Overview

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

We provide expertise in service redesign and evaluation, specialist advice on healthcare innovation, initiatives including clinical guidelines and models of care, implementation support, knowledge sharing and continuous capability building.

Our Clinical Networks, Taskforces and Institutes provide a unique forum for people to collaborate across the NSW Health system. By bringing together leaders from primary, community and acute care settings we promote an integrated health system.

Aims:
The Forum is held to provide opportunity for the members of the Musculoskeletal Network, and their colleagues, to present their work that relates to the work of the Network and to celebrate their achievements.

Photography
Please note photographs will be taken during the Forum. If you do not wish to be photographed please advise Robyn Speerin.

Tweet your questions during the Forum to @RehabRobyn using the hashtag #MSK15
# Chair of session: Matthew Jennings, Co-Chair, ACI Musculoskeletal Network

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<td>The experience of patients admitted to hospital with acute low back pain: a qualitative study</td>
<td>Carlos Haddad, Arvin Damodaran, H. Patrick O’Neil &amp; Wendy Wu; Western Sydney University, Liverpool Hospital, University of NSW, &amp; Macquarie University</td>
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<td>Interim outcomes from the application of the STarT Back Risk Stratification Tool for Acute Low Back Pain in a tertiary NSW public hospital physiotherapy outpatients department</td>
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### Chair of session 1: Simon Willcock, General Practitioner, Director of Primary Care Services, Macquarie University

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<td>Osteoporosis re-fracture prevention – what on earth do spaghetti and cheese and trigger tools have in common with broken bones?</td>
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<td>Georgina Drewery &amp; Michele Pitt; Far West Local Health District &amp; Western NSW Primary Health Network</td>
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<td>Danella Hackett, OACCP Coordinator, Fairfield Hospital</td>
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| **12.05pm**       | CROSSBAT (Combined Randomised and Observational Study of Surgery for type B ankle fracture Treatment): results of a multi-centre RCT  
*Rajat Mittal*, on behalf of the CROSSBAT Study Group; Whitlam Orthopaedic Research Centre; Sydney South West Local Health District; University of NSW; Ingham Institute for Applied and Medical Research |
| **12.15pm**       | Early mobilisation after total hip and knee arthroplasty: a multicentre, prospective observational study of current Australian practice  
*Matthew Chua*, Andrew Hart, Justine Naylor, Rajat Mittal, & Ian Harris; Whitlam Orthopaedic Research Centre; Sydney South West Local Health District; University of NSW; Ingham Institute for Applied and Medical Research |
| **12.25pm**       | Physiotherapy-based rehabilitation after hip and knee arthroscopy: current Australian practice  
*Andrew Hart*, Ian Harris, Justine Naylor & Rajat Mittal; Whitlam Orthopaedic Research Centre; Sydney South West Local Health District; University of NSW; Ingham Institute for Applied and Medical Research |
| **12.35pm**       | Is inpatient rehabilitation associated with better patient-reported health-related quality of life and joint-specific behaviour after knee or hip arthroplasty?  
*Justin Naylor*, Andrew Hart, Rajat Mittal, Ian A. Harris & W. Xuan; Whitlam Orthopaedic Research Centre; Sydney South West Local Health District; University of NSW; Ingham Institute for Applied and Medical Research |
| **12.45pm**       | Panel Questions & Answers |
| **1.00pm**        | Lunch |

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| **1.45pm**        | NSW Paediatric Rheumatology Network (PRN) project: implementation of the model of care  
*Anne Senner*, Lyn Brodie, Jeff Chaitow, Patricia Davidson, Catherine Grahame, Debra Grech, Tim Hoffman, C Holder, Janine Jackson, Cathy Lovell, Gabor Major, Sharon Ryan, Davinder Singh-Grewal & Robyn Speerlin; Sydney Children’s Hospitals Network, Agency for Clinical Innovation, John Hunter Children’s Hospital, Arthritis NSW & Consumer Representative |
| **1.55pm**        | A survey of parent and carer experiences and expectations of paediatric rheumatology care in New South Wales  
*Andrea Coda*, Julie Jones, Debra Grech & Davinda Singh-Grewal; University of Newcastle, Sydney Children’s Hospital, Randwick, University of NSW & University of Sydney |
| **2.05pm**        | JIA as an adolescent: need for multidisciplinary care  
*Paula Bray*, Damien McKay, E Morris, Anne Senner, Davinder Singh-Grewal; Sydney Children’s Hospital Network |
<p>| <strong>2.15pm</strong>        | Panel Questions &amp; Answers |</p>
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<td>GP perspectives of the JHH Osteoporosis Re-fracture Prevention Service</td>
<td>Lucinda Matheson, Fiona Niddrie, Margot Patterson, A. Nayakamo, D. Mathers &amp; Gabor Major; John Hunter Hospital, Newcastle</td>
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<td>2.40pm</td>
<td>Implementation of re-fracture prevention of &gt;65 year old inpatients</td>
<td>Fiona Niddrie, S. McNeil, L. Matheson, S. Gangadharan, Gabor Major &amp; B. Walsh; John Hunter Hospital, Newcastle</td>
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<td>with fractured neck of femur prior to discharge</td>
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<td>Evaluation Brake the Break: a community based osteoporotic (ORP)</td>
<td>Lillias Nairn; South Eastern Sydney Medicare Local &amp; St George Hospital, Kogarah NSW</td>
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Implementing Better Care for People with Acute Low Back Pain

Chris Needs¹, Maher, C², on behalf of the ACI Musculoskeletal Network Acute Low Back Pain Working Group

¹Port Macquarie Rheumatology; ²The George Institute for Global Health

Evidence from primary care reveals international assessment and treatment guideline recommendations for the treatment of acute low back pain are not being adhered to. This is evidenced by the liberal use of spinal imaging, the overuse of opiate analgesia, and recommendations of bed rest. As well, while 40% of those reporting an episode of acute back pain will have recovered within six weeks almost 30% remain unrecovered at twelve months.

The Agency for Clinical Innovation Musculoskeletal Network has development a Model of Care for the Management of Acute Low Back Pain (ALBP MoC). The key objectives of this model of care is to reduce pain, promote function and attempt to reduce long term disability through the use of evidence based assessment and treatments coupled to a patient flow pathway.

The ALBP MoC, in part, is being implemented as part of the Musculoskeletal Primary Care Initiative, which involves four Primary Health Networks and their Local Health Districts. This will involve people who present to their doctor, physiotherapist or to the hospital emergency department with acute low back pain being triaged and managed accordingly to their personal needs. This paper will discuss possible ways of improving patient outcomes along with some of the challenges relating to the model's implementation.

Your notes:
The experience of patients admitted to hospital with acute low back pain: a qualitative study

Carlos El-Haddad,1,2 Arvin Damodaran,3 H. Patrick McNeil,4 and Wendy Hu1

1 School of Medicine, Western Sydney University; 2 Department of Rheumatology, Liverpool Hospital**, NSW; 3 Prince of Wales Clinical School, University of New South Wales; 4 Faculty of Medicine and Health Sciences, Macquarie University, NSW

studying setting

Objectives
To understand the patient experience of being admitted to hospital with acute low back pain (LBP), with a view to developing suggestions for care and LBP management guidelines

Methods
Interpretive phenomenological analysis (IPA) was adopted to examine semi-structured interviews from patients admitted to hospital with acute LBP. Sampling continued until thematic saturation was reached (n=14). Data were analysed using the Framework Method, so that data from multiple participants could be summarised, compared, and analysed systematically.

Results
Four themes were identified: pain and helplessness, desire for validation, interactions with health care teams, and a return to pre-morbid identity and roles. Patients’ initial presentation to hospital was characterised by severe pain, disability, and difficulty in communicating their illness experience. Patients expected doctors to investigate for an underlying cause of the back pain. To recover, they were required to navigate a system they did not understand, interacting with health care workers who seemed to operate independently rather than as a team. Patients viewed medical treatment as a means of returning to pre-morbid activities of daily living, roles, and relationships. Using these themes, a model of the inpatient journey was developed.

Conclusions
We have described new patient insights which highlight how the hospital environment adds unique challenges to managing acute LBP. Several suggestions for acute LBP management guidelines are made: developing lay summaries for patients, including methods for communicating the team structure and roles to patients, and ensuring all members of treating teams are educated to ensure guidelines are implemented consistently.

Your notes:
Interim Outcomes from the Application of the STarT Back Risk Stratification Tool for Acute low Back Pain in a Tertiary NSW Public Hospital Physiotherapy Outpatient Department

Chris Barnett, Haskins, R., & Henderson, J.

John Hunter Hospital, Newcastle

Background

John Hunter Physiotherapy has a strategic data quality system approach to provide a comprehensive data suite for organisational needs and ongoing clinical practise evaluation and improvement.

The NSW ACI advocates the use of the STarT back risk stratification tool within its acute low back pain model of care. The application of this tool has not yet been studied within an Australian public hospital physiotherapy outpatient setting.

Aim

To describe the profile and interim outcomes of patients with acute low back pain presenting to a tertiary NSW physiotherapy outpatient setting incorporating the STarT back risk stratification tool.

Intervention

Patients with low back pain presenting to the John Hunter Hospital physiotherapy department completed the STarT Back Risk Stratification Tool in addition to baseline measures of pain (NRS) and disability (RMDQ). Consenting patients were followed-up via mail questionnaire at 6 months.

Outcomes

76 of 403 patients with low back pain were classified as acute and further sub-classified as high (42.5%), medium (30.1%) and low risk (27.4%). 22 patients have been followed-up at 6 months. The risk of a poor disability outcome at 6 months was found to be predicted by baseline risk classification (p=0.02). Further, negative recovery beliefs at baseline as identified on the STarT back tool were common (47.4%) and predicted greater risk of a poor disability outcome (OR 10.5, 95%CI 1.4-81.1, p=0.02).

Conclusion

These findings highlight the potential of the STarT back tool to inform prognosis and identify unhelpful beliefs to aid clinical decision making in a tertiary NSW physiotherapy outpatient setting.

Your notes:
The integration of allied health services and general practice in the primary care environment for the delivery of a coordinated conservative pathway for the management of OA

Fiona O’Meara & Martin Cushing, Project Officers, Musculoskeletal Primary Health Care Initiative (MSK PHCI)
North Coast Primary Health Network (NCPHN) and Mid North Coast Local Health District (MNC LHD)

Background

The Mid North Coast is one of three pilot sites in NSW tasked by the NSW ACI to deliver a musculoskeletal primary health care initiative with a focus on the three musculoskeletal conditions responsible for the largest burden of disease – OA hip and Knee, Osteoporosis re-fracture prevention, and Acute low back pain.

Aim

The aim of the OA component of the initiative is to plan, implement, and evaluate a coordinated and sustainable conservative care program, delivered in the primary care setting, for people identified with a clinical diagnosis of OA Hip or Knee.

Intervention

Seven practices across the MNC were recruited to participate in the OA component of the initiative. Supporting allied health services were identified (physiotherapy, exercise physiology, and dietetics) and multidisciplinary work groups established around each of the practices. Existing barriers to service delivery were discussed and solutions proposed. Resources were developed to assist with patient identification, assessment, referral, education and review. Business case was developed using the current CDM framework to encourage patient review and quarterly workgroup meetings established to develop the team and provide case conferencing opportunities and a forum for troubleshooting.

Conclusion

A number of barriers both structural and financial have been identified that hamper the delivery of a coordinated conservative care pathway in the primary care environment. Little opportunity exists for GPs to meet and work with their allied health counterparts to provide cohesive coordinated care to patients with chronic conditions. Allied health providers are not financially rewarded for their time to participate in case conferencing with GPs and other providers. Bringing providers together is a valuable step in the process of learning to work as a team to improve patient outcomes.

Your notes:
**Osteoporosis re-fracture prevention - What on earth do spaghetti and cheese and trigger tools have in common with broken bones?**

**Martin Cushing**, Fiona O’Meara, Project Officers, Musculoskeletal Primary Health Care Initiative (MSK PHCI)

North Coast Primary Health Network (NCPHN) and Mid North Coast Local Health District (MNC LHD)

**Background**

As a chronic disease, osteoporosis is ideally suited to being managed in the primary care sector. Yet how osteoporosis is managed in primary care is a void of information representing a significant opportunity for investigation and improvement.

**Aim**

A part of the scope of the NC PHN MSK PHCI is to sustainably introduce the NSW ACI ORP Model of Care into the primary care sector. Given the constraints of sustainability, within current resources and a re-fracture prevention roadmap that will exist into the future, the task was a blank canvas of quality improvement for patient safety.

**Intervention**

A pilot study was established between a single general practice and a diagnostic imaging service. The imaging service provides the practice a monthly report of all fractures (≥50 years) emanating from that practice. These fractures are audited for identification (via investigation), diagnosis and treatment.

**Outcomes**

The pilot has been operational since June 2015. Of the 156 fractures identified, 155 were retrospectively identified as minimal trauma by the practice clinical principle. Of these, 43 were investigated via bloods and 29 via DEXA, with 30 commenced on osteo-specific pharmacology. Unfortunately no data has been captured re GPMP or TCAs.

**Conclusions**

Identification of fractures as potentially osteoporotic remains the first and most severe barrier to management of osteoporosis in the primary care sector. As none of these fractures emanated from the secondary sector they are effectively outside the reach fracture liaison coordinators to identify and communicate. Other systems change interventions are necessary to capture and communicate these fractures - this is the realm of spaghetti and cheese and trigger tools…what could that be?

**Your notes:**
Integrated Musculoskeletal Models of Care Program

Georgina Drewery & Michele Pitt,

District Manager Chronic & Complex Care, Far West Local Health District; Far West Councils and Integrated Care Coordinator Western NSW PHN

Background

Far West Local Health District, Western NSW Primary Health Network have combined clinical expertise and resources to implement the NSW Health Agency for Clinical Innovation Musculoskeletal (MSK) Models of Care (MoC). The MSK MoC involves General Practitioners (GPs) working with multi-disciplinary care teams.

Aims

To reduce pain and increase functional capacity and quality of life of the program participants. In people over 60, MSK conditions account for more than half of their chronic conditions. Osteoporosis affects one in two women over 60 and one in three older men. Numbers are projected to increase as the population ages. Arthritis affects more than 15% of the population and is projected to increase to almost 25% by 2050.

Intervention

Service providers and patients who register to be part of the MSK Program, will have access to the Musculoskeletal Coordinator as a central contact for appropriate coordinated care. Case conferencing will also be available between the patient, carer, GP, Specialist and multidisciplinary teams.

Outcomes

- Visits since 12 May 2015 751
- Clinic two full days per week
- Back pain 520 70%, exclusive 290 39%, joint OA Hip/Knee 230
- Hip Arthritis 145 20%
- Knee Arthritis 315 42%

Conclusion

The MSK Work Group has developed a Program that is collaborative, integrated, patient centred and transferrable in different settings. The MSK Program supports better teamwork and partnerships to provide a seamless patient journey between the interface of acute and primary care. Service providers who participate in the MSK program will be provided with an electronic resource toolkit developed specifically for the Program.

Your notes:
CROSSBAT (Combined Randomised and Observational Study of Surgery for Type B Ankle Fracture Treatment): Results of a Multi-Centre RCT

Rajat Mittal on behalf of the CROSSBAT Study Group

Whitlam Orthopaedic Research Centre; Sydney South West Local Health District; University of NSW; Ingham Institute for Applied and Medical Research

Introduction and aims
This study assesses whether surgical management is superior to non-surgical management in participants with an isolated, type-B fibula fracture with minimal talar shift.

Method
A multi-centre, randomised controlled trial with an observational cohort was conducted. Participants were recruited from 22 hospitals across Australia and New Zealand. Participants consenting to follow-up but not randomisation formed the observational cohort. SURGICAL GROUP: Fracture fixation using a plate and screws. Post-operatively, ankles were splinted and participants were non-weight-bearing for 2 weeks, then weight-bearing was allowed; NON-SURGICAL GROUP: Ankles were splinted and participants were allowed to weight-bear. OUTCOMES: All participants were reviewed at 6 weeks, 3, 6 and 12 months post-injury. Primary outcomes were the American Academy of Orthopaedic Surgeons Foot and Ankle Outcomes Questionnaire (FAOQ) and the physical component score (PCS) of SF-12v2 general-health survey at 12 months. The randomised and observational cohorts were analysed separately.

Results
436 participants were enrolled; 160 formed the randomised cohort (n=80 surgical group; n=80 non-surgical group); 276 formed the observational cohort (n=19 surgical group; n=257 non-surgical group).

Randomised cohort: At 12 months, the surgical group was not superior to the non-surgical group for FAOQ (mean difference 3.2, favouring the non-surgical group; 95% CI: 0.4 to 5.9; p=0.028) or PCS (mean difference 0.6, favouring the non-surgical group; 95% CI: -2.9 to 1.8; p=0.63). The surgical group had a higher number of participants with adverse events (32% vs. 14%; p=0.009).

Results for the observational cohort were similar to the randomised cohort.

Conclusions
Surgical management is not superior to non-surgical management for treating type-B ankle fractures with minimal talar shift.

Your notes:
Early mobilisation after total hip or knee arthroplasty: A multicentre, prospective observational study of current Australian practice

Matthew Chua, Hart, A., Naylor, J.N., Mittal, R., & Harris, I.A.
Whitlam Orthopaedic Research Centre; Sydney South West Local Health District; University of NSW; Ingham Institute for Applied and Medical Research

Background
Protocols for the prevention of venous thromboembolism following total hip arthroplasty (THA) or total knee arthroplasty (TKA) typically recommend early mobilisation. There is no accepted definition for ‘early mobilisation’, but ‘Fast-Track’ protocols indicate mobilisation is feasible the day of surgery (postoperative day 0 – POD 0).

Aims
To determine the proportion of THA and TKA recipients mobilised POD 0, whether patients ambulated at least 5m or 10m on the first day mobilised, and identify any variables that affect time to mobilisation and distance mobilised.

Methods
A prospective observational study was conducted of patients with osteoarthritis undergoing primary, unilateral THA or TKA at 19 Australian hospitals. Poisson regression and logistic regression were used to identify associations between potential influencing variables and outcomes.

Results
818 THA and 989 TKA patients were included. Only 9.41% of THA patients and 5.60% of TKA patients first mobilised on POD 0. By the end of POD 1, 72.52% of the entire cohort had mobilised. On the first day that patients mobilised, 81.35% of THA and 79.95% of TKA patients ambulated at least 5m. Even fewer ambulated at least 10m. Time to mobilisation and distance mobilised was significantly earlier and further in males, public hospitals, anterior hip approach, no spinal or epidural block, no intra-articular drain, no indwelling catheter, no acute complication and no donor transfusions.

Conclusions
A minority of THA and TKA patients mobilise POD 0; the majority mobilise by the end of POD 1. Treatment-related factors are more associated with earlier mobilisation than patient-related factors.

Your notes:
Physiotherapy-based rehabilitation after hip or knee Arthroplasty: Current Australian Practice

Andrew Hart, Harris, I., Naylor, J., Mittal, R.

Whitlam Orthopaedic Research Centre; Sydney South West Local Health District; University of NSW; Ingham Institute for Applied and Medical Research

Background

Supervised physiotherapy has long been utilised following total hip or total knee arthroplasty (THA, TKA), yet, recent evidence indicates that home-based programs are an effective and viable option.

Aims

This study aimed to determine to what extent home-based programs (monitored or unmonitored) are commonly utilised following arthroplasty and whether differences in uptake exist between public and private recipients.

Methods

1618 people undergoing primary, unilateral TKA (n = 673) or THA (n = 731) were recruited pre-operatively from 19 high-volume centres around Australia. Demographic details, medical history and surgical data were obtained in conjunction with pre-operative Oxford Knee or Hip Scores. Details about the rehabilitation received (type, duration, frequency) were obtained via telephone follow-up at 35 and 90 days post-surgery.

Outcomes

31.5% (16.4% of TKA and 47.4% of THA) participated in home programs only. Private sector patients received significantly more supervised therapy (inpatient rehabilitation, clinic-based programs, day hospital or domiciliary). No significant differences were found in baseline joint functionality (OKS, OHS) between patients who went home or to inpatient rehabilitation. After removing patients with major complications, home program only rates were 17.4% for TKA and 48.9% for THA. Median cost of supervised physiotherapy per person who received care beyond a home program was A$1394/person for THA and A$1348/person for TKA.

Conclusion

Contrary to the high-level evidence, supervised physiotherapy-based rehabilitation, including inpatient rehabilitation, remains the norm for most TKA and THA recipients. The cost burden of these unsupported physiotherapy modalities runs into the thousands of dollars per patient. Resolving this evidence-practice gap should be a priority for all stakeholders in order to improve the sustainability of these services in light of the increasing numbers of procedures being performed each year.

Your Notes:
Is inpatient rehabilitation associated with better patient-reported health-related quality of life and joint-specific behaviour after knee or hip arthroplasty?

Justine Naylor, Hart, A., Mittal, R., Harris, I.A., Xuan, W.

Whitlam Orthopaedic Research Centre; Sydney South West Local Health District; University of NSW; Ingham Institute for Applied and Medical Research

Background

Inpatient rehabilitation is a costly treatment option commonly utilised in the private sector following total knee or hip arthroplasty (TKA, THA) yet there is no evidence that it facilitates better recovery compared to discharge directly home.

Aims

To determine if participation in inpatient rehabilitation after TKA or THA procured better patient reported health-related quality of life (Euroqol 5D, EQ5D) and joint-specific behaviour (Oxford Knee or Hip Score, OKS, OHS).

Methods - Intervention

A prospective, multicentre observational study was conducted involving 19 high-volume public and private arthroplasty hospitals across five states of Australia. Consecutive eligible people with osteoarthritis in the knee or hip were recruited pre-operatively (baseline) and followed-up by telephone at 35 and 90 days post-operatively. The EQ5D visual analogue scale (VAS) 0-100 ‘today’ health and the OKS or OHS were monitored across time. Public consumers, those who had bilateral procedures and those who experienced a significant complication within 90 days of surgery were excluded.

Outcomes

TKA: 399 recipients were included. At both 35 (p = 0.048) and 90 days (p = 0.018), those who received inpatient rehabilitation, compared to those who did not, reported a significantly lower quality of life (by 4 points) whilst accounting for other covariates. Inpatient rehabilitation was not significantly associated with OKS at 90 days.

THA: 447 recipients were included. At 35 days, those who received inpatient rehabilitation reported a significantly lower quality of life (p = 0.018, 3 points) whilst accounting for other covariates. This association was not evident at 90 days. Inpatient rehabilitation was not significantly associated with OHS at 90 days.

Conclusion

Inpatient rehabilitation is associated with slightly lower health-related quality of life early after either TKA or THA, lasting at least until 3 months in TKA recipients. Joint-specific behaviour is not associated with whether or not inpatient rehabilitation is received.
NSW Paediatric Rheumatology Project (PRN): Implementation of the Model of Care


Sydney Children’s Hospital Network, Agency for Clinical Innovations, John Hunter Children’s Hospital, Arthritis/Osteoporosis NSW, Consumer Representative

In 2013, the Musculoskeletal Network at the Agency for Clinical Innovation (ACI) in collaboration with Arthritis/Osteoporosis NSW launched a new state-wide model of care for children and young people with musculoskeletal disorders. The model of care was developed and reviewed by a broad group of multidisciplinary expert clinicians, patients, parents and young people throughout NSW. The aim of the model of care is to support access to effective care for the 6000 children and young people in NSW with rheumatological diseases. In 2015, in a show of commitment to realisation of the NSW PRN Model of Care for patients and their families, the Sydney Children’s Hospital Network (SCHN) and ACI have collaborated to fund a project to take the first step in the diagnostic work and implementation of the state-wide model of care. A project officer was appointed in July to undertake the diagnostics which are required to develop a clinical practice and business case to allow for implementation of model of care. The presentation will outline the key objectives of the NSW Paediatric PRN Project and results of the diagnostic work that has been undertaken to date. The areas for potential redesign will be discussed and requirements to create the changes.

Your Notes:
A Survey of Parent and Carer experiences and expectations of paediatric rheumatology care in New South Wales.

Andrea Coda¹, Julie Jones², Debra Grech³, Davinder Singh Grewal⁴

¹ Faculty of Health and Medicine, School of Health Sciences, Podiatry; The University of Newcastle, NSW; ² Discipline of Paediatric and Child Health, The University of Sydney, NSW; ³ Physiotherapy Rheumatology, Sydney Children Hospital (SCH) Randwick; ⁴ Consultant Paediatric Rheumatologist, The University of NSW & The University of Sydney.

Aim

This survey of parent and carers aims to establish the level of care and services currently provided to children diagnosed with Rheumatic Diseases (RD) in New South Wales (NSW), Australia.

Method

The survey included parents and carers of children presenting to paediatric rheumatology (PR) services in NSW. Subjects attending PR clinics in both public and private settings were invited to complete an online or paper survey.

Results

Overall 148 surveys were completed. The process of obtaining the diagnosis of RD was described as being ‘difficult’ or ‘very-difficult’ in 56.9% (n=83) of the surveyed cohort and 41.5% (n=61) consulted 4 or more different clinicians prior to diagnosis. Between symptom onset and final diagnosis, 42.6% (n=63) participants reported a delay of 5 months or more, and 16.9% (n=25) waited longer than 12 months. Ultimately, 91% (n=134) were referred to a paediatric rheumatologist and 63.6% (n=94) were seen within four weeks from initial referral. More than half of respondents felt that general practitioners and general paediatricians were not aware of RD. Overall, improved knowledge of paediatric rheumatology diseases amongst general practitioners, improved access to PR, improved educational materials for patients and families, access to specialty rheumatology nurses and coordinated rheumatology teams would have significantly improved the overall experience of their child’s disease.

Conclusion:

Children with RD in NSW still experience significant delays from symptom onset to definite diagnosis through consultations with multiple healthcare professionals. Reassuringly, when the referral to PR services is made, patients are usually seen faster than other international standards.

Your Notes:
**JIA as an Adolescent: Need for Multidisciplinary Care**

Paula Bray, McKay, D., Morris, E., Senner, A.M., Singh-Grewal, D.

Sydney Children’s Hospital Network

“Having arthritis as a teenager was challenging. Your teenage years are hard enough without having a condition that makes you different from your friends.” The challenges of normal adolescent development will be discussed in relation to living with a chronic illness such as Juvenile Idiopathic Arthritis (JIA). Many adolescents with JIA progress through adolescence without too many hurdles; there is a sub group of patients who struggle to navigate normal adolescent developmental milestones because of their chronic illness. Participation in school, sporting and social activities may be significantly affected and can negatively impact further education, vocational choices, and future employment and health trajectories throughout the lifespan. Managing these patients and supporting their development, requires a multidisciplinary team approach. Identification of young people at risk will be discussed. The vital importance of preparation for transition will be highlighted as the adolescent with complex JIA may continue to require medical and multidisciplinary care into adulthood. Through the presentation of two case studies, the complexities of managing these adolescents with JIA will be highlighted and discussed.

**Your Notes:**
**GP Perspective of JHH Osteoporosis Re-fracture Prevention Service**

**Lucinda Matheson**, Niddrie, F., Paterson, M., Nayakamo, A., Mathers, D., & Major G

John Hunter Hospital, Hunter New England Local Health District, NSW

**Background**

For the past seven years Hunter New England Local Health District (HNELHD) has participated in a project to reduce the number of fractures people sustain as a result of osteoporosis, through early identification, investigation and treatment of bone fragility.

The John Hunter Hospital (JHH) Osteoporosis Re-Fracture Prevention (ORP) service identifies those people, over 50, presenting to JHH Emergency Department with a broken bone from a simple trip or fall (minimal trauma). This population is considered "high risk" for osteoporosis and future minimal trauma fractures, which may be preventable with early detection, intervention and treatment, improving patient outcomes, and reducing health care expenditure and hospital admissions.

The HNELHD JHH ORP service acknowledges the crucial role of patient General Practitioners (GP’s) to long-term effectiveness of this secondary prevention strategy.

**Aim**

To evaluate the JHH ORP service from the local GP perspective and to welcome feedback and suggestions for collaborative improvement.

**Intervention**

A 10 question digital survey (designed by JHH ORP service staff in SURVEY MONKEY) emailed to 406 General Practitioners via the HNELHD HealthPathways registry for anonymous online completion in September 2015.

**Outcomes**

GP answers to questions about JHH ORP service awareness, correspondence, local area Health Pathways utilisation and current referral and treatment practice for bone fragility, will assist in the evaluation of our service and future strategic changes.

**Conclusion**

The JHH ORP service has not previously considered input from all stakeholders on evaluation and the collaboration of the JHH ORP service with patient GP’s is crucial to long-term effectiveness of this secondary prevention strategy. The GP feedback from reviewed surveys will assist the JHH ORP with future decision-making, planning, service design and implementation to ultimately achieve better patient outcomes.

**Your Notes:**
Implementation of Re-Fracture Prevention of >65yo Inpatient Fractured Neck of Femur Prior to Discharge

Fiona Niddrie, McNeil, S., Matheson, L., Paterson, M., Gangadharan, S., Major, G., Walsh, B.

John Hunter, Hunter New England Local Health District, NSW

Background

The Re-fracture Prevention for Over 65 Years Fractured Neck of Femur (NOF) Inpatient Project was initiated in response to the ‘minimum standards for management for hip fractures’ Agency for Clinical Innovation guideline. (ACI, 2014) The John Hunter Hospital (JHH) established a steering committee to introduce the recommended seven standards of care. An outpatient osteoporosis re-fracture prevention (ORP) service was already functioning at JHH, and in association with the ortho-geriatric team re-fracture prevention treatment prior to discharge from hospital was implemented

Aim

To initiate re-fracture prevention assessment and treatment for >65yo fractured NOF patient’s prior to discharge, as per Standard 6.

Interventions

- Ortho-geriatric team to manage ORP assessment and treatment
- Education of geriatric/junior staff
- Formulary application to JHH pharmacy for Denosumab. Zoledronic Acid already approved (restrictions apply for both approvals)
- Identification and cost of treatment accepted by service management.
- Checklist communication sticker for patient notes
- ORP letter to GP
- Communication of patients to CNC for education, database and service evaluation
- Standardisation of documentation on patient discharge summary

Outcomes

- Total number of patients commenced on treatment
- Patients commenced on treatment in June 2015 compared to September 2015
- Number of Bone Mineral Density (BMD) for this group
- Number of appropriate occasions of GP documentation

Conclusion

ORP assessment and treatment can be initiated in hospital prior to discharge with collaborative commitment from the treating team, hospital management and pharmacy. This decreases the burden placed on existing outpatient ORP waiting lists and clinics and reduces inconvenience for patients having to return to hospital for additional outpatient appointments.

Reference


Your Notes:
Evaluation of Brake the Break: a community based osteoporotic re-fracture prevention (ORP) service in metropolitan New South Wales

Lillias Nairn
South Eastern Sydney Medicare Local

Background
This service was initiated in part response to the high rate of falls-related injury hospitalisations in 2010-2012 in the St George area, identified by South Eastern Sydney Local Health District. While representing a significant burden of disease, osteoporosis (OP) often remains undetected until a fall or other lesser insult results in an osteoporotic or minimal trauma fracture (MTF). Even after MTF, OP screening rates are low and treatment is often not initiated despite evidence that re-fracture risk increases by 2-4x after the first MTF. Further, early screening and treatment have been shown to significantly reduce this risk.

Aim
To reduce the re-fracture rate among people aged 50 years and over, living in the St George area, who had experienced a MTF

Intervention
Brake the Break (BtB) was based on the ACI NSW Model of Care (MoC) for Osteoporotic Re-fracture Prevention

Outcomes
191 patients attended a total of 260 clinics between May 2014 and June 2015. The short follow-up prevented re-fracture rate evaluation. Proxy outcome measurements identified as indicators of success included proportion of patients having BMD screening (99%); Vitamin D testing (63.4%); pharmacological treatment initiated (57.4% of 101 patients recommended to start treatment); and referred to community based falls prevention programs (20.4% referred to Stepping On). Quality of Life (EQ-5D-5L) showed improvement at final follow-up. The service was highly acceptable to consumers who overwhelmingly reported satisfaction and improved health literacy.

Conclusion
BtB demonstrated that establishing an evidence based MoC for osteoporotic re-fracture prevention in a community setting was feasible and highly acceptable to consumers.

Your Notes:
Thank you for attending the ACI Musculoskeletal Network Forum 2015

Seven CPD hours