Joint replacement reviews conducted by physiotherapists

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2014 The Quantum Leap
The Royal Melbourne Hospital (RMH)

- One of two major adult trauma services in Victoria
- 1,400 beds across hospital and community settings
- More than 8,000 staff employed across 33 sites

Orthopaedic Unit
- >2000 surgical procedures annually
- 15 orthopaedic surgeons
- 2 fellows, 7 registrars & 5 residents
- 6 advanced practice physiotherapists
JRS Clinic

- Physiotherapy led post operative joint replacement surgery (JRS) clinic

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Joint Replacement Surgery

• Commonly performed major surgical procedure
• Proven success in alleviating pain & disability

JRS in Australia

• 2013 - 86,000 procedures
• Predicted to increase in the future
• 10 year period 2003 – 2012;
  – 41% ↑ hip procedures
  – 69% ↑ knee procedures

(Joint Replacement Registry 2013)
Long Term Follow Up

Strong recommendations for long term follow up

- Australian Orthopaedic Association (AOA)
- British Orthopaedic Association (BOA)

“practical impossibility for arthroplasty surgeons to review all their total joint replacement patients …without compromising their ability to assess, treat and accommodate the predicted increasing demand”

Arthroplasty Society of Australia, 2012
JRS at RMH

• 200 procedures performed annually

2009 baseline audit

Variation in clinical practice

• Surgeon preferences vs. recommended best practice
• Requests for radiographs
  - 50% not indicated at 6 week review
  - Unnecessary exposure to ionising radiation
  - Inefficient utilisation of resources & work force
Objectives

- Multidisciplinary post operative joint replacement clinic

**Access**
- Improve efficiencies
- Orthopaedic consultation

**Quality of Care**
- Best practice
- Safe & effective

**Workforce**
- Role substitution
- Maximise skill

**Patient Centred**
- Active role
- Individual management
Funding Model

• 2009 Victorian Department of Human Services Workforce Innovation Grant

• RMH one of 3 pilot sites metropolitan Melbourne

• $66 000 for 12 months
JRS Clinic

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- Advance practice physiotherapist conducts post operative reviews in place of orthopaedic colleagues
- JRS clinic co located with orthopaedic clinics
RMH JRS Protocol

Orthopaedic clinic
- 6 weeks

JRS clinic
- 3 months
- 6 months
- 12 months
- Annually

Intervention
- patient education
- monitor progress
- wound check
- functional review
- xray (per protocol)
- physical assessment
- questionnaires
Service Criteria

Inclusion criteria
- Primary & revision joint replacements

Exclusion Criteria
- Intra operative complications
- Tumours
- Complex medical history

Data Collection
- Patient Reported Outcome Measures (PROMS)
- Body Mass Index
- Joint range of motion
Credentialing Physiotherapists

MH Allied Health Credentialing Policy
• Clinical practice guidelines & Work Based Assessment

Up Skilling
• Self guided learning
• Case discussions
• Radiology up skilling
• Theatre sessions
Activity

Clinic activity – number of encounters offered

- Green bars represent clinic activity.
- Purple bars represent PROMS mail out.

Activity

- Clinic attendance rate 88.7%

October 2009- September 2011

- 378 joints reviewed (288 patients)
- 56 cases discussed with orthopaedic unit
- 23 patients discharged to surgeon
- 5 wait listed for revision surgery

No nursing input required for wound issues
No adverse outcomes or sentinel events
Patient Survey

30 patients surveyed (90% response rate)

Overall, highly satisfied with service

- Timely appointments
- Clear outcome of consultation
- Organisation of community referrals
- Confident with physiotherapist management
- Clinic staff accessible if required
RMH - OA & JRS Pathway

Osteoarthritis Hip & Knee Service

- Outpatient Orthopaedic clinic
- Pre Admission Clinic

Day of Surgery Admission

- Theatre & Recovery

7SW Orthopaedic Ward

JRS Clinic

**OAHKS**
- ↓ wait time for initial appt
- ↓ wait time consent for surgery to procedure

**Hip & Knee Pathway**
- ↓ LOS
- ↓ transfusion rates
- ↓ post operative complications
- no increase in re admissions
Service Enablers

- Executive support
- Medical champion
- Physiotherapists with post graduate qualifications
- Standardised unit protocol
- Clinical guidelines
- Co location with orthopaedic clinics
Future Direction

Physiotherapist scope of practice

• Requesting pathology

• Requesting Imaging e.g. bone scans

Alternative methods of review

• Electronic media - online questionnaires

• Telephone Interviews
JRS Clinic Outcomes

- Provides standardised post operative pathway for all patients
- Safe & effective model of care
- Efficient utilisation of resources
- Development of workforce
- Platform for auditing & research
- Guides continuous quality improvement
- Patients are satisfied with their care
Acknowledgements

Victorian Public Healthcare Awards
Victorian Department of Health

AProf Andrew Bucknill
Melbourne Health Executive
RMH Physiotherapy & Orthopaedic departments

Belinda Cary       Debbie Munro
Sam Plumb         Arlee Hatfield
Uyen Phan          Genevieve Juj