

REPORT

# ACI Initiatives August 2016



Collaboration. Innovation. Better Healthcare.

**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.

[www.aci.health.nsw.gov.au](http://www.aci.health.nsw.gov.au)

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## Table of Contents

Foreword	iii
Introduction	iv
Glossary	v
Assessment of unwarranted clinical variation, community acquired pneumonia	1
Assessment of UCV – stroke audit report	2
Clinical services framework for chronic heart failure	3
Assessment of UCV – chronic obstructive pulmonary disease	4
Clinical guidelines for blood and marrow transplant long-term follow-up	5
Centre for healthcare redesign school graduate certificate	6
Patient reported measures program	7
Intensive care unit capability program	8
Business cases for Murrumbidgee rehabilitation	9
Clinical Innovation Program capability building program	10
Strengthening healthcare in the community – a decision support tool	11
Allied health services guide for people living with dementia	12
Patient centred medical home background paper and health neighbourhood capability building scoping paper	13
Acute low back pain model of care	14
Pain linkage service	15
The stroke vision defects tool	16
National surgical quality improvement program	17
Prostate cancer clinical registry NSW	18
Impact of physiotherapy care in the ED	19
Ladder falls	20

## Foreword

This report provides an update on Agency for Clinical Innovation (ACI) initiatives that have made significant progress in the past six months, from February 2016 to August 2016.

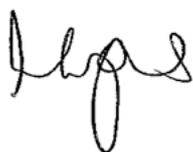
During this period we have been working closely with our partners to identify key priorities and areas of ongoing work and collaboration for our Clinical Networks, Taskforces and Institutes.

We have listened to the feedback from the system and are changing the way in which we do business to be more responsive to the needs of local health districts, while maintaining a strong emphasis on the importance of clinician and consumer led initiatives.

Building the capability of people working in the NSW health system remains a key priority for our organisation, as we empower staff to continue to develop and implement innovative change initiatives in their workplaces.

Reducing unwarranted clinical variation across the system and reporting on patient outcomes has also become a key focus for us as we build strong links between the acute, primary and community care settings for a more integrated health system.

I commend the clinicians, managers and consumers who have worked with the ACI to deliver the service improvement initiatives detailed in this report. It is through strong collaborations that we can together deliver real improvements to the way care is provided in NSW.



**Dr Nigel Lyons**

Chief Executive

Agency for Clinical Innovation

## Introduction

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

Our goal is to be recognised as the leader in the NSW health system for delivering innovative models of patient care.

We provide a range of services to healthcare providers including:

- service redesign and evaluation
- specialist advice on healthcare innovation
- initiatives including models of care, guidelines and frameworks
- implementation support
- knowledge sharing
- continuous capability building.

Visit the [Innovation Exchange](#) to learn more about local innovation and improvement projects from across the NSW health system.

Visit the [Excellence and Innovation in Healthcare portal](#) to learn more about ACI and Clinical Excellence Commission initiatives.

## Glossary

<b>ACI</b>	Agency for Clinical Innovation
<b>BHI</b>	Bureau of Health Information
<b>BMT</b>	Blood and marrow transplant
<b>CAP</b>	Community acquired pneumonia
<b>CHF</b>	Chronic heart failure
<b>COPD</b>	Chronic obstructive pulmonary disease
<b>ED</b>	Emergency department
<b>HEET</b>	Health economics and evaluation team
<b>ICHOM</b>	International Consortium for Health Outcomes Measurement
<b>ICU</b>	Intensive care unit
<b>ITIM</b>	Institute of Trauma and Injury Management
<b>LHD</b>	Local health district
<b>MLHD</b>	Murrumbidgee local health district
<b>NSQIP</b>	National Surgical Quality Improvement Program
<b>PCCR</b>	Prostate Cancer Clinical Registry
<b>PEACE</b>	Patient experience and consumer engagement
<b>PCMH</b>	Patient centred medical home
<b>PHN</b>	Primary health network
<b>PREMs</b>	Patient reported experience measures
<b>PRMs</b>	Patient reported measures
<b>PROMs</b>	Patient reported outcomes measures
<b>QARS</b>	Quality audit reporting system
<b>SCAP</b>	Stroke clinical audit process
<b>SHN</b>	Specialty health network
<b>UTAS</b>	University of Tasmania
<b>UCV</b>	Unwarranted clinical variation

# Assessment of unwarranted clinical variation, community acquired pneumonia

## Strategic initiative

Enhance and progress the ACI's strategy for reducing unwarranted clinical variation (UCV).

## Aim

- To support local health districts (LHDs) and specialty health networks (SHNs) to identify local causal factors for UCV, to target local service improvement strategies and evaluate outcomes.

## Benefits

- Improved quality of care
- Assistance for clinicians and managers to identify factors that contribute to clinical variation
- Community acquired pneumonia (CAP) audit results that can be used in the identification of local service improvement strategies.



## Summary

The ACI CAP audit tool enables hospitals to collect patient level data for adults admitted to hospital with CAP.

The toolkit contains tools and information that enable sites to measure patient, process and system factors that contribute to unwarranted variation, and then use this information to prioritise and target local service improvement strategies.

The ACI CAP audit tool will enable clinical teams to identify where current care is being delivered in line with best practice and any aspects of current care that may warrant service improvement strategies.

The audit will assist teams to identify, monitor and compare care processes and outcomes for patients. By using a standard audit tool, teams will have the opportunity to benchmark processes and outcomes against peer hospitals within NSW.

The aggregated data can be used for internal quality review purposes and to identify service improvement opportunities.

## Background

Each year, there are over 14,000 adults admitted with CAP to NSW hospitals.

With the aim of reducing UCV, the ACI Respiratory Network was tasked to collaborate with clinicians to understand the factors associated with variation in pneumonia outcomes. This informed the development of the audit tool.

An audit process was recommended to identify and quantify specific clinical, process and system factors that may contribute to variation in outcomes. Formal permission was obtained to adapt the British Thoracic Society CAP Audit Tool to meet the requirements of the NSW Health context.

The adapted CAP audit was piloted during 2015 across tertiary, major metropolitan and major non-metropolitan hospitals. It has subsequently been reviewed and evaluated for usability and usefulness by clinical leads and clinicians involved in the pilot audits.

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# Assessment of UCV – stroke audit report

## Strategic initiative

Enhance and progress the ACI's strategy for reducing UCV.

## Aim

- To reduce mortality for ischaemic and haemorrhagic stroke patients admitted to NSW public hospitals.

## Benefits

- Reasons for local clinical variation identified
- Effective strategies to reduce clinical variation identified
- Improved access to acute and post-acute stroke care
- Development of new sites with organised stroke care.

## Summary

The stroke clinical audit process (SCAP) engaged over 600 clinicians and managers across NSW, providing them with the information and peer support needed to identify and locally address UCV.

The SCAP has shown that UCV can be explained.

At present, stroke patients do not always receive evidence-based care at hospitals caring for acute stroke patients in NSW. Importantly, good access to a stroke unit bed is associated with better patient outcomes. Early indications are that the SCAP is addressing UCV by improving stroke bed access and adherence with important clinical processes.

By providing reliable service data and reaching out, face-to-face across NSW, the SCAP process has increased the profile of UCV in general, demonstrating it is a local issue with local solutions.

The interim results of the SCAP program, and local responses, were presented at a second UCV workshop on 28 April 2016.

## Background

NSW stroke outcomes compare favourably with those of other OECD countries and have been improving with coordinated and locally initiated development of specialised stroke care.

However, recent Bureau of Health Information (BHI) reports have suggested UCV in stroke outcomes.

In response to reported variation, ACI's NSW Stroke Network undertook a highly consultative and collaborative process involving hospital clinicians and managers, the executives of LHDs, the Unwarranted Clinical Variation Taskforce and BHI; to determine the next steps in identifying and addressing the reasons for clinical variation and to understand if this variation was indeed unwarranted.



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# Clinical services framework for chronic heart failure

## Strategic initiative

Enhance and progress the ACI's strategy for reducing UCV.

## Aim

- To support clinicians in the community and hospital environments to provide evidence-based care in the prevention, diagnosis and management of people with chronic heart failure (CHF) across the continuum of care.

## Benefits

- Better patient outcomes and experiences
- Reduced hospitalisations
- Reduced morbidity and mortality.



## Summary

The clinical service framework consists of nine standards which cover the full spectrum of services for the prevention, diagnosis and management of CHF. Prevention includes primary and secondary prevention. Diagnosis includes the investigation of causal, precipitating and exacerbating factors. Management includes pharmacological and non-pharmacological management across the spectrum of multidisciplinary care, rehabilitation and palliative care.

Following the publication of the initial framework, a range of initiatives have been introduced to improve the provision of quality care through better coordination, stronger partnerships between healthcare providers and empowering patients to actively participate in their care. These initiatives include NSW Health integrated care initiatives (including risk stratification, patient reported outcome measures and chronic disease management services) and the patient centred medical home (PCMH). There is also an ongoing focus on UCV and unplanned re-admission to hospitals throughout NSW.

## Background

CHF is one of the leading causes of admission and re-admission to hospital. Across NSW public hospitals in the period from July 2009 to June 2012, there were 28,877 hospitalisations with a principal diagnosis of CHF. Of these, 6751 (23%) were followed by an unplanned re-admission within 30 days of discharge.

The evidence base has evolved since publication of the initial clinical service framework in 2003, with new evidence supporting the role of multidisciplinary care, new pharmacological interventions and devices that may improve survival and quality of life.

Despite these advances, evidence continues to emerge that the current provision of care is often sub-optimal with poor adherence to best practice guidelines and there is an inequity of care particularly comparing city and rural areas.

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# Assessment of UCV – chronic obstructive pulmonary disease

## Strategic initiative

Enhance and progress the ACI's strategy for reducing UCV.

## Aim

- To identify clinical, process and system factors that contribute to patient outcomes across LHDs; and to assist LHDs to review opportunities for service improvement strategies where required.

## Benefits

- Identifying variation and opportunities for improvement for chronic obstructive pulmonary disease (COPD) treatment within LHDs
- Reducing 30-day readmissions for COPD in sites with significant clinical variation after developing and implementing service improvement strategies
- Reducing 30-day mortality in patients with COPD.

## Summary

The *COPD-X plan: Australian and New Zealand guidelines for the management of chronic obstructive pulmonary disease* were endorsed in February 2016 by the ACI Respiratory Network executive steering committee to be used by clinicians working with patients with COPD in NSW.

Permission was obtained from the Royal College of Physicians, London to adapt the British Thoracic Society COPD audit for use in NSW. Measures added were Aboriginality, advance care directive and antibiotic/steroid prescribing in line with the COPD-X guidelines.

Three sites – Liverpool, John Hunter and Campbelltown Hospitals – volunteered to review the COPD audit tool and provide feedback on the logistics of the tool. Feedback was noted and the tool was amended.

Four members from the COPD advisory group nominated their sites to participate in an upcoming pilot, to commence in August 2016. It is anticipated that data from 40 audits per site will be obtained using QARS (quality audit reporting system), initially developed by the Clinical Excellence Commission. The nominated sites are St George, Wollongong, The Tweed and Wagga Wagga Rural Referral Hospitals.

## Background

The *Spotlight on measurement – Measuring 30-day mortality following hospitalisation* report, published August 2015, discusses a range of issues and options for the ongoing measurement and reporting of 30-day mortality in NSW with one of the focuses being on COPD.

The BHI presented preliminary data to the Respiratory Network Executive Steering Committee at the end of 2015 for the next report, released in June 2016.

A clinical advisory group was established which agreed that the most appropriate way to assess UCV was to audit LHDs and their service provision around COPD.



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# Clinical guidelines for blood and marrow transplant long-term follow-up

## Strategic initiative

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

## Aim

- To support the delivery of quality long-term follow-up care across NSW to improve patient outcomes.

## Benefits

- Statewide approach based on evidence
- Improved quality and experience of care
- Improved health outcomes, social participation and quality of life.



## Summary

The clinical guidelines outline thirteen high risk domains requiring evidence based screening and assessment for the long-term follow-up of people following allogeneic blood and marrow transplant (BMT).

These prevention and screening guidelines for clinical care aim to support LHDs and health professionals to provide safe and effective care, reduce clinical variation and ensure that NSW patients have access to services, expertise and resources consistent with their needs, values and preferences.

Further resources to support long-term follow-up care are being developed using co-design methodology, in collaboration with the ACI patient experience and consumer engagement (PEACE) team. This approach brings patients, families and staff together to share the role of improving health services, based on their experience of care.

## Background

The long-term complications following allogeneic BMT can affect every organ of the body. The collective impact of these complications can lead to poor health outcomes including increased mortality, while lowering the quality of life for people following BMT.

An expert multidisciplinary working group, comprising members of the BMT Network, was established to review current evidence and develop resources to support the provision of long-term follow-up care in NSW.

Long-term follow-up screening and assessment services aim to provide early recognition of complications, improvements in quality of life and long-term survival for this cohort. Currently there is significant variation in the delivery of long-term follow-up care for BMT survivors in NSW.

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# Centre for healthcare redesign school graduate certificate

## Strategic initiative

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

## Aim

- To support NSW Health staff to build intermediate level skills in service improvement; to provide a professional pathway for staff in clinical redesign; and to deliver service improvements aligned to strategic goals of the healthcare services.

## Benefits

- Acquisition of skills in project management, improvement science, implementation management and leading change across organisational boundaries
- Building of strong redesign alumni networks
- Working with patients and carers for improved delivery of health services
- Increased focus on implementation.



## Summary

In 2016, the redesign program qualification transitioned from a Diploma of Project Management to a Graduate Certificate in Clinical Redesign in partnership with the University of Tasmania (UTAS).

This provides significant recognition of the comprehensive learning and skills development of participants of the program.

While the content delivered by ACI remains largely unchanged, a subject has been added called 'translational research and health service innovation', which focuses on the factors that will further promote implementation.

Over a year, teams of LHD/SHN staff are required to participate in 14 face-to-face contact days, complete e-Learning modules and complete a service improvement project that is strategically important to their organisation.

Students who obtain the Graduate Certificate in Clinical Redesign can proceed to a professional honours and doctorate in Clinical Redesign through UTAS.

UTAS and ACI are planning to offer past graduates of the program the opportunity to upgrade their qualification in late 2017.

## Background

In August 2007, NSW Health started teaching redesign methodology to staff through the Centre for Healthcare Redesign (CHR). Over 450 staff have been through this program to date with demand continuing to increase.

Using proven redesign methodology, frontline staff can identify when there are issues impacting patient journeys and then develop and implement better ways of providing care.

Redesign projects have resulted in new ways of delivering better care for patients and carers in NSW since 2007.

The ACI has updated the methodology to ensure it remains contemporary with best practice. They use the methodology to underpin the development of models of care and guidelines for the NSW health system, as well as provide training for staff to implement models of care, and undertake their own improvements at the frontline.

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# Patient reported measures program

## Strategic initiative

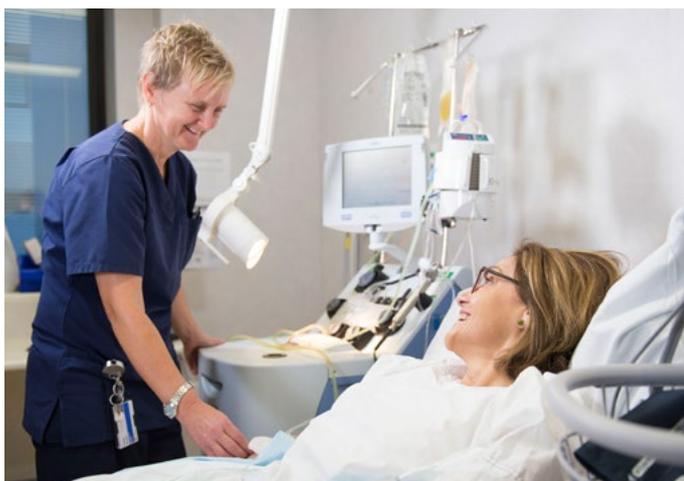
Develop an approach for defining and collecting health outcomes and an assessment of value based healthcare.

## Aim

- To improve health outcomes for patients and improve service delivery through the repeated and routine collection, measurement and use of direct timely feedback of patient reported measures (PRMs).

## Benefits

- Improved health outcomes for patients
- Improved communication between clinicians and patients
- Patients as partners in their healthcare
- Assist clinicians to understand the true burden of disease (in chronic conditions)
- Measuring patient reported outcomes is important as traditionally measured biomarkers often fail to correspond with how a patient is actually feeling.



## Summary

Patient reported measures are outcomes that matter to patients.

These measures can be split into two distinct groups: patient reported outcomes measures (PROMs) and patient reported experience measures (PREMs). The former capture the patient's perspectives about how illness or care impacts on their health and wellbeing, whereas the latter capture a person's perception of their experience with healthcare or services and can be used for quality improvement processes as well as driving improvements in service delivery locally.

The ACI has completed a co-design process with clinicians and consumers to test, refine and implement the PRM program across NSW. Ten proof of concept sites across NSW (including LHDs and primary healthcare) are now collecting and using PRMs to truly determine outcomes that matter to patients and to capture their experiences of care.

## Background

The literature demonstrates that patients who are engaged in their healthcare tend to experience better outcomes and choose less costly interventions, such as physical therapy for low back pain after they participate in a process of shared decision making.

Enabling patients to provide direct timely feedback about their health-related outcomes can provide a better reflection of how a patient feels about their healthcare than traditionally measured biomarkers and adds value to their interactions with healthcare providers.

The development and implementation of the PRMs was identified as a system enabler in the NSW Health Integrated Care Strategy to support consumers, LHDs, SHNs and primary healthcare.

Ten proof of concept sites are involved in the program. Each has identified a patient cohort with chronic and complex conditions.

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# Intensive care unit capability program

## Strategic initiative

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

## Aim

- To provide capability development enabling LHD project staff to have the understanding and knowledge to support the implementation of the service model.

## Benefits

- Centralised training of staff, allowing for networking and sharing across site boundaries
- Support the application of the theory and knowledge to change at the site level
- Support for LHD staff to build sustainable service models to deliver better intensive care for patients.

## Summary

The CHR, Implementation Team and Intensive Care Unit (ICU) Network have collaborated to design and build a tailored program for LHD staff who are implementing the level 4 service model.

The program had two key focuses; to provide the theory and knowledge, and to support the application in practice.

The curriculum for the face-to-face components of the program included project management, building collaborative partnerships, redesign and implementation.

The CHR team worked with sponsors and project staff to identify learning needs and develop and deliver a curriculum that was best suited to meet those needs. The implementation team and ICU network have worked with LHD staff to apply and embed their skills to this complex project.

The centralised curriculum was provided over a 6 month period, with ongoing implementation support being provided for the full 18 month implementation of the project.

Participants evaluated the program as very beneficial and appreciated the opportunity to establish a network that was still very active after the end of central training days.

## Background

The intensive care service model project was launched on 11 January 2016 in nine sites from across seven LHDs, with the commencement of project officers at each site.

The project aims to standardise the way level 4 intensive care services are delivered, used and networked within an LHD or region, improving the access and delivery of care to critically ill patients in rural, regional and smaller metropolitan hospitals across NSW.

Due to the large number of sites expressing an interest in partnering with ACI in the implementation of the service model, ACI has committed to a phased implementation.

The first phase includes Bathurst, Bega, Broken Hill, Dubbo, Grafton, Griffith, Goulburn, Kempsey and Shoalhaven. Sites are yet to be finalised for the second phase which will commence September 2016.



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# Business cases for Murrumbidgee rehabilitation

## Strategic initiative

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

## Aim

- To enhance existing rehabilitation services within the Murrumbidgee LHD (MLHD) by implementing in reach and outreach rehabilitation services in line with the NSW Rehabilitation Model of Care.

## Benefits

- Reduction in acute and admitted subacute (rehabilitation) bed days
- Increase in acute ward capacity
- Increase in rehabilitation beds capacity
- Introduction of outpatient services across MLHD
- Significant financial savings.



## Summary

As part of the implementation process for the NSW Rehabilitation Model of Care, the ACI's rehabilitation network manager, implementation team and health economics and evaluation team (HEET) worked with a project team from the MLHD to identify which rehabilitation care settings would be most appropriate to best meet the needs of the population of MLHD.

Research revealed that implementation would require realignment of internal resources and/or additional funding.

As such, the rehabilitation network manager, HEET and MLHD then worked collaboratively to prepare a business proposal for the MLHD executive, which described the benefits of enhancing two settings of the NSW Rehabilitation Model of Care – in reach to acute services; and outreach services.

This business proposal was used by the LHD to successfully negotiate additional funding as it could clearly demonstrate the patient and economic benefits of implementation.

Implementation is due to commence shortly.

## Background

MLHD was identified as a pilot site for implementation of the NSW Rehabilitation Model of Care.

MLHD and ACI have been working together to put into effect the NSW Rehabilitation Model of Care in a way that will best meet the rehabilitation needs of the local population of MLHD.

A business proposal was prepared by the ACI and the LHD which detailed the case for change and proposed service model for implementation which was in line with the NSW Rehabilitation Model of Care and the [MLHD Rehabilitation Clinical Services Plan 2014–2018](#).

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# Clinical Innovation Program capability building program

## Strategic initiative

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

## Aim

- To provide project partners with an 'on the ground' capability building program that is flexible, robust and includes core skills development to deliver a successful project management and implementation strategy.

## Benefits

- Customisable education program to support ACI's partners, adjusted to meet individual experience and skill sets
- 'On the ground' support, with regular site visits
- Working collaboratively to build the capability of project and implementation officers in LHDs.



## Summary

The Clinical Innovation Program capability building program has three core education sessions, designed to provide participants with the essential knowledge, skills and abilities to deliver results, using successful project, change and implementation management techniques. These sessions include:

- accelerated implementation methodology
- business case collaboration with HEET
- solutions generation workshop.

Additional sessions can be delivered in either a structured or ad-hoc way, depending on the needs of the participants. These sessions consist of:

- project management planning
- diagnostic tools for the assessment phase of the project
- assessment of the current situation reporting
- a subject matter conference/team building course.

A significant investment in developing tools and resources was made by the ACI implementation team to assist our partners in delivering outcomes that are suited to the individual implementation project's needs. This information can be found at: [www.aci.health.nsw.gov.au/make-it-happen/cip](http://www.aci.health.nsw.gov.au/make-it-happen/cip)

## Background

The Clinical Innovation Program was established in 2014 to explore, develop and provide support to LHDs/SHNs for the successful implementation of clinical innovations of statewide significance. The 2014 cohort of innovations have been developed into models of care, which can be customised based on the local needs of the hospital/LHD and are currently in varying stages of being implemented.

To support the hospitals/LHDs in delivering sustainable outcomes, it was determined that a capability building program would be the most effective way to support all partnering hospitals/LHDs to ensure the knowledge, skills and abilities required to successfully implement the models are locally embedded.

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# Strengthening healthcare in the community – a decision support tool

## Strategic initiative

Respond to changes in policy and mode of service delivery.

## Aim

- To provide a structured approach to reviewing, developing or commissioning health services in the community.

## Benefits

- Provides a checklist to ensure that no major issues have been forgotten
- Step-by-step guidance for planning and service development
- Useful for assessing a proposed change, or comparing possible service options.

## Summary

This decision support tool provides a structured approach to reviewing, developing or commissioning health services in the community. It takes standard steps in planning – including clarifying the issues involved, determining the criteria to be met and making decisions based on costs, benefits and other likely impacts, applying them to the particular circumstances of community based healthcare. This tool can be used by an individual or a group who are reviewing, planning or commissioning services. It can be used as a checklist of issues that need to be considered, or as a structured approach to planning or reviewing healthcare services. Working this through with other stakeholders (for example clinicians, consumers, primary health networks [PHNs] and relevant non-government organisations [NGOs]) can help build shared understanding, innovative approaches and a commitment to the agreed approach.

## Background

The guide was commissioned by the ACI in partnership with the Community Health Directors, and developed by the Centre for Primary Health Care and Equity, University of New South Wales, to respond to the changing contexts of community healthcare delivery. Local health districts are seeking to reduce avoidable hospitalisations, PHNs have come on stream, NGO contracts are re-negotiated and opportunities have opened up for commissioning and outsourcing services. These changes can improve care and be cost-effective, however the complexity of Australian primary healthcare means that there is also a risk of disrupting existing services, undermining important partnerships and further fragmenting healthcare. The tool was developed to help identify these risks and think through the likely impact of proposed changes and local planning decisions in an evolving healthcare environment.



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# Allied health services guide for people living with dementia

## Strategic initiative

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

## Aim

- To develop resources aimed at informing consumers about how allied health interventions can support people with dementia and their carers.

## Benefits

- Empowers consumers to seek support
- Provides information about what allied health disciplines have to offer
- Provides guidance on how to find an allied health professional
- Educates health and medical professionals about how they can respond to the needs of people living with dementia and their carers.



## Summary

ACI's Aged Health Network and Alzheimer's Australia have produced two guides to highlight the many ways that allied health professionals can contribute to the everyday lives of people living with dementia and their carers and families.

The resources were co-designed by consumers and allied health professionals.

The consumer guide, *Allied health professionals and you: a guide for people living with dementia and their carers* empowers people living with dementia and their carers to partner with allied health professionals to live life to the fullest.

The health professionals' guide *Better health for people living with dementia: a guide on the role of allied health professionals* provides information and ideas for doctors, nurses and allied health professionals about a range of evidence-based health interventions that support people living with dementia and their carers.

## Background

The ACI's Aged Health Network identified allied health in aged healthcare as a priority area.

The Consumer Dementia Research Network, Alzheimer's Australia, identified access to better information about allied health as a priority area for people with dementia and their carers.

Both groups recognised that information on allied health services exists but is fragmented, often difficult for consumers to locate, mostly discipline specific and often not dementia specific.

Consequently, the ACI Aged Health Network, funded by Alzheimer's Australia, created a proposal to develop resources about the benefits of allied health interventions for people with dementia and their carers.

The *Allied Health Professions: Supporting people with dementia and their carers* was presented to Alzheimer's Australia in October 2014, and a contract to undertake the project was signed in August 2015.

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# Patient centred medical home background paper and health neighbourhood capability building scoping paper

## Strategic initiative

Establish relationships and work programs with PHNs.

## Aim

- To increase awareness and encourage early adoption of the PCMH and health neighbourhood healthcare models.

## Benefits

- Long-term reduction in healthcare costs
- Reduced unnecessary ED visits and hospitalisations
- Higher job satisfaction for healthcare staff and clinicians
- Improved integration of the healthcare system.



## Summary

For the past 18 months, the ACI has hosted a PCMH working group. A background paper has been developed which highlights the key features of the model, outlines considerations for implementation and provides local case studies where principles of the model have been adopted. This paper is available as a document on the ACI website, and is currently being converted into an educational website for health professionals and consumers.

The working group has also supported the development of a scoping paper which explores options for ACI's involvement in a capability building project to support implementation of the PCMH model across NSW.

## Background

The PCMH model is a vehicle for enabling best practice principles of primary and community care (for example, team-based care, care coordination and data-driven improvement) to be implemented in general practices. The model includes principles which rely on a supportive 'health neighbourhood'.

In Australia, the PCMH model is publicly supported by the Commonwealth Primary Health Care Advisory Group, the Australian Medical Association, the Royal Australian College of General Practitioners and others. Within NSW, Western Sydney PHN and North Coast PHN, in particular, are championing the model and working in partnership with their respective LHDs to implement the principles.

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# Acute low back pain model of care

## Strategic initiative

Establish relationships and work programs with PHNs.

## Aim

- To reduce pain and disability associated with acute low back pain.

## Benefits

Each person presenting with acute low back pain:

- is appropriately triaged for the care required
- is supported to self-manage their acute low back pain
- will be less likely to progress to the well-known cycle of chronic pain.



## Summary

The model of care is for people aged 16 years and over who present to their general practitioner, other primary care and the emergency department (ED) with a new episode of acute low back pain; that is low back pain of less than 3 months duration, with or without leg pain and preceded by 1 month of no pain.

The Musculoskeletal Network consulted the Pain Management Network and Emergency Care Institute when developing the model of care to ensure the interventions are congruent across acute and chronic pain management.

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

Implementation to date includes development of an implementation toolkit, a consumer version of the model of care, audit tool and HealthPathways.

Current work includes discussions with the NSW Ambulance Service as they can be the first provider of care.

## Background

Low back pain is recognised internationally and nationally to be a major cause of disability, with a quarter of Australians having low back pain at any one time.

High levels of disability result in personal and societal economic costs. It is the most common health condition that results in a person retiring from the workforce early.

Studies have shown that about 40% of those reporting an episode of acute back pain will have recovered within 6 weeks. However, 48% will still have pain and disability after 3 months and of these almost 30% remain unrecovered at 12 months.

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# Pain linkage service

## Strategic initiative

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

## Aim

- To improve access to expert pain specialist teams for people who live in rural and remote NSW.

## Benefits

- Reduced travel time for rural patients
- Monthly access to a telehealth clinic
- Outreach visits three times each year
- Access to expert support.



## Summary

Under the Pain Linkage Service, three rural LHDs have formed partnerships with established pain services.

Murrumbidgee, Far West and Southern NSW LHDs selected appropriate providers following an expression of interest process. Greenwich, St Vincent's and Nepean pain clinics were chosen as the favoured providers, and each of these clinics have established linkages with their partner LHD and PHN under a service agreement.

This program provides general practitioners and other primary care providers access to expert support to manage patients with chronic and complex pain presentations. It also includes a videoconferencing solution and a chronic pain toolkit to support the process.

LHDs outreach visits have been conducted in all regions and clinic appointments have commenced. The services will provide access to a monthly telehealth multidisciplinary pain clinic along with three annual outreach and upskilling visits to the region.

Patients and clinicians have already reported satisfaction with the new system.

## Background

The objective of the NSW pain plan and model of care was to provide equitable and evidence-based services that improve quality of life for people living with pain and their families, and to minimise the burden of pain on individuals and the community.

Murrumbidgee, Far West and Southern NSW LHDs were identified in the second round of funding under the NSW pain plan from the NSW Ministry of Health in 2015 as requiring support to provide access to services for people living with chronic pain.

The collaboration between ACI, the NSW Ministry of Health, HealthShare services, LHDs and SHNs has enabled telehealth to be used in the delivery of care to communities that may not otherwise have received this care.

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# The stroke vision defects tool

## Strategic initiative

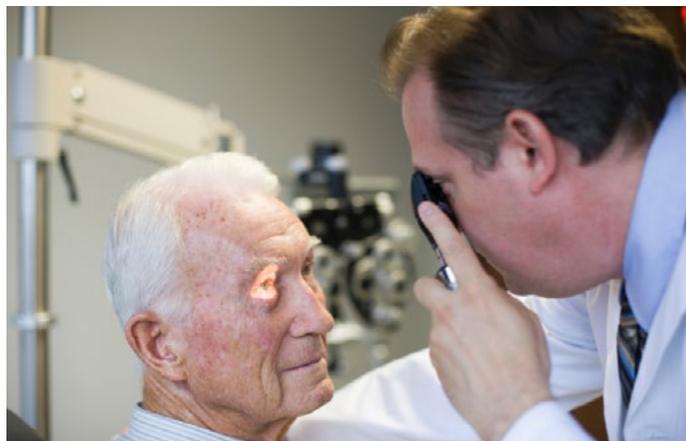
Enhance and progress the ACI's strategy for reducing UCV.

## Aim

- To develop a standardised vision defect tool to be used by non-eye care practitioners to assist in the identification of pre-existing and recently acquired vision problems in patients who had recently had a stroke.

## Benefits

- Facilitates rehabilitation and recovery for patients with stroke by detecting acquired and long standing vision defects
- Increases the number of patients who have their eye conditions detected and managed during the early stages of their recovery post stroke.



## Summary

The stroke vision defects tool comprises a questionnaire with a bedside-based vision screening test.

The questionnaire determines current and newly acquired ocular conditions in response to questions and guided observations by the non-eye care practitioners.

The project included the recruitment of 100 patients and some clinical staff from Hornsby, Ku-ring-gai and Manly hospitals.

The vision screening tool has been found fit for purpose and identifies pre-existing and newly acquired visual problems in patients with a diagnosis of stroke in the majority of cases.

When coupled with an educational package, a further conclusion was reached that the tool could reduce over-referral of patients (50% during validation) to ophthalmological services.

The ophthalmology network has endorsed this proposal and in phase 2 of the project an education package is being developed to support implementation of the tool in rural sites so as to maximise the usefulness of the tool without unnecessary patient burden produced by inappropriate referral.

## Background

The *Stroke & Vision defects: A pilot study to compare the existing models of care 2008* was developed to improve eye care for patients recovering from stroke. The study recommended that:

- increased attention is paid to the detection of pre-existing and acquired ocular conditions as part of the acute stroke management process
- ocular findings are managed with treatment or onward referral
- documentation is provided for each patient of ocular conditions that arise from either an ophthalmic or neurological cause
- ocular status is communicated to staff, patients and relatives.

In response, the 'standard eye assessment tool for inclusion in the *Acute Stroke Care Clinical Guidelines*, use in the stroke unit and in the patient medical record' was developed.

The tool has been received well by the trial sites.

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# National surgical quality improvement program

## Strategic initiative

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

## Aim

- To improve surgical care through the use of risk-adjusted clinical data.

## Benefits

- Better outcomes for patients
- Risk adjusted data and robust reports
- Lower costs of care.



## Summary

In 2015, the ACI supported four NSW hospitals to enrol in the National Surgical Quality Improvement Program (NSQIP).

Each site is required to recruit a surgical clinical reviewer and a surgical champion.

Westmead, Nepean, Coffs Harbour and Port Macquarie hospitals are the pilot sites and are all submitting data to the NSQIP program. These hospitals are now beginning to receive their risk adjusted reports from the College of Surgeons. Nepean Hospital will be presenting its data and early findings to the Surgical Services Taskforce in August 2016.

The ACI, along with the pilot hospitals, has established the NSW Collaborative. The role of the collaborative is to schedule regular meetings to share experiences and goals, for networking, and to create a cooperative and trusting environment to share lessons learned and outcomes from the collected data.

## Background

The American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP®) commenced in the Veterans Health Administration Hospitals in the mid-1980s. NSQIP now extends to over 750 hospitals internationally.

NSQIP is designed to help hospitals to improve surgical care through the use of risk-adjusted clinical data.

Surgical clinical reviewers collect data on 135 variables; including preoperative risk factors, intraoperative variables and 30-day postoperative mortality and morbidity outcomes for patients.

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# Prostate cancer clinical registry NSW

## Strategic initiative

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

## Aim

- To capture outcomes for diagnosis, treatment, quality of life and mortality data for men diagnosed with prostate cancer in NSW.

## Benefits

- Improved quality of care and outcomes of men living with prostate cancer in NSW.



## Summary

The Urology Network embarked on a joint project with the Cancer Institute NSW to establish a population based clinical registry to improve the care and outcomes of men living with prostate cancer. This is the NSW arm of the Prostate Cancer Outcomes Registry Australia and New Zealand.

The International Consortium for Health Outcomes Measurement (ICHOM) aims to transform healthcare systems worldwide by measuring and reporting patient outcomes in a standardised way.

The ICHOM, NSW Prostate Cancer Clinical Registry (PCCR) and ACI's Urology Network are working together to compare, learn and improve health outcomes for patients with prostate cancer.

## Background

The ACI is a strategic partner of the ICHOM.

The ICHOM develops global sets of health outcome measures for clinicians to collect, compare and drive system and service improvements.

The ICHOM developed the advanced prostate cancer set of health outcome measures.

The Cancer Institute NSW established the NSW PCCR in partnership with the ACI with the aim to capture diagnosis, treatment, quality of life and mortality data for men diagnosed with prostate cancer from the 1 January 2015 onwards at participating sites. The ACI has partnered with ICHOM to ensure the standards set by the NSW PCCR are globally recognised.

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# Impact of physiotherapy care in the ED

## Strategic initiative

Promote and undertake research in large system change.

## Aim

- To evaluate the emergency physiotherapy models of care across all NSW intervention EDs and determine their impact on patient access to care, clinical outcomes and consumer and staff satisfaction.

## Benefits

- Provide strong evidence of the relative efficiency and effectiveness of existing models of service provision for patients in EDs
- Improved timeliness and quality of care
- Understanding how emergency physiotherapy workforce use and access can be improved.



## Summary

Timely access to care in EDs can lead to better health outcomes for patients and reduce or avoid hospital stays.

This project facilitates timely quality care for this patient group. Emergency departments are a key provider of treatment for patients with musculoskeletal injuries, which is a core skill of the physiotherapist.

This multicentre project evaluated the role of physiotherapists in 20 NSW EDs examining details of clinical practice and related activities, patient flow and ED performance.

We found that the introduction of the primary contact emergency physiotherapy practitioner (EPP) role improved patient outcomes, overall staff and patient satisfaction and patient flow. These findings should encourage hospitals to integrate this model of care in their service.

## Background

Patient presentations to EDs are increasing at a rate higher than population growth.

The most common ED presentations are musculoskeletal, and a proportion of this group comprise minor injuries amenable to the EPP model of care.

The EPP role has been introduced to give primary clinicians responsibility for tasks in the management of musculoskeletal conditions, which was previously given to doctors only. The service differs between sites with many EDs still lacking the EPP service.

Since 2014, the project successfully involved 20 NSW EDs to identify the physiotherapy models of care and determine impact on patient flow and outcomes, and patient and staff satisfaction.

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# Ladder falls

## 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 reduce the burden of injury associated with ladder falls in the home environment through increased awareness in the community of the risks associated with the use of ladders.

## Benefits

- Reduction of trauma from falls from ladders
- Collaboration with Monash University with evidence based prevention messages.



## Summary

This project will encompass several aspects to address the primary target group, men aged 55 and over who are still active, and the secondary target group, families of men aged 55 and over who are still active.

The project seeks to develop a key message that is effective, easily recognisable and memorable. It will also promote injury prevention with posters and flyers to inform of the dangers of falls from ladders. Education will also include safety guidelines on the proper use of ladders.

## Background

Falls from ladders are a significant cause of serious injury and have been increasing in number across Australia.

Research conducted by the NSW Institute of Trauma and Injury Management (ITIM) showed that between 2010 and 2014, there were 8,496 hospital admission across NSW as a result of a fall from a ladder.

Analysis of major trauma statistics found 372 ladder falls, which resulted in major trauma in the 55 years and older age group, predominantly in males, with a mortality rate of 10%.

Falls from ladders were estimated to cost the health system \$51.8 million over the same time period.

As a result of the study, ITIM seeks to reduce the number and severity of injuries from ladder falls in the home environment through a ladder safety awareness project in collaboration with Monash University.

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