The Agency for Clinical Innovation (ACI) works with clinicians, consumers and managers to design and promote better healthcare for NSW. It does this by:

- **Service redesign and evaluation** – applying redesign methodology to assist healthcare providers and consumers to review and improve the quality, effectiveness and efficiency of services.
- **Specialist advice on healthcare innovation** – advising on the development, evaluation and adoption of healthcare innovations from optimal use through to disinvestment.
- **Initiatives including Guidelines and Models of Care** – developing a range of evidence-based healthcare improvement initiatives to benefit the NSW health system.
- **Implementation support** – working with ACI Networks, consumers and healthcare providers to assist delivery of healthcare innovations into practice across metropolitan and rural NSW.
- **Knowledge sharing** – partnering with healthcare providers to support collaboration, learning capability and knowledge sharing on healthcare innovation and improvement.
- **Continuous capability building** – working with healthcare providers to build capability in redesign, project management and change management through the Centre for Healthcare Redesign

ACI Clinical Networks, Taskforces and Institutes provide a unique forum for people to collaborate across clinical specialties and regional and service boundaries to develop successful healthcare innovations.

A priority for the ACI is identifying unwarranted variation in clinical practice and working in partnership with healthcare providers to develop mechanisms to improve clinical practice and patient care.

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This report updates on ACI initiatives that have made significant progress in the past six months, from March 2015 to August 2015.

These initiatives are strengthening capability, reducing unwarranted clinical variation and building knowledge and understanding about the complexity of large system change and improvement in the NSW Health system.

Our next steps to transform innovation in healthcare delivery will be to identify what outcomes matter to patients, and encourage collection and reporting on these measures.

Only by doing this can we demonstrate to patients, clinicians and healthcare providers the results of the care provided and how that care can be improved.

I commend the teams that have delivered these initiatives and their partners across and outside the health system, who share a common goal of wanting to make a real difference to patient care.

Dr Nigel Lyons
Chief Executive
Agency for Clinical Innovation
## Abbreviations

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<tr>
<td>ACCHS</td>
<td>Aboriginal Community Controlled Health Services</td>
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<td>ACI</td>
<td>Agency for Clinical Innovation</td>
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<td>AIM</td>
<td>Accelerated Implementation Methodology</td>
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<td>ACS NSQIP</td>
<td>American College of Surgeons National Surgical Quality Improvement Program</td>
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<td>ALBP</td>
<td>Acute low back pain</td>
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<td>ALOS</td>
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<td>AMS</td>
<td>Aboriginal Medical Service</td>
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<td>Bureau of Health Information</td>
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<td>CCAP</td>
<td>Chronic Care for Aboriginal People Program</td>
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<td>CEC</td>
<td>Clinical Excellence Commission</td>
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<td>CHR</td>
<td>Centre for Healthcare Redesign</td>
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<td>CLD</td>
<td>Criteria led discharge</td>
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<td>ED</td>
<td>Emergency department</td>
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<td>eMR</td>
<td>Electronic medical record</td>
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<td>GENCA</td>
<td>Gastroenterological Nurses College of Australia</td>
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<td>GPs</td>
<td>General practitioners</td>
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<td>ISBAR</td>
<td>Identify, Situation, Background, Assessment and Recommendation</td>
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<td>ITIM</td>
<td>Institute of Trauma and Injury Management</td>
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<td>LHD</td>
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<td>LOS</td>
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<td>LST</td>
<td>Large systems transformation</td>
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<td>ML</td>
<td>Medicare Local</td>
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<td>NT</td>
<td>Northern Territory</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PHN</td>
<td>Primary Health Network</td>
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<td>PREMs</td>
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<td>PRMs</td>
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<td>PROMs</td>
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<td>RACF</td>
<td>Residential aged care facility</td>
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<td>RICH</td>
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<td>SACC</td>
<td>Service Access and Care Coordination Centre</td>
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<td>SCAP</td>
<td>Stroke clinical audit process</td>
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<td>SERG</td>
<td>Stroke Expert Reference Group</td>
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<td>SHN</td>
<td>Specialty Health Network</td>
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<td>UCV</td>
<td>Unwarranted clinical variation</td>
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<td>VIP</td>
<td>Vocational Intervention Program</td>
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Strategic initiative
Progress the ACI’s strategy for reducing unwarranted clinical variation.

Aim
• To encourage regular assessment of clinical variation.
• To understand correct causes of unwarranted clinical variation.
• To provide data analysis and support to Local Health Districts to improve service.

Summary
The Stroke Expert Reference Group (SERG) conducted an audit at six sites using a revised NSW Stroke Clinical Audit Tool. The audit data was analysed by the Florey Institute, Monash University, Victoria.

SERG then revisited the six sites and, supported by analysed data, joined discussions with clinicians and managers to develop strategies and processes to address unwarranted clinical variation.

This led to the development of the Stroke Clinical Audit Process (SCAP) V2, which will be implemented across 30 facilities to identify gaps in services that contribute to unwarranted clinical variation. The SCAP V2 supports the Stroke Clinical Variation Statewide Strategy.

Background
Bureau of Health Information (BHI) data on 30-day mortality after ischaemic and haemorrhagic stroke was published in Health in Focus 2012.

The overall NSW outcomes compared well with most Organisation for Economic Co-operation and Development (OECD) countries. However, the BHI analysis identified significant clinical outcome variation, measured against a statewide arithmetic average of adjusted 30-day mortality.

The ACI UCV Taskforce engaged LHD clinicians and managers to examine the 30-day mortality data.

The consensus from that engagement was to develop SERG.
Aim
The standards aim to:
• improve patient outcomes
• reduce emergency department presentations, inpatient admissions and amputations
• reduce clinical variation, aligning existing services to state, national and international guidelines
• guide the implementation of new high risk foot services
• identify services who could provide telehealth services to areas without a comprehensive high risk foot clinic.

Summary
ACI Endocrine Network has worked with stakeholders to produce high risk foot service standards. Implementation of the standards will occur over two phases.
• Self-assessment process, collation of the summary report, identification of priority areas and improvement planning.
• Support for actions to develop services, including linking sites without access to high risk foot services to an existing service, where appropriate.

Background
The ACI Endocrine Network identified the need for standards for the management of diabetes-related foot complications as a priority due to:
• the increase in the number of people being diagnosed with diabetes mellitus each year, and
• the absence of an articulated statewide approach to improving care for people with diabetic foot complications.

Benefits
• Equity of access to appropriate foot care throughout NSW.
• Better care coordination.
• Strengthened multidisciplinary approach.

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Scan the QR code
Strategic initiative
Align work programs with Local Health Districts and other service providers to work together on agreed priority programs.

Aim
- To improve documentation of clinical management within the electronic medical records (eMRs).
- To improve workflow for clinicians.
- To provide the opportunity to analyse data.
- To report data back to clinicians.
- To develop service delivery improvement strategies.

Summary
In December 2014, eHealth invited the ACI to partner with the eMR team to develop four condition-specific clinical builds. The clinical conditions selected were stroke (ischaemic and haemorrhagic), cardiac (chest pain), respiratory (community acquired pneumonia and chronic obstructive pulmonary disease) and renal (dialysis).

Relevant ACI Networks have established clinical reference groups to participate in the design and development of the respective eMR builds. LHD chief executives have been offered the opportunity to have additional clinical representatives included within the reference group.

Background
The eMR program broadens the application of the existing electronic medical record into the inpatient setting. The eMR program will be providing an enhanced electronic solution that supports clinical service redesign, innovation, clinical governance and evidence-based practice, contributing to improvements in the quality and safety of patient care.

Each time the patient screen is opened it will provide clinicians with the latest snapshot of the patient’s medical record information, including ongoing clinical notes. The patient summary screen will provide live information consistent with ISBAR (Identify, Situation, Background, Assessment and Recommendation), and can be viewed by multiple users concurrently. Each component on this screen will allow the clinician to link directly to the source information, if required.

Benefits
- Streamlined ordering and referral process.
- Will allow orders to be modified.
- Streamlined data collection.
- Timely analytics for clinicians.
- Support for evidence-based clinical practice.
- Reduced unwarranted clinical variation.
- Improved patient outcomes.

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ACI Initiative Update 2015
Criteria led discharge

Aim
• To reduce delays when a patient is medically ready to return home from hospital.

Benefits
A formalised CLD process could:
• improve patient experience
• enhance patient safety
• reduce bed days
• minimise waste
• improve staff satisfaction.

Summary
A patient’s discharge from hospital can be delayed for many reasons. Criteria led discharge (CLD) is a process to ensure patients can return home from hospital as safely and quickly as possible.

The criteria for discharge are documented early in the admission by the senior medical clinician (e.g. the consultant or Visiting Medical Officer). Additional criteria may be added by the interdisciplinary team members.

For appropriate patients, CLD-competent staff can discharge a patient according to the documented criteria.

Implementation is currently progressing across 30 hospitals in NSW.

Best practice for CLD is:
• to identify a patient as eligible for CLD on admission (or pre-admission for planned admissions)
• to continue having the medical team review patients every day and update the set criteria, if required
• to agree the criteria and plan for discharge in partnership with the entire health care team, including the patient and/or their carer
• for the CLD-competent staff member to monitor and record if the patient has met the criteria, and if a patient does not meet the criteria, a medical review is necessary
• for a transfer of care (discharge) checklist to be completed for all patients – this should include a section on patient education that has been provided.

CLD does not substitute for clinical judgement.

Background
The Acute Care Taskforce is focused on improving the medical inpatient journey through five main elements:
• clinical management plan as led by ACI
• interdisciplinary ward rounds as led by the CEC’s In Safe Hands – Structured Interdisciplinary Ward Rounds
• a meaningful estimated date of discharge entered on admission, revised throughout the patient journey, and includes what next steps a patient is waiting for – led by the NSW Ministry of Health and Health Education and Training Institute
• a structured process for identifying patients eligible for CLD as led by ACI
• planned transfer of care, in partnership with the patient, their families and/or carers, as led by CEC.

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Community-acquired pneumonia clinical variation

Aim

- To assist clinicians to investigate and address clinical, process and systems factors that may contribute to unwarranted variation in outcomes for adults admitted with community-acquired pneumonia (CAP).

Benefits

- Improve patient outcomes.
- Reduce unwarranted variation in outcomes.

Summary

A CAP audit tool will be developed in consultation with lead clinicians. The CAP audit tool will be tested in five pilot sites and reviewed for its effectiveness in identifying factors that may contribute to unwarranted variation in patient outcomes.

The CAP audit tool will then be provided to Local Health Districts and specialty health networks (SHNs) to investigate factors associated with variation and develop targeted service improvement strategies.

ACI will then develop mechanisms for benchmarking and to share learnings.

Background

In 2013, BHI released a report on 30 day mortality report from pneumonia which showed:

- variation in mortality across NSW hospitals
- a need to investigate potentially contributing factors
- a need to identify targeted service improvement areas.

The British Thoracic Society has given permission to ACI to adapt their CAP audit tool for use in NSW. Opportunities exist for international benchmarking of CAP key performance indicators.
Aim

• To assist in the spread of innovation across NSW Health by finding demonstrated examples and supporting the implementation of these in LHDs and SHNs.

Benefits

• Solutions developed by clinicians.
• Proven methodology to develop sustainable model.
• Support from ACI for staged roll-out.
• Continuous learning.

Summary

ACI is supporting the implementation of two models.

1. Specialist geriatric outreach
   This model aims to maintain the health and independence of older people living in residential aged care facilities who are experiencing rapid decline. This can keep older people well for longer, reducing avoidable hospital presentations and/or admissions and reducing health care costs.

   The ACI is supporting the implement this model in Mid-North Coast LHD, Northern NSW LHD, Southern NSW LHD, St Vincent’s Hospital Network and South Western Sydney LHD.

2. Service access and care coordination
   The Service Access and Care Coordination Centre (SACC) model aims to support clients’ self-management, informed and participative decision-making, and improve access to, and coordination of, services. This integrated approach aims to reduce duplication of effort by service providers. The SACC model operates on the principle of ‘no wrong door’ and providing the ‘right care, right place, right time’.

   The ACI is supporting the implementation of this model in Illawarra Shoalhaven LHD, Northern Sydney LHD and Sydney LHD.

Background

In 2014, two examples of innovation were identified through the Clinical Innovation Program. The LHD/SHNs listed above applied successfully to form partnerships with the ACI, which offers:

• an evaluation of the current service model and development of a baseline analysis
• financial support for an implementation lead
• implementation support through planning, assessing and operationalising the model
• monthly site visits, with capability training for the implementation lead
• two-day accelerated implementation methodology (AIM) training
• three-day solutions generation workshop
• community of interest, monthly teleconference to discuss issues, solutions and quick wins.

Strategic initiative

Continue to build local capability in redesign, innovation and sustained improvement.

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Strategic initiative
Develop an approach for defining and collecting health outcomes and an assessment of value-based healthcare.

Aim
• To enable patients to provide direct, timely feedback about their outcomes and experiences using patient-reported measures (PRMs).
• To decide what PRMs are most important.
• To develop systems and processes to collect PRMs from patients.
• To develop systems and processes to use PRMs to improve individual patient care, inform local service improvement and evaluate the NSW Integrated Care Strategy.

Summary
PRMs include patient-reported outcome measures (PROMs), patient-reported experience measures (PREMs) and disease-specific measures.
ACI is working to develop, test and implement PRMs with Mid-North Coast LHD, Northern Sydney LHD, Western NSW LHD and Western Sydney LHD.
Each pilot site has identified their patient cohort(s). Question sets for PROMs, PREMs and disease-specific conditions are being developed and tested.
Educational resources, tools and referral linkages will also be developed for clinicians, managers and consumers.

Background
The ACI has been working with the four pilot sites and key partners to consult widely on the development of meaningful PRMs since late 2014. A workshop in April 2015 brought together all key stakeholders, including LHD pilot sites.
Since then, ACI, pilot sites and partners have:
• developed systems and processes to collect PRMs from patients
• developed systems and processes to use PRMs to improve individual patient care, inform local service improvement and evaluate the NSW Integrated Care Strategy.
Implementation of PRMs is due to commence in each pilot site in October 2015. The learnings from the pilot will inform the wider application of PRMs across the NSW health system.

Benefits
• Improved patient engagement, experience and satisfaction.
• Improved communication.
• Access to real-time feedback.
• More timely and appropriate referrals for better coordinated and integrated care.
• Better understanding of disease burden and health care outcomes.

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Accelerated implementation methodology

Strategic initiative
Continue to build local capability in redesign, implementation and sustained improvement.

Aim
- To increase implementation capability across NSW Health.

Summary
AIM is a dynamic two-day program giving staff practical tools to assess the likelihood of successful implementation of change, and tips and tactics to address areas of weakness. It focuses on the human aspects of change, addressing key areas such as sponsorship, building individual’s readiness for change and organisational culture.

In 2015, ACI obtained the rights to AIM in perpetuity. Programs have been delivered in Darwin, Hobart and for the NSW Office of Local Government, attracting senior executive staff who offered positive evaluations. Courses have been requested from NT and Tasmania.

Background
The Centre for Healthcare Redesign (CHR) at ACI has been running the AIM program for more than seven years, and its popularity and reach continue to grow. CHR has trained local health service staff to deliver the program, and last year over 50 programs were held for NSW Health staff and some Medicare Local (ML) staff undertaking partnership projects. The consistent feedback is that it is practical and fills a knowledge gap in taking a systematic approach to implementation.

ACI plans to continue the delivery of internal NSW Health programs and external programs, with the fees from the latter re-invested in AIM to refresh, develop and update the program materials.

Benefits
- A consistent methodology for implementation.
- Build on the platform of the thousands of staff already trained in using the methodology.

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Aim
- To analyse ACI’s approach to large systems transformation.
- To encourage reflection among ACI staff involved in implementation projects about their assumptions and approaches.
- To allow stakeholders from health services to express their views on how the ACI approaches implementation and innovation.
- To assess how the ACI’s implementation approach compares internationally.

Summary
The ACI large systems transformation study focused on three large systems change projects in stroke, hip fracture and delirium care.

The study revealed that:
- important innovations occur at the health service level
- innovations are shared horizontally among sites mediated by the ACI
- ACI staff balance linear progress with unpredictability and complexity, and
- ACI flexibility allows services to ensure changes are appropriate and sustainable.

The findings were presented at the LST roundtable and forum in June 2015. Present were pillar staff, health service staff, and two prominent implementation researchers from overseas, Stephen Samis (Vice-President Programs, Canadian Foundation for Health Improvement) and Myles Leslie (A/Professor, Armstrong Institute for Patient Safety & Quality, Johns Hopkins University, USA). Local contributors included Matt Jennings (SSWLHD), Jamie Gill (CCLHD), Anne Moehead (NCLHD), Harvey Lander (CEC), Vicki Newton (PBMH) and Jennifer Parkin (ACI).

Background
Contemporary healthcare delivery systems around the world are redesigning their services. Change initiatives need to key large-scale evidence and planned reforms in to site-specific opportunities and contextual constraints. ACI’s approach to implementation is unique as it renders transformations amenable to local adaptation.

Benefits
- Enables ACI staff to reflect on their own implementation beliefs and practice.
- Helps understand the challenges and opportunities facing service-based project staff.
- Raises awareness of strategies that help frontline staff adopt and adapt proposed transformations.
RICH Forum

Strategic initiative
Continue to build local capability in redesign, innovation and sustained improvement.

Aim

- To showcase and share innovative rural projects which:
  - show a resourceful and innovative approach to an existing issue
  - have potential for transferability across other health sectors
  - demonstrate sustainability in embedding the change.
- To aid networking between residential aged care staff, Aboriginal Medical Services, LHDs, MLs and consumers at each of the regional hubs.
- To share resources and lessons learned.

Summary

In March 2015, more than 240 healthcare professionals and consumers connected in the virtual forum known as RICH – Rural Innovations Changing Healthcare. Hosted by the ACI, it showcased innovative rural working models of care and demonstrated new ways to collaborate and improve healthcare across NSW.

Using a combination of face to face, videoconference and social media, the one day forum linked 17 satellite hubs across rural NSW bringing together a mix of cross-sector disciplines at each site for a day of interdisciplinary networking between LHDs, NSW Ambulance, RACFs, MLs, general practice and consumers.

This year’s forum, ‘Collaborative teams’, showcased 10 projects with potential for broader implementation and collaboration across rural health sectors. A further eight e-posters were displayed.

Background

The RICH Forum is a virtual conference without travel. It requires the same organisation as a conventional conference; a keynote speaker, call for abstracts and concurrent presentations.

Site coordinators at each site drive local engagement, and test runs are scheduled to build capacity and confidence in using the technology.

The ACI also provides an information toolkit to sites with attendance sheets, help desk numbers, contact details for all sites, consent forms to share presentations and the evaluation.

The day is facilitated so that the program runs to time and participants have the opportunity to ask questions in a supported environment.

Benefits

- Flexibility for clinicians who can drop in and out without giving up a day’s work.
- Involvement without the need for travel and accommodation.
- Highly cost effective.

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1 Deadly Step screening program

**Strategic initiative**

Ensure all ACI projects and activities seek to close the gap in health outcomes for Aboriginal people and improve the health outcomes of other priority populations.

**Aim**

- To promote point of care screening, early detection and coordinated follow-up of chronic disease in Aboriginal communities.

**Summary**

A local organising committee is formed between staff from the local AMS, LHD and PHNs to plan an event for their community to be screened for chronic disease.

The community events deliver ‘point of care’ screening for cholesterol, blood pressure, blood glucose level, albumin creatinine ratio, height, weight, body mass index, waist and smoking.

A key component of the 1 Deadly Step events is the follow-up of those participants identified as at risk during screening.

Data is collected using an iPad app which produces a summary of participants’ chronic disease risk status. GPs can download reports for their patients via the 1 Deadly Step web portal to support efficient and targeted follow-up.

**Background**

The 1 Deadly Step project is an initiative of the Chronic Care for Aboriginal People Program (CCAP). This project demonstrates how the CCAP Model of Care can be used as a framework for designing chronic disease programs targeting Aboriginal people and communities.

The 1 Deadly Step program is a partnership project between ACCHS, LHDs and MLs/PHNs. The unique component of 1 Deadly Step is the involvement of sport and its ability to engage Aboriginal people who might not normally be screened for chronic disease.

1 Deadly Step has a partnership with NSW Country Rugby League, which is able to support events with current and past NRL players and providing games and activities for children.

**Benefits**

- Results presented to participants visually in culturally appropriate form to allow easy understanding of risk status.
- Acceptable to and engaging for Aboriginal communities.
- Works within, rather than alongside, current system.

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Aim

- To improve employment opportunities and outcomes for people with traumatic brain injury.

Benefits

- Increased retention of pre-injury employment.
- New pathways for improved work training placements.
- Earlier commencement of return to work following injury.
- Improved health outcomes, social participation and quality of life.
- Increased capacity within the vocational rehabilitation sector.

Summary

The vocational intervention program (VIP) is funded by the NSW Government’s Safety Return to Work and Support involving the Motor Accident Authority of NSW, Work Cover NSW and the Lifetime Care and Support Authority.

Over the next two years the VIP will service 78 clients in three regions of NSW – metropolitan Sydney, the NSW North Coast and Western NSW.

VIP services operate within a service integration model, with the brain injury rehabilitation program teams partnered with selected vocational rehabilitation providers at each local region. Two specific interventions are provided.

Fast-track is for clients who were working at the time of their injury, are identified to have good potential to return to work and have employers who have agreed to manage a return to their pre-injury place of employment.

Place and train is for clients with more severe brain injury who have no pre-injury employment option and require intensive training and skill development via a 12-week unpaid work training placement.

Background

Returning to the workforce following brain injury is an important step in rehabilitation. Currently, only 29% of people return to work after a brain injury in NSW, despite work being the main goal of most people. Integral to success in return to work is effective partnerships between all parties: employees, vocational rehabilitation providers, clinicians, people with a brain injury and their families.

The provision of specialist employment services for people with severe brain injury within the Commonwealth-funded Disability Employment Service has progressively declined over the past 10 years. The VIP aims to re-build capacity in the sector by training and partnering appointed employment service providers with the brain injury rehabilitation clinicians under an integrated model of service.
Strategic initiative
Align work programs with our pillar partners to demonstrate a coordinated approach to delivery of programs in the LHDs.

Aim
- To support evidence-based primary care for people with acute low back pain (ALBP).
- To reduce pain and disability associated with ALBP.
- To improve the process of care, patient outcomes and satisfaction with care.

Summary
The ACI model of care for the management of people with ALBP has been developed for people aged 16 years and over who present to their general practitioner or ED with a new episode of acute low back pain i.e. low back pain of less than three months duration, with or without leg pain, and preceded by one month of no pain.

The model of care provides different care pathways for patients with ALBP using three triage classifications:
(i) non-specific low back pain
(ii) low back pain with leg pain and
(iii) suspected serious pathology (red flags).

While multiple practitioners could be involved in the care of these patients, the primary team members comprise the patient and their family, their general practitioner, practice nurse and physiotherapist. The model of care is to be trialled in the current musculoskeletal primary health care initiative, beginning in August 2015.

Background
Low back pain is a major cause of disability, and a quarter of Australians having low back pain at any one time. High levels of disability result in personal and societal economic costs. Studies have shown that about 40% of those reporting an episode of acute back pain will have recovered within six weeks. However, 48% will still have pain and disability after three months and about 15% at 12 months.

The model of care was developed in consultation with the ACI Pain Management Network, and is based around primary care.

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Scan the QR code
**Gastrostomy feeding tube guidelines**

**Strategic initiative**

Align work programs with LHDs and other service providers to work together on agreed priority programs.

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**Aim**

- To provide a practical resource for clinicians to assist them in providing standardised care for children and adults who have a gastrostomy tube or device.

**Benefits**

- Statewide approach based on evidence.

**Summary**

The ACI established an expert multidisciplinary working group to provide professional insight into the development of the guidelines. It included gastroenterologists, clinical nurse consultants, clinical nurse specialists, nurse unit managers, ambulance officers, dietitians and speech pathologists.

The aims of the project were to:

- develop guidelines for the insertion, care, replacement and removal of gastrostomy feeding tubes and devices in public healthcare facilities
- develop practical guidelines that can be implemented across the health systems
- consider options for educational resources to support the guidelines
- identify and address the key elements of the patient journey.

An evidence check review was conducted to critically appraise and summarise existing evidence relating to specific areas of gastrostomy care.

Drafts of the guidelines were circulated to key stakeholders for two consultation rounds in February and May 2014. The guidelines were launched in December 2014. To support implementation, the ACI Nutrition and Gastroenterology Networks will host education days for clinicians on gastrostomy care in two metropolitan and four regional areas of NSW in 2015.

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**Background**

In 2012, the ACI received a request from the NSW Ombudsman about the existence of state guidelines related to gastrostomy tubes and devices.

The Gastroenterology and Nutrition Networks advised that there were no statewide guidelines for the insertion, management and ongoing care of gastrostomy feeding tubes and devices.

The NSW Director General endorsed the development of statewide guidelines by the ACI. The development of these guidelines was undertaken as a joint project by the ACI and GENCA.

An expert multidisciplinary working group was established to develop these guidelines.

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Strategic initiative
Align work programs with our pillar partners to demonstrate a coordinated approach to delivery of programs in the LHDs.

Aim
- To help people plan and think through the likely impact of any proposed changes resulting from the NSW Health Integrated Care Strategy.

Benefits
- Improved decision-making.
- Better health care.

Summary
The decision support tool can be used for a variety of purposes:
- for reviewing an existing service, or area of service provision: perhaps within a regular quality improvement cycle, as part of re-organising services or to determine how well a particular approach is working
- for assessing a proposed change, or comparing possible service options: the guide provides a structured approach to describing and assessing competing alternatives
- for planning services: it can assist with developing service specifications for planning or commissioning
- for providing training or facilitation: it can be used for training in planning, commissioning and redesigning services.

It has been developed with Local Health Districts/Networks in mind, although it may also be useful for PHNs and other health service organisations.

Background
Health care in the community is changing. People are receiving more acute care outside hospital, and those whose health is frail are more often being managed at home. In NSW the Health Integrated Care Strategy is encouraging more comprehensive and coordinated care for people with chronic conditions. Public, non-government and private sectors are finding new ways of working together.
Aim
• To prevent avoidable vision loss and blindness.

Benefits
• Improved identification, vision screening, referral, access, treatment and management of the population at risk of non-acute eye disease.
• Clear communication pathways between service providers and between service providers and patients and carers.
• Improved experience of patients and carers.

Summary
Different service delivery models are being developed for:
• people at risk of developing glaucoma and those diagnosed with glaucoma, and those with diabetes mellitus at risk of developing diabetic retinopathy
• people with uncomplicated symptomatic cataract.
This will require the development of:
• strategies to identify the populations requiring vision screening
• standard protocols for referral, screening and management
• efficient administrative processes.

Background
As the Australian population grows and ages, demand for eye health care services will increase.
Reduced vision has consequences for physical health outcomes including increased risk of fall (x2) and hip fracture (x4-8), with implications for demand for other health care services. For conditions such as diabetic eye disease and glaucoma, up to 50% of patients may be unaware they have the condition at all and 25% may never see an eye care provider. More people are developing diabetes mellitus, and are at risk of developing diabetic retinopathy.
The existing configuration of eye care services cannot adequately accommodate all current or future needs for eye care in NSW. This is especially notable in western and southwestern Sydney and regional NSW.
At present, there are multiple barriers to care. Models of care are poorly defined and poorly integrated. Screening is opportunistic and therefore inadequate. Cost is a major barrier for patients seeking private referral and access to public hospital eye clinics is difficult. There are long waits to obtain initial appointments at the eye clinic and then, if required, a queue for surgical care. Communication between providers in the clinical pathway is often poor.
**Pre-procedure toolkit update**

**Strategic initiative**
Align work programs with our pillar partners to demonstrate a coordinated approach to delivery of programs in the LHDs.

**Aim**
- To review and update the Pre-procedure preparation toolkit ensure that patients presenting for surgery or a procedure receive the best possible care.

**Summary**
- A steering group, comprised of members from the Anaesthesia Perioperative Care Network and Surgical Services Taskforce, is overseeing the review.
- The steering group has reviewed the existing information and is finalising additional and updated content for the toolkit.
- Targeted consultation has also been undertaken with Aboriginal health care staff and services to ensure the toolkit supports the needs of people from Aboriginal and Torres Strait Island backgrounds.

**Benefits**
- Supports standardised care across hospitals and LHDs including tertiary, metropolitan, regional and rural facilities.

**Background**
- The Pre-procedure preparation toolkit was developed in 2007 to provide a set of standardised principles to support care for patients presenting for surgery or a procedure.
- It was designed to support a multidisciplinary team approach to pre procedure care.

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Strategic initiative
Align work programs with our pillar partners to demonstrate a coordinated approach to delivery of programs in the LHDs.

Aim
- To collect clinical data to quantify 30-day, risk-adjusted surgical outcomes.
- To allow international benchmarking of outcomes among participating hospitals.

Summary
The ACI and the Surgical Services Taskforce remain committed to assisting NSW hospitals enrol in the American College of Surgeons Quality Improvement Program (ACS NSQIP®). The ACS NSQIP® is a nationally validated, risk-adjusted, outcomes-based program to measure and improve the quality of surgical care. The program prospectively collects clinical data to quantify 30-day, risk-adjusted surgical outcomes and allows for external benchmarking of outcomes among participating hospitals. Hospital managers, quality manager, and clinicians are provided with the tools, reports, analyses, and support necessary to make informed decisions about improving the quality of care.

Four hospitals (Nepean, Westmead, Coffs Harbour and Port Macquarie) are joining a NSW collaborative and the ACI will be working with these sites.

A surgical clinical reviewer has been appointed at Nepean Hospital and has commenced training with the College of Surgeons.

The three remaining hospitals are currently recruiting.

Background
Many hospitals have trouble tracking surgical complications and lack the data necessary to analyse and take appropriate steps to fix problem areas.

The ACS NSQIP® data enhances a hospital’s ability to reduce preventable complications, length of stay and preventable readmissions.

NSQIP enrolment in NSW has been initiated and led by clinicians who are seeking better data to improve the clinical management of surgical patients.

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Aim

• To reduce unwarranted clinical variation in prostate surgery across NSW Health services.

Summary

NSW public hospitals with at least one surgery each year and a minimum of 10 surgeries for three years were used to investigate variation in length of stay by hospital.

Hospitalisation data were obtained from the NSW Admitted Patient Data, which included an anonymous patient level identifier generated through record linkage to allow a ‘look-back’ to previous hospital admission with the aim of identifying patient co-morbidity.

There are about 3400 prostatectomies in public hospitals in NSW annually at an average cost per separation of approximately $9500. The average length of stay was 4.6 days, and tended to be higher for patients with co-morbidity (31%; ALOS=6.8), and for radical prostatectomy (10%; ALOS=10.1).

Six hospitals were identified as ‘special cases’ with the ALOS above state average.

Further consultation with networks and clinicians is required to understand what the potential sources of variation may be.

Background

High level data from the Activity Based Management Portal suggested variation in LOS for prostatectomy across NSW LHDs. As part of a series of analyses, ACI’s health economics and evaluation team was engaged to undertake an investigation of possible hospital differences in ALOS for prostatectomy in NSW.

The original analysis using five years of historical data was done in two stages, the first by diagnosis related group and the second by procedure. This analysis suggested hospital differences in LOS.

Further analysis using the most recent three years of data (2011/12-2013/14) was undertaken to build on this preliminary investigation of hospital variation in LOS for prostatectomy in NSW.

The findings of this analysis were summarised to initiate dialogue among clinicians, the network and the ACI, and in particular to facilitate discussion with those hospitals that were identified as ‘special cases’. 
Aim
- To reduce unwarranted clinical variation through the provision of point of care access to up-to-date, evidence-based information.

Benefits
- Provides a 'one stop' resource to assist clinicians from the initial resuscitation to stabilisation and transfer, if necessary.
- Potential to reduce secondary injuries and deaths as a result of the optimal management of the primary injury.
- Potential to reduce length of stay by optimising early treatment.
- Easy access to guidelines, updated evidence and educational material.

Summary
The ACI’s ITIM has developed an innovative clinical support tool known as the NSW Trauma app, designed to provide a portable and versatile amenity in trauma care and utilising smart phone or tablet computer technology.

The NSW Trauma app includes the provision of user friendly trauma resources for both adult and paediatrics, such as:
- localised guideline repository
- specific burn injury resources
- interactive checklists
- clinical timestamps
- trauma related medical calculators
- detailed NSW health facility information.

It is designed to be compatible across iOS and Android platforms.

Background
There is no overall integration or standardisation of guidelines and features despite the majority of content being similar irrespective of location. There exists an important need to streamline, integrate and present an updated app to all trauma clinicians in NSW irrespective of location and profession that will aid in care of victims of trauma.

There is a need for the provision of a one stop resource to support the front line clinician to provide accurate and timely care for the patient. It is burdensome to access a bench top computer often competing with other staff and programs, to access imperative information and resources to aid in the delivery of evidenced base care and reduce unwarranted clinical variance in a timely and efficient manner.

Clinicians require up-to-date, evidence-based information to deliver optimal care to trauma patients. The creation of a platform for NSW trauma clinicians will allow rapid and efficient access to centralised minimal standard of excellence information related to trauma care.