

## STUDENT LEARNING ASSESSMENT REPORT

**PROGRAM:** Physical Therapy (D.P.T.)

**SUBMITTED BY:** Skye Donovan PT, PhD, OCS

**DATE:** September 29, 2018

**BRIEFLY DESCRIBE WHERE AND HOW ARE DATA AND DOCUMENTS USED TO GENERATE THIS REPORT BEING STORED:** Data for this report are documented and stored in three ways 1) In paper format in a locked filing cabinet in the Chair's office 2) electronically on the University maintained Share drive 3) on an external drive secured in a locked drawer in the Chair's office

### EXECUTIVE SUMMARY

**Program description from the Course Catalog:** The Marymount University Doctor of Physical Therapy (D.P.T.) program prepares generalist practitioners to deliver best available physical therapist practice for improving movement, function and health across diverse individuals and communities. The program employs a dynamic learning-in-context environment that is warm and welcoming. Critical thinking, professionalism, respecting individual differences, and adherence to ethical practices ground all classroom, clinic, and community activities. The program utilizes a modified problem-based curriculum unique to the region.

Upon successful completion of this program, students will be able to

- function independently, managing patients with a wide variety of simple or complex conditions;
- perform skilled physical therapist examinations, interventions, and clinical reasoning proficiently and consistently;
- apply best available scientific evidence, clinical judgment, and patient preferences in physical therapy patient management;
- manage a full-time physical therapist's caseload to achieve resource-efficient and patient-effective outcomes;
- exhibit care, compassion, and empathy in delivering physical therapy services sensitive to individual, cultural, and social differences; and
- implement a self-directed plan for professional development and lifelong learning.

The physical therapy program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).

**List all of the program's learning outcomes:** *(regardless of whether or not they are being assessed this year)*

Learning Outcome	Year of Last Assessment	Assessed This Year	Year of Next Planned Assessment
1. function independently managing patients with a wide variety of simple or complex conditions;	2014-15	X	2020-21
2. perform skilled physical therapist examinations, interventions, and clinical reasoning proficiently and consistently	2014-15	X	2020-21

3. apply best available scientific evidence, clinical judgment, and patient preferences in physical therapy patient management;	2016-17		2019-20
4. manage a full-time physical therapist's caseload to achieve resource-efficient and patient-effective outcomes;	2015-16		2018-19
5. exhibit care, compassion, and empathy in delivering physical therapy services sensitive to individual, cultural, and social differences;	2015-16		2018-19
6. implement a self-directed plan for professional development and lifelong learning.	2016-17		2019-20

**Describe briefly how the program's outcomes support Marymount's mission, strategic plan, and relevant school plan (generally not more than two paragraphs, may use bullet points):**

The mission of the Doctor of Physical Therapy (DPT) degree program is to prepare generalist practitioners to deliver best available physical therapist practice for improving movement, function and health across diverse individuals and communities. The program employs a dynamic learning-in-context environment that is warm and welcoming. Critical thinking, professionalism, respecting individual differences, and adherence to ethical practices ground all classroom, clinic, and community activities. The mission of the university states, "Marymount University is comprehensive Catholic university, guided by the traditions of the Religious of the Sacred Heart of Mary, that emphasizes intellectual curiosity, service to others, and a global perspective. A Marymount education is grounded in the liberal arts, promotes career preparation, and provides opportunities for personal and professional growth. A student-centered learning community that values diversity and focuses on the education of the whole person, Marymount guides the intellectual, ethical, and spiritual development of each individual." As the mission indicates that Marymount is committed to career preparation and professional development while focusing on the whole person, the student learning outcomes developed by the PT faculty attempt to show how the DPT program supports this Mission. Not only do our learning outcomes identify the skills necessary to practice in the career of physical therapy (#1-4), they also measure the moral sensitivity to recognize and understand the diversity of individuals (#5) and professional development (#6).

The Department of PT generated a new strategic plan with the help of the Office of Planning and Institutional Effectiveness. Our plan has strong ties to the Malek School of Health Professions and the University strategic plan with arms including inter-professional education, service learning, leadership, professionalism and forging partnerships.

**Provide a brief description of the assessment process used including strengths, challenges and planned improvements to the process, and provide evidence of the existence of a culture of continuous improvement based on assessment (generally not more than two paragraphs, may use bullet points):**

In the spring of 2018 the PT faculty reviewed the two learning outcomes scheduled for assessment during the 2017-18 academic year and confirmed the methods of assessment most appropriate for these. Due to curricular changes, we identified three new assessment methods this year that more accurately represent the outcomes we are interested in measuring. We also reviewed the LOR from 2015 when these outcomes were last assessed. This allowed us to prudently select the appropriate assessment methods, most accurately measuring these outcomes. A strength of our process is all core PT faculty work together during annual faculty retreats where the curriculum and course work is discussed, ensuring that the best potential assessment methods are considered and implemented. We identified assessment methods that best represented the learning outcomes and tried to tie many of the assessment methods to course requirements. The faculty met early this Fall to review the learning outcomes report prior to its submission. We will continue to meet this year and make any necessary adjustments to improve the students' abilities in reaching our Departmental mission and goals.

**Describe how the program implemented its planned improvements from last year:**

<p><b>Outcome</b></p>	<p><b>Planned Improvement</b></p>	<p><b>Update</b> <i>(Indicate when, where, and how planned improvement was completed. If planned improvement was not completed, please provide explanation.)</i></p>
<p>Students will apply best available scientific evidence, clinical judgment, and patient preferences in physical therapy patient management</p>	<ol style="list-style-type: none"> <li>1. A seminar series for third year students will be piloted this year. The seminars will bring expert clinicians to campus to host interactive Q &amp; A based on complex patient care scenarios requiring critical thinking and clinical reasoning.</li> <li>2. The department will construct assignments for all skills related courses centered on plan of care, and will also foster discussion on this topic during bi-annual advising meetings.</li> <li>3. A more formal adjunct faculty orientation will direct the instructors to review this material in tutorial sessions throughout the program.</li> </ol>	<ol style="list-style-type: none"> <li>1. The seminar series for the third year students was very successful. In total we brought 11 guest speakers to campus who hosted engaging sessions. The student feedback was positive and faculty who attended the sessions were impressed with the level of rigor and new practice arenas that were discussed. These types of sessions allowed the students to discuss difficult/challenging patient scenarios with experienced clinicians. The PT faculty will continue to host these sessions, due to the value added to the curriculum.</li> <li>2. In all of our skills courses, we have a recurring twice weekly tutorial session which allows students to discuss patient cases in a structured format. During the past year, we added assignments to tutorial which specifically asked students to comment on plan of care, including what the evidence states about best patient outcomes, and what is feasible in their area of practice from a regulatory standpoint. This was also addressed in the laboratory sessions throughout the year where more explicit instruction and demonstration of treatment sessions occurred. Students were held more accountable to the specifics of this skill this past year.</li> <li>3. Adjunct faculty orientation specifically described our strategic plan, student learning outcomes in addition to sharing information from this (2017-18) and the prior year. We shared some of the clinical instructor feedback and student reflections</li> </ol>

<p style="text-align: center;"><b>Outcome</b></p>	<p style="text-align: center;"><b>Planned Improvement</b></p>	<p style="text-align: center;"><b>Update</b> <i>(Indicate when, where, and how planned improvement was completed. If planned improvement was not completed, please provide explanation.)</i></p>
		<p>regarding areas of growth and improvement, which allowed us to open discussion for how the role of adjunct may assist with some of these. Additionally tutorial leader orientation was restructured to also touch of some of these topics, and how to more effectively use the tutorial process to achieve these goals.</p>
<p>The student will implement a self-directed plan for professional development and lifelong learning</p>	<p>1. Professional development will be a topic covered in the series of seminars developed for the third year students including perspectives from recent graduates, mid-career professionals and expert clinicians from diverse backgrounds and work settings. 2. Faculty will bring up the topic of professional development earlier in the curriculum and embed in the majority of advising sessions</p>	<p>1. Professional development was the theme of an entire week of the PT 757 course, which included guest lectures from 7 clinicians. In addition we had the great fortune to have the President of the APTA (our National association) come speak to our students on this topic. 2. Faculty host an adviser meeting very semester, this past year faculty employed some new strategies such as group advising sessions which made this an easier topic to cover in the context of discussion among peers with various goals. In addition the faculty plan to improve this system for the upcoming year by giving the 3<sup>rd</sup> year students concrete examples and expectations for their written professional development plan and adviser meeting. By giving the students clearer guidelines with adequate advanced notice we hope to enhance the faculty's ability to assist the students with their professional development. We also have the CTL coming in (Fall 2018) to host a session for our first years on reflective writing. If faculty see it as a value add, we will incorporate it for other students in the program to improve the students' ability to formulate an effective plan for their future career goals.</p>

**Provide a response to last year’s University Assessment Committee review of the program’s learning assessment report:**

Comment: Use of both direct and indirect measures with careful attention given to how students’ approach self-assessment and rate themselves. Emphasis on continuous improvement is impressive. The combined involvement of the entire PT faculty in the assessment process is to be commended.

Response: Upon sharing the committee’s comments from last year, the PT faculty was further energized to continue our commitment to achieving quality student learning outcomes. As evidenced by our report below, the entire faculty collaborated to provide accurate and thoughtful reflection on our assessment process.

**Outcomes Assessment 2017-2018**

**Learning Outcome 1:** function independently managing patients with a wide variety of simple or complex conditions

**Assessment method #1:**

A survey is sent out to our DPT alumni one year and 5 years after graduation by the Office of Planning and Institutional Effectiveness (PIE); this year’s survey went out to the classes of 2016 and 2012. We ask a set of supplemental questions in addition to the University-wide standardized items. (see Appendix) A personal email from the Chair of the Dept. accompanies the survey request in an effort to increase response rate. This year we had a good response rate of 26.

**Assessment Activity**

Indirect Outcome Measure	Performance Standard	Data Collection	Analysis n=26
Self-report response to alumni survey question	90% of responses will rate themselves as at least “good” for the ability to Function independently managing patients with a wide variety of simple or complex conditions	Alumni Survey set out by PIE with supplemental questions designed by PT faculty	12 good 14 excellent

**Assessment method 2:**

The PT faculty used data from the final practical examination in the neurorehabilitation and acute care courses. As this skill is one that requires patient management skills it is very difficult to measure in the classroom setting, therefore we use practical examination performance as an indicator. Practical exams require the students to interact with mock patients, while being evaluated by faculty. The 2 courses selected have practical exams that use complex patient cases for the final practical exam. Students are randomly assigned to a patient case and they perform an examination and evaluation of the patient, including a demonstration of what would occur during the treatment session. It is expected that students use appropriate communication style and techniques that are relevant to the patient case. Each student was evaluated using a standardized rubric (See Appendix). Each must achieve at least an 80% in each section of the exam (as outlined on rubric) in order to pass the exam. In addition, any significant safety violation that would result in patient or therapist harm results in failure of the practical exam.

### Assessment Activity

Direct Outcome Measure	Performance Standard	Data Collection	Analysis n=40
Performance on acute care and neurorehabilitation practical exams	100% of students will pass the final practical exam in both courses	Scores & faculty comments for all practical exams were analyzed for PT 731 and PT 741	Statistics were employed to identify strengths and weaknesses within the exam. All 36 students passed the exam for PT 731 and all 40 passed the exam for PT 741.

### Interpretation of Results

**Describe the extent to which this learning outcome has been achieved by students** (*Use both direct and indirect measure results*):

The alumni survey results are a composite of 1 year and 5 year graduates. The survey asks if, after practicing as a licensed physical therapist, if Marymount University DPT program prepared them to manage simple and complex patients. Although this is self-reported, and retrospective we feel this survey gives us an accurate representation of the graduates' strengths/challenges. This survey also allows the graduates to participate in "reflective practice" which improves their clinical skills and role as a health care practitioner. Results showed that 100% ranked themselves as "good" or "excellent"; exceeding our goal of 90% for this outcome. For the direct measure, practical exam scores were used. The breakdown of the scores is as follows: PT 741 had 29 A grades and 11 B grades while PT 731 had 27 A and 9 B grades. The faculty valued changing the assessment methods this year, to not just rely on self-report. It is important that our graduates feel they are well equipped to handle simple and complex patients, however often times this skill comes with time and experience. By only relying on the survey, the graduates may have gained this comfort level upon practicing independently for a year, and the program states this as a learning outcome upon graduation. The faculty wanted to use a directly observable method to assess our student's ability to handle complex patients, and felt as though the practical exam performance reflected that. Our students met our goal of 100% passing the exam. The faculty will continue to monitor this outcome closely and will alter our methods of assessment as needed.

**Briefly describe program strengths and opportunities for improvement relative to assessment of outcome:**

Though our students displayed a 100% pass rate on their practical exams, they had the opportunity to undergo one re-take of each exam. Ultimately we wish the students to pass on their first attempt. This year the faculty have implemented a new policy in our student handbook which states: "As these exams most closely resemble the physical therapy clinical setting, they are a critical component of our program and are administered in each of the three major skills-based courses (PT 721, PT 731 and PT 741). Students must pass these exams with a grade equal to or higher than 80%. Failure of two practical exams (across the curriculum)

will result in the generation of a learning contract. Failure of a third practical may result in dismissal from the program.” The faculty are optimistic that this new policy will strengthen the students’ dedication to high performance, which will result in transferrable patient handling skills in the clinic.

**Discuss planned curricular or program improvements for this year based on assessment of outcome:**

- 1) Faculty will evaluate and refine as needed the complex patient cases for tutorial and practical exams to incorporate multiple diagnoses and psychosocial aspects into the skills courses.
- 2) The final comprehensive written exam will contain new questions focused on complex patient cases, requiring students to use higher level clinical reasoning skills.

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**Learning Outcome 2:** perform skilled physical therapist examinations, interventions, and clinical reasoning proficiently and consistently

**Assessment Method #1:**

Clinical Performance Instrument (*CPI-Web*) –

The *CPI-Web* is the primary student evaluation instrument used to quantify student performance in the clinical environment against entry-level expectations of a licensed physical therapist. This proprietary tool was developed by the American Physical Therapy Association. It underwent extensive psychometric analyses of content throughout its development. The majority of physical therapy academic programs in the United States and Canada use this tool to assess student outcomes. The *CPI-Web* contains eighteen (18) distinct evaluative criteria that cross the spectrum of behaviors and actions required of a physical therapist in clinical practice. Each person inputting data into a *CPI-Web* tool must first complete an on-line course and certification examination to confirm basic knowledge and competency using the instrument. Data entered into the *CPI-Web* is immediately accessible to the Program and is easily downloaded for analyses.

The *CPI-Web* is a summative evaluation instrument. Both the student and his or her clinical instructor (CI) input data into the *CPI-Web* at midterm and completion of each clinical practicum experience. Data include Likert rankings and narrative comments. The Likert scale anchors with “beginning” on the left, or low end of the scale, and projects to “beyond *entry-level*” on the upper scale. Entry-level performance, which is positioned just below “beyond-entry-level”, is the expected student outcome on each criterion.

This report uses direct measures of CI assessment of student clinical performance. This data was extracted from documented student performance that occurred during final, fulltime clinical practicum experience in August 2015. These students graduated from MU following this clinical practicum. These data are measures of MU-DPT student entry-level performance.

Definition: Entry-Level Performance (*CPI-Web*)

- Capable of functioning without guidance or clinical supervision managing patients with simple or complex conditions.
- Consistently proficient and skilled in simple and complex tasks for skilled examinations, interventions, and clinical reasoning.

- Consults with others and resolves unfamiliar or ambiguous situations.
- Capable of maintaining 100% of a full-time physical therapist’s caseload in a cost effective manner

Definition: Advanced-intermediate Performance (*CPI-Web*)

- Requires clinical supervision less than 25% of the time managing new patients or patients with complex conditions and is independent managing patients with simple conditions.
- Consistent and proficient in simple tasks and requires only occasional cueing for skilled examinations, interventions, and clinical reasoning.
- The student is capable of maintaining 75% of a full-time physical therapist’s caseload.

Limitations of the *CPI-Web* as an Assessment Tool

Students are supervised throughout their clinical experiences by a clinical instructor (CI) who is not a core faculty member; and each student has a unique clinical instructor. Although the expectation is that the online training program for completing the tool enhances the tool’s reliability in making judgments about achieving *entry-level* performance, there is still great variability based on settings and CI philosophy. The definition of *entry-level* is complex and the number of concepts embedded in each of the 18 overarching criterion can be large. If a student is deemed lacking in any aspect of a criterion, he/she will be graded below entry-level performance on all aspects of it, which makes it difficult to tease out specific areas of weakness.

Program faculty continues to support a graduate outcome goal that states: 100% of MU-DPT graduates will be rated *entry-level* in each evaluative criterion in the *CPI-Web* upon completion of their final clinical practicum. This is controversial in the professional community because students do not have the “real” opportunity to practice “without supervision.”

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*CPI-Web* Criteria Used for this Student Learning Outcome

*CPI-Web* Criteria Used in this Report

Criterion ( <i>CPI-Web</i> Reference #)	Definition
Clinical Reasoning (7)	A systematic process used to assist students and practitioners in inferring or drawing conclusions about patient/client care under various situations and conditions.
Examination (9)	A comprehensive and specific testing process performed by a physical therapist that leads to diagnostic classification or, as appropriate, to a referral to another practitioner. The examination has three components: the patient/client history, the systems reviews, and tests and measures. ( <i>Guide to Physical Therapist Practice</i> . Rev 2nd Ed. Alexandria, VA: American Physical Therapy Association; 2003.)
Evaluation (10)	A dynamic process in which the physical therapist makes clinical judgments based on data gathered during the examination. No defined number or range of number of visits is established for this type of episode. ( <i>Guide to Physical Therapist Practice</i> . Rev 2nd Ed. Alexandria, VA: American Physical Therapy Association; 2003.)

<b>Criterion (CPI-Web Reference #)</b>	<b>Definition</b>
Diagnosis and Prognosis (11)	<p>Diagnosis is both a process and a label. The diagnostic process performed by the physical therapist includes integrating and evaluating data that are obtained during the examination to describe the patient/client condition in terms that will guide the prognosis, the plan of care, and intervention strategies. Physical therapists use diagnostic labels that identify the impact of a condition on function at the level of the system (especially the movement system) and at the level of the whole person. (<i>Guide to Physical Therapist Practice</i>. Rev 2nd Ed. Alexandria, VA: American Physical Therapy Association; 2003.)</p> <p>Prognosis is the determination by the physical therapist of the predicted optimal level of improvement in function and the amount of time needed to reach that level. (<i>Guide to Physical Therapist Practice</i>. Rev 2nd Ed. Alexandria, VA: American Physical Therapy Association; 2003.)</p>
Plan of Care (12)	<p>Statements that specify the anticipated goals and the expected outcomes, predicted level of optimal improvement, specific interventions to be used, and proposed duration and frequency of the interventions that are required to reach the goals and outcomes. The plan of care includes the anticipated discharge plans. (<i>Guide to Physical Therapist Practice</i>. Rev 2nd Ed. Alexandria, VA: American Physical Therapy Association; 2003.)</p>
Procedural Interventions (13) and Educational Interventions (14)	<p>The purposeful interaction of the physical therapist with the patient/client, and, when appropriate, with other individuals involved in patient/client care, using various physical therapy procedures and techniques to produce changes in the condition. (<i>Guide to Physical Therapist Practice</i>. Rev 2nd Ed. Alexandria, VA: American Physical Therapy Association; 2003.)</p>
Documentation (15)	<p>All written forms of communication provided related to the delivery of patient care, to include written correspondence, electronic record keeping, and word processing.</p>

**Assessment Activity**

<b><u>Indirect Outcome Measures</u></b>	<b><u>Performance Standard</u></b>	<b><u>Data Collection</u></b>	<b><u>Analysis</u></b>		
			<b><i>Advanced-intermediate (f)</i></b>	<b><i>Entry-Level (f)</i></b>	<b><i>Beyond Entry-Level (f)</i></b>
<b>Examination (9)</b>	100% of students will rate themselves as entry level on <i>CPI-Web</i> criteria 9, 10, 11, 12, 13, 14, 15, and 7 at the completion of the third and final clinical internship.	Data source: <i>CPI-Web</i> CI evaluation of student performance Student population: DPT Class of 2018; August 2018 graduates N= 38 Students/Graduates)	7	25	6
<b>Evaluation (10)</b>			6	32	0
<b>Diagnosis/Prognosis (11)</b>			3	35	0
<b>Interventions: Procedural (12)</b>			5	33	0
<b>Interventions: Educational (13)</b>			3	34	1
<b>Plan of Care (14)</b>			4	32	2
<b>Documentation (15)</b>			3	35	0
<b>Clinical Reasoning (7)</b>			4	33	1

<u>Direct Outcome Measures</u>	<u>Performance Standard</u>	<u>Data Collection</u>	<u>Analysis</u>		
			<i>Advanced-intermediate (f)</i>	<i>Entry-Level (f)</i>	<i>Beyond Entry-Level (f)</i>
<b>Examination (9)</b>	100% of students will be rated “ <i>entry-level</i> ” by their Clinical instructors on criterion CPI items 9, 10, 11, 12, 13, 14, 15, and 7 at the completion of the third and final clinical internship.	Data source: <i>CPI-Web</i> CI evaluation of student performance Student population: DPT Class of 2018; August 2018 graduates N= 38 Students/Graduates	2	33	3
<b>Evaluation (10)</b>			1	35	2
<b>Diagnosis/Prognosis (11)</b>			0	34	4
<b>Interventions: Procedural (12)</b>			0 <ul style="list-style-type: none"> <li>1 student rated as “Intermediate”</li> </ul>	30	7
<b>Interventions: Educational (13)</b>			0 <ul style="list-style-type: none"> <li>1 student rated as “Intermediate”</li> </ul>	31	6
<b>Plan of Care (14)</b>			0 <ul style="list-style-type: none"> <li>1 student rated as “Intermediate”</li> </ul>	34	3
<b>Documentation (15)</b>			1	34	3
<b>Clinical Reasoning (7)</b>			2	31	5

**Assessment method #2:**Case Report

In the final semester of the program, students complete a case report as part of PT 803. This course (see attached syllabus- Appendix) has the following learning objectives that meet the criteria for this program student outcome:

- Present and defend the clinical decision-making paradigm used to address the clinical question for the case report.
- Establish patient goals based upon physical therapist professional judgment with support from relevant literature, supervising physical therapist, and inclusion of patient preferences and motivations.
- Select clinical outcome measures appropriate to the clinical question and justify the use of each outcome measure (including discussion of psychometric properties of each tool).
- Name and link specific interventions to the established goals

PT 803 requires students to demonstrate their ability to clinically reason in order to perform an examination and intervention in a written format. This is the capstone course for our curriculum and faculty feel this adequately represents effective patient management from start to finish (for one patient). In order to be successful in this course students must consider all of the confounding factors that apply to the patient and the current evidence in the literature to come up with an effective plan of treatment. The case report is a written description of the reasoning used to manage the patient. Each student was evaluated using a standardized rubric (see attached rubric in the Appendix) where each domain was rated excellent, acceptable or unacceptable. The categories from the rubric that are being evaluated as evidence for this student outcome are: Clinical reasoning process, Outcomes and Discussion.

**Assessment Activity**

Outcome Measures	Performance Standard	Data Collection	Analysis	
			Excellent (90-100%)	Acceptable (80-89%)
Direct measure: Final assignment <b>Clinical reasoning process</b>	90% of students will score at or above the acceptable levels for these categories as measured on the rubric. The standards for what are considered acceptable are listed below.	Data was collected and aggregated from the Spring 2018 final written assignment.	47	3
<b>Outcomes</b>			47	3
<b>Discussion</b>			47	3

### Assessment Method #3:

#### Student evaluation forms (Mission trip in Nicaragua)

This Spring 29 (73%) students participated in the global education course to Nicaragua. This trip is an optional 2 week clinical experience added-on to PT 801 (Clinical Practicum II) which lasts 10 weeks. Students were evaluated by core and adjunct clinical faculty on several practical skills and behavioral components using a 5 point Likert scale (see attached rubric in the Appendix). The areas in which we evaluated data were from the following domains: clinical reasoning, screening, examination and evaluation.

#### Assessment Activity

<b>Outcome Measures</b> <i>Explain how student learning will be measured and indicate whether it is direct or indirect.</i>	<b>Performance Standard</b> <i>Define and explain acceptable level of student performance.</i>	<b>Data Collection</b> <i>Discuss how the data was collected and describe the student population</i>	<b>Analysis</b> <i>1) Describe the analysis process. 2) Present the findings of the analysis including the numbers participating and deemed acceptable.</i>
Direct evaluation of student performance form used in Nicaragua mission trip	90% of students will score at or above the acceptable level (4/5) on Likert scale	Data was collected, analyzed and aggregated from Spring 2018 student evaluation forms.	100% of the students were performing outlined skills and behaviors at least frequently in the areas of clinical reasoning, screening, examination and evaluation

#### Interpretation of Results

##### **Describe the extent to which this learning outcomes has been achieved by students (Use both direct and indirect measure results):**

The results of the CPI show that 100% of the students rated themselves of at least “advanced intermediate” for the 8 skills we assessed. One CI rated one student as “Intermediate” in three of the skills (procedural interventions, educational interventions and plan of care). Concerning this one student the faculty explored the comments offered by the clinic instructor which included: “Needs enhanced awareness of best evidence in clinic management; Dosing and demand imposed still do not seem to be consistently based on patient ability/irritability or with respect to goals; Still needs significant assistance to provide sufficient information to the patient for base understanding. These comments were additionally put into context by our director of clinical education, who spoke at length with the clinical instructor, who noted he was harder than needed to be on this student which was reflected in her evaluation. He also noted he doesn’t prefer to rate students as “entry level” as a matter of principle. Taking that information and the fact that 100% of the students passed their final clinical, the faculty feel the CPI accurately assesses this learning outcome. In addition, the clinical performance evaluation in Nicaragua, (which is completed by core faculty, who are familiar with programmatic student learning outcomes) reveals that we achieved and surpassed our desired threshold of 90% of students would be rated as acceptable or above for performing PT examinations and interventions. The case report rubric is also used as it assesses clinical reasoning in the theoretical realm. Often physical therapists need to go to primary literature to uncover viable treatment options for their patients, placing importance on critical reading and reflection, which are two important components clinical reasoning. As evidenced by the final case report submission, 100% of students were competent in this skill. The faculty feel using all three of these outcomes measures is necessary to fully evaluate this learning outcome, as it encompasses several skills necessary to be a successful practitioner.

##### **Briefly describe program strengths and opportunities for improvement relative to assessment of outcome:**

In evaluating the CPI as an assessment tool, it is evident that student self-evaluations do not match their clinical instructor evaluations. Despite meeting our goals, the faculty would value having our students rate themselves similarly to their supervisors. While we realize this is a high level skill, and our students are not experts in evaluation, we discussed implementing activities that allow for reflection resulting in more accurate self-awareness and self-efficacy.

**Discuss planned curricular or program improvements for this year based on assessment of outcome:**

- 1) The faculty will implement complex /multi-systems patient problems (including exam questions) to enhance clinical reasoning needed for effective clinical practice and for passing the national board exam.
  - 2) The faculty will explore an open-access journal option for students to publish their case reports, thereby placing enhanced importance on clinical reasoning.
-