



The Royal
Melbourne Hospital

City Campus



6th January 2012

Trust Sub-Committee
Philanthropy, ANZ Trustees
36/55 Collins Street
MELBOURNE VIC 3000

Dear Sub-Committee Members,

RE: Physiotherapy Travelling Scholarship

Thank you for providing me with the opportunity to travel overseas via the Felice Rosemary Lloyd Travel Scholarship. The experience was valuable and has enabled us at The Royal Melbourne Hospital to further develop our physiotherapy led Joint Replacement Surgery service.

Please find enclosed a summary report detailing the progress of the JRS service to date, activity during the travel scholarship, and expenditure.

Please contact me on 9342 7440 should any additional information be required.

Yours Sincerely,

Bernarda Cavka
Senior Musculoskeletal Physiotherapist

Victorian Community Foundation – Felice Rosemary Lloyd Trust
Travelling Scholarship Final Report

**The physiotherapy led post operative Joint Replacement Surgery clinic
- Improving patient care and access in orthopaedics**

Project Description

A Physiotherapist-led Joint Replacement Surgery (JRS) Clinic was pioneered at the Royal Melbourne Hospital (RMH) in October 2009 to improve the efficiency of the review process following hip and knee arthroplasty surgery and improve outpatient access to orthopaedic consultation. A credentialed advance scope physiotherapist was engaged to work alongside the Orthopaedic team and conduct post-operative reviews in place of the orthopaedic surgeon.

A protocol for the JRS Clinic was developed collaboratively by the Orthopaedic Surgery and Physiotherapy Departments at RMH. The orthopaedic surgeons conduct the initial 6 week post-operative review and the physiotherapist conducts subsequent reviews at 3, 6 and 12 months, and annually thereafter. Routine radiological imaging occurs immediately post operatively, and at 1 year, 5 years, 10 years and then annually. Radiological credentialing allows the physiotherapist to assess and manage patients independently. The JRS clinics are collocated with the orthopaedic clinic facilitating immediate surgical input when required.

At the time of the scholarship submission in October 2010, RMH was the only known hospital in Australia which employed physiotherapists in the post-operative JRS clinic. Therefore, there was limited opportunity of collaborating with other health services for ongoing service development and with the clinical and theoretical up skilling of physiotherapists in this new area of practice for the profession in Australia. The United Kingdom has been a leader internationally in the establishment and expansion of extended scope physiotherapy clinics. Several health trusts throughout England, Scotland and Wales have been providing post-operative JRS clinics conducted by non-medical professionals (physiotherapists, nurses & occupational therapists) for at least 7 years.

The Felice Rosemary Lloyd Trust travelling scholarship provided the opportunity for travel to the United Kingdom to further develop my extended scope skills in the long term management of patients following hip and knee replacement surgery and to benchmark our JRS service with centres of excellence in the UK through the development of a positive collaborative relationship. Additionally, the scholarship enabled me to present a paper summarising the activity and achievement of the RMH JRS clinic at an international orthopaedic surgery conference.

Travel Agenda & summary

The travel scholarship provided an exciting year of learning, international collaboration, ongoing development of our JRS clinic and review of the current management of patients undergoing elective hip and knee arthroplasty at the Royal Melbourne Hospital.

The scholarship was divided into two separate trips to maximise the learning opportunities in a variety of clinical settings including hospital visits and attendance at an international conference. Table 1. outlines the activities undertaken for the travel scholarship including a brief summary of the experiences gained from the individual visits.

Table 1.

Date	Activity Outline
2nd- 4th February	<p>Arthroplasty Care Practitioners Association (ACPA) & British Hip Society (BHS) combined scientific meeting 2011 <u>Torquay, United Kingdom</u></p> <ul style="list-style-type: none">• The conference provided an educational opportunity to enhance my knowledge of the important components of arthroplasty follow up including image interpretation, identifying modes of prosthetic failure and data collection. Several UK arthroplasty practitioners presented on the service models adopted by their health services for arthroplasty follow up and pre-operative management of this patient cohort.
23rd August	<p>The Royal Derby Hospital <u>Derby, United Kingdom</u></p> <p>Claire Stevens Occupational Therapist and Arthroplasty Practitioner Orthopaedic Unit</p> <ul style="list-style-type: none">• Claire is currently the sole occupational therapist in the UK who is employed as an arthroplasty practitioner and has been in this role for 8 years. Claire is currently completing post graduate studies which will allow her to inject and aspirate joints in the clinic. The Royal Derby Hospital provided a great example of how local health agreements can enable suitably qualified and skilled staff to extend their scope of practice.
24th August	<p>Royal National Orthopaedic Hospital <u>Stanmore, United Kingdom</u></p> <p>Pamela Coward Arthroplasty Practitioner Joint Reconstruction Unit</p> <ul style="list-style-type: none">• The Royal Melbourne Hospital has developed a strong link with the Royal National Orthopaedic Hospital in Stanmore through our Head of Orthopaedics AProf Andrew Bucknill. We consulted closely with the Royal National Orthopaedic Hospital in the early stages of planning and establishment of our own JRS clinic. Therefore, it was a great opportunity to visit the arthroplasty practitioners and observe their joint review clinics in person. Stanmore have a strong credentialing framework for new staff employed to work in the clinics which includes a six week orientation program. There is strong emphasis on radiology interpretation and observation of clinics conducted by orthopaedic surgeons.

<p>25th August</p>	<p>National Orthopaedic Centre (NOC) <u>Oxford, UK</u></p> <p>Kathleen Reilly Research Physiotherapist</p> <ul style="list-style-type: none"> The NOC is recognised internationally for their innovation and research related to joint arthroplasty including the design of knee prostheses and development of the Oxford Hip and Knee Questionnaires. Kathleen and the remaining physiotherapy research team are involved in several projects across the continuum of care for patients with hip and knee osteoarthritis / joint replacements. The team provided advice on data collection, potential research topics and use of patient reported outcome measures. It was inspiring to see the amount of publications and scientific meeting presentations the physiotherapists at NOC have achieved in order to share their research with international colleagues.
<p>30th August – 2nd September</p>	<p>Royal Bournemouth Hospital (RBH) <u>Bournemouth, UK</u></p> <p>Tom Wainwright (physiotherapist) Mr. Robert Middleton (orthopaedic surgeon)</p> <ul style="list-style-type: none"> The RBH are internationally recognised for their success in implementing the principles of enhanced recovery on their dedicated arthroplasty ward which has resulted in improved patient satisfaction, clinical outcomes and multidisciplinary team work. Implementing a standardised and highly organised clinical pathway is essential in ensuring evidence based management of patients undergoing elective surgery and the reduction of post-operative complications. The joint replacement surgery clinic forms the end of the pathway and therefore provides a mechanism of auditing the multi-disciplinary management of patients across the acute continuum of care. At the RBH I also had the opportunity to observe an extended scope physiotherapist independently inject a patient in the joint arthroplasty clinic. (Appendix 1.)
<p>6th-7th September</p>	<p>UK Conference on Enhanced Recovery – promoting research, sharing experience, forming consensus <u>Bath, UK</u></p> <ul style="list-style-type: none"> The focus of the conference was monitoring compliance to enhanced recovery pathways and protocols, together with measuring and improving patient experience. Presentations related to best pain management techniques were relevant to the Joint Replacement Clinic as pain can prevent patients from moving the replaced joint thereby limiting range of motion and function in the future. Attending the conference allowed networking with other centres in the United Kingdom who have an interest in the optimal management of patients undergoing arthroplasty surgery. It was inspiring to see how instrumental physiotherapists have been in the adoption and implementation of enhanced recovery for elective hip and knee arthroplasty surgery.
<p>8th-9th September</p>	<p>International Society of Orthopaedic Surgery and Traumatology (SICOT) XXV Triennial World Congress <u>Prague, Czech Republic</u></p> <ul style="list-style-type: none"> I gave an oral presentation on the RMH JRS clinic (Appendix 2.)

Progress of project

Over the past two years the RMH JRS service has achieved significant milestones including the development of an advanced electronic database, presentations at three renowned scientific conferences, and high patient satisfaction with the service provision. Below is a summary of the current status of the JRS clinic objectives outlined in the travel scholarship application.

Objectives Achieved

- Establishment of internationally accepted best practice guidelines and protocols for the JRS clinic at RMH

The RMH JRS clinic protocol for the long term management of patients following hip and knee replacement surgery is based on the international best practice guidelines published by the British Orthopaedic Association and Arthroplasty Society of Australia. Our protocol received positive feedback from international colleagues during the course of the scholarship travel. For example, following my presentation at the SICOT conference in Prague the session moderator commented;

"This is an excellent paper and an excellent model for managing the patient in a time with an increasing demand for follow-up. " (**Henrich Malchau, MD PhD**, Co-director Harris Orthopaedic Laboratory, Massachusetts General Hospital, Boston).

Continuing progress

- Development of a hip and knee replacement radiological image interpretation learning resource to enable senior physiotherapists in Victoria to achieve competency in this area of practice.

The electronic radiological imaging learning resource is close to completion. The development of this learning module has been aided by the Liverpool Arthroplasty Image Interpretation Course Manual which was purchased with the scholarship funds.

- Development of patient information resources such as booklets / pamphlets detailing basic medical & allied health advice related to recovery and self-management following JRS.

Members of the multi disciplinary orthopaedic team are work collaboratively to develop this material with reference to the patient information resources provided to me by the health services in the UK.

- Expansion of the physiotherapy led JRS services within Victorian public health services through ongoing promotion of the RMH model.

Through the travel scholarship and support from Melbourne Health, I have presented at the following conferences with the aims to encourage other public health services in Australia to implement physiotherapist led joint replacement review clinics:

Combined New Zealand Orthopaedic Association and Australian Orthopaedic Association Scientific Meeting
New Zealand, October 2011

Australian Physiotherapy Association Conference
Brisbane, October 2011

- Initiation of research projects related to the role of physiotherapists in the JRS clinics.

In 2012 we aim to submit an article for publications in a scientific medical journal summarising the implementation and development of our JRS service.

- Establishment of a special interest group for physiotherapists in Victoria working in JRS clinics.

Objective for 2012.

- Collaboration with the Victorian School's of Physiotherapy and RMH departments (orthopaedic, radiology, physiotherapy) regarding the possibility of offering hip and knee replacement image interpretation courses

Objective for 2012.

Changes made to the original proposal

1. Attendance at the SICOT Conference in Prague was an addition to the initial proposal. Once the scholarship was offered in December 2011, I submitted an abstract for the conference with the knowledge that I would be in Europe at that time. Conference oral presentations are highly regarded in healthcare as they allow organisations and individuals to show case innovation and service improvement and enable ongoing professional development for the conference delegates. Presenting at the SICOT was a great opportunity to represent the RMH on an international platform and share our achievements to date with our JRS service.
2. Changes were also made to the hospitals which I initially proposed to visit. This was due to clinician availability during the time frame of the scholarship travel. The objectives remained unchanged.
3. Whilst in the UK I also attended the 2011 UK Conference on Enhanced Recovery. The underlying principle of enhanced recovery is to enable patients to recover from surgery and leave hospital sooner by minimising stresses on the body during surgery. This should result in improved patient outcomes in the immediate to long term post operative phase following hip and knee replacement surgery.

Dissemination of information to date

- Presentations to physiotherapy and orthopaedic departments at RMH
- Conference oral presentations
 - Australian Physiotherapy Association National Conference
 - Annual Australia Orthopaedic Association Conference
 - SICOT Conference
- Victorian Osteoarthritis Hip and Knee Service steering committee – the group meet 3 times per year. We have discussed the possibility of inviting physiotherapists working in Victorian HRS clinic to attend these meetings.

We are also in the process of writing an article summarising the implementation and development of the JRS service at RMH in a scientific journal.

Travel Scholarship Expenditure

Amount received from ANZ Trustees: \$7500

Amount received from Melbourne Health (RMH): \$5995

Balance remaining: \$0

Expenditure

Travel & accommodation	\$5908
Living Expenses	\$620
Conferences / resource material	\$967
Study leave (120 hours)	\$6000
Total	\$13495



Bernarda Cavka

Date: 06/01/2012



Arlee Hatfield (Physiotherapy Manager)

Date: 06/01/2012

Appendix 1.

<http://www.enhancedrecoveryblog.com/>

Enhanced Recovery – Australian hospitals can learn from the UK experience

2011 December 16

[Leave a comment](#)

by webmaster



Earlier this year Bernarda Cavka visited the UK to attend the 1st National Enhanced Recovery Conference in Bath. During her stay she also visited some hospitals utilising enhanced recovery pathways, seeking to learn from the sites in order to help inform her own hospital's implementation of enhanced recovery.

Bernarda works as a Physiotherapy Team Leader at he Royal Melbourne Hospital, Australia and after her visit she sent us the following guest blog with her reflections of her visit to Bournemouth.

Enter Bernarda...

In August this year I had the opportunity to visit the Royal Bournemouth Hospital (RBH) to observe the multidisciplinary team management of their elective hip and knee arthroplasty patients and gain a further understanding of how the team have achieved such great results with patient satisfaction, clinical outcomes, and length of stay. I was particularly interested to hear about RBH's experiences with the implementation of the principles of enhanced recovery which is a relatively new concept in public health in Australia.

From the outset it was evident that a cohesive, innovative and highly structured team is the key ingredient to drive any change and achieve success with short term and long term goals. The team had the same vision and objectives regarding patient care which were consistently communicated to the patients and family members at varied stages of the pathway. In particular, the preoperative MDT education sessions provided patients with a clear understanding of what to expect from the time they were admitted onto the unit until discharge home including the importance of effective pain management, day of surgery mobilisation and the promotion of independence with self care.

Discussions with Tom Wainwright reinforced the importance of data collection to monitor processes and clinical outcomes along the patient journey, in engaging staff and as a mechanism of

APPENDIX 2

The Royal Melbourne Hospital



Joint replacement reviews conducted by physiotherapists

Bernarda Cavka
Senior Orthopaedic Physiotherapist
The Royal Melbourne Hospital
Australia

SICOT Prague 2011

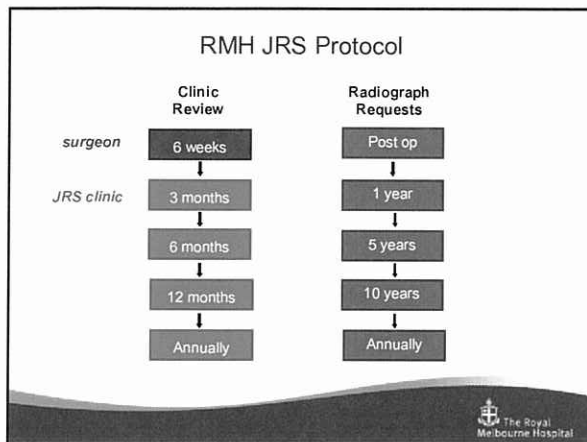


Joint Replacement Surgery (JRS) clinic

- Long term follow up of hip & knee replacements
- Advanced practice physiotherapist substitutes the surgeons in conducting specified post operative reviews

Objectives

- Ensure standardised follow up for all patients
- Facilitate patient access in orthopaedic outpatients
- More effective utilisation of orthopaedic unit resources

JRS Clinic

Exclusion criteria

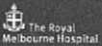
- Surgical & rehabilitation complications

Data Collection

- Oxford Hip / Knee Score
- Body Mass Index
- Joint range of motion

Physiotherapist Credentialing

- Radiology interpretation
- Case discussions in clinic
- Weekly clinical unit meetings

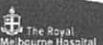
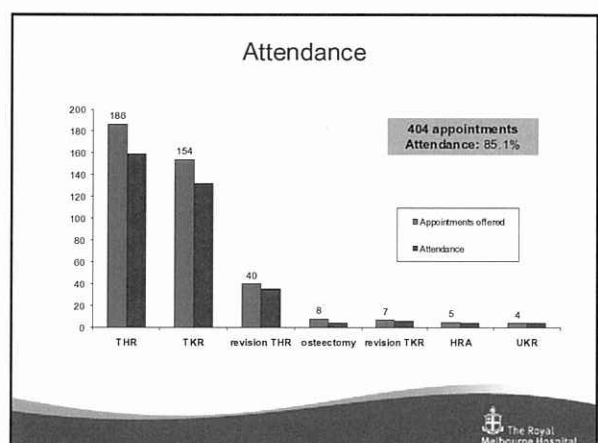


Activity

October 2009- June 2011

- 284 joints reviewed (253 patients)
- 39 cases discussed with orthopaedic unit
- 15 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

27/30 patients responded to survey

Overall, highly satisfied with service

- Timely appointments
- Clear outcome of consultation
- Organisation of community referrals
- Confident with physiotherapist management
- Clinic staff accessible by phone if required



Current Developments

Physiotherapist scope of practice

- Diagnostic blood tests

Retrospective audit

- Providing appointments to discharged patients

Mail review

- Questionnaires years not requiring radiographic review
- Patient able to request clinic appointment if required



Acknowledgements

A/Prof Andrew Bucknill - Head of Orthopaedics RMH

Arlee Hatfield - Manager of Physiotherapy RMH

Belinda Cary

ANZ Felice Rosemary Travel Scholarship (ANZ Trustees)

