for organisations in the mental health field engaging in benchmarking activities;
- learning what is required to promote such practices on a wider scale; and
- evaluating the suitability of the national mental health performance framework as a basis for benchmarking and identifying areas for future improvement of the framework and its implementation.

Barwon Health Mental Health Service was, through participation in the project, able to develop a local approach and understanding of the nuances of benchmarking in an area where there appears to be extreme differences between service type and delivery methods across Australia. The definitions of key performance indicators and the requirements for interpretation to a stage where the comparison of data between local service areas and individual services was both informative and productive, with the identification and final use of data resulting in local projects relating to integrity of data collection and use through to planned staff education programs and changes in process. The benefits of these local projects are unlikely to reap the benefits in the duration of this project, but the development of a skills base and service understanding of benchmarking as a quality improvement process has been invaluable.

Two complete rounds of KPI data and comparative results are available for discussion, with additional interpretative supplementary indicators also available. The use of the data is not, in the experience of the project, in the individual KPI results, but in the grouping of KPIs providing a robust view of service performance and increased confidence in the accuracy of the results.

Poster 224

Efficacy of unit appointed infection control nurses in an Australian intensive care unit with an Acinetobacter outbreak

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Introduction: Two ICU infection prevention liaison nurses were appointed to manage this outbreak and institute a cultural change to improve infection prevention practices. An increasing number of positive Acinetobacter isolates were identified in March 2004, with colonisation rates rising from a monthly average of 0.35 per 100 beddays to 2.7 (median 2.83) cases per 100 beddays. The quality improvement project's objective was to measure/assess the multimodal infection control program's effectiveness on the rate of Acinetobacter colonisation.

Methods: All admissions were retrospectively audited from March to October to identify factors associated with Acinetobacter outbreak. Routine data was collected on all ICU admissions on demographics, duration of stay, origin of admission and severity of illness (APACHE 11). Positive clinical isolates were identified in the patient cohort group by hospital surveillance (IPSS). Interventions included introducing alcohol based rub and multidisciplinary hand hygiene education program, reprocessing non-disposable respiratory equipment audit and introducing housekeeping and discharge environmental cleaning checklists. Main outcome measures were rates of acinetobacter patient colonisation, clinical infection and multi-drug resistant strains, length of ICU and hospital stay, rate of ICU readmission, hand hygiene compliance and hand hygiene solution used.

Results: Over a 20-month period, *Acinetobacter patient colonisation*: Monthly rate peaked at 5.6 cases per 100 beddays, averaged 2.7 cases (median 2.83) per 100 beddays; fell to average of 0.39 cases (median 0.32) following 12 months.

Clinical Acinetobacter infection: Monthly rate averaged 0.19 cases (median 0.17) per 100 beddays during outbreak; fell to 0.14 cases (median 0) per 100 beddays following 12 months. *Multi-drug resistant Acinetobacter*: Averaged 0.21 cases (median 0.20) per 100 beddays during outbreak to 0.16 (median 0.20) per 100 beddays following 12 months. Patients colonised or infected with Acinetobacter had a longer ICU stay (median 10 vs 2 days, p=<0.001) and were more likely to require ICU readmission (20% vs 8%, p=<0.001). Hand hygiene compliance increased from 33% (pre-intervention) to 49% (post intervention). This decreased slightly to 39% six month post outbreak resolution. *Monthly volume of ABHR*: Increased from average of 9.1 litres/1000 beddays (median 34.76) 9 months preceding outbreak to 142 litres/1000 beddays (median 141) during outbreak. This was maintained at 146 litres/1000 beddays (median 151) following 12 months.

Discussion: The introduction of two ICU infection prevention nurses and associated interventions proved effective in reducing nosocomial Acinetobacter colonisation and clinical infection and improving hand hygiene compliance. The Acinetobacter acquisition rate remained below 0.39 cases (median 0.32) per 100 beddays 12 months post outbreak resolution. Hand hygiene compliance was not sustained at level achieved 6 months post intervention, however the rate of 39% at 12 months post intervention remained higher than pre-invention compliance rate of 33%. The successful implementation of the ABHR solution and sustained change to hand hygiene practice is suggested by the sustained high monthly volume of ABHR usage in the 12 month period post outbreak resolution (median 151 litres/1000 beddays).

Poster 229

Evidence-based multidisciplinary approach to improve patient care: CO_2 Retaining Patients Working Group

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Introduction: Following a patient complaint and anecdotal concern from the Respiratory Unit, a CO_2 Retaining Patients Working Group was established to review the current issues around oxygen administration in patients who are known CO2 retainers, and determine strategies to reduce harm and improve patient care.
The main objectives of the working group were to:

- Identify the current issues surrounding oxygen administration in patients who are known CO_2 retainers.
- Develop evidence-based guidelines for identifying patients who are known CO_2 retainers
- Develop system/process for communicating to all clinical staff that the patient is a known CO_2 retainer
- Develop education, implementation and communication strategy to ensure sustainability.

Methods: The Committee met fortnightly for 3 months and considered the findings from a Root Cause Analysis addressing an incident involving a patient who was a known CO_2 retainer, and the findings from a retrospective audit of COAD patients admitted to the Respiratory Unit.

Results:

- There is considerable literature and evidence-based guidelines on the appropriate oxygen administration and management of patients who are known, or at risk of becoming, CO_2 retainers.
- The retrospective audit of COAD patients conducted by the Respiratory Unit demonstrated significant issues with the administration of oxygen within the organisation, with subsequent increased length of stay (average 7.89 days compared to 4.85 days), increased use of non-invasive ventilation (39% patients compared to 23% patients) and increased use of ICU beds (39% compared to 23%) for those patients who are treated with high-flow oxygen (< 4L/min O_2) compared to those patients who are treated with low-flow oxygen.

Discussion: There is potential to improve the care of patients who are either at risk, or known CO_2 retainers through education of patients and staff, in addition to instituting procedural, communication systems and equipment initiatives. Communication systems include Alert of "CO_2 Retainer" on Emergency Department HAS system and Medi-alert card for patients to carry in their wallet, identifying them as a "CO_2 Retainer". Other strategies include the development of "CO_2 Retainer Pack", which will be given to all identified CO_2 Retainers. The pack includes:

a. Coloured arm-band to identify as "CO_2 Retainer"
b. Laminated sign for above the bed, identifying patient as "CO_2 Retainer"
c. Venturi Mask for individual patient for use whilst as inpatient
d. Oxygen administration policy including guidelines for CO_2 Retainers

The above was implemented in mid-2006, with an evaluation of the strategies to occur, and feedback to the clinical areas essential to foster a culture of continuous quality improvement.

Poster 246

Quality Improvement In Renal Dialysis: Achievements and Challenges of the Renal Collaborative

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The Renal Collaborative is a continuous quality improvement program which has been operating in Queensland since 2001. Utilising the service improvement methodology from the U.S.A.'s Institute for Healthcare Improvement 'Breakthrough Series', it has developed clinical indicators based on the latest evidence and a data collection and feedback process using novel information technology. The Renal Collaborative has overcome many challenges, and achieved improvements in some clinical performance measures, but not others. We describe the structure of the Renal Collaborative, outline its key achievements, and discuss possible barriers to improvement in this long-running quality improvement program.

Methods: Beginning in 2001 with just 4 pilot sites, the Collaborative grew over the following years to include all 11 public dialysis facilities in Queensland. The clinical indicators used by the Renal Collaborative are based on the Caring for Australasians with Renal Impairment (CARI) guidelines and address both process of care measures (e.g. Glomerular Filtration Rate (GFR) at referral to Nephrologist) and clinical outcomes (e.g. serum haemoglobin and albumin). Data is collected annually, and is available to the sites via the indicator analysis tool, which allows users to benchmark against the state and prepare reports tracking their performance over time. The Collaborative also brings renal clinicians together six monthly to review data results, disseminate evidence and share service improvement strategies.

Results: Significant improvement across the state has been achieved in some indicators, but not others. When comparing data from inception of the program, and the latest available data, improvement has been achieved in: Urea Reduction Ratio, Total Weekly Dialysis Hours, haemoglobin, ($p < 0.001$) and blood pressure ($p=0.01$). These indicators share the characteristics of being under the control of nephrologists and responsive to change. Conversely, no significant improvement has been achieved in GFR at first dialysis, or serum albumin, phosphate, and calcium phosphate product. GFR at first dialysis has achieved some improvement ($p=0.068$), perhaps reflecting that it is still an issue of clinical debate. There is good clinical evidence for attaining certain biochemical values (e.g. albumin, phosphate) but these have many determinants and are difficult to change – even at the patient level. Finally, despite statewide efforts at improvement, rates of temporary access use have worsened ($p=0.01$), possibly reflecting health system planning issues not within the scope of the Collaborative.

Discussion: The Renal Collaborative has been a network that has brought enthusiastic clinicians together, enabled data collection and promoted evidence-based practice. In reviewing the achievements of the program, there are lessons to be learnt for others embarking on quality improvement, particularly in the area of dialysis. Indicators should be reviewed yearly for suitability and sustainability. Resource and workforce issues of the participating units must also be reviewed to assess whether improvement is limited by these factors. Such reviews ensure that the energy of a quality improvement program is directed appropriately.

Poster 251

Capability of ambulatory monitoring system in community rehabilitation to quantify physical activity levels in patients

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Community rehabilitation programs have become an increasing focus for health systems as an opportunity is seen to maintain a person's health and decrease hospital admissions. Such programs are usually evaluated at a local level by supervising process elements, since outcomes are much harder to measure. Cardiac rehabilitation has been proven to be effective, but many programs have different models of care because of uncertainty about which elements are effective, as well as budgetary and geographical factors. Careful studies of rehabilitation programs have focussed largely on long term readmission rates, but these results are too late and too imprecise to influence the care of individual patients. An interesting question is whether participants do increase their activities outside of the exercise sessions in the program. Monitoring of activity in the home is difficult: diaries and questionnaires are subject to significant bias, as well as difficulties with literacy and other skills.

To investigate rehabilitation patient activity levels outside exercise sessions, we are developing an ambulatory monitoring system to provide weekly feedback to participants and staff about the actual physical activity of each participant. The system consists of an accelerometer-based monitor to detect movement and analysis software. Consenting participants in Redcliffe-Caboolture cardiac rehabilitation program will wear these pager sized monitors on a waist belt, throughout a period of 5 weeks. The analysis software has the capability to derive activity classification such as walking, sit/stand, lying and postural transitions from the raw acceleration data of body movement. This can be provided in a summary form of daily activity profiles as feedbacks to the rehabilitation co-ordinator and participants.

We expect that daily activity profiles will be useful in several specific areas: in providing feedback and motivation to participants about their progress; in monitoring by the rehabilitation coordinator of each participant's progress; and in modifying exercise interventions to overcome specific areas of activity where problems become apparent. In addition, the activity monitor allows quantitation of the effects of the rehabilitation program outside of the supervised exercise sessions. If results are accurate and reproducible, this may represent an improved assessment tool for rehabilitation programs in general. Finally, there is the possibility that an initial daily activity profile may be useful as a selection criterion for suitability and likely benefit in a rehabilitation program, allowing better targeting of resources.

Such monitoring capability could potentially reduce illness severity and cost by providing early warning to carers of any deterioration of a patient's health. The implementation of this system within a cardiac rehabilitation program is an example of where specific patient data has the potential to drive improvement in care. This system can enhance the quality of our health services by providing accurate measures of patient activity levels to assist with program evaluation.

Poster 264

Counting excess lives saved or lost in the care of acute myocardial infarction: Patient selection is more important than method of risk prediction

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Introduction: Measuring outcomes of hospital care using statistical process methods is becoming an increasingly used method in the early identification of unfavourable trends which may be due to suboptimal quality of care. A new statistical process technique, termed the variable life-adjusted display (VLAD),[1] uses risk-adjusted cusum methods to plot, as a function of time, the cumulative number of lives lost or saved that are in excess of those expected. Several studies have applied this technique to the care of patients presenting with acute myocardial infarction (AMI). Much debate centres on which risk adjustment method is most accurate: one based on routinely collected administrative data or one based on clinical data abstracted from medical records. Much less emphasis has been given to the impact of appropriate patient selection on the validity of such analyses.

This study aimed to: 1) compare AMI-related VLAD mortality curves generated using prediction rules based on either administrative or clinical data; and 2) assess changes in mortality curves after removing patients whose outcomes were deemed to be very unlikely to be influenced by variations in quality of care.

Methods: 467 consecutive patients admitted to a tertiary hospital in Brisbane, Queensland with a principal discharge diagnosis of AMI between July 1, 2003 and March 31, 2006 were studied. Administrative data relating to 12 variables were gathered from centrally-collected hospital discharge abstracts and used to estimate mortality risk using a modification of the Ontario AMI prediction rule.[2] Clinical data relating to 8 variables were abstracted from all medical records and inputted into the GRACE prediction rule.[3] Two cusum mortality curves were then generated for the entire cohort using both rules, and then replotted after applying patient deselection criteria of misdiagnosis of AMI, out-of-hospital/out-of-ambulance cardiac arrest, death within 30 minutes after presentation, transfers in from other hospitals, patients deemed palliative/conservative care intent, and residents of nursing homes.

Results: The two risk prediction rules yielded virtually identical VLAD mortality curves when all patients were included, despite the absence of significant correlation between scores for individual patients generated by either rule. What was initially portrayed by both models as 11 excess deaths over 18 months became excess saving of 3 lives when patient deselection criteria were applied, with out-of-hospital/out-of-ambulance cardiac arrest having the largest impact on trend reversal. Significant predictors of excess mortality included misdiagnosis, older age, female sex, cardiac arrest, and palliative/conservative care intent.

Discussion: Patient selection rather than choice of risk prediction model appears to be the most important factor in determining validity of VLAD mortality analyses as it applies to the care of AMI. VLAD analyses for other disease conditions should be validated in terms of impact on mortality trends of coding inaccuracies and patient characteristics which may have little relation to quality of care if erroneous labelling of hospitals as poor performers is to be avoided.

References: 1. Lovegrove J et al. Lancet 1997; 350: 1128-1130.2.Tu JV, et al. J Am Coll Cardiol 2001 ; 37 : 992-997
3. Granger CB, et al. Arch Intern Med 2003; 163: 2345-2353.

DAY TWO Tuesday 7th AUGUST

0730-0830 – "Power Speaking" – Breakfast with the Experts *P 1 & 2*
Chair: Mr Jim Birch
Speakers: Prof Dianne Parker, Dr Simon Eccles, Prof Sean Clarke, Mr Stephen Duckett, Dr John Youngman, Dr Christine Jorm, Mr Christopher Newell

WORKSHOP 1 A 9.00-10.30am *M1* Using Observational Research to Reshape Clinical Practice Professor Rick Iedema, Dr Christine Jorm and Mr Bryce Cassin The National Commission	WORKSHOP 2A 9.00-10.30am *P3&4* Clinical Indicator Workshop Ms Darlene Hennessy Australian Council on Healthcare Standards Chair: Ms Jenny Tuffin	WORKSHOP 3 – Part 1 (200 people) *M3* 9.00-12.30pm Making Change Work Mr Rod Anderson	WORKSHOP 4 9.00-10.30am *M4* Patient Safety: "The Engagement Party" Dr Peter Lee
WORKSHOP 1 B 11.00-12.30pm *M1* Using Observational Research to Reshape Clinical Practice Professor Rick Iedema, Dr Christine Jorm and Mr Bryce Cassin The National Commission	WORKSHOP 2B 11.00-12.30pm *P3&4* Clinical Indicator Workshop Ms Darlene Hennessy Australian Council on Healthcare Standards Chair: Ms Jenny Tuffin	Part 2 Follows from previous *M3* Making Change Work Mr Rod Anderson	WORKSHOP 5 11.00am-12.30pm *M4* Human Factors Engineering Dr Shelly Jeffcott, Professor Joseph Ibrahim and Dr Sue Evans.
Off site Visit to Skills Development Centre Session 1 9.00am-10.30am	TUTORIAL 1 9am-12.30pm *GH1&2* DR SIMON ECCLES TOPIC: Accuracy of IT Records / Health Space Chair: Ms Heather McDonald	TUTORIAL 2 9am-12.30pm *M2* PROF DIANNE PARKER TOPIC – Understanding and Improving Organisational Culture Chair: Mrs Margaret Marshall	TUTORIAL 3 9am-12.30pm *P5* PROF SEAN CLARKE TOPIC: Nursing Work Environments and how they promote quality of care Chair: Ms Marilyn Cruickshank
Off site Visit to Skills Development Centre Session 2 11.00am-12.30pm	TUTORIAL 1 CONTINUED LOCAL SPEAKER: Dr Leonie Katakar Mr Craig Hooper DIALOGUE	TUTORIAL 2 CONTINUED LOCAL SPEAKER Ms Susan Johnston Mr Christopher Newell DIALOGUE	TUTORIAL 3 CONTINUED Ms Christine Duffield Ms Michelle Kosky DIALOGUE

1030-1100	**MORNING TEA**	***Great Halls 3 & 4***
1230–1330	**LUNCH**	***Great Halls 3 & 4***

Posters Discussion Session Theme 2 –Education, Training and **Skills Development** and Theme 3 – **Systems Change and Leadership** ***Great Halls 3 & 4***

Poster 28 – Factors that facilitate and hinder the utilization of the medical emergency team: a nursing perspective **Mrs N Santiano**	**Poster 49** – Cancer Services Imaging and training and assessment program **Mr D Sampson**	**Poster 82** – Development of an online safety and quality education package and checklist for all health service staff and an evaluation of its effectiveness **Ms P McGarrity**	**Poster 91** – Co-location in Action **Ms C Foley**
Poster 93 – Staff Responsibilities Matrix for Risk Management **Ms C Foley**	**Poster 106** – Model of Care for Prevention & Management of Delirium in the Acute Care Setting **Ms J Sinnott**	**Poster 107** – "Communicating for Clinical Care" – Using Trigger Scenarios to Improve Communication Practices **Ms M Mitchellhill**	**Poster 132** – An innovative approach to skills development **Ms F Strongylos**
Poster 176 – Medical Record Documentation and Interprofessional Communication: An Intergroup Communication Approach **Dr D Hewett**	**Poster 188** – Sharp cat – reducing needlestick injuries & blood exposures and improving reporting **Mrs J Wayland**	**Poster 197** – The Emergency Department Assessment of Patient Medication: A Comedy of Errors **Dr R Bradbear**	**Poster 198** – Clinical Governance knowledge and competencies required by Victorian Public Hospital Medical Administrators – A survey of Medical Administrators currently working in Victorian Public Hospitals **Dr S Shea**
Poster 199 – Increasing the safety of enoxaparin therapy in medical inpatients: a combination of guidelines and education is effective. **Dr R Bradbear**	**Poster 203** – Understanding Effective Clinical Handovers: A Multidisciplinary Approach **Dr B Watson**	**Poster 205** – A Model To Ensure Comprehensive Assessment And Treatment Plans Based On Best Practice Guidelines In Dentistry With An Evaluation Tool **Dr D Golding**	**Poster 207** – The development of clinical practice guidelines for the management of delirium in older people in Australia **Ms C Brand**
Poster 219 – Training for Quality: learning from the VET sector **Dr G Fennessy**	**Poster 227** – Consumer Leadership **Ms K Simons**	**Poster 232** – Medical leaders in Clinical Governance: The Role of a Head of Unit in 2006 **Dr A Dwyer**	**Poster 235** – St Vincent's Hospital Toowoomba's response to a Pandemic Influenza H5N1 Threat: and derived recommendations. **Ms K Hamilton**
Poster 237 – Redesigning models of care to meet the needs of people with osteoarthritis (OA) of the hip and knee **Dr C Brand**	**Poster 247** – Improving Patient Safety Through Surgical Simulation: Finding the Evidence to Support the Uptake of the Fundamentals of Laparoscopic Surgery Program by Advanced Surgical Trainees **Ms K Walker**	**Poster 260** – WAASM – Mortality audit extends beyond the data **Ms J Mountain**	**Poster 262** – Quality Approach To Managing Assault Presentations to the Emergency Department **Ms D Wakefield**

Theme 3- Systems Change and Leadership			*Great Halls 3 & 4*
Poster 8 – “Better Workplaces” Leadership Development Program **Ms J Phillips**	**Poster 18** - Putting process into action **Ms L Bates**	**Poster 21** - Equal Access: Health Service Cultural Diversity Plans **Ms L Horvat**	**Poster 22** - The ‘In’ in Interdisciplinary Care **Ms J Exton**
Poster 43 - The power of bottom up networks as a force for safety and quality **Mr P Hibbert**	**Poster 53** - A Partnership Between An International Law Firm and An Acute Care Hospital - Evaluation Of A Pilot Program To Provide Pro Bono Legal Services For Cancer Patients **Ms E Ballinger**	**Poster 57** - Establishing a Quality Management System; the Catalyst for Redefining an Organisational Culture and Implementing Change **Ms B Knight**	**Poster 83** - Queensland, Stay On Your Feet: A Falls Prevention Collaborative Addressing Falls Injury Prevention Across the Continuum **Ms R Bell**
Poster 85 - Using functional status outcomes of hospitalised older people as indicators of healthcare quality **Ms L Beddoes**	**Poster 88** - Measuring Program Compliance In Community Health Using Feedback Data And Benchmarking **Ms L McCrorey**	**Poster 89** - Implementing Electronic Medications Management In A Private Hospital **Mr J Evans**	**Poster 90** - Clinical Governance and Peer Review **Ms C Foley**
Poster 98 - A Staged Approach to Optimising Electronic Billing in LANTIS **Ms S Avery**	**Poster 109** - Clinical Governance: Achieving a Quality Governance Framework From The Bedside to the Board **Ms K Morrissy**	**Poster 115** - An Exploration of Symptom Management Practices to Evaluate Quality of Care in an Oncology Setting **Ms E Cohen**	**Poster 120** – The fall and rise of an outer-metro emergency department **Dr J Farmer**
Poster 121 - Bridging the Gap – The Orthopaedic Way **Ms C Kimber**	**Poster 131** - Informing Consumers: What Are The Challenges In A Hospital Setting? **Ms L Stevenson**	**Poster 133** - An innovative approach to delivering our goals **Ms C Theobald**	**Poster 151** - Along the road of discovery – facing the challenges of implementing Clinical Governance **Ms F Ciaravella**
Poster 179 - Public Dental Emergency Demand Management Strategy **Dr S McGuire**	**Poster 183** - The Power Of Change - Role Redesign In An Outpatient Clinic **Ms R Coyne**	**Poster 187** - Patient Perceptions of Obstetric Clinical Handover (Pilot Study) **Dr G Chin**	**Poster 189** - Getting It Right at Night **Ms P Markham**
Poster 220 - Leadership For Change - The Power Of The People **Ms P Frost**	**Poster 225** - Through the innovation of Discharge Planning System to Reduce the Length of Stay in a Medical Center **Mrs C Shu-Chen**	**Poster 233** - Open Disclosure and leadership- a way forward **Ms B Dougan**	**Poster 239** - Lessons for healthcare from the railways **Dr S Jeffcott**
Poster 242 - Is Your Head In The Sand? **Mrs H Parsons**	**Poster 243** – Poor concordance with non pharmacological recommendation for osteoarthritis within a chronic disease management program: implications for clinicians, consumers and policy makers **Dr C Brand**	**Poster 244** - Understanding the safety culture of maternity services **Ms S Allen**	**Poster 245** – Application of an evidence based implementation model for supporting service redesign for people with osteoarthritis in ambulatory care settings. **Dr C Brand**

Poster 259 - Adopting a transformational change framework to implement a statewide strategy. **Ms M Arblaster**	

1330-1515	**Plenary 3 - The Passion and the Power of Teams** **Proudly supported by Queensland Health** Chair: Mr Jim Birch	***Great Halls 1 &2***
1330-1415	Presentation by Queensland Health KEYNOTE ADDRESS – INTERDISCIPLINARY TEAM RESEARCH INTERNATIONAL SPEAKER: PROF SEAN CLARKE	
1415 – 1435	TOPIC – GETTING TO THE HEART OF PATIENT SAFETY-COMPASSION AND CARING SPEAKER: MR ROBIN YOUNGSON	#11
1435 - 1455	TOPIC – TEAM WORK TO ENHANCE QUALITY PATIENT CARE THROUGH THE USE OF CLINICAL INFORMATION TECHNOLOGY SPEAKER: MR SIU-FAI LUI	#12
1455 - 1515	Q&A with SPEAKER PANEL	

13?, 14?

1515 – 1545 **Afternoon tea** *Great Halls 3 & 4*

1545-1715	**PLENARY 4 - Research – The Power Behind Practice** Chair: Mr Jim Birch	***Great Halls 1 & 2***
1545 - 1700	TOPIC – PUTTING RESEARCH INTO PRACTICE DR DIANA HORVATH #15 — 開始沒有 PROFESSOR WARWICK ANDERSON #16 SALLY CROSSING	~~tote bagging~~ ~~#17~~
1700 - 1715	AWARD PRESENTATIONS: AAQHC	
1900-2300	HESTA SUPERFUND CONFERENCE DINNER	*Plaza Terrace Room*

Workshop1

Using observational research to reshape clinical practice

Workshop presenters: Professor Rick Iedema, Dr Christine Jorm and Mr Bryce Cassin

Workshop 2

Clinical indicator workshop

The Australian Council on Health Care Standards

Facilitators: Darlene Hennessy – Executive Manager, Development Unit

Workshop 3

Making change work

Rod Anderson

Workshop 4

Patient safety: "The engagement party"

Peter Lee

Workshop 5

Human factors engineering

Shelly Jeffcott, Jo Ibrahim, Sue Evans

Tutorial 1

Accuracy of IT and Healthspcace

Simon Eccles

All medical notes contain errors. When the paper notes look rushed and appallingly written, those reading them know to double-check the facts but when those same notes appear smartly typed on a computer screen they appear more authoratative. How do we ensure that notes captured electronically are accurate. This becomes vital when elements of that medical information will then be shared far more widely and in very different contexts from those in which they were first recorded.

Tutorial 2

Dianne Parker

Tutorial 3

Nursing Work Environments and how they promote quality of care

Sean Clarke

In this presentation, practice environments for nurses will be defined and an explanation provided about how this concept is both similar to and distinct from staffing and skill mix indicators. A tool called the Nursing Work Index developed by and popularized at the University of Pennsylvania and used in international research studies will be presented and its use explained, along with research presenting its associations with nurse outcomes and outcomes of care. To provide a practical clinical context for the discussion about the impacts of practice environments on quality of care, clinical vignettes dealing with a concept called "failure to rescue" (potentially preventable deaths following complications) will be analyzed.

Off-site visit

Queensland Health Skills Development Centre.

Interdisciplinary team research

Sean Clarke,

Associate Director, Centre for Health Outcomes and Policy Research, University of Pennsylvania

Across the health care continuum, achieving optimal outcomes for patients requires not only well-trained, highly-functioning individual team members from different disciplines but also effective teamwork and communication in a practice environment that favours good practice and coordination of care. In this address, a framework for understanding how staffing and practice environments in health care facilities affect outcomes in health care facilities (especially acute care hospitals) will be presented. This will be followed by a discussion of research and survey results regarding perceptions of health care workers about the environments in which they practice, including communication and other aspects of team functioning. The presentation will conclude with implications for health care leaders at all levels and suggestions for future research.

Getting to the heart of patient safety, compassion and caring

Robin Youngson

What is a culture of safety? Technical approaches to patient safety don't help us answer that question and we need to reframe our thinking. Culture exists in an immaterial world of assumptions, values, beliefs and behaviours. Attempts to create a 'safety culture' within healthcare providers may fail unless we consider the whole system dynamic to include the beliefs and behaviours of external stakeholders including health consumers. The really curious question is this: In this world of massive turbulence and change, how could such a stable, robust and pervasive dynamic of persistently unsafe care exist, despite all of our efforts? Maybe there is a kind of "attractor" for unsafe behaviour within the complex system? This speaker believes there is an alternative stable dynamic, characterised by caring, compassion, openness and trust. Speaking straight from the heart and with experience of leading transformational change Robin challenges some of our assumptions and beliefs.

Team work to enhance quality patient care through the use of clinical information technology

Dr. Siu-Fai Lui, Consultant (Quality and Risk Management)
Dr. Nt Cheung, Chief Medical Informatics Officer
Dr. Hong Fung, Cluster Chief Executive (NTEC), Chairman of HA Clinical Informatics Steering Group
Dr. Pak-Yin Leung, Director (Quality and Safety)
Hospital Authority, Hong Kong.

The Hospital Authority (HA) operates 43 public hospitals, 45 Specialist Clinics and 74 General Clinics across Hong Kong. It has 52000 staff providing medical care for over 7 million patients with 1 million admissions and 13 million ambulatory visits every year. One essential component in the provision of quality patient care is a user friendly, easily accessible and comprehensive clinical information system to support the day to day operation of our frontline staff. Since the early 1990s, a Clinical Management System (CMS) has been designed, built and implemented by a team of frontline (medical, nursing and allied health) and IT staff for the HA in Hong Kong. Currently, the CMS is used by over 12,000 frontline staff everyday through 15000 workstations with 2 million+ transactions. The CMS provides frontline staff with necessary clinical information, results and reports including radiological pictures for the care of patients and supports a very wide range of operational functions via a comprehensive order entry system. A comprehensive Electronic Patient Record system (ePR) allows information of any patient to be accessed from any workstation across Hong Kong. Team work was the key element in the success in developing the CMS to achieve the common goal to build a clinical IT system to meet the needs of our patients and our staff. At any moment of time, a team of 160+ doctors and 100+ nursing and allied health staff are working closely with the IT staff in the continuous development of the system. Visionary and strategic planning, effective governance and meticulous implementation were also key factors.

The provision of healthcare service is a complex operation and with ever increasing workload, the safety of our patients has become an important aspect of quality patient care. A reporting and learning culture is important for patient safety – in particular to identify the risks. A user friendly Advanced Incident Report System (AIRS) has been developed by a team of frontline and local IT staff. The AIRS is implemented across all the hospitals and clinics of the HA, allowing frontline staff to directly report any incident or near miss at any of the workstation.

Many clinical risks were identified and risk reduction strategies were developed. Some measures were supported by the CMS (e.g. medication checking, alerts and high risk flags). To ensure correct patient identification is a key element in many processes. An "Unique Patient Identification" 2D-barcode scanning system has been developed by a team of frontline and IT staff to prevent cross-matching and blood administration errors as well as to ensure correct patient identification for other procedures.

The authors are key members of the clinical / IT team involved with the development of the CMS and IT system for HA since the early 1990s. They will share their experience of a very interesting and rewarding journey in making use of IT for better patient care and to enhance patient safety.

Consumer Involvement in Research: Priorities and Process

Warwick Anderson, Diana Horvath, Sally Crossing,
Sally Crossing
Chair, Cancer Voices NSW and Chair Breast Cancer Action Group NSW

Better and more relevant research will be done when the added value of health consumer involvement is factored in, as a regular part of the process. Such a process is expected to produce research which is more readily translatable to practice. There are basically two types of consumer participation in research (apart form the traditional role of being its subjects)

- Participation in setting research priorities
- Participation in decision-making about which research is funded.

This presentation will discuss both, with emphasis on a recent successful consumer initiated program which offers a process for implementing the NHMRC / CHFA Model Framework for

Consumer and Community Participation in Health and Medical Research (Dec 2004).

Cancer Voices NSW, the independent peak organisation for NSW cancer consumers, worked with the Cancer Council NSW, the leading cancer charity in that state, to develop a set of criteria to reflect consumer and community values regarding for research and a training program for informed consumers. This led to an annual review process for program grants by a Consumer Review Panel. Three peer reviewed articles have been published or are in print describing this project, now in a third successful year. The most relevant to this presentation, which will be discussed, is Operationalising a Model Framework for Consumer and Community Participation in Health and Medical Research; Australia & New Zealand Health Policy 2007, 4:13.

Posters: Education, Training and Skills Development

Poster 28

Factors that facilitate and hinder the utilisation of the medical emergency team: a nursing perspective

Nancy Santiano, Sanjay Jayasinghe, Lis Young, Ann Morgan
The Simpson Centre for Health Services Research, Liverpool, NSW, Australia

Introduction: The Medical Emergency Team (MET) replaced the cardiac arrest team in six hospitals within an Area Health Service in the late 1990's. An increased awareness of patient safety has led to MET and similar rapid response teams being introduced to increasing numbers of hospitals in Australia, the United Kingdom and the United States. This project explored factors that facilitated and hindered the optimal utilisation of the MET in an acute hospital.

Methods: Focus groups (FG) and key informant interviews (KII) of nursing staff were conducted in an acute hospital. One trained researcher moderated all the audiotaped focus groups and interviews. Each focus group involved a minimum of 4 and a maximum of 8 nurses. Homogeneity of the group was sought by assembling individuals by position and ward areas. The interview was standardised by using a list of predetermined questions. All transcripts were analysed using a qualitative data analysis software, 'NVIVO'. Two other researchers analysed each transcript independently to identify key words and phrases, into components and key themes.

Results: Four FC were conducted (3 for ward nurses and 1 for clinical nurse educators). The key informants included nurse unit managers and MET Coordinator. Factors that facilitated MET utilisation were: recognised advantages for patient care and safety, and supportive supervisors and peers. Factors that prevented the optimal utilisation of the MET included: a lack of resources to support the implementation of the MET, variability in support for the MET amongst medical staff, criticism directed towards nursing and medical staff from the MET team and, a lack of communication and documentation of modified MET calling criteria where appropriate.

Conclusion: FC and KII were useful in exploring factors that facilitated and hindered optimal utilisation of the MET. Results and associated recommendations were presented to the MET stakeholders. Improvement strategies have since been developed and implemented.

Poster 49

Cancer Services

Imaging training and assesment program

David Sampson, Renee Voysey, Lynette Cassapi, Somkhit Rattanavong, Annie Lau, Odette Wilson, Justin Dixon, Vincent Towell
SSWAHS Cancer Services - Western Zone, Liverpool, NSW, Australia

Introduction: Liverpool and Macarthur Cancer Therapy Centres are part of South Western Sydney Cancer Service. As part of verifying that the patient is receiving their radiotherapy treatment to the correct region, x-rays or portal images are taken, usually for the first three days of treatment and at regular intervals thereafter. Images are taken and reviewed by radiation therapists. After this the responsibility of the radiation oncologist to also review these images and either reject or approve the images. This is in-line with the current Imaging Policy.

As part of an audit process with the roll out of a new imaging policy, it was discovered that Radiation Therapists (RT's) and Radiation Oncologists agreed on the decisions made about images 99% of the time. In order to give the Radiation Oncologists confidence that all RT's were assessing portal images the same way, and getting the same result, it was decided that an imaging training and assessment program would be necessary. A RT training and assessment group was formed to create a training program and an assessment tool.

Discussion: The concept of assessment in the workplace context was unfamiliar, therefore it was necessary to explain to staff why they should participate in training and assessment and what the group was hoping to achieve by implementing the program. A training document was created as a reference manual and the training process was decided upon. Staff were required to read the training document, participate in an in-service, assess some 34 training images, representing 7 anatomical sites (with answers provided), and then complete and be signed off as competent on 26 assessment portal images. During the in-service, there was discussion about our current process - its pros and cons, the use of open field portals and responsibility with radiation. All staff participated in the training over a period of 3 months. No staff members were prevented from assessing real patients' portal images during this period.

Conclusion: This training and assessment program has been valuable as a means to ensure that all staff have been trained to the same standard and are assessing portal images with the same accuracy. The program has encouraged staff to think more about producing useful reference images, using the tools that are available to them, and thinking about the small, but extra dose of radiation given from portal images. This has been an invaluable quality improvement process, and the training program has undergone some review and will be expanded to cover all portal imaging tools that are used within the Radiation Therapy service.

Poster 82

Development Of An Online Safety And Quality Education Package And Checklist For All Health Service Staff And An Evaluation Of Its Effectiveness

Annie Moulden, Kathy Byrne, Sherene Devanesen, Simon Fraser, Sue Kirsa, Doug Travis, Patricia McGarrity
Victorian Quality Council, Melbourne, Victoria, Australia

This abstract will describe the development of a safety and quality education package, evaluation of the package within a number of health services, the outcomes and plans for the package.

An expectation exists that all health care staff contribute to safety and quality improvements in patient care. However, in order to meet this expectation, staff need to understand the underlying principles and be aware of organisational processes. Education regarding quality is often aimed at middle and senior management, with more junior staff having less involvement. An education package was developed to address this gap, the 'Introduction to Safety and Quality Principles' (the package). The package is designed to:

- Improve staff awareness of safety and quality principles
- Improve staff awareness of organisation-specific safety and quality processes.

The package was designed as a generic education tool, suitable for clinical and non-clinical staff, for use in staff orientation or inservices. The package consists of:

- An online component describing generic safety and quality principles
- A checklist, providing staff with the opportunity to relate the principles described in the online component to actual processes within their organisation. Managers, or their delegates, would complete the checklist with the staff member.

Content of the package was determined using the National Patient Safety Education Framework, conducting a literature review and consulting with Quality Managers.

A pilot project was conducted to evaluate the effectiveness and appropriateness of the package in health care settings. A four-month pilot project was run in six health services, metropolitan, regional and rural. Staff from wards, allied health departments and non-clinical areas participated. Data collection included baseline perceptions of knowledge of safety and quality principles and processes, post-package survey and interviews with managers. Matched non-participatory areas also participated in the post-package evaluation. The pilot project was completed in January 2007.

Results were analysed overall, by health service type and by discipline. An improvement in perceived knowledge of safety and quality principles and processes was demonstrated overall, with the most significant changes occurring in rural settings and with allied health staff. No improvement was demonstrated in the non-clinical group. Key points gained from interviews with managers included the increased awareness of safety and quality processes amongst staff, increased confidence amongst staff in using these processes, the ease of use of the package, and the opportunity for robust discussion provided by the checklist.

The package will be made available online to all health services. It will be recommended for use by clinical staff only. Organisations will be advised to develop a manager's guide to the checklist, to ensure standardisation of information being conveyed regarding organisational safety and quality processes.

Poster 91

Co-location in Action

David McNamara
Holy Spirit Northside Private Hospital, Brisbane, Australia

A large acute tertiary public hospital Central Sterilizing Supply Department (CSSD) was notified late November 2006 that their department required an eleven week closure to allow major building works. This was part of the redevelopment of the hospital campus, with minimal notification for managers to prepare for appropriate maintenance of services.

The public hospital approached co-located private hospital CSSD to request the use of CSSD facilities during this period, as a co-located acute tertiary facility. The private hospital offered assistance to the public hospital, as six of the eleven weeks requested would occur over the Christmas period when reduced procedures are undertaken.

Discussions between the Private Hospital CSSD Manager / Public Hospital CSSD Manager & Public Hospital Perioperative Manager identified potential problems that could occur during the merging of the two units. These included the transport of the Public Hospital equipment, much of it sterile, to and from the Public Hospital operating suite.

Other major issues identified included, using the Private Hospital CSSD Quality Management 'Tracking' System in the Public Hospital where currently no tracking system exists, wrapping techniques are different, however the Public Hospital intended to trial techniques already in use at the Private Hospital. Steam sterilizers were the same but the use of a low temperature sterilizer at the Private Hospital CSSD was expected to increase output.

Private Hospital CSSD Manager and Public Hospital Operating Theatre staff met to discuss changes required: wrapping changes, indicator usage and implementation of the tracking system. Information on current Public Hospital equipment lists and instrument tray inventory was obtained to allow input of basic data into the tracking system, again allowing greater efficiencies in a combined CSSD. The Public Hospital CSSD Manager also created equipment transport procedures between sites. Company representatives were requested to provide in-service to upgrade the Public Hospital staff to the Private Hospital requirements.

Challenges encountered were the underestimation of inventory by the Public Hospital, change in shifts, increase in number of night duty nights to accommodate increased workload, extension of co-location due to building / equipment issues in the Public System and confined area hosting 3 x staff levels. Loan set throughput increased significantly.

Poster 93
Staff Responsibilities Matrix for Risk Management

Christine Foley
St. Vincent's & Holy Spirit Health, Brisbane, Australia

There is an increasing recognition for staff to be made aware of and understand the responsibilities that they have in relation to risk management and patient safety within their organisation. This includes their role and the role that others in the team play in a safety culture and in preventing harm. A project was established to develop an organisation–wide document and training tool to raise staff awareness and to measure their understanding of their responsibilities and the responsibilities of others in their team.

A Staff Responsibilities Matrix for Risk Management was developed which integrated the key elements of the organisation's Risk Management and Policies and Programmes (incorporating clinical and corporate governance) and the key components of the National Patient Safety Education Framework (Safety & Quality Council, 2005). The matrix was formatted for all staff, a second matrix targeted at middle managers, and a third matrix targeted at executive leadership.

The staff matrix was developed as a word document to hand out to all staff at orientation and induction, with a supporting powerpoint presentation that was delivered by Quality & Risk Managers to all staff at orientation to the facility, and a copy of the files uploaded onto the intranet with open access to all staff.

Each facility commenced using the matrix in January 2007 as part of the orientation program, with evaluation being undertaken progressively across each facility. Evaluation consisted of staff feedback, and review of each element of the matrix that was measurable e.g. incident and event reporting, hazard reporting, staff participation in policy and procedure review / morbidity and mortality – peer review meetings / adverse event analysis and other indicators. These have been linked to Accreditation outcomes monitoring and evaluation within each facility, with modifications made to the matrix progressively.

The application of the matrix has demonstrated that even across different types of facilities, acute / sub-acute / aged care, the three groups of employees have varying levels of education, training and skills development required in order to understand what risk management is all about, what their role is on a day to day basis, and what roles others play in their organisation. Standardising risk management education and tools and varying the method of delivery to suit the needs of the relevant staff will enhance their understanding and uptake of risk management and patient safety initiatives into their day to day practice.

Poster 106
Model of Care for Prevention & Management of Delirium in the Acute Care Setting

Jacqui Sinnott
Victoria University, Victoria, Australia

Background: Delirium is a prevalent and serious disorder affecting hospitalised older patients. It is often associated with poor outcomes of acute care such as functional decline, falls, and restraint use, increased length of stay, greater hospital costs, more frequent nursing home placement and higher mortality.

Objective: The aim of the project was to develop, implement and evaluate the effectiveness of a model of care for prevention and management of delirium in the acute care setting.

Method: The model of care consists of 5 Key principles:

- an education program on delirium for healthcare professionals
- cognitive assessments and delirium risk factor screening on admission
- implementation of delirium prevention strategies for patients identified at risk
- use of the diagnostic instrument - Confusion Assessment Method (CAM) to diagnose delirium and
- implementation of delirium strategies post-diagnosis.

The model of care was introduced in November 2006 and targeted patients 70 years and older admitted to the acute care facility. The main outcome measures were staff knowledge of delirium, incidence of delirium, detection of delirium, severity of delirium, complications associated with delirium such as falls, length of stay, hospital costs, discharge destination and mortality.

Results: Data was collected and analysed from a three month period, November 2006 to February 2007.

Preliminary results have revealed:

- 97% of staff indicated their understanding of delirium was improved post the education program
- 44% increase in staff knowledge of delirium post the implementation of the model of care
- Decrease in the incidence of falls due to delirium
- Length of stay has decreased for patients who have been diagnosed with delirium
- No increase in hospital costs and potential for more effective utilisation of financial resources
- 83% of patients were ultimately discharged to pre-admission accommodation
- There have been no deaths during the period under study

Discussion: Delirium provides an opportunity for acute care facilities to examine and improve the quality of care for the older patient population. The model of care was designed to use the best available evidence to provide staff with resources, processes, strategies and interventions for preventing and managing patients experiencing delirium in the acute care setting. The delirium model of care has been accepted with enthusiasm and outcomes thus far have been very positive for patients, staff and the hospital alike.

Poster 107

"Communicating for Clinical Care" – Using Trigger Scenarios to Improve Communication Practices

Mary Mitchelhill[1], Leonie Watterson[2]

[1]Clinical Excellence Commission, Sydney, Australia, [2]Sydney Medical Simulation Centre, Sydney, Australia

Objective: To introduce education tools for use at a ward level, testing trigger scenarios as an effective teaching tool for healthcare staff.

Method: Providing targeted education to a large healthcare workforce can be difficult. A means to overcome this is to implement education tools for use at a ward level that can be delivered effectively by staff without extensive facilitation experience.

Two sets of existing trigger scenarios were identified for use. The first set developed by the Sydney Medical Simulation Centre (SMSC) and a second by the Prince of Wales Hospital (POWH) Emergency Department and Diversity Health. The tools were reviewed by area health service representatives and considered appropriate for use.

A facilitator's guide was adapted from the SMSC guide with inclusions from the POWH. The aim of the step by step guide was that it would assist facilitators in running sessions and provide guided questions to promote discussion to then enable the team to identify solutions to communication issues. A selection of area health service facilitators attended workshops run by the Clinical Excellence Commission demonstrating use of the trigger scenarios and facilitators' guide and to give them experience prior to delivering their own sessions.

Evaluation of the project included formative workshop evaluation by facilitators; a facilitator's evaluation post education session to assess the guide and relevance of each scenario used; a participant self assessment completed prior to the education session to measure current practice and confidence levels in communicating; and a participant evaluation post education session to test effectiveness and scenario relevance.

Results: The trigger scenarios were tested in nine sites across four area health services. During the six week trial, facilitators held over 53 sessions with multidisciplinary groups to include a total of 320 participants.

Workshop evaluations identified that facilitators were provided with the knowledge and skills to effectively run sessions. Most felt confident to do this using the guide and others felt that their confidence levels would increase with practice.

Post education facilitator and participant evaluations identified the trigger scenarios as a relevant and useful tool to use for education in communication. The scenarios highlighted issues experienced and enabled reflection on current practice and future strategies to improve communication. Over 80% of facilitators rated the education session as good to excellent for relevance, practicality and enjoyment. 95% of participants were satisfied with this communication activity. The participants identified that effective communication reduces the incidence of errors.

Self assessments revealed communication difficulties were experienced on a daily basis, equally with patients and staff. The majority of participants indicated they commonly practiced effective communication. Respondents rated themselves confident to very confident when dealing with difficult communication situations. These self assessments will be repeated at 3 months for evidence of change.

Conclusions: The use of trigger scenarios as an education tool for health service staff is effective in raising communication issues and assisting staff to identify local improvements. The opportunity to discuss barriers to effective communication has exposed teams to issues faced by different members and alternative strategies to improve patient safety and clinical quality.

Poster 132

An innovative approach to skills development

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The Health Service provides comprehensive primary, secondary and tertiary health care services and the Program consists of a mixture of Primary, Ambulatory and Chronic/Complex services. The implementation of web-based training modules with supporting quizzes, evaluation and FAQ pages for the Program has resulted in improved equity of access to training and improved variety in training delivery modes. This has ensured that easily accessible, meaningful training can be delivered in a time and resource efficient manner, which is easily sustainable and can continue to adapt to changing training needs within the Program.

Modes of delivery of training provided by the Unit across the Program were reviewed. Quality, Privacy, Health Promotion and Clinical Documentation training were provided on a face-to-face basis by the Executive Officers at the unit. Whilst the training is vital across the Program it was felt that a more efficient mode of delivery would benefit the facilitators and delegates. Web-based training modules were launched on 27 July 2006, primarily for the Program staff but available across the organisation. Executive Officers will continue to deliver certain training on a face-to-face basis, particularly where 'workshop' style training is appropriate.

The web-based training incorporates audio, video, powerpoint presentation, a quiz, evaluation and FAQ components. Training is therefore delivered at a time and place convenient to the delegate and may be completed in more than one sitting. A database also collects information regarding course completion, quiz results and evaluation results.

Equity of training is now ensured via the delivery of web-based training. These modules may also be delivered as part of the employee induction process. Six modules initially launched: Quality Improvement, Introduction to Consumer Participation, Privacy, Clinical Documentation, Managing Variance Reporting and Project Skills.

A further four modules were developed and were made available to staff in January 2007: Incident Reporting – Process for Staff, Incident Reporting – Process for Managers and Health Impact Assessment; Introduction to Health Promotion will be made available by March 2007. Results from the evaluation components incorporated with each module are reviewed on an ongoing basis and improvements made where required. The Quality Improvement module has been updated since its launch in July.

Feedback to date includes *"This is a wonderful initiative which will provide staff with easily accessible, meaningful training, I will continue through the packages."* The Program Executive Management Team mandated annual completion of the Quality Improvement, Privacy, Clinical Documentation, Health Promotion, Incident Reporting and Consumer Participation modules for all staff, the Finance module is mandated for cost centre managers and the Health Impact Assessment module is mandated for all managers. As of 27 February 2007 a total of 804 staff had successfully completed the following modules: Clinical Documentation – 204; Consumer Participation – 124; Privacy – 204; Project Skills – 50; Quality Improvement – 179; Finance – 37; Health Impact Assessment – 3; and Incident Reporting – 3. A further 267 modules had commenced and were 'in progress'.

Poster 176

Medical Record Documentation and Interprofessional Communication: An Intergroup Communication Approach

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Introduction: Failures in communication are increasingly cited as contributing factors to medical error and adverse events in health care. To date, there has been little systematic research addressing the relationship between interprofessional communication and the quality of health care from an intergroup perspective. Recent research in health communication supports the need to consider the influence of social and group identities in interactions between health professionals within the highly differentiated social system of the tertiary-referral hospital. We aimed to explore these issues amongst members of the multidisciplinary team that contribute to the management of patients with upper gastrointestinal bleeding (UGIB) in a large tertiary-referral facility.

Methods: This project adopts communication accommodation theory (CAT), a socio-psychological theory of communication, to investigate and analyse the nature of health professional communication and its relationship to medical error and quality of care. Because UGIB patients require coordinated multidisciplinary management from a range of specialties and subspecialties in a tertiary care setting, there is significant potential for intergroup tension and system failure. CAT is an intergroup theory of communication that can predict and explain these communication tensions. The data were derived from two sources: inpatient medical records, and in-depth interviews, and analysed using qualitative and quantitative methods. All admissions to a 900 bed teaching hospital during 2005 with symptoms of UGIB were identified from the hospital information systems (n=225), and the medical records were analysed retrospectively. In-depth interviews (n=48) were conducted with a broad range of health professionals and administrative staff from multiple hospital departments who contribute to the management of patients with UGIB.

Results & Discussion: Findings from medical record analysis suggest systematic deficiencies in documentation/communication with intergroup stylistic differences in written communication, whilst interviews reveal that the health professionals have a strong sense of their discipline and professional memberships which pervades interactions. An intergroup theoretical approach, which considers that individuals are influenced by their social and personal identities, provides a useful framework for understanding the complexities of interprofessional interaction in a tertiary hospital context. These results have implications for the implementation of clinical practice improvement initiatives and team training in this setting.

Poster 188

Sharp Cat – Reducing Needlestick Injuries & Blood Exposures and improving reporting

Jan Wayland

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Needlestick injuries and blood/body fluid exposures pose a serious risk to healthcare workers, and while some are unavoidable, many can be prevented through awareness and improved practice. In 2005 concerns were raised regarding the sustained number of exposure injuries and the increasing number of sharps hazards reported. The programs in place were old and no longer effective.

In response to these concerns the "Sharp Cat" program was designed. "Sharp Cat" is the face of safe sharps handling and disposal at St Vincents & Mercy Private Hospital. It is an innovative program designed to raise awareness, provide education and feedback outcomes and improvements.

Sharp Cat was introduced in November 2005, utilising marketing strategies to create intrigue and stimulate interest, with great success. The Sharp Cat program is highly visible across all areas of the hospital, with unique features designed to target specialty areas such as the operating suite. It is a simple program that provides constant reinforcement of safe practice and the need for staff to protect themselves and their colleagues.

The effectiveness of the Sharp Cat program has been evaluated through staff awareness evaluation and on data collected for the first 12 months following introduction of the program. Data has shown the program to be successful in reducing exposure injuries and sharps hazards and improving reporting of injuries.

Poster 197

The Emergency Department Assessment of Patient Medication: A Comedy of Errors

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At first thought it appears easy to determine the medications taken by patients who present to the Emergency Department (ED). After all, patients arrive with neat typed lists (often typed by their grandson on his new computer), as well as a letter from a referring general practitioner, and there is a discharge summary from their last admission, as well as a bag of medication. However closer inspection reveals that often the actual medication being taken is different to any of these sources of information, a fact overlooked by busy ED doctors.

Pharmacists have been important professionals in hospitals for many years. They have long established an advisory presence in hospital wards, as well as their role in dispensing. It is now emerging that their particular skills can shorten hospital stay, help prevent readmissions and thus reduce costs. We have been trialling the placement of a pharmacist in the ED. The initial goal was to reduce the problem of inaccurate and incomplete medication charts being sent with the patient to the ward, resulting in prolonged illness or new complications.

The magnitude of the problem facing doctors in the ED had not been previously recognised in our District. An initial audit showed that 29% of patients had all of their medications recorded accurately by ED staff, and that 36% of these medications were accurately recorded. Perhaps more worryingly still, in 15% of audited medications the hospital medication chart showed a discrepancy from the correct dose. As well as inpatient admissions, many patients from ED are discharged back to the community. In the audit, prior to pharmacist placement in ED, only 18% of discharged patients were receiving a discharge medication record.

Individual case studies indicate that the problem is multifactorial: patients hoard medications, hospitals substitute generics for brand name (or other generic) medications without educating the patient about the substitution, many patients in our District consult more than one general practitioner, a proportion attend more than one hospital, and most of our patients are elderly (modal age of patients in the general medical wards at Redcliffe Hospital is 83).

The ED pharmacist works 0800 - 1630 Monday to Friday. The pharmacist identifies high risk patients; to 65yrs, >5 medications, admission with an adverse drug reaction, poor adherence, etc. A medication history is taken using information from the patients, medications they bring with them, general practitioners (GPs) and GP medication lists, local pharmacies, relatives and previous notes for collateral evidence. The assessment of a high risk patient takes 20 - 60 minutes (mean 40 minutes).

Following the implementation of an ED pharmacist, the level of accuracy in medication records increased from 36% of medications documented completely before an ED pharmacist, to 99% of medications recorded correctly. Patients receiving a discharge medication summary increased from 17% to 45%, and medication discrepancies (strength, dose, frequency) on medication chart decreased from 15% to 7%.

It must be assumed that medication errors are at least as common at other times as during the working hours of the pharmacist. We believe that this may represent a significant risk to the patient, as well as needless cost for the health service.

Poster 198

Clinical Governance knowledge and competencies required by Victorian Public Hospital Medical Administrators - A survey of Medical Administrators currently working in Victorian Public Hospitals

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Competencies or skills required of Medical Administrators to manage health services organisations in general have received a reasonable recognition. Competencies are defined as the knowledge, skills and abilities required to effectively manage clinical governance affairs in health services organisations. There is little information available regarding clinical governance knowledge and skills required of Medical Administrators in order to meet the current and future clinical governance and patient safety related challenges. Medical Administrators in western countries in particular are under increasing pressure not only to run an efficient organisation but also to ensure that the services provided are safe and are of high quality.

These clinical risk management related challenges are being tackled by using the concept 'clinical governance' as a vehicle by the United Kingdom National Health System, while implementing formal clinical risk management systems seems to be the primary mechanism by which Australia is attempting to address these concerns. The development of the clinical governance concept has given a greater recognition for Medical Administrators' role in the health sector as they play a predominant role in implementation of the clinical risk management initiatives. It is therefore important to understand what critical challenges medical Administrators face in meeting clinical governance requirements and to identify competencies that they need in meeting those challenges.

The aim of this study was to provide a greater understanding of the concept of clinical governance and essential competencies needed by Medical Administrators. This will in turn allow individual Medical Administrators to evaluate themselves and prepare their own plans for ongoing professional education to improve or acquire important competencies. This information will assist professional colleges such as Royal Australian College of Medical Administrators and Australian College of Health Services Executives to plan and provide professional development education resources.

Medical Administrators in Victorian public hospitals were surveyed to ascertain their understanding of clinical governance and to identify their opinion of the core competencies required to effectively manage clinical governance related challenges in public hospitals.

Twenty-four Medical Administrators participated in the study and the results of their collective opinions will be presented under the following categories:

- *Ranking of which 'dimensions/activities' are the most important considerations for 'Clinical Governance'*
- *Extent of involvement in the dimensions/activities of Clinical Governance*
- *Critical challenges faced in implementing Clinical Governance activities in the workplace*
- *Competencies required for Clinical Governance components of*: clinical incidents management; patient expectations including complaints; clinical leadership/professional performance; providing high quality services and maintaining minimum standards of care; change management and staff education; credentialing and identification of scope of clinical practice (privileging); management of medico-legal, legislative compliance-related activities; management of data, information, decision-making; process mapping, analysis and improvement; evidence-based medicine and policies, protocols and guidelines; and implementation and designing of clinical governance systems.

A summary statement of knowledge and core competencies of Medical Administrators will be discussed.

Poster 199

Increasing the safety of enoxaparin therapy in medical inpatients: a combination of guidelines and education is effective.

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Introduction: Following the introduction of the low molecular weight heparin, enoxaparin, as anticoagulant therapy in the management of venous thromboembolism, serious haemorrhagic events were identified in medical inpatients in our two hospitals. The aim of this study was to assess the effect of an intervention to reduce such events based on a treatment algorithm for high risk patients. A treatment strategy was developed and implemented early in 2004, based on patient age, renal function (GFR as calculated by the Cockcroft Gault formula), weight, concomitant therapy and duration of enoxaparin therapy. These factors were suspected to convey high risk for bleeding, based largely on data we had collected and the meagre but growing literature about this problem. The dosing schedule used was as follows: initial dose 1 mg/kg for all patients, then 1 mg/kg bd if GFR > 60 ml/min, 0.75 mg/kg bd for GFR 30-60 ml/min and 0.5 mg/kg bd for GFR <30 ml/min. Printing a calculated GFR based on the MDRD formula (eGFR) on pathology results prompted consideration of impaired renal function in the elderly. Safety was further enhanced by encouraging use of laboratory monitoring of peak antiXa levels (4hr post-dosing), attempting to achieve the therapeutic window of 0.5-1.0 IU/ml where possible. A further 10% dose reduction could occur in the presence of advanced age, concomitant anticoagulant therapy or duration of enoxaparin therapy for 4 or more days. At the same time, an education programme directed to hospital medical staff was implemented to publicise the guidelines and raise awareness of the risks of enoxaparin therapy.

Methods: Using a retrospective analysis of coded medical records in the two hospitals, we determined the number of serious events between 2000-2006 inclusive. These events were: major bleeding requiring blood transfusion or resulting in organ failure, death or contributing to death. The incidence of these events was compared in the time frames of before (2000-2003) and after the intervention (2004-2006) and are expressed as events per 10,000 medical inpatients.

Results: The majority of haemorrhagic events involved extraperitoneal haematomata, predominantly located retroperitoneally or in the rectus sheath. Fourteen serious events, including 6 deaths, occurred in the period 2000-2003. All these patients demonstrated two or more risk factors. In the intervention period of 2004-2006, 3 events were detected, including 1 death. The incidence rates were 5.0 and 1.2 (events/10,000 medical inpatients) before and after the intervention, respectively. No new incident thromboembolism was documented to suggest that dosage reduction resulted in reduced efficacy.

Discussion: Although there are some limitations to this study, this retrospective data provides useful supportive evidence that enoxaparin dosage modification in at-risk patients is effective in reducing serious hemorrhagic events. Unfortunately computerised records of the numbers of patients on anticoagulant therapy are not available to us. While it is possible that some variation in the proportion of total patients treated with enoxaparin occurred, in the authors' view this is more likely to be an increase in enoxaparin therapy in more recent years, rather than a decrease. Each of the 3 events which occurred after introduction of the revised treatment strategy was associated with inappropriate dosing and non-compliance with the treatment strategy. This provides compelling evidence that treatment algorithms must be coupled with targeted education of hospital medical staff to achieve benefits to patient safety.

Poster 203

Understanding Effective Clinical Handovers: A Multidisciplinary Approach

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This paper represents the first in a series of studies which examine the communication process that occurs between health professionals during clinical handover. Communication during handovers has often been observed to be poor. To date much of the communication research into team functioning has typically focussed on how individuals engage with one another in the operating theatre environment (e.g., Lingard, Reznick, DeVito & Espin, 2002; Carthy, de Leval, Wright, Farewell, Reason, 2003) or in the emergency department (Eisenberg, Murphy, Sutcliffe, Wears, Schenkel, Perry & Vanderhoef, 2005). Using Tajfel's (1978) social identity theory (SIT) we investigate the importance of the health professionals' social and professional group identities, cognitions and behaviours, in clinical handover situations.

In this first study we examine the elements of effective and ineffective clinical handovers from the health professional perspective. Twenty health professionals from different disciplines (medical, nursing and allied health) participated in one-on-one interviews to discuss clinical handover procedures. Health professionals discussed their views on effective and ineffective handovers across a range of handover situations (post-take ward rounds, nurse handovers, and case conferences). We addressed two key research questions: 1) What do different types of health professionals from different disciplines perceive as important components in clinical handovers, and 2) Do different types of health professionals vary in their interaction needs, goals, and behaviours during a clinical handover? Results are discussed in terms of the differences in the clinical handover practice across health professional disciplines and the value of making health professionals aware of these differences in order to facilitate an improved communication process and develop strategies for ensuring effective and best practice handovers.

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Poster 205

A Model To Ensure Comprehensive Assessment And Treatment Plans Based On Best Practice Guidelines In Dentistry With An Evaluation Tool

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The increasing use of electronic record-keeping in clinical practice provides an opportunity to ensure the continuous development of a systematic, comprehensive and consistent assessment approach. This is essential in multi-centred Dental Practices with many full and part-time clinical staff.

Developing the appropriate prompts with clinicians on the assessment custom screen should ensure a consistent approach to the dental needs of consumers and identify those 'at risk'. This paper provides examples of electronic custom screens that have been developed for the assessment of new patients, recall patients and patients attending for emergency care.

Critical to a comprehensive assessment screen is the education of clinicians on best practice guidelines to ensure the treatment plan chosen following assessment provides the best possible outcome to the patient. Keeping abreast of the many guidelines published on dental care requires time and resources and in this model, the development of a Clinical Governance Committee with this function provides this resource to clinicians.

Literature reviews on the introduction of best practice guidelines into clinical practice show it is not without difficulty. and therefore clinical auditing for compliance requires appropriate education and feedback. For this reason, the evaluation tool developed with this model to assess compliance to agreed standards of both assessment and treatment planning is dynamic in the way it is used and not just a 'tick-box'.

In using the evaluation tool with its scoring system of completed assessment screens and the subsequent treatment plans chosen, areas of feedback to the clinician having published guidelines include:

- Caries risk assessment
- Periodontal assessment and appropriate ongoing care
- Appropriate selection of the type of radiograph for diagnosis
- Appropriate treatment of the diagnosed caries on the radiograph - preventive or restorative treatment
- Medical history implications for dental care
- Appropriate antibiotic prescribing
- Recall frequency based on risk factors found at assessment.

In conclusion, electronic custom screens provide an important tool to ensure comprehensive assessments but in order to ensure that safe and quality care results, an evaluation tool of completed assessments and ongoing treatment plans must not just cover the required medico-legal requirements but feedback to clinicians on variances from best practice guidelines to complete the quality cycle.

Poster 207

The development of clinical practice guidelines for the management of delirium in older people in Australia

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Background: Delirium is a serious condition with significant mortality and morbidity that frequently occurs in older patients who have pre-existing cognitive impairment – a patient group that is increasing in prevalence. However delirium is often under-recognised or overlooked, particularly in those who present with 'hypoactive' delirium, the delirium subtype which predominantly affects older people.

In 2006, the Australian Health Ministers Advisory Committee's Care of Older Australians Working Group (COAWG), now Health Care of Older Australians Standing Committee (HCOASC) and the Australian Department of Health and Ageing commissioned development of evidence-based *Clinical Practice Guidelines for the Management of Delirium in Older People*. The aim of the guidelines was to provide a series of recommendations to guide clinical assessment, prevention and management of delirium in older people across acute, subacute, residential care and community care settings in Australia. Although delirium guidelines had previously been developed in some local health settings across Australia, the current project was intended to establish the first set of national guidelines specifically for the Australian health care environment.

Methods: A multidisciplinary Delirium Guidelines Expert Working Group (DEWG) was constituted and met to discuss content development and formatting of the guidelines. This process was overseen by the COAWG-appointed Delirium Consultancy Steering Group (DCSG). Once key decision nodes in delirium management were identified a rigorous literature review was undertaken based on methods outlined by the NHMRC. Development of recommendations was informed by the levels and quality of available evidence around decision nodes and confirmed by DEWG within a face-to-face meeting. An international external review of the draft guidelines, using the Appraisal of Guidelines for Research and Evaluation instrument was undertaken. The final document was reviewed and endorsed by the DCSG and the HCOASC.

Results: A number of key messages have been incorporated into the guideline recommendations, including:

- A structured process for screening and diagnosing delirium should be established in all health care settings.
- Delirium is usually precipitated by an underlying acute health condition, which in most cases can be identified with careful assessment and investigation.
- Increasing age, dementia, visual impairment and severe medical illness are important risk factors for delirium.
- Preventative environmental and clinical practice strategies should be incorporated into the care plan of all older people across all health care settings.
- Non-pharmacological strategies such as environmental and behavioural strategies should always be utilised as a first-line measure to manage the symptoms of delirium.
- There is a role for antipsychotic medications in the management of significant behavioural or emotional disturbance in the delirious patient; however caution should be exercised in their prescription to older people.
- The guidelines reflect the current available evidence base and its limitations. However there is a lack of research in delirium care, particularly in the areas of screening for delirium and symptom management. The guidelines also highlight a lack of research in Australian settings, especially research that focuses on the needs of the ATSI population, and those in residential and community care settings.

Poster 219
Training for Quality: learning from the VET sector

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Introduction: This paper describes the evolution of a professional development programme for staff working in allied health.

When developing a training programme it can be difficult to develop generic skills and competencies that all staff can follow to develop in the area of quality improvement.

Method: This programme follows many of the key skills and competencies from the Australian VET (vocational education and training) sector and adapts these for an allied health care setting. It explains how this adaptation is made and what the key components of training and assessment can be.

Results: A core set of key knowledge and competency areas was defined for all staff. These could then be adapted further for each area of allied health. Staff now have a clear picture of the different aspects of quality and knowledge and competencies that could be expected for each area. Uptake and participation in each of the areas has grown with the launch of this programme.

Discussion: Competency-based training is a new and often daunting issue in health care and more so in an area such as quality or clinical governance. This paper develops strategies to deal with this challenge.

Many of the issues and findings from the programme can be transferred to medicine and nursing and would be helpful for education and quality staff when considering this type of professional development.

Poster 227
Consumer Leadership

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Introduction: The importance of leadership to achieve change is well known, as is the role of consumers in healthcare, however little is known about consumer leadership in healthcare or the opportunities for consumers to provide leadership in healthcare quality and safety. This project was conducted to: define consumer leadership and the characteristics and skills of consumer leaders; and identify models for developing leadership capacity and opportunities for consumer leaders to work with health services to improve quality and safety.

Methods: A systematic literature review was conducted to identify research evidence regarding leadership and consumers and health. This was widened to include advocacy, activism and participation when a very small number of research-based studies were identified. A targeted consultation of semi-structured interviews, with people from health, disability, financial and environmental sectors was conducted to identify characteristics of and support required for consumer leadership, and models to enhance consumer leadership and health service capacity to work in partnership.

Results: The literature identified that consumer leadership is organic, emerging from a community of interest, and acquired through recognition of the group. Consumer leaders have the ability to articulate the shared vision and energise others to change the status quo. Consumer leadership, like other forms of leadership, can be developed through leadership development programs, mentoring and peer support. Health consumer leadership is embedded in consumer participation in health, with participation providing a number of opportunities for consumer leaders to work with health services.

Discussion: The concept of consumer leadership was under-represented in the research literature, however there was a vast array of descriptive literature that, with the consultations, provided consensus as to the nature, characteristics and purpose of consumer leadership. The requisite conditions for effective consumer participation in health were also clearly identified. Guidelines for health services to engage with emerging health consumer leaders have been developed.

Leadership development programs are a widely used strategy to increase leadership capacity in both business and community sectors. A consumer leadership-development program with mentoring and a peer support network are currently being developed.

Poster 232

Medical leaders in Clinical Governance: The Role of a Head of Unit in 2006

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Until the early 1990s, hospitals were lead and controlled by non-clinical administrators. In the mid-1990's, John Hopkins Hospital (US) and Guy's Hospital (UK) developed clinical directorate models, lead by clinicians managers.

Through reviewing current literature, incorporating trends within medical colleges to adapt the CANMeds Performance management framework for medical professions, and as an evolution of the organisational requirements of a head of unit in a major health service, the organisation has developed the following role description for a Head of Unit for 2006.

There are four key components to the role of a Head of Unit:

1. Ongoing medical expert within their field: ensure leading edge, evidence-based practice within the unit; maintain leadership in their research, academic, and scholarly pursuits relating to their specialty; provide advice and expertise to the organisation relevant to their specialty

2. Leadership of the specialty within the organisation:

- Contribution to the organisation's strategic direction and clinical service plan
- Contribution to the unit's service plan
- Professionalism, including health advocacy for the patient
- Communicator/ collaborator/ facilitator

3. Management of their unit within the organisation:

- Service provision: including waiting list management, ensuring team functioning, ensuring continuity and coordination of the service
- Human resource management – senior and junior medical staff, and non-clinical staff where relevant. This includes the appointments, credentialing, scope of practice delineation, and performance management
- Clinical Governance (to ensure the six dimensions of quality – safety, effectiveness, efficiency, appropriateness, access and acceptability are addressed)
- Financial management
- Teaching/ research
- Ethics and legislative requirements
- Occupational Health and Safety
- Role within the organisation in an emergency/disaster

4. Contributing to overall leadership of the organisation: actively and enthusiastically.

This role has been implemented since mid-2006, written into position descriptions and actively performance-managed against the distinct areas. Discussion has surrounded the barriers/ challenges to implementation (including a predominance of sessional medical staff, overcoming a culture of autonomy and professional independence, and varying formal education in management and business training). This has been balanced with the organisational benefits for clarity around the responsibilities for Heads of Units in service/ patient flow issues, and for individuals in the clarification of expectations.

Importantly, the above roles of a Head of Unit can be adapted/ modified for any health service within Victoria/ Australia, and potentially internationally.

Poster 235

St Vincent's Hospital Toowoomba's response to a Pandemic Influenza H5N1 Threat, and derived recommendations

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The threat of an avian H5N1 influenza pandemic is considerable. The world health organisation

(WHO) considers the avian influenza A/H5N1 virus a substantial public health threat with pandemic possibility. Avian influenza has been estimated to have a potential mortality rate of more than a hundred million people and having had 258 confirmed human infections to date with a mortality rate greater than 50%, the risk of human-to-human transmission through viral mutagenesis is of dire significance. To date the most effective defence against an influenza pandemic is a directed vaccine to elicit a specific immune response toward the strain or strains of the influenza virus. However there is no evidence that vaccines or antivirals used in the treatment or prevention of such an outbreak would decrease morbidity or mortality. Therefore it is widely concluded that good infection control practices and social distancing form the mainstay of preventative measures. Key infection control recommendations include admission to an isolation ward, cohorting of confirmed cases with professional public health authorities and regional health departments, adequate hand hygiene with antiseptic solutions, the use of N95-type masks, non-sterile disposable gloves, aprons and eye protection. Use of patient-exclusive clinical instruments, daily disinfection of the hospital ward, implementation of measures to reduce risk of needle stick injuries and eye splashing, and reinforcement of appropriate sampling and transport of blood and other corporal fluids, are also highly practiced through good hospital pandemic policy. This report discusses the effectiveness of pandemic influenza policy derived by St Vincent's Hospital Toowoomba in effectively controlling a pandemic influenza H5N1 threat originating from Vietnam and presenting to the hospital Emergency centre with cold and flu symptoms. The report concludes that pandemic policy was effective in directing course of action in mainstay, forming effective revaluation but was not completely utilised by staff. Recommendations included further pandemic-directed education, signs, and PPE made available for staff and clients in the emergency department.

Poster 237

Redesigning models of care to meet the needs of people with Osteoarthritis (OA) of the hip and knee

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Background: There is international and local evidence that opportunities exist to improve implementation of evidence-based care and to better meet the expressed needs of people with OA hip and knee. There is increasing demand and long waiting lists in public hospitals for surgical assessment and joint replacement surgery.

The Aim of this project was to develop a musculoskeletal co-ordinator led Osteoarthritis (OA) Hip/Knee Service Model that would improve: documentation of recommendations for evidence-based interventions, support for patient education and condition self management, and integration between acute ambulatory and community-based service providers.

Methods: In 2004, the Victorian Government Statewide Elective Surgery Program funded the creation of the Hip and Knee Multi-Attribute Prioritisation Tool (MAPT), a patient-administered questionnaire that supports evidence-based, clinically reliable prioritisation of OA care, and redesign of ambulatory service delivery. The Commonwealth Government in the same year supported development of an evidence-based clinical pathway for management of hip and knee OA (OACP) to inform service redesign. Together these initiatives have led to development of the Melbourne Health OA Hip/Knee Service that implements the OACP and performs prioritisation assessment. A musculoskeletal coordinator provides the focus of the service. The service is supported by a number of clinician decision support strategies, patient education and administrative electronic documentation tools. Service mapping of community partners has been used to provide stepped care referrals for rehabilitation and other community health interventions. Service evaluation has included: a 'before and after' audit of adherence to OACP recommendations for pharmacological and non-pharmacological care, documentation of service referrals for previously unmet need, general practitioner and patient satisfaction with the service.

Results: The roles of the MSC and service mapping will be outlined. Evaluation has demonstrated improved documentation of: patient assessment (for e.g. documentation of NSAID risk pre-3.7%, post-100%, falls risk pre-7.4%, post -100%, BMI pre-14.8%, post-98.1%), interventions (e.g. use of simple analgesia pre-25.9%, post-82.6%, physiotherapy pre-11.1%, post-90.4%, dietician assessment pre-18.5% post-71.4%). Of 104 patients referred to the service by orthopedic surgeons and rheumatologists, all received education and 59.6% a goal-setting care plan. Service referrals included physiotherapy (90.4%), hydrotherapy (63.5%), dietician (63.5%), arthritis self-management program (18.3%) and falls clinic (9.6%). Of 72 patients referred by general practitioners (GPs), 59.7 had inadequate medication knowledge, and 29.2% had had conservative therapy in the previous 18 months. Patients reported experience was very positive. GP response rate was low, however 8/9 responses indicated the standardised letter was useful and 7/9 found the assessment guide useful.

Conclusion: The OA Hip/Knee Service provides a comprehensive chronic disease management approach to meet patient perceived needs and support optimal health outcomes for patients with hip/knee OA. Early evaluation confirms significant unmet need in patients referred for acute care specialist assessment. The service has improved documentation of adherence to OACP recommendations for OA care and has identified a cohort of patients for whom surgical assessment could have been avoided.

Poster 247

Improving Patient Safety Through Surgical Simulation: Finding the Evidence to Support the Uptake of the Fundamentals of Laparoscopic Surgery Program by Advanced Surgical Trainees

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Introduction: The introduction of laparoscopic surgery has lead to an increase in morbidity[1]. Simulation training programs have been developed to reduce surgical errors; however, few programs have been validated. The evaluation of simulation training programs is expensive and takes years; one option for Australia is to examine programs that have been successfully validated overseas. The Fundamentals of Laparoscopic Surgery (FLS) program was developed to provide advanced surgical trainees with a tool that can measure cognitive, clinical and technical skills. Simulators that can provide objective measures of surgical skills may reduce morbidity providing a bench-mark standard that surgeons must achieve before being certified. Several obstacles have been identified that could affect the successful roll out of the FLS program in Australia, including cost; timeframe; access and support.

Methods: To combat the obstacle of cost, an educational grant was secured that covers the first 100 trainees to take part in the program. To overcome the issue of access in Australia, a simulation centre has provided an FLS trainer box for every Queensland Health hospital with advanced surgical trainees and trained Proctors in almost every Australian capital city. This gives trainees in Queensland the opportunity to practice whenever convenient in their place of work and testing is flexible around the trainee's schedule. It is hoped other hospitals in Australia will follow the Queensland example to provide easy access for their trainees. The centre is recruiting surgeons with expertise in laparoscopic surgery to supervise advanced surgical trainees in the FLS program.

Results: FLS trainer boxes have been placed in 12 Queensland sites and the remaining 3 sites will be completed by April 2007. Several issues have arisen from the roll out of FLS program. These include lack of support from some surgeons; the method of delivery may be too flexible when compared with USA model; and there are some differences in the techniques used in Australian surgery. Fitting yet another training program that was not mandatory and that is clearly designed for American surgical trainees, into already time-poor schedules is a major issue for trainees. The FLS program roll out across Australia and New Zealand has therefore taken considerably longer than expected.

Discussion: The use of well designed simulation programs has the potential to reduce morbidity by providing training that does not directly endanger patients. Even though FLS has been validated in the USA we still need to determine if it is suitable for Australian surgeons. Even with the evidence from the USA trials of FLS and financial incentives provided by the free course the uptake of FLS has been slow. Trainees will always be reluctant to take on extra training unless the benefits are clear to them. Mandating the course would allow for a complete evaluation; however, it is difficult for professional colleges to mandate simulations programs before we have the evidence that they improve clinical performance and reduce morbidity.

1. Tang B, Hanna GB, Carter F, Adamson GD, Martindale JP, Cusdchieri A, Competence assessment of laparoscopic operative and cognitive skills: Objective Structured Clinical Examination (OSCE) or Observable Clinical Human Reliability Assessment (OCHRA). World J Surg 2006;30;527-534

Poster 260

WAASM - Mortality audit extends beyond data collection

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The Western Australian Audit of Surgical Mortality (WAASM) is a clinically-led peer review of deaths in all Western Australian hospitals that occur whilst under the care of a surgeon. Consultant surgeons self-report on the cause to death and detail any areas for consideration, of concern or adverse events. Cases are peer-reviewed and in approximately 15% of cases a further detailed case note review is undertaken by a second consultant surgeon. Surgeons receive detailed feedback on their own cases and all surgeons receive de-identified copies of case note reviews where it is thought there are lessons to be learned. WAASM is protected by qualified privilege.

An area for consideration is where care could have been improved or different, but is recognised as an area of debate. An area of concern is where care should have been better and an adverse event is defined as an unintended 'injury' caused by medical management rather than by disease process, which is sufficiently serious to lead to prolonged hospitalisation or to temporary or permanent impairment or disability of the patient at the time of discharge, or which contributes to or causes death. Surgeons and assessors also consider whether the incident contributed to the death of the patient, whether it was preventable, and who was responsible.

From 2002 to 2005, 1610 deaths were reviewed under the WAASM process. In 63 (4%) cases, assessors reported that an adverse event caused death and 17 (1%) of these events were considered preventable. These figures are similar to other international reported studies[1,2]. Assessors reported a further 150 (9%) areas for consideration and 144 (9%) areas of concern.

Through this review process WAASM identifies deficiencies of care that go unreported through existing systems. These include delays, missed diagnosis, staffing problems, transfer problems, technical problems with surgical procedures and patient-related factors. WAASM identifies recurring deficiencies of care across hospitals and specialities and with the support of the Western Australian Department of Health has brought these to the attention of the hospitals and clinicians. WAASM data indicated insufficient compliance with DVT guidelines and organised a symposium on DVT management. WAASM data identified inconsistencies and complications in patients admitted on oral anticoagulants. A meeting was organised to bring together physicians and surgeons to discuss the critical issues pertaining to perioperative anticoagulant management and to update surgeons regarding changes to the management of heart disease and the related use of anticoagulant therapy. WAASM has identified recurring problems with fluid balance management and is currently organising a workshop on this topic.

WAASM has demonstrated that surgeons have changed their practise through ongoing peer review audit and pertinent feedback. WAASM is part of the ANZASM project.

(1) Bellomo R, Goldsmith D, Russell S, Uchino S. Postoperative serious adverse events in a teaching hospital: a prospective study. MJA 2002; 176(5): 216-218. (2) Vincent C, Neale G, Woloshynowych M. Adverse events in British hospitals: preliminary retrospective record review. BMJ 2001; 322: 517-519.

Vincent C, Neale G, Woloshynowych M. Adverse events in British hospitals: preliminary retrospective record review. BMJ 2001; 322: 517-519.

Poster 262

Quality Approach to Managing Assault Presentations to the Emergency Department

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Domestic violence is now recognised as a significant issue in Australia's healthcare system. The cost to the individual and the wider community is shown to be significant (Laing 2002). The hospital presented is in a community that has one of the highest rates of domestic and family violence in the country. Indigenous women present to the subject emergency department at much higher rates than any other group. Indigenous women also present to the hospital with assault-related injuries at far higher rates than any other group.

A medical file audit of women presenting with assault-related injuries showed an inconsistent response by health professionals. In response to these findings hospital-wide Best Practice Guidelines were developed. An ongoing domestic violence training strategy that involved all health professionals was also implemented. Individual ward strategies were also developed to reflect the types of presentations that most commonly occur on each ward.

File audits results post-implementation of the domestic and family violence strategy will be presented. The implementation process will also be critically discussed, including the challenges of a hospital wide implementation.

Laing, L *"Economic Costs of Domestic Violence: Literature Review"* Australian Domestic & Family Violence Clearinghouse Topic Paper 2002

Posters: Systems Change and Leadership

Poster 8

"Better Workplaces" Leadership Development Program

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Introduction: Leadership Development is a major strategy for driving reform within Queensland Health. The Better Workplaces Culture and Leadership Development Program (the Program) aims to achieve improvements in the leadership capabilities of Queensland Health leaders that will bring about real improvements in clinical care.

Leaders have a huge impact on the culture and climate of a workplace, this in turn influences how well individuals and teams perform, which ultimately affects patient outcomes. Research indicates that improvements in the quality of clinical care are positively associated with an organisational culture that emphasises leadership, teamwork and innovation (Berlowitz, Young et al 2003). Clinical leaders have a complex role in balancing both clinical and leadership responsibilities. The Program has been particularly designed to support the development of senior clinicians in their leadership responsibilities, especially in relation to people management and personal development.

Method: The Program being implemented consists of a range of initiatives for executives, managers and supervisors, including:

Inspiring Executive Leadership Residential Workshops (catering for over 600 Executives and Senior Clinicians); 360-degree feedback with a face-to-face debriefing session; Executive coaching available to over 600 executives; Development of training modules contextualised to the Queensland Health environment; Web-based support for leaders; Leadership Development Workshops for Managers and Supervisors (catering for over 4000 Queensland Health Managers and Supervisors).

Queensland Health has engaged the Hay Group and the Queensland University of Technology to support the implementation of the program.

Results:

To date:

- 25 executive leadership development (clinical and non-clinical) residential workshops conducted. 491 participants (to date), 80% of participants rated the workshop overall as excellent or good.
- 372 executives have undergone the 360-degree feedback process and received a feedback report and a one-to-one feedback debrief session with a consultant from the Hay Group.
- 44 executives (to date) have accessed executive coaching services from the Hay Group.
- 17 manager and supervisor leadership development workshops conducted. 418 participants (to date), 77% of participants rated the workshop overall as excellent or good.
- Leadership Development Website established.
- QUT have commenced drafting training materials contextualised to the Queensland Health environment.

Discussion: The Program encourages Queensland Health Leaders to be decisive, productive, responsive, and innovative. It focuses on lifting the performance of Queensland Health leaders by setting the standard of leadership performance and regularly measuring this performance through 360-degree feedback, whilst providing ongoing development via coaching, training and development and sharing of current leadership information.

Poster 18
Networking for Change

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In 2001 NSW Health established 3 paediatric networks, which incorporated metropolitan and rural partners, linking each local paediatric unit with one of the three specialist Children's Hospitals in NSW. The aim was to improve the quality of care by increasing the availability of support, including special clinical outreach, professional training and development, smoother transfer and referral between services and shared treatment protocols and guidelines. The Networks each worked across Area Health Services borders to implement state mandated clinical guidelines and 2004 saw the merger between NSW Area Health Services. This resulted in greatly expanded regions, and, in the area concerned, there was a total of 5 different groups working to produce paediatric policies within their specific geographic area. To ensure the consistent delivery of high quality health care it became imperative that a coordinated approach to area-wide policy development occured across the region. This presentation will describe the process undertaken to develop a formal method of paediatric policy consultation and development to an area health service the size of England.

Method: Funding was secured to employ a Project Officer to identify, develop and implement assessable and acceptable area-wide policies, guidelines and standards. One of the first tasks was to commence a process of introduction and consultation to ensure acceptance across the area. In the initial stage, senior health staff were asked to delegate representative staff from across their geographic area, to ensure stakeholder engagement. The resulting gathering of stakeholders ensured full representation and support across all levels. From this group a small working party was formed to determine the details of the policy, before returning to the stakeholders for further input and consultation.

Results: From the initial invitations, a group of 31 topic experts/stakeholders were assembled for a teleconference using 14 phone lines for the 1 1/2-hour meeting. The stakeholders provided feedback that will be used in developing further policy, and the initial policy served as a template for further policies. Findings included the need for a range of templates that could be used in different stages of the process.

Discussion: Despite reservations about the ability of a teleconference of such size to achieve consensus, the process was very successful, providing good direction for the working party. Lessons learned from the process have been used as a template for further area wide policies and protocol development with the establishment of an Expert Consultative Committee or Reference Group. Findings from this process will be available in July.

Poster 21
Equal Access: Health Service Cultural Diversity Plans

Lidia Horvat
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Victorian Government policy recognises that health services face particular challenges in ensuring that Victorians with a low level of English proficiency or from culturally and linguistically diverse backgrounds enjoy the same level of access to high quality services as the broader community. Over 40 percent of Victorians were either born overseas or have at least one parent born overseas. In responding to these challenges, the Victorian Government and the Department of Human Services have introduced a key policy initiative that requires all health services to develop a Cultural Diversity Plan and establish a Cultural Diversity Committee. This committee will act as the focal point for the development, implementation, monitoring and reporting against the plan. From 2007, every Victorian health service is required to report annually on the accomplishments of the plan through the quality of care report.

The purpose of the Health Service Cultural Diversity Plan is to provide greater direction within health services in responding to the needs of their culturally and linguistically diverse (CALD) communities. Health services must address a set of minimum reporting requirements and areas of action, as identified within the department's *Cultural Diversity Guide.* These criteria provide a broad framework, which allows each health service to determine how it will respond to its local CALD communities through a strategic coordination and planning process.

The plans will assist health services to: identify and understand people and their needs; establish effective processes to work in partnership with ethno-specific agencies and CALD communities; respond appropriately to people's cultural and linguistic needs; equip staff with cultural competencies and build a culturally responsive workforce; increase the ability to respond to quality and improvement for CALD patients and clients; and, develop a greater sense of awareness of diversity issues across the service.

At a broader level the plans are designed to provide an evidence base to: identify key result areas and system-wide strategies to improve health service responsiveness to CALD issues; capture and promote best practice 'multicultural' examples across the health service; provide a central coordinating mechanism for responding to and initiating CALD planning at the local health service level; support the Victorian Government's whole of government reporting framework on responsiveness to cultural diversity; and importantly, integrate CALD issues into the broader planning mainstream of health services through the quality and safety plan framework, quality reporting requirements and appropriate service delivery plans.

Cultural Diversity Plans have been overwhelmingly supported by health services across Victoria. The impact and outcomes of the plan will be reported in the 2006-07 Victorian Quality of Care Reports. In the longer term, the plans will provide an evidence base to define and measure progress in health service responsiveness and equal access for CALD communities.

Poster 22

The 'In' in Interdisciplinary Care

Jill Exton, Alyson Svenson, Janet Weir-Phyland
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Timely and efficient collation of information and its communication are the cornerstones of good patient care. Differences in models of care serve to illustrate the difficulty faced by hospitals in achieving this. At this subacute rehabilitation and aged care facility multi-disciplinary assessment and care planning has long been accepted practice. A review of our processes, however, identified several issues:

- Assessment processes were often duplicated resulting in staff inefficiencies and patient frustration
- Some initial screening assessments lacked sufficient comprehensiveness and were often not revisited
- Multi-disciplinary care orders were not always followed through, particularly when not documented in a central point
- Progress notes did not always accurately reflect key patient issues

To address this, an interdisciplinary committee was convened, with medical, nursing, allied health, quality and risk management, education and hospital executive representation. The committee was given the responsibility of coordinating and facilitating an improvement in the assessment and care planning documentation system at the facility.

Following reviews and baseline audits of our practice, a detailed literature review and survey of like facilities was conducted to identify care planning systems that might be applicable to our patient population.

An assessment and care planning document was developed which integrated initial medical, nursing and key allied health assessment information, incorporating mandatory risk screening with prompts for further investigations/referrals when needed. This utilised an interdisciplinary care planning tool for the recording of key issues and management actions which was linked to the interdisciplinary team meeting documentation. The tool meant that information was collated in relevant Care domains rather than having the traditional profession focus. The system was designed to identify discharge issues as well as care needs and included a discharge planning tool.

Key results have been the following:

- Care planning documents more accurately reflected current status
- Improvement in number of care plans considered comprehensive
- Improvement in percentage of allied health orders transferred to care plans
- Evidence that progress notes reflect pertinent patient issues
- Reduction in duplication of patient demographic and subjective history information
- Initial results show that an interdisciplinary team has been able to improve the quality and standard of assessment and care planning documentation to enable provision of safe, quality care.

Poster 43

The power of bottom up networks as a force for safety and quality

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The baseline compliance with many patient safety indicators is low. Intervention using conventional techniques such as academic detailing, disseminating guidelines and protocols, and education programs usually result in improvements of around 10-15% and are generally not sustained.
However, it is not acceptable to tolerate a problem in which only half the patients are receiving correct management, and acceptance of this is widespread. Conventional solutions are inadequate in terms of cost and effectiveness and may be more costly than the problem itself.

The hypothesis will be presented that traditional reliance on re-organisation and extrinsic application of change by decree does not work at the coal-face. Exploiting the properties of complex systems which emerge spontaneously, such as natural networks, and the natural appeal and propagation of appropriately presented and chosen ideas, may greatly enhance effectiveness whilst remaining affordable.

We develop this theme, and discuss the possibilities of natural networks which combine several features of emergent systems including small worlds and scalability. Other novel concepts such as stickiness and the tipping point, conjoined with such network properties, hold promise for an improved focus on patient safety through networks.

Poster 53

A Partnership Between An International Law Firm And An Acute Care Hospital – Evaluation Of A Pilot Program To Provide Pro Bono Legal Services For Cancer Patients

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Introduction: Many people suffering from chronic and life threatening illness suffer substantial burdens in accessing legal services to address concerns relating to the impact of illness and treatment. This paper reports on a partnership between a social work department in an acute care hospital and an international law firm. The partnership was established for the purpose of investigating the legal needs of cancer patients and establishing a pilot (the program) to provide pro bono legal services to meet some of these needs. This paper reports on the processes engaged in to develop, implement and evaluate the program and on the outcomes of the program over a 12-month period.

Methods: A needs analysis was conducted by surveying social workers engaged in assisting patients with legal issues and, based on this, a proposal to provide specific services to eligible patients was made by the law firm. Organisational approval was given following reports to the CEO and Executive. Implementation of the program included engaging key stakeholders in a change management process using an action research and "evaluation on the run" approach[1]. The planning, development and evaluation cycle engaged key stakeholders. All processes and systems were developed in consultation with all direct service providers from both organisations.

Evaluation of the program was conducted by analysis of records kept by both organisations. A survey by questionnaire of social workers was conducted and a qualitative method of analysis was used to identify common themes in their responses.[2] The evaluation included observations made by the legal firm and reports on activities and advocacy the firm engaged in outside of the scope of the program. A decision was made not to survey patients and their families as it was anticipated that referred patients were likely to be extremely ill and receiving complex and demanding treatments.

Results and Discussion: The evaluation reports on the legal outcomes of the program. Forty-five referrals made to the legal firm generated 68 legal matters. These included: Early access to superannuation claims and/or consultations (29); Powers of Attorney completed (17); Wills completed (11); Income Protection Insurance claims and/or consultations (5); Unfair Dismissal consultations (2); On–referral to specialised services (eg, family law) (2); Consultation regarding HECS liability (1); legal consult for a patient's relative (1).

Social workers reported substantial benefits for patients and their families. These included the reduction of significant barriers to accessing legal services. They also reported that distress and burden had been alleviated as a result of services provided. These included financial, social and psychological burdens. Social workers also reported that their learning from the collaboration had enhanced their own practice with consequent benefits to patients and their families. Through the course of the program, the law firm identified significant inequities in relation to taxation law relating to early access to superannuation and engaged in advocacy for law reform in this area. A recent report on the evaluation has made a number of recommendations including one that the program become an ongoing service for patients and their families.

Poster 57

Establishing a Quality Management System; the Catalyst for Redefining an Organisational Culture and Implementing Change

Barbara Knight

Catholic Healthcare, Sydney, Australia

The organisation is a not-for-profit provider of health, aged, and community services in metropolitan and regional New South Wales. Increasing growth across all sectors, but more particularly in residential aged care, required changes to infrastructure and systems and was the impetus for reviewing and evaluating what processes were currently in place. In many cases growth had been achieved by absorbing smaller services into the larger organisation resulting in many diverse cultures and systems. There was a need to promote understanding of the organisation's mission and values and for common systems and processes across all services.

The Quality Management System was introduced using a project management approach. A business case was prepared, presented and accepted. The decision was communicated to all services and received with varying degrees of enthusiasm. Extensive negotiation was needed at all levels to establish a project timeline that was acceptable to internal stakeholders and met the constraints imposed by external review processes. Assessment of current systems and identification of similarities and gaps was carried out through a programme of consultation, workshops and site visits by the implementation team. The same processes were followed in the customisation and implementation stages of the project. Bringing the teams from the communities of care together in workshops demonstrated that in many cases isolation, caused by distance, had led to development of individual processes that met individual needs, and did not in all cases measure the outcomes of care and service delivery. Changes were noted in the characteristics of the workshops as the project progressed. Initially didactic with participants reluctant to be involved, the format became interactive as trust was established, opinions debated and decisions made. Similarly, the corporate support services had traditionally worked independently without consulting each other or the service delivery teams. The process of gathering and sharing of information increased the opportunities for networking between the communities of care and corporate services. It was obvious that a shared perspective on what belonging to a larger organisation meant, was evolving.

Evaluation strategies were built into the project plan; timeframes were met; objectives achieved and the project was completed within budget. Positive feedback was received formally through audits/surveys and committee meetings and anecdotally from many stakeholders. External validation of the success of the project occurred with third-round Accreditation for Residential Aged Care in 2006 with all nineteen sites receiving three-year Accreditation and, in some cases, Better Practice Awards.

While the project was intended to centralise and customise the systems for demonstrating the quality of care and service delivery throughout the organisation, key results from the process included the promotion of a values-based organisational culture and enhancement of a quality philosophy across the services, without loss of individual traditions. The expansion of networking opportunities within and across regions led to understanding and a greater trust between the corporate support services and those directly involved in delivering care.

Poster 83

Queensland, Stay On Your Feet: A Falls Injury Prevention Collaborative Addressing Falls Injury Prevention Across The Continuum.

Rebecca Bell

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Introduction: The Queensland Falls Injury Prevention Collaborative (FIPC) was established in February 2006. Twelve months on there have been a number of significant achievements and key learnings. The FIPC is a clinician-led collaborative that spans both public and private sectors, and the continuum of care from hospital, aged care and community.

Methods: The FIPC was established by the Patient Safety Centre, with calls for expressions of interest (EOI) distributed state-wide. Once a steering committee was established, through the same EOI process, a planning day was conducted to determine the targets for the following 12-months.

Results: The FIPC has 190 members, with a steering committee of 15 members and five working groups. The five working groups represent each of the targets identified.

The targets were:

1. To improve incident reporting indicators for falls and to provide more meaningful reports to clinicians;
2. To improve education/training/awareness programs for both clinicians and consumers;
3. To implement service development initiatives including:
    (a) Specialist falls prevention resource officers
    (b) Community and outpatient falls clinics
    (c) Cross-continuum approaches state-wide (including primary prevention programs).

As a result of these targets several projects have been developed and implemented. A new data dictionary for the reporting of falls incidents has been developed in consultation with clinicians state-wide. A new community safety checklist has been written and will be printed in June 2007. A new "one stop shop" internet site for falls prevention is currently being developed and will be live by July 2007. A satellite broadcast of Professor Stephen Lord was made available to 138 sites in Queensland in February 2007. Business cases have been developed for the implementation of falls prevention resource officers and falls clinics in Queensland and these will be distributed in March 2007. The aim of these is to support districts when applying for funding for these projects. A "Community Integration Supplement" of best practice guidelines is currently being re-written and will be printed in July 2007. The launch of the collaborative in August 2006, attracted over 120 participants.

Discussion: The key learnings from the last 12-months have been that a central support officer for the co-ordination of collaborative activities has been instrumental in the support of these activities. However, the working groups need to be increasingly self-sufficient in order to be sustainable in the long-term despite any restructures that may occur. This year will focus on completing existing projects as well as the start of new work including providing more continuing education opportunities for clinicians, supporting clinician-led research to provide a greater evidence base for falls injury prevention and rolling out more equipment and to ensure implementation of falls injury prevention strategies moves from theory to practice.

Poster 85

Using functional status outcomes of hospitalised older people as indicators of healthcare quality

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Introduction: Older people in acute care environments suffer a functional decline. Cross-sectional prospective studies demonstrate that 3.2 to 75 percent of older people aged 65 years or over admitted to general medical wards decline in their performance of activities of daily living, instrumental activities of daily living and cognitive and/or mental status. The interaction of 1) age-related changes 2), hospital structures (e.g. the environment) and care processes, and 3) bio-psychosocial effects of acute illness, predispose older people to geriatric syndromes such as falls, incontinence, delirium, and malnutrition. These syndromes can precipitate functional decline and poor outcomes such as higher rates of falls, skin breakdown, and increased length of stay, readmissions and mortality in older people when they are admitted to hospital for an episode of acute care. Functional status maintenance is a major indicator of the quality of care for older patients in acute care environments. The purpose of this study was to explore the nexus between functional status assessment, management and health outcomes of older people admitted to the acute care environment.

Methods: An observational study was undertaken to explore how the functional status of older hospitalised in-patients was assessed and managed in a general medical ward located in a tertiary hospital in Melbourne, Victoria. Participants were aged 65 years or more (and Aboriginal or Torres Strait islanders aged 45 years or more). Data were collected regarding the assessment and management of functional status of older people by members of the interdisciplinary team. Patient outcome data including discharge destination, length of stay, readmission rates and adverse events were recorded as end-point measures to identify the impact of a decline in the functional status of older people. This is the first of a series of studies that investigate functional status as a major indicator of the quality of care for older patients admitted to acute care environments.

Results: Findings are discussed in terms of patient variability, the hospital environment and patient care processes. Functional decline was investigated in relation to patient length of stay in hospital, rates of readmission, discharge destination and predisposition to adverse events such as falls and pressure ulcers, and patient mortality rates.

Conclusion: Functional status has been identified as a precursor to a variety of patient outcomes for older hospitalised patients. There needs to be a change in the environment of care so that functional status management, rather than adverse events, drive health practices to promote early identification of older patients at risk of sub-optimal functional outcomes.

Poster 88
Measuring Program Compliance Using Feedback Data And Benchmarking

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The organisation undertakes internal program reviews as part of its quality plan and framework. The aim of the internal program review is to review two to three programs per year and prepare a report to the Board of Management Audit Sub -Committee.

The objectives of the review are to:

- gather information to guide continuous improvement of program delivery.
- scope financial status of the program.
- gather feedback from consumers and stakeholders regarding their satisfaction with the program.
- measure program compliance with both LCHS standards and recognised national standards.
- benchmark against other organisations with similar programs.
- measure program compliance against agreed Funding & Service Agreements, including reporting.

The outcomes are to produce a report and recommendations to guide future planning within the organisation, comply with contract performance targets and to implement the recommendations from the report.

There are a number or roles and responsibilities including the Sponsor of the review (the Director of the program area), the Facilitator (Quality Manager), Program Liaison (Program Manager) and the Review Panel (3 staff nominated from other program areas). The Review Panel are provided with training and background material and are supported through the process by the facilitator. Program staff are required to complete information in relation to the program standards and attend the review day to provide additional information as requested.

The program review provides an opportunity for program staff to communicate the program strengths and identified areas for improvement. The program reviews have been conducted over the past 3 years and have provided many opportunities for improvement and have identified best practised in some programs.

The review process takes approximately three to four months, with a report to the audit sub committee at the end of this time. An evaluation of each review is conducted at the completion of the review with all participants being invited to complete a survey. An action plan is developed by the Program from the recommendations.

Areas for program improvements have included identifying consumers are not provided with adequate information on entry to the service. This was identified over a number of reviews - a new consumer information brochure and process were implemented. Duplication of services was identified and this was rectified. Volunteer program was identified as not being supportive of volunteers. New processes for support and induction where implemented to this program.

Poster 89

Implementing Electronic Medications Management In A Private Hospital

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Reducing medication-related errors associated with hospital admissions is a key element in improving patient care, decreasing length of hospital stays and controlling overall health costs.

According to Wilson et al, in *The Quality in Australian Healthcare Study* (*MJA* 1995), 16% of patients have an adverse medication event from their hospitalisation, with 51% of such events classified as highly preventable. To this Bates et al (*JAMA* 1995) add that 56% of medication-related errors occur at the prescribing stage, 6% at transcribing, 4% at dispensing and 34% at administration. These errors not only impact patient wellbeing, they also result in 'wasted' time from pharmacists and nurses in securing a legible, complete or safe order.

Electronic medications management (ePrescribing) provides a systems approach to dealing with these issues, encompassing doctor prescribing, pharmacy review and dispensing, and nurse administration. While few people disagree with the goals of electronic medications management, implementing such a system requires more than a focus on clinical statistics. Global experience has shown that an essential part of any ePrescribe implementation is a strong focus on change management.

From a human behaviour perspective, implementing electronic prescribing involves significant changes to work habits that are often ingrained from years of clinical practice. In the case of specialist consultants, these workflow changes are magnified in the private hospital setting where there is no hierarchy of junior doctors to input orders. Attempting to change/challenge individual workflow habits with a new, unknown system can easily lead to defensiveness and negativity if the system doesn't meet expectations.

Essential to any implementation of electronic medications management is a multi-faceted strategy that includes doctors, nurses, IT support, administrative leadership and clear communication. This strategy must then be grounded in a broad change management plan (for example, Kotter's eight-stage change model).

Successful implementation is dependant on numerous factors. For doctors ease of use and workflow efficiencies, combined with the influence of clinician champions is vital. Doctors also need to be assured of nursing competence and confidence in the system, and nurses themselves need to feel confident and competent in using ePrescribing for regular medication administration.

Backing up the primary healthcare team should be an IT infrastructure that is stable and integrated with other hospital systems; a clear plan for communicating the vision for electronic medications management; and critically 100% executive support. Continuing training and support, with the offer of one-on-one support is vital to the ongoing success.

Though in its early days now, ePrescribing is likely to become the standard medications management system. Learning lessons from the pioneers in this field will be essential for smooth transition to better patient outcomes in the future.

Poster 90
Clinical Governance and Peer Review

Donna Stinchcombe, Christine Foley
Holy Spirit Northside Private Hospital, Brisbane, Australia

In early 2005, an acute Private Hospital undertook a number of initiatives to improve patient safety within an integrated risk management framework within the Organisational Governance Frameworks. Following the Bundaberg Commission of Inquiry, an approaching organisation-wide ACHS survey, key changes to health legislation in Queensland and its own exposure and experience with Coronial Inquiries the Executive and Quality & Risk team at the hospital set about major changes in the application of Clinical Governance & Peer Review processes. Over a period of nearly two years, the hospital has demonstrated continuous quality improvement in the application of clinical governance systems and processes.

The aim of the initiative was to implement a multidisciplinary peer review process within the broader governance framework that was timely, relevant, engaged the key stakeholders and could demonstrate accountability for patient outcomes and system / clinical practice changes required as a result of genuine peer review and discussion. The changes are embedded within the entire organisation, further demonstrating the sharing of lessons learned within the facility as peer review processes grow and percolate across the facility.

The hospital has made a commitment to its community that every patient who encounters the service should expect to have flagged indicators, complications and deaths case reviewed by a multidisciplinary group of clinicians with their treating clinician. Lessons learned that may flag the need for system, policy or practice changes, greater education or ongoing monitoring of potential risks are now consistently recorded and disseminated to peers. Where more detailed review and follow-up is required, the Quality & Risk Manager role works with Executive to ensure that the accountabilities for governance are followed through and monitored via Executive Risk Meetings, Medical Advisory Committee & Group Quality & Risk Committee.

A customer focus approach with VMO's is critical in engaging them in an important process such as peer review. Being able to present data and provide information to them in a way that is professional and considerate of areas of potential criticism is crucial in facilitating frank discussion about patient safety issues. The impact of peer pressure from VMO's on increasing participation and attendance has been a critical part of the process, with a Quality & Risk Team and Executive that are prepared to work in collaboration with the VMO's to give them the information that they want.

It has been a lot of trial and error with the data presentation and the VMO's are increasingly asking for more information at each meeting as their interest is triggered by certain trends or issues raised in the data. Setting some boundaries and timeframes for the sub-specialists at the outset would have been useful in engaging them, but they at times fell outside of the radar and avoided discussions about how to undertake peer review within a subspecialty or across competitive private facilities but within their own practice group.

Poster 98

A Staged Approach to Optimising Electronic Billing in LANTIS

Sandra Avery, Nasreen Kaadan

Liverpool Hospital, Liverpool, NSW, Australia

Our service has implemented an electronic patient information system, and developed the system beyond any other levels of utility in Australia. From this comprehensive information, we can now automatically produce a full real-time record of services, and claim the appropriate Medicare benefit in a timely fashion.

The focus of this project is the automated billing process.

- Stage 1. Determine the financial data required, and where and how to record this.
- Stage 2. Implement and review processes required to book and capture each service electronically.
- Stage 3 Produce an electronic record of services that satisfies the requirements for Medicare Benefits.
- Stage 4 Pilot a sign-once (for multiple days of treatment) Medicare benefit authority. Enabling the department to lodge a claim on behalf of the patient.

Objectives:

- Improve accuracy of treatment records used for billing purposes
- Reduce the timeframe between end of treatment and issue of billing information.
- Electronic lodgement of claims directly to Medicare (no patient invoicing, or patient burden)
- Eliminate debt write-off due to non lodgement of claims.

Discussion: This project successfully redesigned and implemented procedures for clinical and clerical staff in order to produce a more accurate, and timely record of treatment. This was reliant on diligent audit reporting, and staff compliance to accurately record and capture treatment items.

Through a process of continuous quality improvement and by exploiting the capabilities of our information software, we met the requirements for Medicare Accreditation, Financial Protocols and departmental patient record integrity.

We reduced clerical processing by 30 hours per week, while improving the billing accuracy.

Stage 4 is in pilot. This will allow the patient to sign once only for their multiple treatment days, on their last day. The assignment of benefits enables us to lodge a claim directly with Medicare, so patients will no longer have to lodge the Medicare claim themselves or remit payments to the centre. This redesigned system recoups billings efficiently and reduces patient inconvenience.

Poster 109

Clinical Governance: Achieving a Quality Governance Framework From The Bedside to the Board

Jo-Anne Moorfoot

Southern Health, Victoria, Australia

Introduction: A number of high profile public enquiries, as well as academic studies over the last decade (AQSHC, Duckett study) have focused health industry and consumer attention on the significance and cost of both adverse events and inadequate governance structures and controls. This has resulted in an increased expectation that health services have effective governance systems and processes in place to identify, investigate and mitigate patient safety risks.

Method: In 2006, this large health care organisation undertook an extensive review of the clinical governance structure in place. The previous structure was considered to have developed a narrow focus on adverse events with a reduced capacity for broader quality and safety activities. In addition the permeation of even this narrow safety and quality agenda to all levels of the organisation was inconsistent.

We undertook a comprehensive literature review, including an investigation of existing governance models in Australia & internationally and consultation with key internal and external stakeholders. Subsequently a comprehensive multi-level and integrated system of quality and safety performance monitoring and clinical governance was designed.

Results: This new and broader governance structure addresses all dimensions of quality (VQC) through three domains of activity:

Strategic: Activities designed to drive forward better patient care and to manage organisational clinical risk
Continuous: Assurance that the organisation provides high quality, safe services
Reactive: Responding to internal and external patient safety and quality issues

These domains of activity occur at the level of Unit, Clinical Program, Hospital & Health Service thus creating a standardised & summative Clinical Governance mechanism. Standardised terms of reference, reporting templates, data sets & investigative methodologies have been developed to support activities in these domains. This has resulted in the establishment of quality and safety committees at unit & clinical program level. At an organisational level the Joint Programs Quality and Safety Committee ensures an integrated & balanced, multidisciplinary clinical perspective is maintained whilst the Executive Quality and Safety Committee provides a whole of organisation, executive perspective & function. The EQSC ultimately reports to the Board Quality Committee using the same domains of activity common to all levels of the health service.

The revised Clinical Governance structure was implemented in July 2006. This framework has provided the opportunity for the introduction of a broader range of quality & safety activities vertically integrated through all levels of the organisation.

Poster 115

An Exploration of Symptom Management Practices to Evaluate Quality of Care in an Oncology Setting

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Introduction: A major indication of quality of care delivery in the oncology context is symptom management outcomes. A review of the literature reveals compelling evidence to suggest that cancer patients do not receive adequate symptom management, supportive or palliative care throughout the course of their disease and treatment. The barriers to optimal symptom management in the oncology setting are multifaceted and include: 1) inconsistent assessment, treatment and documentation practices that prevent evaluation of symptom outcomes in a comprehensive manner; 2) measurement of self-report of symptom severity that makes interpretation in the clinical setting problematic for clinicians without the appropriate education; 3) paucity of available tools to measure interventions in terms of their quality and effectiveness; 4) lack of data-generated from the ward that can be fed back to staff and used to support continuous practice development; and 5) the need to change the clinical environment towards goal orientated care. This presentation reports on the first of a series of studies exploring the multidimensional aspects of symptom management in the acute oncology setting.

Method: A participatory observational research design was used to identify the multidimensional influences inherent in the current clinical environment related to symptom management practices. Data were collected in an Australian metropolitan tertiary referral hospital that provides specialist cancer care.

Results: The findings of this study are discussed in terms of barriers and facilitators to optimal symptom management found in the clinical setting. Barriers identified include: the vast majority of patients experienced multiple concurrent symptoms, however, assessment and interventions were primarily targeted at individual symptoms; patient symptom assessments were most commonly conducted in an ad hoc versus comprehensive and systematic manner and documentation of these assessments was frequently incomplete; patient participation in the assessment and management of their symptoms was not routinely sought after or included in documented care plans. Facilitators to optimal symptom management included the range of resources, albeit under-utilised, available to health professionals in the clinical setting.

Discussion: The findings suggest that environmental reform in terms of guidelines for symptom assessment, management and patient participation is a key step to improving the quality and effectiveness of patient care. In addition, a process of continuous feedback of quality data in relation to symptom management should be put in place and evaluated as an intervention to improve and sustain patient outcomes.

Poster 120

The Fall and Rise of an Outer-Metro Emergencey Department

Mark Little[2], Jillann Farmer[1]
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Introduction: In January 2006, the Emergency Department with an annual patient census of 38,000 , was downgraded to a primary service level due to a lack of medical staff. Due to intense community pressure, a full service emergency department was reinstituted under the management of a private medical company. This presentation reviews the impacts and risks of a major service downgrade, and the reestablishment of a public hospital Emergency Department.

Method: A descriptive analysis of the phases of the department's demise and restoration will be presented, including:

- Risk Management strategies employed for:
  - preserving service continuity and service standards in the context of major disruption to services and new team members
  - effectively operationalising a limited-hours department as an immediate contingency
  - Impact this has had on the patients, emergency department staff, administrative staff, the hospital and the community
  - Implementation and ongoing management of the contract which brought a private contractor into a Public Hospital Emergency Department.
  - Leadership and Change Management challenges presented to both the Company and the Hospital Administration.
  - Impact of leadership change on both the Emergency Department and the Hospital

Results:

Results (pre- and post-) that will be presented will include:

- Attendances
- ATS data
- Casemix
- Benchmark performance
- Absenteeism
- Bypass
- Staffing levels

A descriptive account of less tangible markers of improved departmental health will also be provided.

Discussion: This major disruption to services has resulted in significant and positive change for the hospital. We are seeking to present the lessons learned, both from the downgrading of services, and the public-private partnership that has resulted in the department's restoration and resumption of full services at the hospital.

Poster 121

Bridging the Gap – The Orthopaedic Way

Cheryl Kimber[3]
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Osteoporosis contributes significantly to fractures, subsequent disability and premature mortality in Australia. Osteoporosis fractures, commonly occurring at the hip, vertebrae or wrist, are typically sustained with little or no trauma.

In 2004 and 2005 a clinical audit was undertaken in a large metropolitan hospital to investigate the adherence to best practice guidelines to prevent osteoporosis fractures from happening again after a low trauma wrist fracture. This demonstrated consistent poor practice across the two year audit period.

This resulted in the development of a plan to improve practice in the hospital. This consisted of the development of a co-ordinated clinical pathway which was implemented in the fracture clinic. This involved the whole team - the patient, orthopaedic surgeons, orthopaedic nurses, administrative clerks, general practitioners and metabolic bone specialists.

Dedicated change champions and trained healthcare workers were used to prompt and facilitate better diagnosis and management practices, including the systematic initiation of general practitioner and/or specialist follow-up regarding osteoporosis management.

This has resulted in a marked sustainable change in practice in the Orthopaedic Outpatient Clinic.

Results: A significant increase in the identification of actual fragility fractures from 32% to 75% occurred following the implementation of the coordinated clinical pathway. Consequently 60% more patients were commenced on an appropriate osteoporosis management plan in 2006 than 2004 or 2005. Communication with the patient's general practitioner was very poor prior to this practice change however the 2006 data clearly shows a distinct improvement from 30% to 90%. The pathway also incorporated patient education and their participation in the health care journey. Not surprisingly this improved by 50% in 2006.

Discussion: The availability of guidelines does not in itself necessarily change practice. Guidelines have to be developed into protocols and pathways with the roles and expectations of each member of the team clearly stated. These then need to be audited and the results fed back to the team. This approach can then lead to measurable clinical practice improvement. Eventually we expect to be able to measure a reduction in repeat fragility fractures in our catchment area as a result of these interventions.

Poster 131

Informing Consumers: What Are The Challenges In A Hospital Setting?

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It is important and recommended that consumers be given a clear explanation of the potential risks and benefits of any blood transfusion therapy that they may receive. However, blood transfusion is just one part of a patient's care in hospital and the challenge is to inform and engage consumers when they may be at their most vulnerable and receiving large amounts of information about their health. A statewide government transfusion improvement program sought information on this issue to inform interventions that would improve the informed transfusion consent process. This information was sought from the literature and also directly from consumers. The challenges raised during this process include:

- Information about blood is only one part of the overall care information required.
- Different groups have different needs (e.g. acute versus chronic patients, patients versus carers), which may change over time.
- Informing consumers with disabilities, those who are culturally and linguistically diverse (CALD) and indigenous consumers.
- Identifying and engaging staff and the time points for offering information during the patient's journey.
- Offering all patients information once and determining the frequency of refreshing information.
- Signed 'consent' form versus helping consumers understand transfusion information.
- Knowledge and confidence deficits in health care professionals.
- Consumer willingness to engage (individual patients and patient representatives and advocates).
- Priming and empowering patients to seek information directly from health care professionals.
- Improving quality of delivered messages and measuring their reception.

Interventions to improve the processes for informing patients, have included:

- At a national governance level, the Australian Council for Health Care Standards (ACHS) has since 2006, stated that a policy should exist for written consent to be obtained and that patients are made aware of the risks associated with blood transfusion. This supports the recommendations in the 2002 Australian and New Zealand Society of Blood Transfusion (ANZSBT) and National Health and Medical Research Council (NH&MRC) guidelines that patients be informed of risks and benefits.
- At a state governance level, consumer representation within the transfusion improvement program, to inform program directions from a consumer perspective.
- At hospital governance level, audit of hospital policies and procedures across the state to raise awareness of health professionals of the need to inform patients about blood transfusion therapy and to collect baseline data on policy content.
- At an operational level, development of a tool for both patients and clinicians to inform the discussion about their treatment.

The work of ensuring patients are appropriately informed about blood transfusion therapies they may receive is a 'work in progress'. The challenges remaining for hospitals are significant. We look forward to collaborating with consumers and clinicians to develop strategies to meet these challenges and invite dialogue with those interested in these issues.

Poster 133

An innovative approach to delivering our goals

Cinzia Theobald[1], Fotini Strongylos[2]

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The Health Service provides comprehensive primary, secondary and tertiary health care services and the Program consists of a mixture of Primary, Ambulatory and Chronic/Complex services. The ability for the Program to optimise its contribution to the Strategic Plan requires a commitment to work towards the goals and strategies that are detailed, initially in the Strategic Plan and in more detail, in the Program's Business Plan.

The development of the Program Business Plan and implementation of a project management framework enabled the successful management of strategic projects within agreed timeframe/budgetary constraints. This significantly improved the Program's capacity to deliver on its business plan and increased the skill base of staff seconded to the Unit to participate in this initiative.

The development of the Program's Business Plan was undertaken collaboratively with the Program's Senior Leadership Team, incorporating feedback from staff and ensuring that it aligned with the organisation's projects in order to eliminate duplication of efforts. The Unit were identified as the resource to coordinate/manage strategic goal area projects. Governance structures were implemented to ensure continued involvement from the Senior Leadership Team and staff and Executive sponsorship assigned to ensure sustainable stakeholder engagement throughout the life of the projects.

Secondment opportunities were available to develop the skill base of staff wishing to participate in this initiative via an expression of interest process. Project Management training undertaken within the Unit supported the development of related tools, templates and systems. Commencing in 2006, the following successes can be demonstrated:

- Establishment of dedicated project management resource;
- Successful completion of 8 projects;
- Development of effective project management tools, templates and processes which were reviewed and improved after the first round of projects (e.g. project brief, status reports, risk logs and matrix, evaluation and handover reports, communication plans, governance structures and reporting processes);
- Professional development of 5 seconded staff;
- Individual projects were evaluated upon completion;
- Development of web-based training modules including the 'Project Skills' module;
- Governance structure established; and
- Professional development of Program staff seconded to the Unit (5 secondees all reported high levels of satisfaction with their experience and increased skill-base).

The Program's capacity to deliver on its business plan greatly improved. Individual projects were evaluated upon completion and the entire project process has been continually evaluated and refined.

Poster 151

Along the road of discovery – facing the challenges of implementing Clinical Governance

Filomena Ciavarella, Heather Lampshire

The Clinical Governance program at Peter MacCallum Cancer Centre was initiated in May 2005, largely as a means to engage clinicians in our leadership and accountability systems. Since this time, the Clinical Governance program has evolved from a theoretical discussion at the Board level about the principles of good accountability, to an effective model for delivering and monitoring safety and quality of care across the organisation.

Peter Mac's approach to capitalise Clinical Governance was multi-faceted. By undertaking extensive national and international research on clinical governance, we developed and implemented a four-pillared framework in line with the Victorian Quality Council's framework: Governance, Leadership and Culture; Consumer and Community Involvement; Competence and Education; and Information Management and Reporting. Entrenched within this framework were three key areas of action: Risk Management; Quality Improvement; and Performance Management. The approach to Clinical Governance also included the engagement of senior clinicians to establish leadership and credibility for the program, establishment of appropriate reporting structures, including the development of Committee reporting templates, KPI suites and clinical audit mechanisms, and the implementation of a dedicated team with risk management, quality improvement and organisational development skills to oversee, facilitate and support the program.

Peter Mac's Clinical Governance program has had significant wins over the past years, particularly related to improving the safety culture and delivering the necessary system improvements to improve patient care and reduce patient harm. There is timelier reporting of incidents, more effective and sustainable process improvement initiatives, improved identification of clinical risks and greater consumer participation, to name a few.

Nonetheless, implementing our Clinical Governance framework has not been an easy task. The key challenges we faced, and are still facing almost on a daily basis, include:

- Engaging clinicians to take up their authority and to incorporate clinical governance in their daily activities,
- Turning data into action,
- Dealing with resistance, and
- Getting the real issues out in the open.

We will continue to tackle these challenges to ensure that we bring about the necessary cultural change that is integral to any successful clinical governance program.

Poster 179

Public Dental Emergency Demand Management Strategy

Shane McGuire, John Hoogeveen, Sherie Knight, Mary Murray
Dental Health Services Victoria, Victoria, Australia

In 2004/05 it was identified that an increasing percentage of patients were presenting with emergency needs (requiring assessment/treatment within 24 hours) and as such appointments available for general care were diminishing.

A lack of a standard approach to emergency care, including a definition of what constitutes an emergency, had led to an inability to distinguish between the need for immediate emergency care and care that ought to be provided with the short term. Additionally clinics were faced with a lack of alternative service delivery options when emergency demand levels were high.

In response an Emergency Demand Management Strategy (EDMS) was developed. This included the development of a dental-specific triage tool, introduction of clinic-based ratios for provision of general versus emergency care, and provision of effective alternatives for emergency care where clinic capacity is insufficient.

The Triage Tool is a web-based system managed by frontline administrative staff. Essentially it enables patients to self assess their priority for emergency care through their response to a series of questions. The selection of a particular answer dictates the next question. On completion the Triage Tool allocates an assessment category (1 to 5) depending on the severity of the condition and indicates the maximum time period for care to be provided (Category 1 being care within 24 hours).

A ratio of 4 emergency appointments per day per dental chair was established for both rural and metropolitan dental clinics to ensure greater focus is given to preventative care.

A seamless referral process was implemented for metropolitan clinics into a major dental facility and additional budget provided to rural-based clinics for emergency patients to seek treatment in the private sector.

Triage Records	**Cat 1**	**Cat 2**	**Cat 3**	**Cat 4**	**Cat 5**	**Total**
	Seen 0-1 days	Seen 2-7 days	Seen 8-14 days	Seen 15-28 days	Seen 28+ days	
6 Month Review	**37687**	**15131**	**11574**	**2767**	**4478**	**71637**

Feedback since implementation has been extremely positive and the need to provide immediate care has reduced from 100% prior to the new strategy to approximately 50%.

It is hoped that expansion of this highly successful system to include implementation of a triage process to assess and thus prioritise general care according to need will be the next phase in the development of comprehensive prioritising of needs of public dental patients.

Poster 183

The Power Of Change – Role Redesign In An Outpatient Clinic

Robyn Coyne

The Northern Hospital, Melbourne, Australia

In many public hospitals' outpatient clinics, waiting lists are overwhelming. The waiting time for first appointment for category 2 and 3 patients is unacceptable. Many patients wait up to 36 months. During this time their problem becomes chronic and can deteriorate. When the patients are finally seen by an orthopaedic surgeon their condition is often assessed as one that does not require surgery as a management option.

A metropolitan hospital has proposed a model of management which involves a specialised musculoskeletal physiotherapist with the appropriate skills to safely triage patients referred by GP's. Advanced clinical reasoning and systematic assessment enables the specialised musculoskeletal physiotherapist to safely diagnose a patient's condition and to set an effective management plan for those patients not require surgery.

The safety and quality of this role redesign and changed management has been tested in a pilot study.

Method: 52 patients on an outpatient waiting list were triaged as non-urgent and recruited to a study. The referring GP was informed. 45 were assessed by a physiotherapist. Of these 38 were later assessed by an orthopaedic consultant. Both the physiotherapist and the orthopaedic consultant provided a diagnosis and a management plan. A prospective observational research design tested the level of agreement between the physiotherapist and the orthopaedic consultant.

Results: There was a 95% level of agreement of the patients' diagnoses. The orthopaedic consultant agreed with the management plan for 28 of the 38 patients he reviewed. In a further 6 cases the physiotherapist referred the patient for an orthopaedic consult. The consultant did not feel this was necessary for these 6 patients. This confirmed the conservative and safe approach taken by the physiotherapist. Overall approximately two-thirds of patients did not require an orthopaedic consult.

Discussion: The results of the pilot support the growing body of evidence from Australia and the UK that indicate a specialised physiotherapist is able to safely triage and manage patients on an orthopaedic waiting list. Previous studies have focussed on the relationship building between the consultant and the physiotherapist. This study provided the opportunity to assess safety and care quality as the physiotherapist independently assessed the patients. This successful model of changed management has resulted in the introduction of two outpatient clinics lead by specialised musculoskeletal physiotherapists. Clinical risk management strategies are incorporated into the protocols of the clinics. The sustainability of these clinics will be monitored over time and will be reflected in a reduction in numbers on the waiting list as well as a reduction in waiting time for first appointment.

Poster 187

Patient Perceptions of Obstetric Clinical Handover (Pilot Study)

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NHMRC Centre of Research Excellence in Patient Safety, Department of Epidemiology and Preventive Medicine, Monash University, Victoria, Australia

Key issue: Gaining an insight into consumer views regarding clinical handover with view to incorporating such views into future research, development, improvements and audit in this area.

Introduction: Clinical handover is a process in which information important in maintaining the continuity of healthcare for an individual is passed from one healthcare provider or team to another. Some qualitative research has been done to better understand patients' perceptions of bedside handover. These non-obstetric studies have been too small to make any firm conclusions and focused more on the acceptability of the process rather than allowing patients to express their opinions regarding what the appropriate content and context of handover should entail.

Methods: Following randomisation and consent, a cross-sectional survey via semi-structured interview of 30 postnatal patients from The Royal Women's Hospital (Melbourne, Australia) was conducted on the ward following birth during their immediate peripartum admission. The primary aim was to obtain information regarding patients' perceptions of obstetric clinical handover. Additional information regarding patient demographics, events surrounding their birth and previous childbirth education was also gained through survey data and audit of patient medical records.

Results: 30 women aged between 20 and 42 years were consented to participate and were interviewed. The majority were primiparous (70%). 18 women were booked into low obstetric risk units, 5 women into the Family Birthing Unit and 7 women booked into high risk obstetric risk units. 9 women indicated they had shared care with their general practitioner.

14 women had a normal vaginal birth, 9 women had an assisted vaginal birth and 7 women had a caesarean section. There was only 1 set of twins in this sample.

47% had some prior awareness of the process of clinical handover. On reflection of handover, evidence given that handover had taken place included witnessing verbal handover, observing clinicians reading other clinicians' notes and clinicians showing knowledge regarding the woman's medical history without prior communication with the clinician.

The majority of women expected immediately relevant medical information to be handed over at birth suite shift changes, which in some cases also included a prepared birth plan by the woman. There was some variation regarding the need for all medical and social history to be handed over at shift changes (in particular, information which might result in bias from clinicians was felt better to be avoided). Location of handover was important as 50% preferred bedside handover (mainly to allow for information and verifying quality of data communicated), 27% preferred handover to be performed outside the room (for such reasons as avoiding distraction from labour and distressing information) and 20% had no preference during labour.

Discussion: This cross-sectional survey of postnatal women has produced an interesting insight into their perceptions and awareness of handover. The findings of this survey provide a basis for further research and development of handover in the future.

Poster 189

Getting It Right At Night

Penny Markham

Flinders Medical Centre, Adelaide, South Australia, Australia

Introduction: In a review at the Flinders Medical Centre of Root Cause Analyses over an 18 month period, we identified that 82% of serious adverse events occurred after hours or on weekends, with communication failure, junior staff managing complex workloads, failure to escalate urgent patient reviews and limited experienced clinical support after hours being identified as the contributing factors to the adverse events.

Method and Results: In a first for the organisation, we initiated a "whole of hospital" diagnostic and change management process, led by a multidisciplinary group to confront the system-wide problems influencing safe care after hours.

In the diagnostic phase the team reviewed activity and staffing levels by time of day, analysed medical staff paging data and tracked doctors and nurses over the 24-hour continuum in an attempt to comprehend what type of work is undertaken after hours and why. The diagnostic phase revealed:

- Two broad value streams of after hours activity; junior medical staff (interns) do high volume routine tasks, while more senior staff (registrars) spend most of their time admitting patients in the Emergency Department
- After hours, the clinical experience of staff drops dramatically, while emergency admissions in medicine and surgery peak between 1700 and 2300
- 40-50% of interns' work after hours is passed on from a previous shift
- Most interns are inundated with pagers, restricting work capacity
- The concept of 'team' is entirely different between day and night

Discussion: The team is moving into the intervention phase using a series of PDSA cycles. The results from the interventions including the implementation of teams at night and the journey thus far will be presented.

Poster 220

Leadership For Change - The Power Of The People

Chiquita Walsh[1], Wesley Carter[2]
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The organisation was led by a very small management team and leadership of 80% of the services was predominately in the hands of one person.

The organisation has undergone major restructuring of its organisational hierarchy and as a result, the new executive team has committed themselves to reviewing and resolving ingrained cultural issues and developing and implementing processes to compliment and manage the life cycle changes which will have immediate and long term effects on the organisation. The facility did not present as one organisation, rather a set of departments working in isolation, therefore a lack of motivation, accountability and communication was evident.

The culture was firmly bureaucratic with little or no connectedness between management and employee. The "new kids on the block" actively encouraged participation and consultation within the departments and formed a basic platform for staff and management to communicate and consult on workplace issues and services.

Opening up of communication channels, filtering down of information and imparting trust within the workforce was a planned and strategically designed process involving the new executive team and ALL staff. An "all build the script" principle was encouraged and implemented in several ways:

Past Practices	**Changes/Creation of:**	**Results**
Departmental Meetings exclusive membership	M.M.M.– Multidisciplinary Managers Meeting	Core membership is executive/deptartment heads but open to staff, clients and volunteers
Occupational Health & Safety Committee	R.I.P. – Risk Identification and Prevention	Modernised and synched to ACHS format
No formal employee forum	M.A.D – Meet and Do sessions	All staff encouraged to attend, builds a sense of purpose and value add for employees.
Quarterly Newsletter	"Friday Facts"	Facility wide weekly news
No formal avenue for staff comments, suggestions or feedback	P.O.P. form ("Pop it on a Pinkie")	A bright pink "Have your say" form. Successfully introduced communication avenue with tee shirts, pink morning tea and promotions to launch
As above	Whine and Cheese Sessions	Held monthly to allow employees to "whine or whistle" the good, bad or even the ugly.

The communications strategies as shown above form one component of an overall 6 stage change management plan. There is interdependency between all stages which is vital to the successful achievements and desired outcomes of the overall plan.

Poster 225

Through the innovation of Discharge Planning System to Reduce the Length of Stay in a Medical Center in Taiwan

Chiu Shu-Chen

National Cheng-Kung University Hospital, Tainan, Taiwan, Province of China

Objective: To reduce the length of stay by innovating discharge planning system in a Taiwan medical center.

Methods: In this project, several improving strategies were performed by our team of discharge planning. From literature and our clinical experiences, we figured out the cause-effect diagram of the discharge planning service. Finally, we found five most important factors influencing LOS. They were: (1) the lack of an integrated unit, (2) the lack of full-time case managers, (3) the lack of doctors' participation in discharge planning, (4) incompleteness of computer system, and (5) clients' lack of understanding regarding discharge. Besides,the concept of discharge planning to reduce the LOS. From 2004 to 2006, we applied the concept of discharge planning to make a plan to solve these problems described above. This plan included five strategies: (1) reconstruct the structure of the administration from a subgroup under the Quality Care Committee into an independent committee and strengthen the administrative system, (2) recruit excellent members as discharge planning case managers to integrate the discharge plan related to clients, (3) implement the educational training program for doctors, training seed doctors, and hold competitions to improve doctors' participation in discharge planning, (4) set up fullycomputerized system including discharge planning operating system, paramedical consult system, the referral and reply computerized system, and associated discharge planning relative website to promote the efficiency of clinical work and multidisciplinary communication, and (5) make the posters, handouts, stickers, compact disks to popularize the concept of discharge planning.

Results: After these improvements, the LOS decreased from 9.57 to 8.14 days, completely achieved our objective and showing a 15% improving rate. Other achievements included: (1) the rate of LOS over 30 days decreased from15.1% to 10.6%, a decrease of 30%; (2) the rate of unscheduled readmissions within 15 days a decrease of 4.3% to 3.1%, a decrease of 28%; (3) the rate of inpatients receiving discharge planning services increased from 11.8% to 16.5%, the increasing rate was 40%; (4) the amount of referral to long-term care institutions increased from 535 to 705 cases, with a increasing rate of 32%; (5) patient satisfaction measured by a 5 points Likert scale increased from 4.3 to 4.9 points, with an increase rate of 14% close to 'very satisfied'.

Conclusions: These findings indicate that applying the concept of discharge planning to reduce the LOS is useful. It can reduce the LOS from 9.57 to 8.14 days. Besides, it also can decrease the rate of LOS over 30 days, the rate of unscheduled readmissions within 15 days and increase the rate of inpatients receiving discharge planning services, the amount of referral to long-term care institution, and patient satisfaction.

Poster 233

Open Disclosure and leadership - a way forward

Barbara Dougan, Philip Hoyle

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Health care is a high risk industry, with a significant rate of adverse outcomes, despite more than 10 years of concerted effort to increase patient safety. The Quality In Australian Health Care Study (Wilson et al, 1995) showed that between 10% and 16% of inpatients experience some form of adverse event during their episode of care.

The Open Disclosure Standard developed by the then Australian Council for Safety and Quality in Health Care in 2003 addresses the issue of open communication between health workers and patients and their support person when an adverse event occurs. The AMA code of conduct 1.1b states "Treat your patient with compassion and respect". The MDO's support the concept of Open Disclosure.

We know anecdotally that clinicians often discuss unanticipated outcomes of care or adverse events with patients. With a major impetus for change in traditional roles and relationships between health care providers and patients we needed to establish a way of introducing the practice of Open Disclosure that was systematic, ethical and was focussed on supporting patients and the clinicians throughout the process.

This paper will address the stages in the development and implementation of a model of introducing Open Disclosure in a large area health service which is based on cascading responsibilities and supporting clinicians and patients.

The model we developed has not been used in Australia previously and includes the development of a mentoring program for senior health care workers to support patients and senior clinicians through the Open Disclosure process. Mentors come from across a range of positions within the organisation including VMO's, staff specialists, medical and nursing administrators as well as other administrators. The development of the model has highlighted issues that need resolving which are relevant for the introduction of any new quality and patient safety initiatives across a range of disciplines. These include: reviewing the cultural context of practice, how a skill mix can be used by, available to, taught and made accountable across clinicians and administrators alike. In identifying and resolving these issues the model draws on high reliability organisation theory which proposes that for acceptable levels of quality and safety to be reached there must be agreed goals, ability to achieve a level of skill and knowledge, a way of knowing when the goal has been reached and away of knowing when it's not reached.

In conclusion, Open Disclosure is agreed to be the ethically and professionally correct approach to take as a component of dealing with adverse outcomes. When open disclosure is accepted by clinicians and supported by the organisation it encourages the organisation to have a culture whereby lessons can be learnt. This can be used to develop new systems that will ultimately impact on the number of adverse events.

Poster 239

Lessons for healthcare from the railways

Shelly Jeffcott[1], Nick Pidgeon[2], Andrew Weyman[3], Joseph Ibrahim[1]

[1]Monash University, Melbourne, Victoria, Australia, [2]Cardiff University, Cardiff, United Kingdom, [3]University of Bath, Bath, United Kingdom

Introduction: Safety culture in organisations can be classified into 5 levels (Parker, 2006). *Pathological* is the lowest, typified by poor communication and trust. *Generative* is the highest, typified by open and strong trust relationships. Aviation is often referred to as being at this generative level, while the railways and health are considered to sit somewhat further down, at a lower cultural maturity. This qualitative study examined the evolution of safety culture within the UK rail industry and how, in relation to recent disasters, it has moved backwards and forwards through the different levels. This holds significant lessons for Australian healthcare which has also suffered several high profile failures (Dunbar, 2006).

Methods: Over 50 focus groups, with a total of more than 500 staff across a sample of four UK train operating companies, were carried out (Jeffcott, 2006). Categories of discussion included: general perceptions of safety culture; management commitment and stakeholder relationships; risk management issues (and the setting of priorities); decision making, rules, and procedures; learning and communication; and, finally, resources and morale. Focus groups sessions were between 45-90 minutes and were audio recorded, transcribed and subjected to systematic thematic coding.

Results: The four major rail accidents (1997-2002) were identified as a key driver shaping safety culture on the UK railways. Although initially they were associated with negative consequences, subsequently, the accidents have created major opportunities across the sector. Participants described three major eras: (1) the nationalised British Rail (BR) where 'we worked for the common good...'; (2) the initial post-privatisation pre-accident era (~1993-1999) where 'it became much more adversarial...'; and (3) a more mature privatised era (~2000 to present day) where 'there's a lot more cooperation...' According to safety culture levels, the BR era could be aligned to levels two and three, *reactive* or *calculative*. The initial post-privatisation era saw the industry drop to level one, the lowest or *pathological*. The mature post disaster era is characterised at level four or *proactive*, just one from the highest *generative* level. More recently, the Australian health industry has had its own series of serious disasters (1999-2005) and is suffering from a loss of trust from both within and outside of its institutions; a symptom of a pathological culture. The railways can provide lessons for how to successfully move on from such events. For instance, the re-building of working and trust relationships, both formally (e.g. through government initiative) and informally (i.e. personal networks), was targeted and resulted in the realigning of train and track operator goals. This, in turn, has led today's UK rail sector to surpass its prior BR safety culture level.

Discussion: The generative aviation industry is the traditional exemplar for health. We suggest, instead, that the rail sector makes a more useful comparison in terms of safety culture, particularly since it shares a similar history of recent disasters. Healthcare currently exhibits pathological characteristics and can learn lessons from rail on how to promote greater coordination and data sharing, less uncertainty, higher levels of trust and a more homogenous safety approach.

References: *Parker et al. A framework for understanding the development of safety culture. Safety Science 2006; 44: 551-562. Jeffcott et al. Risk, Trust and Safety Culture in UK Train Operating Companies. Risk Analysis 2006; 26(5): 1105-1121. Dunbar et al. In the wake of hospital inquiries: impact on staff and safety. MJA 2007; 186: 80–3.*

Poster 242
Is Your Head In The Sand?

Heather Parsons, Ann Allenby
Mt Alexander Hospital, Castlemaine, Victoria, Australia

Introduction: In line with the recommendation from the Health Services Commissioner that all Schedule 11 use be monitored, recording the use of these items was implemented in a rural hospital in April 2004.

Methods: Education was undertaken with staff for the implementation phase of the project prior to the date of commencement. Data was extracted from the pharmacy computer system on the number of units of Schedule 11 substances supplied for the twelve months prior to, after implementation of monitoring and a subsequent twelve months. These data were compared and explanations sought for the changes evidenced.

Results:

	2003/2004	Cost	2004/2005	Cost	2005/2006	Cost
No of patient bed days	16,416		17,047		18,189	
Paracetamol 500mg/ Codeine 30mg Tablets	9,525	$457.20	6,476	$310.85	3,414	$162.34
Temazepam 10mg Tablets	6,236	$338.64	3,796	$291.53	2,350	$90.24
Other	13,605	$3295.38	8,185	$2149.77	7,061	$1374.50
Total Units of Schedule 11 used	29,366	$4091.22	18,457	$2752.15	12,825	$1627.08

Discussion: Results show the use of Schedule 11 substances has reduced significantly with the introduction of monitoring of their use. This may be because of less opportunity for drug diversion, changes in practice that have been implemented, and changes in medications prescribed.

Examples of changes in practice have been highlighted as part of this audit process and include:

(1) Paracetamol /Codeine tablets which were previously frequently used post-operatively in the rehabilitation area for hip surgery, have tended to be replaced by regular Paracetamol plus an appropriate dose of narcotic analgesic which is titrated against the patient's pain.

(2) Hypnotic agents are now only given to the patients in our acute and rehabilitation areas by the night staff (not evening staff). This has reduced the number of doses used, as many are written as "prn" (when required). Often when the night staff check whether the patient requires the dose, they are already asleep. The dose can still be given if the patient wakes throughout the night. This change occurred between 2004/5 and 2005/6 year.

Conclusion: Implementation of Schedule 11 recording has been a positive step at our establishment to more clearly monitor use, and drive positive and more appropriate use of these substances.

Poster 243
Poor concordance with non - pharmacological recommendations for osteoarthritis within a chronic disease management program: implications for clinicians, consumers and policy makers

CAROLINE BRAND[1], BRIT GORDON[2], VANESSA WELLS[3], BHASKER AMATYA[1], TONI TOSTI[1], HELEN MORAN[1], STEPHEN GRAVES[3]
[1]Royal Melbourne Hospital, Clinical Epidemiology & Health Services Evaluation Unit, Melbourne, Victoria, Australia, [2]Royal Melbourne Hospital, Allied Health Department, Melbourne, Victoria, Australia, [3]Flinders Medical Centre & Repatriation Hospital, Flinders University, Adelaide, South Australia, Australia

Background: Osteoarthritis (OA) is a chronic rheumatic condition that contributes a large proportion to the global burden of disability. The management of mild to moderate OA usually requires a multidisciplinary approach with a major focus on non-pharmacological interventions. Integration of evidence-based OA recommendations into clinical practice has been inadequate. Failure to demonstrate improved outcomes following implementation of evidence-based guidelines or pathways may relate to the nature of the information, individual clinician or patient factors, or system issues. We previously identified system barriers that led to system redesign to enable implementation of evidence-based interventions within an OA clinical pathway (OACP). The system redesign included development of a musculoskeletal coordinator role to comprehensively assess, refer for non-pharmacological interventions, and support patients in self-management through education and development of a goal-setting care plan.

This paper reports clinician adherence to OACP recommendations, and consumer concordance and barriers to concordance with recommendations for evidence-based non-pharmacological management at 2 sites.

Methods: A comprehensive clinical assessment, and recommendations for EB interventions were documented by the MSC at baseline. Subsequent service utilisation, and reasons for patient non-concordance (preference, cost, access, illness, understanding, other) with recommendations were captured within a structured survey tool at 3 months post-assessment. Adherence to OACP recommendations was documented using a structured audit tool and was analysed according to funding requirements in a before and after study design.

Results: A total 164 patients (101 RMH, 24/8/05-14/02/07, 63 FMC, 21/2/06-5/02/07) were assessed by the services. A 'before & after' analysis demonstrated improved documentation of adherence to OACP recommendations. Concordance with recommendations for non-pharmacological interventions was assessed in 112 patients who had had a 3 month review at the time of analysis and is summarised in Table 1 below.

Table 1	**Uptake of interventions at 3/12 review %**				**Barriers to uptake of interventions at 3/12 %**					
Baseline Recommendations	**Complete**	**Partial**	**None**	**Unknown**	**Patient Preference**	**Intercurrent illness**	**Inadequate understanding**	**Cost**	**Access**	**Other**
Flinders Medical Centre (FMC) N=50										
Hydrotherapy	55.5	25.0	16.6	2.7	20.0	26.6	0	6.6	20.0	26.6
Home Exercises	53.0	32.6	10.2	4.1	33.3	19.0	9.5	0	0	38.0
Dietician	31.6	0	**68.4**	0	**84.6**	7.7	0	0	0	7.7
Self management program	15.9	27.2	**54.5**	2.2	**33.3**	8.3	13.9	2.8	8.3	33.3
Royal Melbourne Hospital (RMH) N= 62										
Hydrotherapy	46.3	19.5	34.2	0	13.6	13.6	0	9.1	**54.5**	9.1
Exercise program	55.9	18.6	25.5	0	3.8	15.4	7.7	3.8	**57.7**	11.5
Dietician	38.5	2.5	**59.0**	0	**41.7**	4.2	4.2	8.3	37.5	4.2
ASMP	40.0	6.7	**53.3**	0	**33.3**	11.1	0	11.1	33.3	11.1

Conclusions: There was sub-optimal concordance with non-pharmacological recommendations, and variation in barriers between sites. The level to which personal preference influences concordance with dietician and self-management programs requires further research to inform design and implementation of cost-effective chronic disease management programs of intervention and requires further investigation.

Poster 244

Understanding the safety culture of maternity services

Suellen Allen, Caroline Homer

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Introduction: Adverse events that lead to actual or potential harm are common and often avoidable events in the maternity setting. Australian patient safety systems have concentrated on the reporting and analysing of adverse events as a strategy hoping to learn from them and reduce future adverse events. There is limited evidence that this has resulted in significant improvements, that is has i.e. that the 'learning loop' been closed. Experience from the aviation industry indicates that it is necessary to also understand an organisation's unique safety culture and behaviour to make improvements to safety. There is little known about the safety culture of organisations in which the adverse events occur in the Australian maternity setting. Safety culture is thought to be influenced by factors such as collaboration and teamwork, safety climate, perceptions of management, stress recognition, job satisfaction and working conditions. Otherwise described as 'the way things are around here'. Understanding the unique safety culture in which maternity care is delivered is likely to inform the development of strategies which are required to improve outcomes for women and their babies.

This paper will initially discuss the concept of safety culture in the context of the maternity setting. The paper will then describe and provide data from **stage one** of a study currently being undertaken to examine the safety culture in a NSW Maternity Service in order to assist with the implementation of unit-specific sustainable strategies to ensure the 'learning loop' is closed after adverse events.

Methods: The study is being conducted over three stages at one NSW metropolitan hospital maternity service as follows:

Stage one - Measure the baseline safety culture scores at the study sites by undertaking safety culture surveys and focus groups and interviews. The safety culture surveys will measure the attitudes and beliefs of maternity health professionals working at the study sites.. Provide feedback to the sites on the results of the safety culture analysis.

Stage two - Develop and test specific safety improvement strategies at the study sites over a 12 month period.

Stage three - Re-measure the safety culture at the study site post intervention (12 months) using safety culture surveys followed by focus groups and interviews to determine if any improvements have occurred.

Results: Results of stage one of the study will be discussed during the presentation.

Discussion: This research will provide new information about the safety culture in one NSW maternity service. This knowledge will assist with the implementation of sustainable strategies to improve responses to adverse events and to ensure learning, that is, learning - 'closing the loop' - occurs and subsequently improve quality of maternity care.

Poster 245

Application of an evidence-based implementation model for supporting service redesign for people with osteoarthritis in ambulatory care settings

Caroline Brand[1], Helen Moran[2], Toni Tosti[1], Bhasker Amatya[1], Brit Gordon[3]

[1]Royal Melbourne Hospital, Clinical Epidemiology & Health Service Evaluation Unit, Melbourne, Victoria, Australia, [2]Royal melbourne Hospital, Department of Rheumatology, Melbourne, Victoria, Australia, [3]Royal melbourne Hospital, Department of Allied Health, Melbourne, Victoria, Australia

Background: Osteoarthritis is a chronic rheumatic condition condition, the incidence of which is increasing worldwide. In keeping with other chronic conditions there is evidence for suboptimal implementation of evidence-based recommendations for interventions. In addition older people with OA often have other medical co-morbidities and require multiple medications, putting them at higher risk of adverse drug events. Evidence-based clinical practice guidelines (CPG) and clinical pathways (CP) offer a means to standardise care and improve implementation of best practice but there is lack of consistency reported in outcomes following development and dissemination of such resources. The reasons for variable success are multifaceted, however lack of an effective implementation process is one operational source of failure.

In 2004, supported by a grant from the Commonwealth Government, the National Arthritis & Musculoskeletal Conditions Program, an evidence-based clinical pathway for management of OA hip and knee, was developed (OACP). With further support from the Arthritis & Musculoskeletal Quality Improvement Program (AMQuIP), pilot implementation of the OACP was undertaken in 6 diverse clinical settings. The main aims of the OACP were to; improve multidisciplinary care, to improve adherence to evidence based-recommendations for pharmacological and non-pharmacological interventions, to improve support for patient self-management of their condition, to improve continuity of care process.

Aim of the paper: This paper describes the development of an evidence based implementation process model that integrates evidence about effective implementation strategies with practical program management and quality improvement processes. It further describes the effectiveness of the implementation process, barriers and solutions to barriers to implementation.

Methods: Evidence for effectiveness of implementation strategies, and existing models for behavioural change were ascertained using a structured literature search. Practical processes for program management and quality improvement methods were based on a peer reviewed and grey literature search. Components of the model were designed to integrate evidence-based and experiential knowledge.

The information obtained was summarised in a draft model and applied to pilot implementation of the OACP in a metropolitan ambulatory care setting. The model was reviewed and refined in an iterative manner.

Evaluation of implementation of pathway effectiveness was undertaken using a number of methods: firstly in an iterative fashion using PDSA quality improvement methods for implementation, and secondly in a formal program evaluation at 3 months post-implementation. The program evaluation included qualitative and quantitative data collection and assessed adherence to OACP recommendations, service utilisation, resource utilisation, patient satisfaction and patient health outcomes.

Results: There was significant improvement in adherence to OACP recommendations. At 3 months after intervention, there was improvement in patient reported global pain, function, priority goal and partner in health scores, but no impact on BMI.

Conclusion: A practical implementation model that integrates evidence-based information about effective implementation strategies with practical program management and quality improvement methods contributed to effective implementation of an OACP. Implications for long term sustainability will be discussed.

Poster 259

Adopting a transformational change framework to implement a statewide strategy.

Jo Montgomery, Margaret Arblaster
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NSW Health is a large and complex health system comprising some 206 hospitals. Annual activity data demonstrates 1.5 million admissions annually, over 27 million services provided to outpatients and community health services and approximately 495,000 surgical services provided. The implementation of the NIMC in NSW represented a major statewide initiative of the Quality and Safety Branch (QSB) of NSW Health. Implementation of the NIMC across Australia was mandated by the Health Ministers in the April 2004 Communiqué. Building on the early development work of Queensland Health and lessons learnt from the national NIMC pilot, QSB supported the NSW Area Health Services to implement a NIMC in a 7-month timeframe.

Objectives of the NIMS implementation project were as follows:

- Provide robust project management assistance to Area Health Services during the implementation phase of the NIMC.
- Ensure statewide implementation of the NIMC through monitoring of milestones and key performance indicators.
- Ensure the NIMC implementation is supported by appropriate tools, training and education.

The January 1 2007 timeframe was achieved through the application of Kotter's framework of transformational change. Networking opportunities were provided for Area Health Service project teams through and introductory workshop held in June 2006, monthly teleconferences with project teams, resources and tools provided on the project web site. Regular feedback via these forums allowed identification of barriers and issues and the sharing and promulgation of solutions to overcome the identified obstacles.

Midway through implementation compliance with the technical requirements of the chart was audited across some 79 sites who had implemented the chart in the period of June to October 2006. AHS data was then collated and a state-wide report published and disseminated to key stakeholders.

Residual issues regarding GP VMO prescribing practices have been accommodated in the short term while seeking long-term solutions consistent with national direction from the NIMC oversight committee convened by the Australian Commission for Safety and Quality in Health Care.

A qualitative evaluation of the transformational change process through the implementation of the NIMC in NSW is occurring in parallel with the post-implementation audit. Kotter's framework of transformational change provided a model that informed the NIMC implementation project management methodology and has delivered the strategy within the desired timeframe. Ingoing audit of key indicators and further medication safety strategies planned in NSW will ensure sustainability of improvements and better patient outcomes.

DAY THREE Wednesday 8th AUGUST

0730:0830	**AAQHC AGM and Breakfast** **Members Only**	*P 1 & 2*

	Plenary 5 THEME – THE POWER OF RESEARCH AND EVIDENCE Chair: PROF MIKE WARD	***GH 1 & 2***
0900-0920	TOPIC – BETWEEN THE DEVIL AND THE DEEP BLUE SEA: PATIENT SAFETY AND RISK IN HOSPITALS Speaker: PROF JEFFREY BRAITHWAITE	
0920-0940	TOPIC – NICS "USING RESEARCH EVIDENCE TO CHANGE CLINICAL PRACTICE Speaker: DR SUE PHILLIPS #17	
0940-1000	TOPIC – THE DANGERS OF MEASUREMENT Speaker: PROF PETER CAMERON # 18 → 21	
1000-10.20	TOPIC – TECHNOLOGY ALLOWS THE RITE OF PASSAGE:THE USE OF RECORD LINKAGE FOR RESEARCH INTO HEALTH Speaker: PROF JAMES SEMMENS #22	
1020-1030	QUESTIONS AND ANSWERS #23	
1030-1100	Morning Tea	*GH 3 & 4*

	THEME 1 *M2* ACCREDITATION ✓ Chair: Mr Bill Lawrence	THEME 2 *M3* MEASURING PERFORMANCE AND OUTCOMES Chair: Ms Kathleen Ryan	THEME 3 *M4* IMPROVING ACCESS Chair: Ms Kae Martin	THEME 4 *P1 & 2* NON ACUTE CARE SETTING Chair: Dr Annette Pantle	THEME 5 *M1* THE INTERNATIONAL SCENE Chair: Dr Desmond Yen	THEME 6 *GH 1 & 2* CLINICAL HANDOVER Chair: Dr Simon Eccles
1100 - 1120	Review of Accreditation #24 **Prof Margaret Banks**	Australian Adaptation of the ISMP Medication Safety Self Assessment Tools **Ms Helen Stark**	The Ambulatory Surgery Initiative in a Public Health Service **Ms Pam Tindall**	What consumers want from primary healthcare – consistent quality in the non acute care setting **Russell McGowan**	Pre operative antibiotics Prophylaxis -Experience from a Taiwanese Medical Centre Setting **Dr Shei-Lin Ku**	Improving Clinical Handover – steps taken to support clinicians in the delivery of safe, effective clinical handover **Dr Annie Moulden**

1120 -1140	The Relationship Between Accreditation Criteria Results and Clinical Indicators #25 **Dr Marjorie Pawsey**	Quality Indicators in Trauma" A Study of Validity **Mr Cameron Willis**	Managing the Wait: responding to the Consumer **Dr Ken Ooi and Ms Lyn English**	Hospital Care of Residents Living in Residential Care Facilities: Profile, Patterns of Utilization and Quality and safety of care **Dr Sanjay Jayasinghe**	Improvements In Quality Of Services In Healthcare Organisations Through Accreditation **Dr Bhupendra Rana**	Facilitated Discussion: Bryce Cassin (Doctorate) Clinical Handover Dr Bob Adams TQEH, South Australia Annie Moulden
1140 - 1200	The Accreditation of Australian General Practices – the journey into the electronic age with AccreditationPro #27 **Ms Marisa Vecchio**	Mental Health Outcomes Dr Aaron Groves	A New Clinical System for Effective Discharge Planning (Improve Access by Reducing Exit Block) **Mrs Cathy Daunt**	Grass Roots Quality – A Simple Approach to Implementing a Quality Framework for Health Professionals Working in the Community Setting **Suzanne Corcoran**	Successful Implementation of Three Tools for Specialty Based Learning from Incidents **Catheliine Snijders**	
1200 - 1230	**Q&A with SPEAKER PANEL** #38	**Q&A with SPEAKER PANEL**	**Q&A with SPEAKER PANEL**	**Q&A with SPEAKER PANEL**	**Q&A with SPEAKER PANEL**	**Q&A with SPEAKER PANEL**

1230 - 1330	**LUNCH**		***Great Halls 3 & 4***
Poster Discussion Session Theme 4 –Human Resources for Health; challenges and opportunities and Theme 5- Patient Safety and Quality			
Poster 74 - Application of Balanced Scorecard Methodology to Improve Staff Performance at an Operation Room Setting **Ms S Ku**	**Poster 127** - Facilitation Of Recruitment And Retention Of Allied Health Staff In A Rural Setting Through The Development Of Specialist Skills And Mentoring: A Pilot Project **Ms L McCourt**	**Poster 156** - Introduction Of Perioperative Dedicated Education Unit To Increase Recruitment And Retention Of Nurses **Mrs S Venkataram**	
Theme 5- Patient Safety and Quality			
Poster 1 - What's an Interpreter? - Giving our Clients a Voice **Ms L Dimopoulos**	**Poster 6** - Risk Minimisation Across Care Settings in a Palliative Care Service Through Shared Documentation and Records **Mrs E Summers**	**Poster 12** - The Happy Migrant Effect- A qualitative study of the perceptions of negative experiences of hospital care by patients with little or no English **Ms P Garrett**	**Poster 27** - The Rapidly Developing Role of the Quality Manager in the Modern Radiation Therapy Department **Ms L Cheetham**
Poster 29 - Setting up a standardised Medical Emergency Team reporting system across an area health service as a Patient Safety Initiative **Mrs N Santiano**	**Poster 32** - Improving Quality of Care for Patients with Delirium, New Initiatives Following an Audit in Acute Medical Inpatients **Ms Y Smith**	**Poster 33** - Look At Me! Look At Me! My Life Is Back On Track! Maximising Potential Of Clients After A Health Crisis Requiring Allied Health Intervention **Ms S Paul**	**Poster 42** - Inter-Rater Reliability of the Australasian Triage Scale for Mental Health Patients **Dr D Liew**
Poster 44 - Promoting Clinical Risk Management in Community Health **Ms A Brown**	**Poster 46** – Team Centered Behavior Based Approach to Correct Site Safety System Implementation **Ms J Smith**	**Poster 55** - Talking the Talk: How A Structured Communication Tool Can Improve Patient Safety **Ms M Martin**	**Poster 60** - "Residential Aged Care Coronial Communiqué": providing case studies of deaths reported to the Coroners Office to improve clinical care in Residential Aged Care Facilities **Prof J Ibrahim**

Poster 64 - Lessons Learnt From The Identification And Management Of An Increased Incidence Of Severe Ovarian Hyperstimulation Syndrome At A Tertiary Obstetric Hospital In Melbourne, Australia **Ms M Draper**	**Poster 67** - Clinical Governance Implementation Using ISO 9000:2000 Quality Management System: A Case Study in Two Public Hospitals in Indonesia **Mr H Djasri**	**Poster 70** - Formative implementation in multisite piloting of a standardised mental health documentation suite. **Mr A Weller**	**Poster 71** - Consumer Perceptions Of Using Self Assessment Outcomes In Mental Health To Engage Meaningfully In Care Planning **Mr T Callaly**
Poster 78 - Customer Quality In Health Care **Dr J Tabrizi**	**Poster 79** - Customer Quality And Type 2 Diabetes In Australia **Dr J Tabrizi**	**Poster 92** - A structured analysis of medication errors: a multi site study **Dr A Gardner**	**Poster 95** - Preventing Wrong Gas Delivery to Patients **Mr P Mason**
Poster 110 – High compliance with a protocol for the management of bleeding peptic ulcer disease improves patient outcomes **Dr P Bampton**	**Poster 116** - Managing Junior Medical Staff After Hours Workloads with Changes to In and After Hours Practice **Dr T Bright**	**Poster 118** - Development of a trigger and screening tool to detect medication errors in a quaternary teaching hospital **Ms M Van De Vreede**	**Poster 119** - Intravenous potassium chloride: Do health professionals in hospitals really know the risks? **Ms M Van De Vreede**
Poster 122 - Reality Bites : Coming To Grips With Patient Safety **Ms R Richardson**	**Poster 126** - Analysis and the subsequent management for intra-operative pressure ulcers **Mrs J Huang**	**Poster 135** - "Too Many Pills": Reducing the Risks of Polypharmacy in the Older Patient in the Acute Care Setting **Ms K Stott**	**Poster 138** - Implementing an Equipment Change to Improve Patient Safety at a Public Hospital **Ms V Wallroth**
Poster 142 - Best Quality and Safety Practice in Managing Skin Integrity **Prof A McMurray**	**Poster 147** - Cleaning Up Narcotic Use – With SOAP....the "Safe Oxycodone Administration Promotion! **Mrs D Bridgeford**	**Poster 150** - The Relationship among Knowledge, Attitude and Practice of Physical Restraint **Mrs M Su**	**Poster 154** - Together Is Better: Providing Multi-Service Drought Relief At The Farm Gate **Ms S Rutherford**
Poster 155 - Improved Survival With In House Overnight Neonatal Consultants **Dr S Fraser**	**Poster 159** - Improving Patient Comfort in Colonoscopy **Ms B Draper**	**Poster 161** - Implementation Of A Chest Pain Assessment Service **Mrs K O'Dwyer**	**Poster 164** - Enhanced Patient Safety with a Web Based Electronic Medication Management System in Two Regional Victorian Hospitals **Mr C Turner**
Poster 178 - A Regional Audit of Dosage Administration Aids in Aged Care Facilities **Dr A Carruthers**	**Poster 182** - Evaluating a Fall Review Program in the Aged Care & Rehab Units **Ms A Ko**	**Poster 184** - Evaluation Of The Effectiveness Of A Hydration Monitoring Tool In Aged Care Facilities **Ms M Sappupo**	**Poster 185** - Breaking Down the Levels of Risk Registers and Improving Safety and Quality in Health Care. **Mr R Johnson**
Poster 186 - The Role Of Family In Rehabilitation After Stroke **Dr T Barskova**	**Poster 193** - Early Detection And Management Of Falls Risk In Older Adults: Exploring The Use Of The Quickscreen Tool In Barwon Health Primary Care Clinical Practice Settings **Ms R Smith**	**Poster 194** - Creating Safety – Addressing Seclusion and Restraint Practices **Mr E Gibbons**	**Poster 195** - Encouraging Quality Improvement in Aged Care and Rehabilitation Services **Ms J Palmer**
Poster 202 - Improving Hand Hygiene – Results of the Victorian Quality Council (VQC) Hand Hygiene Pilot Project 2004 -2006 **Ms D Quin**	**Poster 214** - Health Promotion for Older People – Developing a Lifestyle Option **Ms S Daniel**	**Poster 216** - Designing programs to reduce risk of Vitamin D deficiency amongst dark skinned and veiled people: community reported barriers to uptake of effective interventions **Ms D Couch**	**Poster 217** - A National Initiative To Optimise Acute Postoperative Pain Management: The APOP Project **Dr K McIntosh**

Poster 226 - Fall Reduction in the Cardiac Stepdown Unit **Mrs R Chataway**	**Poster 231** – Communication-an innovative idea to improve safety and quality **Ms R Machiraju Venkata**	**Poster 236** - Post Anaesthetic Assessment Of "At Risk" Special Needs Patients - Working Collaboratively For Improved Patient Safety **Dr S McGuire**	**Poster 253** - A Socio-cultural-technical Integrated Approach which Involves End-users through the Design and Implementation Process can Develop an Information Communication Technology which Incorporates Patient Safety Initiatives: A Case Study of an Electronic Medical Handover System. **Ms M Wong**
Poster 254 - Fast Track Colorectal Surgery - A Rural Perspective **Ms T Moore**	**Poster 258** - Loads Of Rubbish! One Hospital's Experience Of Waste Management Review And Revision **Mrs I Freeman**	**Poster 266** - Exploring Factors Affecting Inadvertent Perioperative Hypothermia **Ms E Pavlos**	**Poster 267** - Capturing immediate Improvement supports Improvement": One organisation's recognition of the value of projects designed to improve the quality and safety of health care services. **Ms M Hills**

1330-15.00	**Plenary 6 DEBATE** ***Great Halls 1 & 2*** **Proudly supported by Baxter Healthcare** **Presentation by Baxter Healthcare** **Facilitator – Jim Birch** DEBATE: **Guests include: Stephen Duckett, Mitch Messer (CHF Chairperson), Joseph Ibrahim, Robin Youngson, Luis Prado** **Managing Demand and Addressing Quality: Competing Priorities or Two Sides of the Same Coin?** **Have we lost the luxury of quality: Is the focus on activity and targets – at what cost?**

1500-1530	CLOSE OF CONFERENCE BEST POSTER PRIZE PROMOTION FOR 2008 CONFERENCE

*PLEASE NOTE THIS PROGRAM IS SUBJECT TO CHANGE

Between the devil and the deep blue sea: Patient safety and risk in hospitals

Jeffrey Braithwaite

Director, Centre for Clinical Governance Research in Health

Introduction: People believe hospitals are spaces to go to get treated but they are simultaneously places of risk. Research evidence is scattered across a vast sea of journals, books, chapters and monographs. Fishing amongst the literature reveals commonly occurring risk specimens, strange species of errors and many unusual items illustrating how hazardous things are.

Methods: Using deep sea literature trawling methods, this paper examines and hauls up for inspection and sorting a range of fascinating and uncomfortable data items to show how, and to what extent, things are risky for patients. While the data is drawn from a range of disparate studies and reports from various countries, for the most part they are the most recent or representative data for that particular domain of hospital activity. The data is extrapolated to a typical, hypothesised large teaching hospital in a modern health system to illuminate the otherwise impenetrable depths.

Results: Overall, inpatients have a 1:10 chance of experiencing an adverse event or near miss and a 1:300 chance of being harmed during their stay. Runciman's principal natural category system shows that some of the major categories are pain following surgery, wound infections and falls, and that there are many rare adverse events, some with high impact. Reaching into various data sets via bottom-trawling methods found that nosocomial infections affect between 5 and 15% of patients and can lead to complications in between 25 and 50% of those admitted to intensive care. Adverse medication events affect many patients: 67% of patients' prescription medication histories have one or more errors. Some 27% of patients over 65 years fall while in hospital. A study of more than 2.8 million operations identified 25 wrong site operations, at a rate of 1:113,000.

Assume a 700-bed tertiary referral hospital with 5,000 staff, treating 75,000 inpatients annually of which 50,000 are same-day cases. Some 7,500 patients would encounter an adverse event, some detectable, some not noticeable or attributable. Many would be infections, falls and medication errors. Some 1,500 of these adverse events would be related to a major disability, with 350 associated with a patient's death.

Discussion: Runciman's system of PNCs can do for errors what the Linnean classification system did for describing species in the sea [and on land, underground and in the air, of course]. Commonly occurring PNCs reflect high levels of risk. More exotic categories only occur intermittently and some are very rare so we need very resilient and vigilant organisations which can cope with the unexpected as well as the commonly occurring.

Sailing the oceans where the currents of literature are found is not personally risky; treading water (or sinking or swimming) in the health system as is a needy patient. The task for health care providers is to absorb what the data is saying so as to infiltrate the murky depths, demonstrate that they can appreciate the extent of patient safety risk, turn this into action, and achieve measurable reductions in its quantum. The task for researchers who travel the seas looking for or creating data is to translate this into information and then intelligence which will underpin efforts to make things safe. The task for patients is to understand risks facing them and to pay close attention to their inpatient care processes and what is done to them whilst in hospital. Patients can be their own best risk minimisation tool. At the end of the day, they are the ones in between the devil and the deep blue sea.

NICS using research evidence to change clinical practice

Sue Phillips,

Senior Program Manager, National Health and Medical Research Council

The prevention of venous thromboembolism (VTE) in hospitalised patients is recognised nationally and internationally as a serious patient safety issue. Numerous clinical practice guidelines on the prevention of VTE have been published and yet many of their recommendations are still underutilised.

Using the findings of a data linkage study on the incidence of VTE in Western Australian hospitals and a systematic review of effective interventions to improve VTE prophylaxis in hospitalised patients, the National Institute of Clinical Studies is implementing a national evidence implementation program aimed at improving the prevention of VTE in 40 participating acute care hospitals. The interventions used include targeted strategies aimed at raising awareness and knowledge of risk, developing whole-of-hospital policies and defining accountabilities, introducing system-wide reminders and prompts for medical, nursing and pharmacy staff and educating patients.

Data on improvements in organisational systems and in compliance with best practice recommendations in high risk patients will be presented. Policy initiatives to sustain improvements and achieve spread to other hospitals are discussed.