Kneed to Succeed
Kneed to Know

Transforming the Joint Replacement Journey at Blacktown and Mt Druitt Hospital with Physiotherapy

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Kneed to Succeed

2015 WSLHD Quality Award Winner
Translational Research
Defining the Case for Change

- Ageing population and increasing cost of health care.
- Growing demand for individual outpatient physiotherapy.
- Increasing waiting times across all conditions.
- Post-operative TKR is the second most commonly referred condition to the outpatient department.
Aim

Simple triple aim but it works:
1. Improve outcome
2. Improve experience
3. Reduce resources used

Our bias was towards improved experience and improved efficiency without reduction in outcome.

In 6 months reduce the average time spent treating total knee replacement patients in the outpatient department by 30%.
Video
CPI Methodology - Brainstorming

Causes of Potential Inefficiencies

- Non-compliance with exercises
- Unrealistic expectations
- Overservicing by therapist
- Patient factors - obesity, apathy
- Unwanted clinical variation
- Lack of awareness of best practice
- Poor patient health literacy
Research Evidence

- Ko et al (2013) - Group Physiotherapy or a supervised home program following TKR can be as beneficial as one-on-one treatment with increased efficiency

- Naylor et al (2012) - Group programs can be enjoyable with psychosocial benefits

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Our Program

- Weekly one-hour class
- Clients receive on average 4 sessions
- Individual sessions or extra classes are provided if required
- Includes:
  - Education
  - Individual client exercises
  - Weekly Ax for joint range and mobility
  - Mobility training
  - Home exercise program
Results

Average time spent treating TKR clients reduced by 59%.
Results

- Increasing number of referrals
- Total time spent by therapists on this cohort reduced by 21 hours/month
- Annual labour efficiency cost saving of $10,500
Results - Most important to us

100%  Enjoyed the exercises

100%  Happy with the quality of physiotherapy

100%  Felt confident exercising at home

“I have managed to build up my confidence to assist in my recovery.”

“Classes were made to be fun but serious, and I enjoyed them all.”
Sustainability

- Number of referrals continues to increase
- Efficiency gain maintained
- 100% client satisfaction maintained
- Group-based programs implemented for other conditions

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Patients Treated in Group</th>
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<tbody>
<tr>
<td>April-June 2015</td>
<td>21</td>
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<tr>
<td>July-Sep 2015</td>
<td>33</td>
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<td>April-June 2016</td>
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<td>July-Sep 2016</td>
<td>46</td>
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</tbody>
</table>
Kneed to Know

2016 WSLHD Quality Award Winner
Chief Executive’s Award
Current Evidence

2 systematic reviews\(^1,2\):

No evidence of benefit (LoS) for pre-admission education for routine patients BUT

One study- may be helpful for complex patients\(^3\)

Who is “complex”? 


Stage 2 - Kneed to Know
Case for change

- Evidence
- Physiotherapy workload
- Increasing volume
- Patient experience

Case for change
Aim

Reduce physiotherapy service time in pre-admission patients by 50% over 6 weeks while maintaining a high quality service.
Service redesign

TKR Pre-admission education class

- Mt Druitt only
- Separate to existing appointment
- Direct referral
  - Bookings vs pre-admission nursing staff
- Patient education books also issued at usual appointment
- Multidisciplinary input
Clockwise from top left: Sandhya Desai, Noel Roncesvalles, Marie March, Genevieve Langron, Tanya Daley, Olivia Clements, Megan Smyth, Andrew Portelli. Absent: Suzan Wesley, Emily Edmonds, Lindsay Craig
Results

- 71% reduction in physiotherapy time per patient
- 100% patient satisfaction
- 71% increase in inpatient physiotherapy OOS
Rolling it out

Second site- now at Blacktown

- Combined TKR/THR
- Weekly class
- Physiotherapy caseload issues worse
- Efficiency in bookings
- “Joint Day Thursday” in pre-admission clinic
Looking Back

- Service delivery redesigns can be efficient and effective
- Flow-on effects to other areas
- Improved continuity of care
- Look at the big picture
- Physios are well-positioned to transform this patient journey

What does your whole patient journey look like?
GP Mx
Private rooms
Waiting list/Screening
Pre-admission
Inpatient
PACC (2/52)
Outpatient PT

Patient Journey
Onwards and upwards...

- Implementing OACCP?
- Opportunistic health care vs “knee only”
- Physiotherapy and clinical screening
- Clinical research
  - Can resilience define the “complex” patient?
  - ..program to address exercise and psychological skills administered by allied health.
Questions?

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