Behind the stats:
What do Clinical Educators do?

Mark Gooding – Assistant Director Physiotherapy, Townsville Hospital and Health Service

Kassie Shardlow – Queensland Physiotherapy Clinical Education and Training Program Manager, Metro South Hospital and Health Service

Susan Stoikov – Senior Physiotherapist, Princess Alexandra Hospital, Metro South Hospital and Health Service
Acknowledgements

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• Ethics & Governance
• Ethical clearance for the study was obtained from the Princess Alexandra Hospital Human Research Ethics Committee: Approval No - HREC/15/QPAH/133 and HREC/17/QPAH/265
• SSAs at each participating facility
Acknowledgements

Student Contribution Project Team

- Susan Stoikov: Princess Alexandra Hospital, Metro South HHS and School of Physiotherapy, Australian Catholic University, Brisbane
- Mark Gooding: The Townsville Hospital, Townsville HHS
- Kassie Shardlow: Logan Hospital, Metro South HHS
- Lyndal Maxwell: School of Physiotherapy, Australian Catholic University, Brisbane
- Jane Butler: School of Physiotherapy, Australian Catholic University, Brisbane
- Suzanne Kuys: School of Physiotherapy, Australian Catholic University, Brisbane
Background

Student Contribution History

1. An investigation into the contribution of pre-registration physiotherapy students on five week clinical placements to the delivery of physiotherapy services within Queensland Health

2. Perceptions of physiotherapists on the contribution of physiotherapy students to the delivery of health services and the transition from student to new graduate
• Physiotherapy profession requires significant levels of clinical training prior to registration.
• Clinical placements involve physiotherapy students working under supervision in a specific health setting/clinical area (e.g., cardiorespiratory, neurorehabilitation, musculoskeletal etc).
• Clinical Training Time: overall an average of 1000 clinical training hours per student – in Queensland, consists of 4-6, 5 week placements.
• Queensland Public Health Sector utilises a state-wide, coordinated Central Allocation Process (CAP).
• Queensland Public Health System is the major provider of clinical placements (~60% of all Queensland physiotherapy program placements each year).

• *Health Workforce Australia (2014): Clinical Training Profile: Physiotherapy*
Background

Student Contribution History

Project 1 (2015)
- State-wide survey Physiotherapy Directors/Clinical Educators
- Retrospective audit of student clinical activity data
- ARTICLE: Clinical activity profile of preregistration physiotherapy students during clinical placements. Australian Health Review

Project 2 (2016)
- Strategies developed/implemented to enhance accuracy and application of clinical activity data related to physiotherapy clinical education
- Collection of student and clinical educator activity data from hospital information management systems
- Collection of student and clinical educator activity data (utilising a developed activity tool)
- Collection of comparator (physiotherapy staff data for new graduates and senior physiotherapists)
- Investigation and analysis of direct and non-direct clinical tasks

Project 3 (2017)
- How does the contribution of a group of students compare to a registered physiotherapist?
- How does the volume of clinical care performed by pre-registration physiotherapy students compare with a new graduate physiotherapist?
- ARTICLE: Changes in direct patient care from physiotherapy student to new graduate, Physiotherapy Theory and Practice

Project 4 (2018)
- What are the physiotherapists’ perceptions of student contribution to the delivery of health services whilst on clinical placement in the Queensland Public Health Sector
- What are the physiotherapists perceptions of student preparedness for practice as a new graduate in the Queensland Public Health Sector
2016 data collection overview

- **Student Placements across 45 weeks (9 x 5 week placement blocks)**
  - Student data from Information Management Systems
    - N = 412, 10,000 days of clinical activity data (all weeks)
    - 3,566 days of clinical activity data (Week 4 and 5 ONLY)

- **STAFF data: New Graduate data from Information Management Systems**
  - N = 50, 1,787 days of clinical activity data

- **STAFF data: HP3 (N = 19, 567 days) and HP4 (N= 23, 596 days)**
  - From Information Management Systems

- **CE activity tool data**
  - N = 53, Jan to May (blocks 1 to 4 only)

<table>
<thead>
<tr>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
<th>Block 5</th>
<th>Block 6</th>
<th>Block 7</th>
<th>Block 8</th>
<th>Block 9</th>
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</thead>
<tbody>
<tr>
<td>23-Jan</td>
<td>27-Feb</td>
<td>3-Apr</td>
<td>8-May</td>
<td>12-Jun</td>
<td>17-Jul</td>
<td>21-Aug</td>
<td>25-Sep</td>
<td>30-Oct</td>
</tr>
</tbody>
</table>
Clinical Educators (CE) have dual roles

1. Maintain service delivery/client outcomes
2. Provide clinical supervision of student practice
   - direct clinical supervision of student practice
     • Refers to when the clinical supervisor is present, observes, works with and directs the person who is being supervised. (Health Workforce Australia, 2011).
   - indirect clinical supervision of student practice:
     • Refers to the clinical supervisor being easily contactable, but does not directly observe the activities (adapted from Australian Nursing Federation Definitions) (Health Workforce Australia, 2011).

• Limited understanding on how physiotherapy CE are spending their time during placement
How do physiotherapy Clinical Educators spend their time during student placements?
What do clinical educators (CE) do?

Objectives

• To develop a tool to capture CE activity during student placements including clinical tasks and non-clinical activities that CEs may undertake during clinical placements

• To determine the activity profile of physiotherapy CEs during clinical placements, specifically identifying a breakdown of their non-clinical tasks (e.g. time spent directly supervising students, providing feedback and student tutorials etc.)

TERMINOLOGY:

• **Clinical Placement**: A clinical placement provides education and training for a physiotherapy student to translate theory into practice, develop knowledge and skills to provide treatment to clients and understand professional behaviours and the clinical environment (Health Workforce Australia, 2011).

• **Clinical Educator**: aka “Preceptor”, “supervisor”, “field educator”
85% of all placements (1221 placements) have more than 1 student on the same placement.
What physiotherapy clinical educator activity data is currently being collected?
Health Activity Hierarchy

Allied Health Activity

- Clinical Care (CC)
  - Individual Patient Attributable (IPA)
  - Non-individual Patient Attributable (NIPA)
- Clinical Services Management (CSM)
- Teaching and Training (TT)
- Research (R)

Direct Clinical Care (IPA + NIPA)  Non-direct Clinical Care (CSM, TT, Res)
Clinical Educator profile – Typical Health System Data

- Teaching and training: 76%
- Clinical Services Management: 9%
- Clinical Care (Individual patient attrib): 12%
- Clinical Care (Non-individual patient attrib): 3%
- Research: 0%

Diagram:
- Allied Health Activity
  - Clinical Care (CC)
  - Clinical Services Management (CSM)
  - Teaching and Training (TT)
  - Research (R)

- Individual Patient Attributable (IPA)
- Non-individual Patient Attributable (NIPA)
Clinical Educator profile – Typical Health System Data

Unknown CE activity

- Breakdown of Teaching and Training time (approx. 76%)
- Breakdown of Clinical Educator Clinical Care activity (approx. 15%)
What additional CE activity data do we need to collect?
Student Contribution Project data collection

Hospital Information Management System

Staff data included:
- Occasions Of Service (OOS)
- Length OOS (LOOS)
- NIPA, CSM, TT, Research

Student data included:
- Occasions of service (OOS)
- Length OOS (LOOS)

Additional “Activity Tool” data

Clinical educator data

Student Data

Other placement information

Total number of students on placement

Placement days

CE: student ratios
Student Contribution Project data collection

Hospital Information Management System
- Staff data included:
  - Occasions Of Service (OOS)
  - Length OOS (LOOS)
  - NIPA, CSM, TT, Research
- Student data included:
  - Occasions of service (OOS)
  - Length OOS (LOOS)

Additional “Activity Tool” data
- Clinical educator data
- Student Data

Other placement information
- Total number of students on placement
- Placement days
- CE: student ratios
The Data Set

Site selection
- 5 Queensland public hospitals
- 3 metro hospitals
- 2 regional hospitals
- Bed numbers range from 325-950
- 4 different information management systems used across 5 hospitals

Health Info System Data
- 92 NG, HP3 and HP4 Staff
- 412 individual students on clinical placement
- 135 groups of students (1:2; 1:3 or 1:4)
- 4 clinical areas (Cardiorespiratory, Musculoskeletal, Neurological physiotherapy, Orthopaedics)

Activity Tool Data
- 53 Clinical Educators
- Collected over 20 weeks
- 46 placements supervising a total of 138 students
Clinical Educator activity tool

• Design
  – 2 purposes:
    1. Verify and improve Information Management System Data
    2. Provide breakdown of clinical educator (and student) data that is not entered into information management systems (i.e. everything other than direct clinical care)

• Trial
• Implement
**Clinical Educator Activity Tool**

**CE Name / Participant Code ___________________**

**Hospital: __________________________________**

**Placement type: ____________________________**

**Placement Start date: ______________________**

**Clinical Educator : Student ratio: __________**

**Week Beginning: ___________________________**

<table>
<thead>
<tr>
<th>CE Activity During Placement</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total rostered time (minutes)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Clinical Care (time in minutes)**

<table>
<thead>
<tr>
<th>Individual Patient Attributable (IPA)</th>
<th>IPA OOS 1</th>
<th>IPA OOS 2</th>
<th>IPA OOS 3</th>
<th>IPA OOS 4</th>
<th>IPA OOS 5</th>
<th>IPA OOS 6</th>
<th>IPA OOS 7</th>
<th>IPA OOS 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>n= no. in group, T=time</td>
<td>T=</td>
<td>T=</td>
<td>n=</td>
<td>T=</td>
<td>T=</td>
<td>t=</td>
<td>t=</td>
</tr>
<tr>
<td>Group 2</td>
<td>n=</td>
<td>T=</td>
<td>n=</td>
<td>T=</td>
<td>n=</td>
<td>T=</td>
<td>t=</td>
<td>t=</td>
</tr>
<tr>
<td>Group 3</td>
<td>n=</td>
<td>T=</td>
<td>n=</td>
<td>T=</td>
<td>n=</td>
<td>T=</td>
<td>t=</td>
<td>t=</td>
</tr>
</tbody>
</table>

| **Non-Individual Patient Attributable (NIIPA)** | | | | | | | | |

**Total Clinical Care time (minutes)**

**Teaching and Training (time in minutes) (record all that apply)**

<table>
<thead>
<tr>
<th>Teaching and Training of Students</th>
<th>Direct supervision of students</th>
<th>Preparing formal feedback to students</th>
<th>Providing formal feedback to students</th>
<th>Student preparation activities</th>
<th>Providing student tutorial / inservice</th>
<th>Other</th>
</tr>
</thead>
</table>

**Teaching & Training of others (eg HPs, Nursing staff)**

**Clinical Service Management time**

**Research**

**Total actual time (minutes)**
How to complete this form:
1. Please complete the demographic and logistical information at the top of the form.
2. If you treat a patient that is independent of the student (i.e., you are the primary therapist) please document this in the table against occasion of service (OOS). If you treat a patient twice, this is considered two OOS and should be documented on separate lines (e.g., am treatment OOS 1 and pm treatment could be OOS 2).
3. If you are responsible for a group (i.e., you are running the group not the student) please document the total number in the group and the time for the group.
4. Please document your teaching and training time against the guidelines listed below.
5. Please record your CSM time.
6. Please report your unpaid overtime this should also include completing APPs outside of paid work hours (i.e., at home) and needing to complete other work-related activities/responsibilities outside of work hours due to supervising students.
7. Your total time should add up to your total work time (i.e., 460 min). If it is over this amount it would indicate that you have performed some overtime.

Teaching and Training Category Guidelines:

Direct supervision of students
- This should describe the total time spent supervising students and assisting them with direct patient care which may include discussing the patient’s condition or treatment plan.

Preparing formal feedback to students
- This should include the time taken to complete the student’s APP (even if this is after-hours)
- Time discussing student performance with other physiotherapists that may have assisted with student supervision

Providing formal feedback to students
- Time taken to review APP with student and discuss strategies for improvement
- Time discussing this information with students’ university if required

Student preparation activities
- Preparing inservices
- Organising patients for students to review
- Planning activities for students (e.g., attending theatre, shadowing a colleague)

Providing student tutorial / in-service
- Providing student tutorial or in-service
- Providing

Other
- Activities related to students that do not fit into the above categories, please document what activities these are.
Clinical educators
- n = 53
  - 39 full time CEs
  - 14 part time CEs
• Collected over a period of 20 weeks (four, 5-week placement blocks)
  - 46 x 5 week placement blocks (varying CE:student ratio 1:1, 1:2, 1:3 or 1:4)
  - 138 individual students supervised
• Physiotherapy Clinical areas
  - Cardiorespiratory
  - Orthopaedics
  - Musculoskeletal
  - Neurorehabilitation
Clinical Educator

RESULTS - Activity tool data

Clinical Educator Activity Tool Data - Results
Profile of Clinical Educator – All clinical areas combined

Teaching and training: 76%

IPA: 12%
NIPA: 3%
CSM: 9%
Research: 0%
Profile of Clinical Educator – All clinical areas combined

Profile of Clinical Educator - Teaching and Training (76% of time)

- Direct supervision of students: 60
- Student preparation activities: 4
- Preparing formal feedback: 3
- Providing feedback: 3
- Providing tutorials: 3
- Other TT relating to students: 2
- Teaching and training of others: 1

Teaching and training 76%
Does this change over the 5 weeks of placement?

Average time per day: Clinical Care, Teaching & Training, Clinical Services Management

**CE Average time/day (mins) by placement week - All clinical areas**

- **Week 1**
  - Average Total TT time: [Value]
  - Average Total Clinical Care time: [Value]
  - Average Total CSM time: [Value]

- **Week 2**
  - Average Total TT time: [Value]
  - Average Total Clinical Care time: [Value]
  - Average Total CSM time: [Value]

- **Week 3**
  - Average Total TT time: [Value]
  - Average Total Clinical Care time: [Value]
  - Average Total CSM time: [Value]

- **Week 4**
  - Average Total TT time: [Value]
  - Average Total Clinical Care time: [Value]
  - Average Total CSM time: [Value]

- **Week 5**
  - Average Total TT time: [Value]
  - Average Total Clinical Care time: [Value]
  - Average Total CSM time: [Value]
Does this change over the 5 weeks of placement?

Average time per day: Clinical Care, Teaching & Training, Clinical Services Management
Average time per day providing direct student supervision

![Bar chart showing average time per day providing direct student supervision.](chart.png)
### Average time per day preparing and providing formal feedback

<table>
<thead>
<tr>
<th>Week</th>
<th>Preparing formal feedback</th>
<th>Providing formal feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 mins</td>
<td>2 mins</td>
</tr>
<tr>
<td>2</td>
<td>10 mins</td>
<td>3 mins</td>
</tr>
<tr>
<td>3</td>
<td>25 mins</td>
<td>15 mins</td>
</tr>
<tr>
<td>4</td>
<td>5 mins</td>
<td>2 mins</td>
</tr>
<tr>
<td>5</td>
<td>20 mins</td>
<td>10 mins</td>
</tr>
</tbody>
</table>

- **138 students**
- **Preparing formal feedback:**
  - Total time = 15,695 min
  - Avg time/student = 113 min
- **Providing formal feedback:**
  - Total time = 13,075 min
  - Avg time/student = 94 mins
Other student Teaching & Training Activities by placement week

Average other student T&T time (mins)/day by placement week

- Blue: Average of Student preparation activities
- Red: Average of Providing student tutorial/in-service
- Green: Average of Other student TT activity (time)

Week 1: 40 mins
Week 2: 15 mins
Week 3: 5 mins
Week 4: 5 mins
Week 5: 5 mins
Summary

- Vast majority of CE time (60%) is spent providing direct clinical supervision of students who are providing the direct clinical service delivery to patients
  - maintain safe, appropriate and high quality patient care
  - in an effective clinical learning environment
- Large amount of CE time spent preparing and providing formal feedback (approx. 207 minutes/student) with peaks in weeks 3 (mid) and 5 (end unit summative assessment).
  - NB: Most placements have more than 1 student/placement
- Large amount of CE time spent in student education activities (eg tutorials/student preparation)
  - Majority occurs in week 1 and tapers weeks 2-5
Results

Occasions of Service

<table>
<thead>
<tr>
<th></th>
<th>Student</th>
<th>New Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All clinical areas</td>
<td>4.4</td>
<td>8.8</td>
</tr>
<tr>
<td>Cardiorespiratory</td>
<td>4.7</td>
<td>10.1</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>4.3</td>
<td>7.5</td>
</tr>
<tr>
<td>Neurorehabilitation</td>
<td>4.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>4.6</td>
<td>8.8</td>
</tr>
</tbody>
</table>
Results

Length of Occasion of Service

<table>
<thead>
<tr>
<th></th>
<th>Student</th>
<th>New Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All clinical areas</td>
<td>60</td>
<td>42</td>
</tr>
<tr>
<td>Cardiorespiratory</td>
<td>56</td>
<td>37</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>57</td>
<td>45</td>
</tr>
<tr>
<td>Neurorehabilitation</td>
<td>67</td>
<td>47</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>60</td>
<td>41</td>
</tr>
</tbody>
</table>
Group of students compared with registered physiotherapist
Average OOS/day student group v registered physios
Average OOS/day student group v registered physios
The transition from student to new graduate is challenging

- Large increase in workload & complexity from student to new graduate is difficult and at times leaves new grads feeling unprepared for their roles
- Students are typically protected from realistic workloads
- 4 themes identified:
  1. Preparedness for practice
  2. Protected practice
  3. Independence & affirmation of practice
  4. Performance expectations

Clinical placements play an essential role in preparing students in becoming a new graduate.

- Supporting students to have realistic physiotherapy practice experience including both clinical and non-clinical tasks may assist the transition from student to new graduate.
- Stakeholder collaboration is essential to enhance the student transition to new graduate.