

CAN PHYSIOTHERAPY STANDARDISED PATIENT PROGRAM BE A COMPARABLE SUBSTITUTE FOR THE TRADITIONAL CLINICAL EDUCATION MODEL IN THE PREPARATORY PHASE OF CLINICAL TRAINING?

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Abstract

The traditional model of clinical placements places over-reliance on clinical institutions' supervisors to facilitate learning opportunities. This model may not be effective in the preparatory phase of clinical training due to students' limited competencies and the necessity for consistent feedback. The opportunistic clinical learning environment, dictated by availability of caseloads, often results in students having little practise opportunities. The need to ensure quality of clinical learning yet reduce clinical load led to the development of the NYP Physiotherapy Standardised Patient Programme (PSPP). PSPP is a simulated clinical training program, using standardised patients to facilitate the training of our physiotherapy students. Standardised patients are healthy individuals who are trained to portray patients with specific medical histories and personalities. This program was conducted over 3 weeks as a preparatory placement to 4 weeks of inpatient and 4 weeks of outpatient placements. The objective of the study was to investigate whether the clinical competency of the students who underwent the PSPP with a subsequent shortened clinical placement period were comparable to students who did the traditional immersion clinical education model of 3 weeks preparatory placement followed by 5 weeks of inpatient and 5 weeks of outpatient placements.

Clinical competency grades of both Year 2 inpatient and outpatient placements of 90 students (PT 2013) who underwent PSPP in 2014 were compared to two earlier cohorts of 83 students (PT 2011) and 92 students (PT 2012), who underwent the traditional clinical placements. The clinical competency grades were compared between PT 2013 cohort who underwent PSPP as the preparatory clinical placement, and PT 2011/PT 2012 cohort who underwent the traditional preparatory clinical placement.

Using independent t-test, there was no significant difference in the clinical performance between cohort PT 2013 and PT 2011 ($p=0.455$; $p=0.412$) as well as between cohort PT 2013 and PT 2012 ($p=0.269$; $p=0.455$), for both inpatient and outpatient placements. Students who completed the PSPP performed just as well as earlier cohorts who

underwent the traditional preparatory clinical placement. Students were able to translate clinical competencies gained in PSPP to actual clinical performance. This resulted in a saving of 2 weeks (80 hours), easing demands placed on clinical resources. Clinical instructors strongly agreed that the program improved the students' communication and clinical reasoning skills.

PSPP is not only a comparable substitute in the early phase of clinical training, but can reduce up to 80 clinical hours per student, without compromising their clinical competency and performance. Use of standardised patient in healthcare training is effective in developing the skillsets needed for successful clinical practice and has been extended to inter-professional education (IPE) at NYP School of Health Sciences. Simulation training programs should be further explored to complement and enhance traditional clinical education model.

Keywords: *Physiotherapy, standardised patient, clinical education, simulation, clinical training, simulated learning environment, physiotherapy students*

Introduction

Clinical education is indisputably a vital component of an undergraduate physiotherapy curriculum (Hobbs, Henley, Higgs & Williams, 2000). Clinical training allows the student to consolidate their knowledge, apply their practical skills, develop critical thinking and learning agility with the exposure to multiple clinical settings and medical conditions. Beyond knowledge and skills, students develop empathy, a greater ability for patient care with improved communication skills and increased self-confidence (Carvalho et al., 2011; Hayward and Blackmer, 2010).

With the increasing complexity of the healthcare environment and the rising expectations placed on healthcare professionals, educational institutions faced numerous ethical challenges including potential litigation, patient safety and whether students should 'practise' on patients (Gordon, Wilkerson, Shaffer & Armstrong, 2001). The clinical learning environment has become overly demanding, stressful and risky (Blackstock et al., 2013). Current clinical training places an over-reliance on clinical institutions' supervisors to

facilitate learning opportunities. This model may not be effective in the preparatory phase of clinical training due to students' limited competencies and the necessity for constant and consistent feedback. The opportunistic clinical learning environment, dictated by availability of caseloads, often results in students having little practise opportunities. These challenges combined with limited clinical resources, increasing student numbers and the move towards more contextual learning, are push factors for educational institutions to explore alternative models and innovative ways to maintain or even enhance current clinical training models.

In the past few decades, there has been an emergence and wide acceptance of Simulated Learning Environments (SLEs) (Pill & Pilli, 2013). The physiotherapy community recognized the potential benefits of SLEs and are exploring the use of SLEs as another possible pedagogy model to supplement clinical placements (Blackstock et al., 2013). Simulation with the use of standardised patient (SP) has been increasingly explored in the medical and allied health education based on the potential educational benefits (Bokken, Rethans, Jobsis, Duvivier, Scherpbier & van der Vleuten 2010). SPs are healthy individuals who are carefully trained to portray patients with specific histories, personalities, attitudes and physical findings (Watson et al., 2012). SPs programs have been reported to complement clinical education by providing student-centered learning, skill acquisition, development of communication skills, protection of patient welfare and addressing insufficient clinical placements (Watson et al., 2012). The use of actor patients to alter the learning process into a wholly student oriented environment allowed educators to place focus on the students rather than the patient's safety (Ziv, Ben-David & Ziv, 2005; Watson et al., 2012; Bokken, Rethans, Scherpbier & van der Vleuten, 2008). With the simulated learning experience as the preparatory block, students will approach their first real patient at a higher level of clinical skills competency and in turn, improve patient welfare (Ziv, Wolpe, Small & Glick, 2003).

Concerns about replacing time in a real clinical setting with SLE led Health Workforce Australia to fund multi-centre research on the implementation of SP as a viable means of clinical training for physiotherapy students in Australia (Watson et al., 2012). For a musculoskeletal placement, instead of the usual 4 weeks traditional clinical placement, students participated in a 1 week clinical simulation using standardised patient with the remaining 3 weeks completed in a real clinical environment. The students' post training competency were compared to the students who did the traditional clinical placement. Students' competency levels were found to be comparable based on their mean Assessment of Physiotherapy Practice (APP) score of 2.73 in the group who participated in simulated learning environment and a mean APP score of 2.63 in the group that had the traditional clinical placement ($p < .05$). In another study, the effects of simulated learning on the competency level of students were evaluated in a cardiopulmonary setting with a similar mode of clinical

delivery where one group underwent simulated learning environment for one week before attending a 3-week traditional clinical placement, while the control group underwent four weeks of traditional clinical placement (Blackstock et al., 2013). Their results showed that there was no significant difference in the competency level of students who underwent simulated learning or control group ($p < .05$). Both studies showed that simulation could replace up to 25% of an entry-level physiotherapy student clinical placement program without compromising on student learning.

Singapore is experiencing an acute shortage of clinical training places and it is postulated to worsen with the need to train more physiotherapists to cope with the increasing demand (Tan, 2009). Thus, there is a need to create more opportunities for learning in a clinical environment (Lee, 2008). Various medical and allied health courses in Singapore have initiated the use of SP to train medical, dental and nursing students in Alice Lee Centre for Nursing Students, NUS Yong Loo Lin School of Medicine and Duke-NUS Medical School (Kowitlawakul, Chow, Salam & Ignacio, 2015; Wong and Lim, 2016).

Students in the Diploma in Physiotherapy program at Nanyang Polytechnic (NYP) must fulfil a total of 1080 hours of clinical education over 3 years in order to graduate. The need to ensure quality of clinical training yet reduce clinical load led NYP physiotherapy faculty to develop the NYP Physiotherapy Standardised Patient Programme (PSPP) in 2014. PSPP is a simulated clinical training program, using standardised patients to facilitate the training of our physiotherapy students. A 3-week traditional clinical block meant as a clinical preparatory placement for the second-year undergraduates was replaced with the 3-week Physiotherapy Standardised Patient Programme (PSPP). The clinical preparatory placement is the students' first exposure to managing clinical cases with supervision and aims to prepare them for their subsequent inpatient and outpatient clinical placements. PSPP aims to provide a consistent mode of clinical training across three core physiotherapy disciplines of musculoskeletal (MS), cardiopulmonary (CP) and neuroscience (NS). This was in contrast to the original traditional model where students were only exposed to one core physiotherapy discipline for the whole 3 weeks. With inclusion of PSPP as the clinical preparatory block in 2014, subsequent clinical placements for both inpatient and outpatient placements were reduced from 5 weeks to 4 weeks, resulting in a saving of 2 clinical weeks or 80 clinical hours.

Recognising the possible effect of the change on our curriculum and graduate outcomes, it was necessary to understand the impact of the program and evaluate if PSPP training can in part replace traditional clinical education to allow students to develop the key clinical competencies needed for patient management. This understanding will also aid broader considerations for various allied health disciplines, challenged by the rising complexities of clinical education including limited

clinical spaces and escalating operational costs. The objective of the study was to evaluate whether the clinical competency of students who underwent the 3 weeks PSPP with a subsequent shortened clinical placement period of 4 weeks inpatient and 4 weeks outpatient were comparable to students who did the traditional clinical education model of 3 weeks preparatory placement followed by 5 weeks of inpatient and 5 weeks of outpatient placements.

Methods

NYP Physiotherapy Standardised Patient Program (PSPP)

PSPP was conducted over 3 weeks to replace about 10% of clinical education hours and as a precursor to prepare students for traditional clinical placements. The program consists of using standardised patients to facilitate the training of our Year 2 physiotherapy students in developing various clinical skills in MS, CP and NS. PSPP aims to acclimatize students to clinical settings via simulated environments and to bridge the gap between academic studies and clinical practice. Past research on PSPP have shown that both students' communication ($T\text{-value}=-4.05, p=0.000$) (Goh, Chua, Khairunnisa, Liew & Ng, 2015) and competency skills improved significantly ($Z\text{-value}= 2.86, p=0.004$) (Poon, Yap, Chan, Tahar & Chan, 2015) post PSPP.

Participants

All NYP physiotherapy students from Cohort 2011 (PT11), 2012 (PT12) and 2013 (PT13) were recruited for this study. As PSPP is conducted for Year 2 undergraduates and started only in 2014, only cohort PT13 underwent the PSPP. Both PT11 and PT12 underwent the traditional clinical immersion model Clinical Education 2A (CE2A). The inclusion and exclusion criteria for the selection have been presented in Table 1. Students who failed or did not complete the preparatory clinical block of CE2A or PSPP were excluded, as they would have to repeat the preparatory clinical block before continuing with subsequent clinical blocks.

Clinical Instructors (CIs)

All CIs were recruited by NYP to assess students' performance in PSPP. All CIs must meet the minimum requirement of at least 5 years of clinical practice with prior supervisory experience in the traditional clinical placement model. All CIs will provide supervision and evaluate students' competency based on their area of expertise in specific disciplines of MS, CP and NS.

Clinical Supervisors (CSs)

CSs are physiotherapists employed by their respective healthcare organisations and assigned a clinical educator role to supervise physiotherapy students on clinical placement. There are training programs in

place offered by both NYP as well as their respective institutions to ensure that all CSs have the necessary skillsets to provide clinical supervision. Depending on individual institutions, most CSs will have a minimum of three years of clinical experience before taking on the clinical educator role under an experienced CS. All CSs will provide supervision and evaluate students' competency at their respective healthcare institutions under the traditional immersion clinical model.

Table 1. *Inclusion and exclusion criteria for PT11, PT12, and PT13*

Population	Inclusion	Exclusion
PT11, PT12	Pass traditional clinical placement CE2A	Failed or did not complete traditional clinical placement CE2A
	Completed all subsequent Year 2 placements	Deferred or drop-out of course
PT13	Pass PSPP	Failed or did not complete PSPP
	Completed all subsequent Year 2 placements	Incomplete assessment forms
		Deferred or drop-out of course

Standardised Patients (SPs)

All SPs were recruited based on the requirements of the planned case scenarios. SPs will undergo an interview to assess their proficiency in English, their ability to memorise and deliver a case as well as their ability to act and react as patients. SPs were also assessed for their physical function to ensure that there will be no increase in health-risk or any safety concerns with their participation in the program. Upon selection, each SP was trained for approximately 8 hours to portray each case scenario and training was extended as needed for complex case scenarios.

Study design

This is a retrospective cohort study to evaluate whether the clinical competency of the students who underwent the 3 weeks PSPP with a subsequent shortened clinical placement period of 4 weeks inpatient and 4 weeks outpatient, were comparable to students who did the traditional clinical education model of 3 weeks preparatory placement followed by 5 weeks of inpatient and 5 weeks of outpatient placements. Each cohort of students - PT11, PT12, and PT13, were required to complete all Year 2 clinical placements to be included in this study. PT11 and PT12 students undertook the traditional immersion clinical model as their preparatory placement and PT13 students undertook the PSPP as their preparatory placement. All three cohort of students who passed their preparatory placement then continued on to

their Clinical Education 2B (CE2B) and Clinical Education 2C (CE2C) which are traditional immersion clinical placements in inpatient and outpatient settings. However, PT13 cohort had only 4 weeks of CE2B and another 4 weeks of CE2C compared to PT11 and PT12, where they had 5 weeks of CE2B and another 5 weeks of CE2C. CE2B and CE2C results of past cohorts PT11 and PT12 were compared with CE2B and CE2C results of PT13 results to evaluate the effects of PSPP with a subsequent shortened clinical placement. All students were graded on the NYP Clinical Evaluation Form in CE2B and CE2C at their clinical placements. The results were graded independently by CSs. The evaluation scores of CE2B and CE2C of PT11 and PT13 were collected and compared to the respective clinical placements and units. This was further repeated with PT12 and PT13. (Figure 1)

Outcome Measures

The key outcome measure was the students' clinical competency expected of a Year 2 physiotherapy student. Clinical competency was defined as the ability to examine, assess, interpret and analyse a patient's problem and to implement, and evaluate a treatment. The NYP Clinical Placement Evaluation form (Appendix A) was adapted from a clinical evaluation form used by University of Sydney Physiotherapy department. NYP has been using the form since 1992 for clinical evaluations with modifications and adaptations through the years. The students' clinical performance were rated on six key areas, namely: examination, interpretation and analyses, intervention plan, implementation, evaluation

and professional behaviour and requires a compulsory competency in the safety aspect as illustrated in Table 2.

Scoring was done based on a 5-point Likert scale (from NC1 to C3) as shown in Table 3. There would be also an open-ended section for the CI to give feedback regarding students' strengths and areas for improvement.

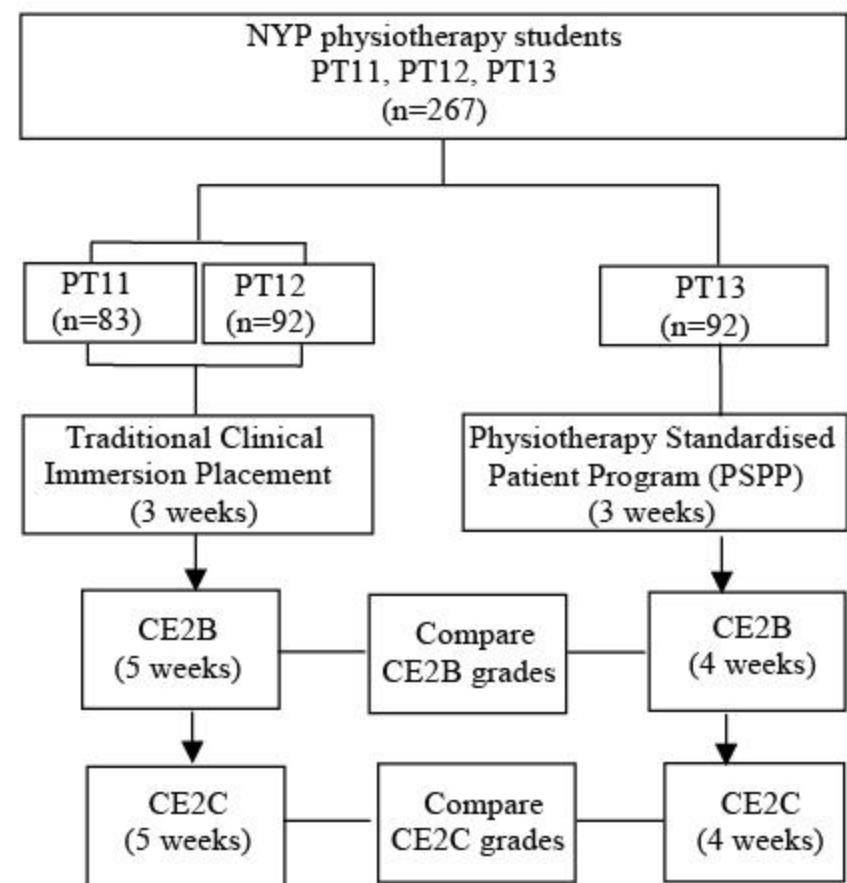


Figure 1. Flow of study design

Table 2. NYP Clinical Placement Evaluation Form

Note. Adapted from "Diploma in Physiotherapy Clinical Education Competency Based Continuous Assessment Mid and End-Unit" by SHS, 2013, HS2220/HS3184 Clinical Education 2B and 2C Student Manual, 42-45.

Assessment Areas and Questions in the NYP Clinical Evaluation Form	
Areas	Questions
Examination	<ol style="list-style-type: none"> 1. Demonstrate an accurate and safe physiotherapy examination 2. Communicate effectively with patients, caregivers and health professionals 3. Obtain relevant primary information from the examination 4. Identify relevant secondary information from the examination 5. Quantify quantitative and qualitative data 6. Accurately document examination findings
Interpretation and Analysis	<ol style="list-style-type: none"> 1. Define the patient's problems and limitations 2. Make a scientific and justifiable physiotherapy diagnosis
Intervention plan	<ol style="list-style-type: none"> 1. Logically rationalize the scientific evidence of the intervention 2. Establish appropriate short term physiotherapy goals 3. Select appropriate forms of intervention
Implementation plan	<ol style="list-style-type: none"> 1. Professionally communicate how the intervention will be implemented 2. Ensure safe and effective intervention 3. Modify intervention accordingly
Evaluation	<ol style="list-style-type: none"> 1. Accurately monitor results of intervention 2. Evaluate effectiveness of intervention 3. Modify intervention accordingly
Professional Behaviour	<ol style="list-style-type: none"> 1. Ensure compliance to medical-ethical and legal requirement 2. Show commitment to evidence based practices 3. Manage time, resources and medical information effectively

Table 3. *NYP Clinical Evaluation Form Grading Criteria*

Grading of NYP Clinical Placement Evaluation Form	
5 point Likert Scale	
NC1	The student is not competent in the specified performance items all the time.
NC2	The student demonstrated competency in the specified performance items less than 75% of the time.
C1	The student demonstrates a satisfactory level of competency in the specified performance items at least 75% of the time.
C2	The student demonstrates a satisfactory level of competency in the specified performance items more than 75% of the time.
C3	The student demonstrates a satisfactory level of competency in the specified performance items all the time.

Results and Discussion

Independent-t test was used to establish if PSPP is a comparable substitute for the traditional preparatory clinical placement for Year 2 students. There was no significant difference in the clinical performance between cohort PT 2013 and PT 2011 for CE2B ($p=0.455$) as well as CE2C ($p=0.412$), for both inpatient ($p=0.392$) and outpatient ($p=0.145$) placements (Table 4). Similarly, independent-t test was done for the evaluation scores between cohort PT 2013 and PT 2012 for both CE2B ($p=0.269$) and CE2C ($p=0.455$). Further analysis of the data also revealed insignificant differences for both inpatient ($p=0.700$) and outpatient ($p=0.150$) placements (Table 5).

Students who completed the PSPP performed just as well as earlier cohorts who underwent the traditional immersion preparatory clinical placement. This implied that the acquired knowledge, confidence, communication and clinical skills gained through PSPP, were translated to actual clinical performance in CE2B and CE2C. Despite the shorter clinical placement period of 4 weeks 2B and 4 weeks 2C, the 2B and 2C clinical competency scores of students who underwent PSPP were comparable to the past two cohorts of students who underwent the traditional immersion preparatory clinical placement and the subsequent 5 weeks 2B and 5 weeks 2C. These findings are consistent with research done by Watson et al. (2012) and Blackstock et al. (2013), which found that simulation can replace up to 25% of traditional clinical placement in MS and CP settings respectively, without compromising student's learning outcomes.

Earlier studies on PSPP showed that students had a statistically significant improvement in confidence (T-value= 10.73 $p=0.000$) (Poon, Yap, Chan, Tahar & Chan, 2015) post PSPP. Existing literature suggesting that an increase in skill competency correlates to an increase in confidence level of students and health care professionals (Wagner, Bear & Sander, 2009; Laschinger et al., 2008).

There was also a significant improvement in the students' communication skills when evaluated by the students themselves ($p=0.000$), by CIs ($p=0.002$) and by the SPs

($p=0.000$) (Goh, Chua, Khairunnisa, Liew & Ng, 2015). The PSPP framework allowed faculty and clinical instructors to tailor the learning experience according to the individual needs of students, including the development of soft skills required in the profession (Cahalin, Markowski, Hickey & Hayward, 2011).

PSPP complemented the traditional clinical placement by improving the students' self-confidence, communication and competency skills in a controlled sheltered learning environment, before the start of their traditional clinical placements. This simulated environment provided a 'safe' setting where students' learning take precedence over patient safety as SPs are well individuals and do not have genuine health concerns. Students could freely explore assessment and treatment options, allowing room for students to learn from their errors with no compromise of patient safety or fear of permanent consequences. Clinical instructors provided minimal guidance to students during the SP interaction, allowing students to self-discover and learn how to handle different clinical situations, including angry patients and safety breaches. The CI is however present throughout the whole interaction but will only step in when the situation seems beyond student's control. A key feature of the program is the provision of feedback and multiple opportunities for students to reflect on their own practice and performance, facilitated by the CI. CI will provide feedback after every session with a SP, guiding each student to self-reflect on whether they have achieved their treatment goals and provided an accurate and comprehensive assessment and treatment of their 'patient'. Particular emphasis is placed on safety aspects to ensure that students will be ready for the traditional immersion placement. Feedback is also provided by the SPs to every student and students are expected to do peer evaluation of one another. Having individual feedback from the CIs, SPs and their peers will provide each student with a good overview of their performance from different perspectives, providing them an excellent platform to reflect on their practice and how to improve the multiple skillsets needed for successful clinical practice.

Table 4. Comparison of Evaluation Scores between PT11 and PT13

Results	Cohort						t	df	p
	PT11			PT13					
	M	SD	n	M	SD	n			
CE2B	28.5	6.32	82	27.2	4.77	90	1.52	170	.455
CE2C	28.1	7.43	83	29.5	5.14	90	-1.40	171	.412
Inpatient	28.2	5.90	83	28.0	5.15	90	.249	171	.392
Outpatient	28.5	7.79	82	28.7	4.99	90	-.271	170	.145

Table 5. Comparison of Evaluation Scores between PT12 and PT13

Results	Cohort						t	df	p
	PT12			PT13					
	M	SD	n	M	SD	n			
CE2B	27.3	7.13	92	27.27	4.77	90	.038	180	.269
CE2C	29.5	5.63	92	29.51	5.14	90	.058	180	.455
Inpatient	29.0	5.41	92	28.0	5.15	90	1.3	180	.700
Outpatient	27.8	7.43	92	28.7	4.99	90	-.998	180	.150

The PSPP preparatory clinical block resulted in a saving of 10 clinical days or 80 clinical hours per student for their Year 2 clinical placements, reducing the overload on limited clinical resources, yet with no compromise of students' clinical competency skills. Based on past studies done on PSPP, survey feedback from CIs, SPs and students, the authors postulated that PSPP facilitated the development of students' communication and competency skills. This in turn enhanced their self-confidence and allowed them to assimilate quickly into the traditional clinical environment in their subsequent 2B and 2C clinical placement. The opportunity to familiarise themselves with multiple clinical settings and scenarios in PSPP, coupled with reflection and learning from their mistakes further enhanced their self-confidence when dealing with real patients. Feedback and guidance from various sources allowed each student to be acutely aware of their strengths and weaknesses, and develop strategies to better prepare themselves before their traditional clinical placement of 2B and 2C.

The study is not without its limitations, including the recognition that standardised patients have limitations in their physical presentation of the cases (Watson et al., 2012). Presentation of cases might also differ even though all SPs have been trained together with a fixed script and match demographically for the cases. The NYP Clinical Placement Evaluation form was adapted from a clinical evaluation form used by University of Sydney Physiotherapy department. Although the form has been updated and modified by experienced educators over the years, there have been no published validity or reliability studies done on the clinical evaluation form.

Conclusions

The use of blended learning including simulation and standardised patients is the future direction of clinical education in physiotherapy. It can be an effective learning

tool to bridge the gap between the classroom setting and a traditional clinical placement, facilitating the transition to clinical practice. The simulated clinical environment is student centered and focused on ensuring that learning through practice takes precedence over other factors such as time management (Blackstock et al., 2013). Use of simulation allows education institutes to keep up with the increasing demand for capacity yet maintaining or even enhancing the quality of clinical training (Watson et al., 2012).

PSPP is a comparable substitute in the preparatory phase of clinical training and provides a saving of 80 clinical hours per student, without compromising students' clinical competency and performance. Further use of standardised patient in healthcare training has been extended for inter-professional education (IPE) in NYP School of Health Sciences.

Acknowledgements

We wish to acknowledge the contributions of the following NYP Physiotherapy graduates for the data collection: Cherie Chen, James Cher, Rina Choo, Frank Aaron He and Tan Ting Hui. We wish to thank NYP School of Health Sciences Management team, Physiotherapy team and all colleagues for their contributions and valuable support. We would also like to extend our appreciation to all Physiotherapy students who participated in the study.

Ethical approval was granted through the NYP School of Health Sciences Project Committee and informed consent was obtained from all participants.

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Appendix A



Diploma in Physiotherapy
CLINICAL EDUCATION II
COMPETENCY BASED CONTINUOUS ASSESSMENT
Mid & End-Unit

STUDENT NAME / NUMBER: _____

CLINICAL PLACEMENT: _____

FROM: _____ TO _____ DAYS ABSENT: _____

Purpose:

The purpose of this assessment is to evaluate the competency level of the student during the clinical. The assessment should be performed **THROUGHOUT THE CLINICAL PLACEMENT**. Identification of level of competency performance in each area and item will allow constructive feedback for remedial action.

Content:

The evaluation consists of **6 areas of individual competency and 1 compulsory competency: safety**. Each area has a number of performance items and criteria, which the student should demonstrate consistently and safely at a satisfactory level. It is expected that the student will demonstrate competency in these performance criteria commensurating *with their stage of clinical practice* (Year 2 or 3). Clinical Supervisors are required to make a judgement based on their understanding of essential competency of an entry level of a physiotherapist which should be moderated by the student's stage of learning.

The student level of performance should be rated as being:

- **Not Competent at a Very Unsatisfactory Level - NC1**
The student is not competent in the specified performance items all the time.
- **Not Competent at a Unsatisfactory Level - NC2**
The student is not competent in the specified performance items most of the time i.e. demonstrates competency less than 75% of the time.
- **Competent at a Satisfactory Level - C1**
The student demonstrates a satisfactory level of competency in the specified performance items at least 75% of the time.
- **Competent at a Superior Level - C2**
The student demonstrates a satisfactory level of competency in the specified performance items more than 75% of the time.
- **Competent at an Excellent Level - C3**
The student demonstrates an satisfactory level of competency in the specified performance items all the time.

Please tick appropriate spaces:

AREA 1	L	E	V	E	L
Examination	NC1	NC2	C1	C2	C3
<i>The student must be able to perform the following items:</i>					
a) Demonstrate an accurate and safe physiotherapy examination					
b) Communicate effectively with patients, care-givers & health professionals					
c) Obtain relevant primary information from the examination					
d) Identify relevant important secondary information from the examination					
e) Quantify quantitative & qualitative data.					
f) Accurately document examination findings					
<u>Specific Comments:</u>					
(if NC1 or 2 has been indicated, please specify details)					
AREA 2	L	E	V	E	L
Interpretation & Analyses	NC1	NC2	C1	C2	C3
<i>The student must be able to perform the following items:</i>					
a) Define the patient's problems & limitations.					
b) Make a scientific and justifiable physiotherapy diagnosis					
<u>Specific Comments:</u>					
(if NC1 or 2 has been indicated, please specify details)					
AREA 3	L	E	V	E	L
Intervention Plan	NC1	NC2	C1	C2	C3
<i>The student must be able to perform the following items:</i>					
a) Logically rationalize the scientific evidence of the intervention.					
b) Establish appropriate short & long terms physiotherapy goals					
c) Select appropriate evaluation procedure					
<u>Specific Comments:</u>					
(if NC1 or 2 has been indicated, please specify details)					

AREA 4	L	E	V	E	L
Implementation	NC1	NC2	C1	C2	C3
<i>The student must be able to perform the following items:</i>					
a) Professionally communicate how the intervention will be implemented					
b) Ensure safe and effective intervention					
c) Appropriately document and report intervention					
<u>Specific Comments:</u>					
(if NC1 or 2 has been indicated, please specify details)					
AREA 5	L	E	V	E	L
Evaluation	NC1	NC2	C1	C2	C3
<i>The student must be able to perform the following items:</i>					
a) Accurately monitor results of intervention					
b) Evaluate effectiveness of intervention					
c) Modify intervention accordingly					
<u>Specific Comments:</u>					
(if NC1 or 2 has been indicated, please specify details)					
AREA 6	L	E	V	E	L
Professional Behaviour	NC1	NC2	C1	C2	C3
<i>The student must be able to perform the following items:</i>					
a) Ensure compliance to medical-ethical and legal requirements					
b) Show commitment to evidence based practices					
c) Manage time, resources & medical information effectively					
<u>Specific Comments:</u>					
(if NC1 or 2 has been indicated, please specify details)					

COMPULSORY COMPETENCY: SAFETY

◆ **Safety:**

At all times maintained acceptable standard of safety for the patient being treated/rehabilitated, other staff and for self: **YES/NO**

If **NO** has been indicated, please give details below:

◆ **Clinical Supervisor's Specific Comments**

1. Student's strengths:

2. Areas for Improvement:
