AN EXPLORATION OF CLINICAL INSTRUCTORS' EXPERIENCES AND PERCEPTIONS OF THE *PHYSICAL THERAPY CLINICAL PERFORMANCE INSTRUMENT*

by

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ABSTRACT

Clinical education is an essential component of the preparation of physiotherapy students for their readiness to practice. Education and evaluation of students' clinical performance is carried out under the guidance of qualified physiotherapist clinical instructors who have had varying amounts of preparation for their roles. Clinical instructors observe physiotherapy students' behaviour within the complex context of patient care and interpret their performance as it relates to defined evaluation criteria. Canadian physiotherapy programs use *The Physical Therapy Clinical Performance Instrument* (CPI) to evaluate students. The CPI was developed as an evaluation tool that would be widely accepted and applicable to a broad range of clinical environments.

The purpose of this study was to explore the shared experiences of physiotherapy clinical instructors using the CPI and their perceptions of its relevance to clinical practice and student evaluation.

Three focus groups were assembled using a purposeful sampling approach. Physiotherapy clinical instructors from three tertiary healthcare facilities affiliated with Dalhousie University participated. Verbatim transcripts of the focus group discussions constituted the research data. A qualitative data-analysis revealed five themes: CPI for summative evaluation, CPI for formative evaluation, training to use the CPI, shared learning, and practicality of the CPI.

The clinical instructors described factors that influenced their perception of the value of the CPI as well as their application of it. The strength of the CPI was considered to be its use as a tool to promote dialogue and learning. Its use for summative evaluation was perceived to be problematic due to inconsistent application across clinical instructors. Training to use the CPI was useful and was considered a positive influence on the clinical instructors' understanding of it. The language, irrelevance of some performance criteria, and excessive overall length of the CPI were found to have a negative impact on its practicality.

This exploratory study indicated challenges and the potential impact that inconsistent understanding of the CPI can have on the clinical evaluation of physiotherapy students. Further study is required to determine the impact that training has on clinical instructors' application and satisfaction with the CPI.

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INTRODUCTION

> *The education of physical therapy students to a level of competence that will inspire trust of both the lay and professional public requires a balance between the academic and clinical components of a PT program. The need for accurate evaluation of clinical competence can therefore not be ignored.* (Loomis, 1985, p.83)
>
> *A clinical performance instrument is a central component of the assessment system and is used by the academic institutions to ensure students' readiness to practice.*
> (Physical Therapist Clinical Performance Instrument, 1997, p.ii)

The quotations above are fundamental to this thesis. They introduce the concept of clinical education of physiotherapy students, its importance to the profession and to the public at large. As implied, determining physiotherapy students' readiness for practice is complex, but accurate clinical evaluation is an essential component.

The introduction is composed of two sections. In the first, I introduce the reader to my experiences, as well as those of my colleagues, in evaluating physiotherapy students — particularly as they relate to the Physical Therapist Clinical Performance Instrument (CPI). Following my personal observations, the reader will be introduced to the literature that helped frame my research questions.

A Clinical Instructor's Observations on the CPI

As a physiotherapist and a clinical instructor for more than three decades, I have experienced many changes in the clinical evaluation of physiotherapy students. It is usually the most challenging aspect of being a clinical educator because it involves making judgements about a student's clinical skills and professional behaviour, and then discussing these judgements with the student in a constructive and reassuring manner. Students must pass the required number of clinical placements before their clinical experience is complete. Thus, a struggling student poses an additional challenge; I try to evaluate based on objective observations that can be

supported by examples of clinical performance. In my experience, clinical instructors want an evaluation instrument that is easy to interpret and that enables them to evaluate a student's clinical performance fairly and accurately.

I recall at least three major changes in the clinical evaluation forms used by Canadian universities. When I was a student and even later, when I first began instructing physiotherapy students, the evaluation forms were developed by the specific physiotherapy program. These were primarily narrative descriptions of a student's performance and usually included a checklist of specific skills, hands-on techniques and use of electrotherapeutic modalities.

In the mid-eighties, the Evaluation of Clinical Competence (Loomis, 1985a), commonly referred to as the Loomis Tool, was widely adopted by Canadian physiotherapy programs. The Evaluation of Clinical Competence (ECC) streamlined the number of evaluation forms that clinical instructors needed to use. The ECC included "Guidelines for Use" and required significantly less narrative than previous forms; my colleagues generally considered it to be an improvement over the myriad university-developed forms that we had been using. However, in the latter part of the nineties, physiotherapy programs began to use the new CPI that had been developed by the American Physical Therapy Association. When Dalhousie University's School of Physiotherapy adopted the CPI in 2001, it was the last Canadian physiotherapy program to adopt the Instrument (personal communication, G. Wainwright, 2004).

The CPI is a performance-based record of a clinical instructor's observations and interpretation of the quality of the behaviours demonstrated by a physiotherapy student. The clinical instructor indicates the student's level of competence for each of 24 performance criteria on a Visual Analog Scale (VAS), anchored with "Novice Clinical Performance" at one end and "Entry-Level Performance" at the other. The line represents the student's developing clinical skills as a continuum and it is marked by the clinical instructor during each clinical experience. Adequate space is provided for clinical instructors to comment during both a midterm and final evaluation.

While the CPI sounds straightforward, I found the Instrument to be intimidating at first because it was difficult to understand the intent of some of the performance criteria and

because I was not confident in scoring the VAS. It has become easier with repeated use but I still feel that some performance criteria are redundant and others do not add to the true measure of a student's clinical performance. I have been part of informal discussions with colleagues who share these concerns, who question the meaning of some of the performance criteria or find they are uncertain about scoring the VAS. I wonder how other clinical instructors view the performance criteria; do they think that the criteria adequately reflect the requirements of clinical practice? Regarding the VAS, I have heard clinical instructors describe scoring it in a variety of ways and some of them have wondered openly if it is truly useful.

The CPI is time consuming, and often I have had to complete it at home. I am not alone in this respect, judging by the complaints I have heard from others. However, I also remember filling-out the ECC at home so this is not unique to the CPI. When clinical instructors supervise two students (2:1 collaborative placement), they must complete four CPIs in a five-week period. Sometimes they complain that filling-out the full evaluation four times in five weeks is needlessly time consuming. I wonder if this influences their willingness to assist with 2:1 collaborative placements. What would clinical instructors say about their satisfaction with the CPI, if given an opportunity to have their opinions recorded?

I attended in-service training before I began using the CPI but I do not know whether other clinical instructors consider training to be a priority, or in fact how available it is. When I first started using the CPI, my colleagues and I shared what we understood about scoring the VAS and tried to make our observations fit the performance criteria. This continues to be the case, particularly with clinical instructors who have not used the CPI before. The fact that a student's clinical progress is based on the evaluation (and the recommendation to "Pass" or "Fail") *assumes* that the clinical instructor is using the CPI within the established guidelines. This begs the question that if clinical instructors do *not* attend in-service training, what is informing their use of the CPI?

In my experience, the selection of a clinical evaluation tool is considered by clinical instructors to be largely a top-down process; the academic institution determines which instrument the clinical practice community will use. That is not to say that clinicians were excluded from the development of the CPI, but I suspect that without attending training in-services, few clinical

instructors were aware of the extensive collaboration, draft revisions and field-testing that preceded the current version of the Instrument. I have heard clinical instructors expressing frustration because they felt they have little input into the selection of the clinical evaluation instruments.

Clinical instructors should be able to justify their use of the evaluation instrument. Credibility is important, especially when a clinical instructor's evaluation is at odds with a student's self-evaluation or, worse still, if the student does not pass.

Clinical Evaluation within the Context of the Literature

The experience gained in clinical practice has always been considered an essential component of the preparation of physiotherapy students for their entry to the profession (Shepard & Jensen, 1997). When students work closely with qualified physiotherapists, not only do they learn specific skills but they also participate in the process of professional socialization; as they proceed through their education and into their early years of practice they learn about the culture of the profession, about its values and its attitudes, and they acquire its accepted behaviours (Payton ed., 1986).

Physiotherapy students undergo assessment in a variety of forms including: (a) self- and peer-appraisal; (b) written or normative-referenced tests; (c) performance-based, structured examinations; and (d) evaluation of clinical practice. Evaluation of hands-on skills has been common practice because of the early profession's apprentice-type of learning (Cleather, 1995). Physiotherapy techniques for the first part of the 20th century were based on observation rather than tested theories; "empirical practice was based on hierarchical teaching" (Cleather, 1995, p.9). Physiotherapy skills and practical knowledge were passed on primarily by imitation, as apprentices worked under the master.

Clinical practice is still a requirement of schools of physiotherapy internationally[1] and the health professions in general (Andre, 2000; Friedman & Mennin, 1991; Stengelhofen, 1993).

[1] Dalhousie's Academic Coordinator of Clinical Education has, to date, organized clinical placements for physiotherapy students from the Netherlands, Sweden, Iceland, the US, England, Scotland, and Australia. (personal communication with G. Wainwright, 2004)

The *Code of Ethics* of the Canadian Physiotherapy Association states that, "physiotherapists shall be willing and diligent preceptors in the education of physiotherapy students," (CPA, 1989) and the accreditation processes for both Canadian and American university-based physiotherapy/physical therapy [2] programs evaluate the clinical education component as well as the academic program.[3] As well, terms of employment can require physiotherapists to instruct students during clinical placements.

Within most healthcare facilities, the physiotherapy clinical instructors' principal function is the delivery of patient care. They must always balance the student's expectation of learning clinical proficiency with their own responsibilities of practice (Shepard & Jensen, 1997). While meeting standards for patient care and other facility-based obligations are more heavily weighted than the tasks associated with a student's clinical experience (Stengelhofen, 1993), the clinical instructor's role is varied and includes being a facilitator, a supervisor, a role model and a clinical evaluator (Scully & Shepard, 1983). The clinical instructor not only teaches through the model of patient care delivery and sharing the responsibility for patient care with students, but at the same time the clinical instructor is observing the students' skills, their interactions with other team members, and their work habits for the purpose of evaluation. Scully and Shepard (1983) initially asserted that the ongoing tension — the length of time taken to complete student evaluations and the difficulty of accurately reflecting student performance — constituted the "hardship" of clinical teaching (p.352).

The Task Force of the American Physical Therapy Association Board that developed the *Physical Therapy Clinical Performance Instrument* recognized that participating in a student's clinical education had an impact on the CIs' practice and specified as a guiding principle that, "the instrument[s] must be responsive to the needs of both the academic and clinical communities" (p.331).

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[2] The terms 'physiotherapy' and 'physiotherapist' are considered synonyms for 'physical therapy' and 'physical therapist' respectively and will be used interchangeably in this document.

[3] *Evaluative Criteria on Accreditation of Education Programs for the Preparation of Physical Therapists.* Retrieved July 27, 2006 from https://www.apta.org/pdfs/accreditation/ptevalcrit.pdf. See also: Accreditation Standards for Physiotherapy Education Programs in Canada 2004. http://www.accpap.ca.

The APTA Task Force (2002) documented the rigorous consultation that went into the development of the CPI, including a survey to determine the clinical instructors' satisfaction with the third draft (a field study version). The survey results indicated that respondents were "generally satisfied with most aspects of that version of the CPI, although many questions produced essentially neutral responses" (4) on the 7-point Likert scale (p.334). The median rating (4) for the "amount of time taken to complete the CPI" was considered to not only reflect the time it took to fill out the form but also the time needed to learn about the Instrument, as well as the general time demands of providing clinical education. The authors suggested that training and experience using the CPI *should* improve clinical instructors' satisfaction with the tool and recommended further study of the final (fourth) version of the CPI (APTA Task Force, 2002).

Vendrely and Carter (2004) reported the results of their study to determine if training clinical instructors to use the CPI affected their ratings of student performance on the Instrument's first five performance criteria. While they found significant differences between trained and untrained clinical instructors' ratings for two of the performance criteria, the authors stated that the small number of responses limited the data analysis for the other criteria. The study raised important questions about the types of training that clinical instructors have, their understanding of the performance criteria, and the psychometric properties of the fourth version of the CPI (Vendrely & Carter, 2004).

Hrachovy et al. (2000) surveyed clinical instructors' acceptance of, and adherence to, the guidelines for use of *The Mastery and Assessment of Clinical Skills 5th Edition* (referred to as the *Blue MACS*) — another clinical evaluation instrument widely used in American physical therapy programs. The study indicated that clinical instructors were generally satisfied with the Instrument and considered it "to be a useful measure of student clinical performance" (p.659). However, the subjects' positive opinion of the tool correlated only moderately ($r = 0.40$) with their reported adherence to the Instrument's guidelines for use, and not at all with the time taken to complete the evaluation tool (Hrachovy et al., 2000). The authors found that neither attendance at training workshops nor experience being a student evaluated with the *Blue MACS* affected the time taken to complete that instrument (Hrachovy et al., 2000). Yet the

Task Force for the CPI suggested that training to use the CPI might improve CI's satisfaction with the Instrument (APTA Task Force, 2002). To date, this has not been studied.

Clinical instructors unfamiliar with the CPI have the option of attending training in-services, but attendance is not compulsory and may not be possible due to clinical demands. In my experience, clinical instructors share their experience using the CPI and in most cases functional familiarity is gained with use. However, it has not been determined how clinical instructors view the CPI training process with respect to their understanding of the Instrument, nor their adherence to the evaluation guidelines, nor the time it takes them to complete the evaluation. Clinical instructors need to better understand the issues of reliability and validity of the evaluation tools they use (Chambers, 1998; Friedman & Mennin, 1991) and training programs facilitating this could, potentially, benefit both the clinical instructors and their students (Vendrely & Carter, 2004; Andre, 2000).

> *Clinical performance is too complex and interactive for measurement. Judgement is always necessary for its assessment. Experienced clinicians judge trainee performance on many small details. This clinical judgement turns on the trainee's handling of important details in the patient and the malady* (Cox, 2000; p.45).

In her discussion of the use of clinical rating-scales for medical residents, Grey (1996) referred to rating as, "a process that captures one person's judgements about another person on a quantifiable scale" (p.24). Stickley (2005) calls clinical evaluation of physical therapy students, "a high-stakes measure" (p.24) and supports a comprehensive evaluation that includes self-assessment and reflects behaviours from cognitive, affective and psychomotor domains. However, the evaluation of these behaviours is complex and requires the clinical instructor to analyze the student's performance on a range of tasks; from more tangible skills such as verbal communication, attention to safety, and hands-on treatment techniques to the less explicit process of clinical decision-making and ethical practice (Vendrely & Carter, 2004; Shepard & Jensen, 1997).

Alexander (1996) used a qualitative research method to study "the influence of subjective judgements" on the clinical performance evaluation of physiotherapy students (p.357). Clinical instructors were reported to use subjective criteria when evaluating physiotherapy students'

clinical performance, which not only influenced the clinical placement grades but also were sometimes based on erroneous judgements and criteria not considered to reflect the evaluation process (Alexander, 1996). The research was considered to be preliminary (Alexander, 1996) but the author was consistent with other researchers who have indicated that understanding of the way physiotherapy clinical instructors use student evaluation instruments is limited and requires more study (Hrachovy et al., 2000; Vendrely & Carter, 2004; Stickley, 2005).

In my experience, physiotherapists regard clinical instruction to be an essential part of the student's preparation for competent practice, and clinical instructors feel professionally responsible to evaluate their student's clinical performance accurately. They discuss their concerns when the student's performance does not meet the required standard and they sometimes share experiences or strategies they have used when the student's behaviour does not fit the criteria of the CPI. Determining a student's level of competence in the complex clinical environment is a challenging task but many issues related to clinical instructors' training and use of clinical evaluation instruments are not well understood.

As a clinical instructor, I am interested in the experiences and perceptions of other clinical instructors who use the CPI. While the questionnaires previously mentioned indicated the levels of agreement or disagreement with the questions posed (Task Force for CPI, 2002; Hrachovy et al., 2000), they offered limited insight into *why* the clinical instructors chose the answers they did. Specific to the CPI, Vendrely and Carter (2004) recommended additional research to investigate the way all 24 CPI criteria are used. The paucity of literature supported the need for additional research about the way clinical instructors use the current version of the CPI.

Therefore, the purpose of this study was to explore clinical instructors' experiences using the CPI with respect to their:

- *Descriptions of its impact on their clinical responsibilities*
- *Perceptions of mastering its application*
- *Perceptions of adhering to the guidelines of the Instrument*

- *Opinions about the relevance of the Instrument to clinical evaluation*

I approached these issues from an interpretive/constructivist rationale (Mertens, 1998) and I used qualitative research methods. The data were collected using focus groups composed of clinical instructors working in tertiary academic health centres that regularly offer clinical placements to physiotherapy students.

This study offered clinical instructors the opportunity to describe their experiences of the CPI in the structured format of a research project. The data (verbatim transcripts of the clinical instructors' discussions) were coded and analyzed. Five recurring themes and their related sub-themes have been reported and discussed within the context of the reviewed literature. This research was exploratory but, given the paucity of research about the CPI, findings will begin to inform the clinical community about the functionality of the CPI.

Chapter 2

LITERATURE REVIEW

Introduction

> *Undergraduate clinical education and assessment represent a key level of quality control in ensuring that standards of professional practice are valued, maintained and enhanced by successive generations of practitioners.* (Cross et al., 2001)

The evaluation of clinical performance in physiotherapy has undergone significant changes over the years (May, 1977; Loomis, 1985; Task Force for CPI, 2002); changes that not only reflect developments in educational theory (Hager & Butler, 1996) as applied in medicine and the other health professions (Nayler, 1995), but also changes that mirror the movement in physiotherapy towards evidence-based clinical practice (Rothstein, 2002). "The assessment system accurately defines and advances what the profession believes represents entry-level practice" (CPI, 1997, p.38). Thus, recent research in clinical evaluation has focused on identifying and evaluating the relevance of specific behaviours associated with competent clinical practice (Cross et al., 2001; Task Force for CPI; 2002; Hayes et al., 1999). In addition, the instruments used for clinical evaluation should reflect the content of the formal curriculum and their reliability and validity should be established (Cross et al., 2001; Task Force for CPI, 2002; Vendrely, 2002).

Clinical evaluation of physiotherapy students is expected to: (a) respond to the "practice expectations within a dynamic healthcare system" (CPI, p.38), (b) contribute to students' skill development, and (c) protect the public by indicating students' readiness to practice (CPI, 1997). In order to graduate, Canadian physiotherapy students must pass all of their clinical practice components in addition to their other academic courses (G. Wainwright, personal communication, 2006). The final evaluation of competence, in most Canadian provinces, is

determined following graduation by the student's successful completion of the nationally administered *Physiotherapy Competency Examination* (PCE).[4]

During the 1950s, preoccupation with professional identification strengthened the integration of science with the "art" of a hands-on profession. It was the beginning of the quest "to remove all vestiges of the label 'technician' by adopting the classic characteristics of a true profession" (Cleather, 1995, p.9); recognition of educational quality and practice guided by a unique, research-based body of knowledge (Payton ed., 1986). Minimum entry requirements for professional practice were changing in the mid-1970s from a two-year diploma to a four-year baccalaureate degree by 1982 (Cleather, 1995). Physiotherapy programs promoted critical analysis of the literature and students were required to carry out undergraduate research. Provincial regulatory bodies began to seek greater autonomy and gradually achieved it by way of direct access.[5] Canadian physiotherapy educators, regulators and the professional association released a statement in 2001 that a "professional masters" degree is the preferred entry-level qualification.[6] There is growing support for research in physiotherapy and an expectation that new graduates will effectively use the academic literature to provide efficient, evidence-based service.

Clinical Evaluation of Physiotherapy Students

Historically, academic physiotherapy programs developed their own clinical evaluation tools; but these were criticised for their subjectivity and their questionable validity and reliability (Loomis, 1985a; Nayler, 1995). When the Canadian-developed ECC was published in 1985, the author, Joan Loomis, was aware of only one other PT clinical evaluation tool for which the results of reliability and validity testing had been published (Loomis, 1985a). The ECC reflected the changing formats of clinical evaluations; subjective narratives were replaced with

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[4] New Brunswick, Quebec, and Saskatchewan do not require the Professional Competency Exam; graduates from those provinces must pass it in order to work in the other Canadian provinces.

[5] Physiotherapists no longer require a physician's referral and many now work independently in remote and rural settings (CPA, 2005).

[6] Physiotherapy programs are in transition as they restructure curricula to deliver a professional masters by the Canadian Physiotherapy Association's 2010 deadline (CPA, 2005).

a variety of formats and rating scales quantified student behaviours considered essential for clinical competence (Loomis, 1985a).

The ECC was widely used by Canadian schools of physiotherapy until they began to adopt the CPI after its publication in 1997. The ECC used a graduated evaluation process that reflected the students' evolving clinical competence as they progressed through their academic program. Thirty-three "Standards of Performance" were marked as "Achieved" or "Not Achieved" for students who were beginning their clinical experience. However, in the senior year, a student's level of competence was rated on each of 36 Standards (Loomis, 1985b). The ratings ranged from "1 – Incompetent" to "4 – Highly Competent," with a zero indicating "Not Observed/Not Applicable" (Loomis, 1985b). Space for comments followed each sub-competency (Loomis, 1985b).

In 1994, a task force appointed by the Board of Directors of the American Physical Therapy Association began to develop a new tool to evaluate clinical practice, the CPI.

> *The uniform adoption of this instrument will ensure that all practitioners entering practice have demonstrated a core set of clinical attributes.* (Physical Therapy Clinical Performance Instrument Manual, 1997, p.ii)

The goal was to create an instrument that would be widely accepted and used to evaluate students' clinical performance on a continuum from novice to competent to enter practice. A guiding principle was the assertion "that clinical competence is based on multiple behaviors deemed essential to the role of the physiotherapist" (Task Force for CPI, 2002, p.331).

Thus the CPI represented another change in educational theory which sought to improve learning through an assessment mechanism that evaluated "how students go about solving problems as well as the solutions that they reach" (Hager & Butler 1996, p.367). Hager and Butler (1996) suggested that student evaluation is currently being influenced by what they considered to be "a global shift in understanding of the nature of working" (p.368) towards a cognitive approach, one which focuses on the way people think and reason, how they arrive at solutions; and recognizes the interaction of people in the context in which they work (Hayes, 1990; Hager & Butler, 1996). The CPI Task Force recognized that cognitive, psychomotor and

affective domains were essential areas for physical therapist students' practice and they developed performance criteria that reflected those areas (CPI Manual, 1997, p 38). Also guiding the development of the Instrument was the rationale that it must "protect society, assist professional decision-making, and facilitate skill development" and be applicable across the broad range of clinical settings (CPI Manual, 1997, p.38).

Development of the CPI and testing of its psychometric properties

Part of the rationale for developing the CPI was to create a clinical evaluation instrument that would meet acceptable standards of reliability and validity (CPI Manual, 1997). The development of the tool occurred in four phases. Following changes to the initial draft and feedback about a second draft, pilot studies were carried out on the second version of the CPI. In addition to students, clinical instructors and ACCEs associated with American physical therapy programs, two Canadian physiotherapy programs participated in the pilot study and the later testing of the third field study version (Task Force for CPI, 2002). The authors concluded that the field study version had high internal consistency (Cronbach alpha = 0.97) and that the performance items represented various aspects of clinical practice. The interrater reliability coefficients (ICCs) for individual items ranged from 0.21 to 0.76 with an ICC of 0.50 for the total score. The two global performance ratings with the lowest ICCs were not included in the fourth version of the CPI. Convergent validity was examined by correlating the scores for each performance criterion to the total days of students' clinical experience. Pearson correlation coefficients ranged from 0.12 to 0.40, with statistical significance set at $p = 0.002$.

ACCEs' satisfaction ratings for the field study draft questions (on a 7-point Likert Scale) ranged from a median of 3 to a median of 6; for the students, the medians ranged from 4 to 5. The lack of training may have resulted in the subjects' lower satisfaction (median ratings 3 and 4) with the time to complete the evaluation, its ease of use, and using it to identify weaknesses in the academic curriculum (Task Force for CPI, 2002). In view of the input from the physical therapy community and the psychometric testing of two previous versions, the Task Force suggested that the fourth version yielded reliable and valid measurements. However, the lack of psychometric testing of the fourth version was a limitation of the CPI that others have cited in their research (English et al., 2004; Straube & Campbell, 2003; Vendrely & Carter, 2004).

TASK FORCE RECOMMENDATIONS FOR FURTHER STUDY

The Task Force recommended further study of the reliability, validity, component structure, and user satisfaction of the fourth version with ACCEs, CIs and students who have been consistently trained to use it. The results of hard copies of CPIs could be compared with the computer version available on the APTA website. Longitudinal data on the CPIs could also be studied to determine the effect that changes in academic programs and physical therapy practice has on the use of "Not Observed" performance criteria (Task Force for CPI, 2002).

Structure of the CPI

The CPI is a competency-based measure of performance at all levels of clinical experience from initial through intermediate to final placement for PT students enrolled in either a baccalaureate or a professional master's program (CPI Manual, 1997, p.ii). There is a brief introduction at the beginning of the Instrument and a description of the components and instructions for using the form (CPI, 1997, p.iv). There are 24 performance criteria that are considered "in the aggregate" to comprise the essential competencies for entry to professional practice (CPI Manual, 1997, p.ii). The first five performance criteria are designated as "Red Flag" items because they are considered "foundational elements in clinical practice" (CPI, 1997, p. ii).[7]

The student's performance for each criterion is scored on a 100 mm visual analog scale (VAS) marked "Novice Clinical Performance" at the left hand and "Entry-Level Performance" on the far right (CPI Instrument, 1997). Boxes for each criterion can be checked to indicate "Significant Concerns," "With Distinction," and "Not Observed," and comments are invited at mid-term and final evaluation. Comments may include such things as critical incidents, problem areas and recommendations for modified goals, or examples of performance that support the "With Distinction."

The "Summative Comments" section at the end of the form captures the student's overall performance with particular reference to the areas of strengths and areas needing improvement (Appendix E, pp.25-26).

Clinical instructors should consider "multiple sources and methods" such as direct observation, videotapes, role-playing and documentation to assess a student's clinical performance (CPI, 1997, p.iv). A new form is used for each clinical placement and the VASs are scored at midterm (M) and final (F) evaluations. The clinical instructors need to consider the particular requirements for their practice area and score students at Entry-Level when they practice consistently and efficiently without requiring guidance.[8] On the other hand, "Novice" typically reflects the performance of students who have had limited exposure to the clinical environment, require close supervision, and need assistance with clinical decision-making (CPI Instrument, 1997).

The Instrument briefly describes halo bias and leniency bias, which it states are the most common problems with rating scales. Halo bias occurs when a student is scored based on a global impression. Clinical instructors are reminded to carefully consider specific behavioural criteria such as the sample behaviours (CPI, 1997, pp.1-24) to avoid marking based on generalizations. The CPI describes leniency bias as "the tendency to avoid harsh evaluations" (p.vi), usually so the clinical instructor can avoid the discomfort of giving the student a poor mark.

The CPI does not specify grading standards and academic institutions are advised to define their own. Grading requirements may consider: (a) the weighting for the performance criteria, (b) a sum or average of all VAS scores, (c) the value assigned to the comments, and (d) the relevance of the Significant Concerns or With Distinction (p.vii) designations.

> *It is expected that a student will achieve entry-level on every performance criterion, signifying readiness to enter the profession, by the end of the final clinical experience.*
> (CPI, 1997)

In summary, the CPI was designed primarily for the summative evaluation of PT students' competence in clinical practice. Clinical instructors rate students' performance on the individual competencies using both a visual analogue scale and a narrative. While comments in

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[7] For the full CPI, see Appendix E.

[8] Special consideration may be given students when facing new and complex situations.

any section may be included for their formative benefit, that particular function of the CPI is not strongly emphasized. A student's overall performance for each clinical experience is summarized and reported as "Areas of Strength" and "Areas Needing Improvement" (CPI, 1997, pp.25-26).

Preparation for Using the CPI

The Task Force recommended that clinical instructors should be trained to use the CPI, but they also intended that the Instrument would require minimal training (Task Force for CPI, 2002). There are a number of tools available for clinical instructors to learn about the CPI. The CPI Manual describes the Instrument's development and includes: (a) instructions for use, (b) educational overheads, and (c) answers to frequently asked questions (CPI Manual, 1997). Three sample cases are provided for CIs to evaluate and discuss during the in-service training. While the in-service participants are encouraged to share their evaluation results, the education session is not set up as a calibration exercise *per se.* As an alternative, clinical instructors may independently review three samples of evaluating various levels of performance on one particular criterion in Appendix A of the CPI (CPI, 1997, pp.32-33).

When Dalhousie began using the CPI, the affiliated healthcare facilities providing clinical education were given a Manual and an instructional video; the Academic Coordinator of Clinical Education provided structured in-services as well (G. Wainwright, personal communication, May 12, 2004). The CPI includes a list of "Support Services" where clinical instructors can seek additional information about the Instrument and its use. The *APTA Clinical Instructors Education and Credentialing Program* also includes specific training for participants to use the CPI for both formative and summative evaluation (APTA, 2003a).

How Clinical Evaluation Contributes to Learning

A primary outcome of clinical education is the student's demonstration of competent entry-level performance (Deusinger, 1990; CPI Manual, 1997; Shepard & Jensen, 1997). Cross et al., (2001) suggested that competence could be used to "summarize consistency in professional behaviour" and to indicate future professional behaviour. Usherwood et al., (1995) in referring

to the British National Council for Vocational Qualifications, used the term "occupational competence" and described it as "the ability to perform the activities within an occupation or function to the standards expected in employment" (p.144). Hager and Butler (1996) stated in general terms that "competence" referred to the ability to carry out routine and predictable procedures as well as having a body of related knowledge. However, they expanded their discussion to describe "personal competence" which they situated within the practice domain. The influence of their description is reflected in the performance criteria of the CPI.

> *A competent practitioner is also expected to be flexible and versatile, a reflective practitioner, a manager of change who is willing to innovate, and a person who has the attitudes and motivations to act skilfully and ethically. Inherent in this definition is the expectation that the competent practitioner effectively demonstrates the ability to practice over an extended period of time within a wide range of diverse contexts that include uncommon occurrences and contingencies* (Hager & Butler, 1996, p. 371).

Naylor (1995) reported that the strength of clinical assessment is the evaluation of students' competence in varied, real-life situations that not only capture many domains of competence but also encourage students to improve their performance. Clinical evaluation in its broadest sense reflects the effectiveness of the entire process of PT education (Deusinger, 1990); however, clinical instructors are primarily concerned with observing the behaviours and skills that are required to provide competent patient care (Shepard & Jensen, 1997).

"The assessment system gives the loudest messages about what is valued" and what is required for students to move toward mastery of skills (Mann, 2002, p.15). The learner's perception of the demands of the evaluation will affect learning behaviour and outcomes. Evaluation determines: (a) the levels of knowledge, (b) the ability to access and select appropriate knowledge in relation to clinical problems, and (c) the ability to generate and test hypotheses for the purpose of diagnosis and treatment (Higgs, 1992). Assessment can: (a) identify inappropriate behaviour and inadequate performance, (b) "motivate students," and (c) "measure the transfer of learning" (Vendrely, 2002; p.64). Evaluation not only clarifies the performance expectations but it can assist the student with setting new learning goals (Cross, 1983; Strohschein, 2002).

Summative evaluation, or the summing up of a PT student's clinical performance, requires the collection of reliable data and the accurate and meaningful interpretation of it (Deusinger 1990). Cross (1983), in an early qualitative study, stressed the importance of clearly defined-clinical evaluation criteria.

> *As in any system, however, feedback must be accurate, specific and constructive. Unless the objectives of assessment (i.e. what skills are to be measured) are initially defined, and an understanding of the criteria against which they are to be measured ensured, the maximum benefit will not be obtained from clinical testing* (Cross, 1983, p.304).

While clinical instructors may be familiar with the behaviours or performance criteria specified by the evaluation, interpreting the associated rating scales is more difficult (Deusinger 1990; Straube & Campbell, 2003). Clinicians will likely base their evaluations on their beliefs about what is important (Usherwood et al., 1995), and on their general impression of a student's personality or performance (Alexander, 1996). In addition, the period of clinical evaluation is brief, and therefore it is essential that students learn to assess their own strengths and to identify accurately their learning needs (Shepard & Jensen, 1997).

Formative evaluation is also recognized as an essential part of the competency-based system. "The purpose of formative assessment is to reinforce or correct the learner's knowledge or performance errors before the final summative evaluation occurs" (Vendrely, 2002, p.64). In performance-based clinical evaluation: (a) the student should be aware of the desired behaviours, (b) there should be regular, structured feedback, and (c) changes in the instructional environment should be made as required (Vendrely, 2002). Students and clinical instructors can work together to tailor the clinical experience to meet the identified learning needs (Hayes et al., 1999; Shepard & Jensen, 1997).

The CPI defines the essential aspects of clinical performance and it incorporates at least one formal evaluation at the midpoint (CPI, 1997). Sample behaviours of the CPI are intended to clarify the performance behaviours and they can be recorded in the summative evaluation as well.[9] Professional attitudes, ethical behaviour and effective interpersonal skills are considered essential clinical skills and the students must understand that these are part of the formal

[9] The comments sections may have formative as well as summative value.

evaluation of their clinical competence (Higgs, 1992; Task Force for CPI, 2002; Strohschein, 2002). Identifying such behaviours on the evaluation tool makes them both visible and credible to those involved in the evaluation (Mann, 2002).[10] A list of specific clinical skills, "Tests and Measures and Interventions" have been appended (CPI, p.35) to the Instrument for clinical instructors' reference.

During formal (mid-term and final) evaluations, the clinical instructor and student should compare the observations they have recorded and discuss the reasons for the evaluation decisions. This requires students to reflect on their performance and their decision-making. It is recognized that reflective practice should be "intentionally facilitated" and not left to chance (Higgs, 1992), it is considered "a learned skill of critical thinking and situational analysis" (Kaufman et al., 2000, p.17). Students identified self-appraisals using the CPI as one activity that promoted reflective practice during their clinical experiences. However, the benefit was undermined if the clinical instructors did not value the students' observations (Musolino, 2006).

As mentioned, CIs need to understand the evaluation tools and be able to interpret the student's behaviours as they relate to the Instrument's performance requirements. Direct observation of PT students continues to be the principal means of evaluating clinical performance; but there are many challenges associated with it, CIs typically have not been specifically instructed either to teach or to evaluate students (Deusinger 1990; Shepard & Jensen, 1997). Ideally, CIs should be regularly documenting specific examples of the student's behaviour to avoid an evaluation based on personal impressions (Shepard & Jensen, 1997; Deusinger, 1990). However, in many cases CIs are required to maintain their usual workloads while they observe, instruct, and correct students (Shepard & Jensen, 1997). Clinical instructors face "multiple distractions and work responsibilities...[and] often report that it is almost impossible to find sufficient time during the workday to evaluate students' needs, perform formative evaluations, and complete the summative assessments" (Deusinger, 1990, p.68).

Hayes et al., (1999) studied PT students to determine if any specific behaviours influenced the CIs' assessments of their clinical competence. They found that instructors observed and valued

[10] The CPI uses "Pass" or "Fail." The "With Distinction" box enables recognition of exceptional student performance.

non-cognitive behaviours (professional behaviour and communication) but they were more likely to discuss with their students inadequate knowledge or poor psychomotor skills. Ultimately the authors found that a "successful clinical experience" was more closely associated with the behavioural changes that students demonstrated when they were given early and accurate feedback (p.667).

How Clinical Instructors Master the CPI

The literature has not described what is required for mastering the use of the CPI. As expected behaviours are demonstrated and additional competencies are identified, the formal midterm evaluation may assist the CIs to organize or to restructure the final portion of the clinical placement. Cross (1983) stated that "any measure of performance is being poorly used if it is not fed directly back to the performer, thereby enabling the cycle to start afresh with a constructive improvement plan" (p.304).

The reality of completing student evaluations is usually more complex than instruction booklets and in-services indicate. According to the CPI Guidelines for Use: "Methods of data collection may include direct observation, videotapes, documentation review, role-playing, [and] interviews" (p.iv). Physiotherapists may consult with colleagues who are recognized for their experience with students or they may solicit feedback from others involved with the student. Assistance from the Student Coordinator on the clinical site, or the ACCE, is essential when the clinical instructor is faced with critical performance issues.

Training clinical instructors to use evaluation instruments was acknowledged to improve their understanding and expertise in clinical evaluation (Friedman & Mennin, 1991; Walker & Openshaw, 1991; Nayler, 1995; Hrachovy et al., 2000). Physical therapists may attend training programs to prepare to be clinical educators; but the availability, content and length of training programs are variable (Shepard & Jensen, 1997). Often PT clinical instructors have not had any instruction about educational theory (Shepard & Jensen, 1997; Cross 1998) or training to apply the clinical evaluation instruments they are required to use (Task Force for CPI, 2002; Vendrely & Carter, 2004).

Vendrely and Carter (2004) proposed that "training programs would affect how clinical instructors rated" a student's performance as demonstrated during a videotaped patient encounter (p.65). Thirty-four (n = 34) clinical instructors were assigned to one of four groups based on their previous training or experience using the CPI.[11] The group sizes were small and ranged from five to 11 subjects. The evaluation procedure used was consistent with CPI guidelines for use; each criterion was rated on the 100 mm VAS and space was provided for additional comments. No hypothesis was stated, but the groups' ratings of the five Red Flag criteria were compared.

The authors reported that only CPI criteria "Safety Performance" and "Responsible Behaviour" had enough rating responses for statistical analysis. The CIECP-CPI-trained group's mean ratings for the "Safety Performance" criterion were significantly lower than those of the CPI-only and the No-Training groups. The CIECP-only clinical instructors' ratings for the "Responsible Behaviour" criterion were again significantly lower than those of the CPI-only trained subjects. Analysis did not indicate that previous experience evaluating students using the CPI affected the clinical instructors' ratings.

Fifty percent or fewer of the subjects rated the "Ethical Practice" and "Legal Practice" criteria. As a result, the groups ranged from zero to eight participants and this prevented meaningful statistical analysis. The authors' discussion about the low response rates is worth noting. They were not convinced that the response rate represented a problem specifically with the simulated student performance but it may have indicated a problem with the clinical instructors' understanding of how to rate the criteria. Some subjects indicated discomfort using the criteria for rating the student's performance and "felt unprepared" to do so, while others indicated "some hesitation regarding the ability to assess the performance accurately due to limited exposure to the student in question" (p.68). Subjects who did rate the criteria justified the rating they gave by stating the "student did not seem to be violating any laws during treatment session" (p.68). It would seem that the dilemma the subjects experienced in rating

[11] The groups were: CIECP (Clinical Instructor Education Certification) and CPI (n = 11), CIECP only (n = 7), CPI only (n = 5), and No Training (n = 11).

the ethical and legal practice criteria warrants further investigation given the weighting of the Red Flag criteria.

The authors did not offer suggestions for the differences observed among the types of training, rather they discussed the results within the context of the study's limitations. They pointed to the lack of evidence for reliability and validity of the fourth version of the CPI as potentially limiting the accuracy of the CIs' ratings. They recommended further research to determine the effects of training programs on CI functions such as supervision styles, negotiation skills, and assessment techniques (Vendrely & Carter, 2004). In light of the limitations, the study should be viewed as exploratory; nonetheless, it still raises questions and indicates that further study of the impact of training to use the CPI and how well clinical instructors understand the performance criteria is needed.

The testing of validity and reliability of the measurement instruments used to evaluate clinical competence continues to stimulate discussion, and researchers question the constructs surrounding student evaluation within a complex clinical environment (Andre, 2000; Cox, 1997; Vendrely, 2002). Cross, Hicks and Barwell (2001) caution that:

> *Since instruments can be valid only if they can be seen to measure what it is they purport to measure, any competence assessment instrument must comprise a balanced and representative sample of behaviours considered indicative of competence by those in a position to judge.* (p. 352)

The Task Force developing the CPI documented the extensive consultation that was undertaken to establish the behaviours considered essential for competent practice. This could be considered a strength of the CPI; to date, however, psychometric testing of the fourth version has been limited.

VALIDITY TESTING OF THE VAS

Straube and Campbell (2003) published the results of validity testing of the VAS. As mentioned previously, a student's competence on each performance criterion is rated on a 100 mm VAS with only two anchors "Novice Clinical Performance" and "Entry-Level Performance." This was done to "maximize sensitivity to fine gradations (0 to 100 mm line)

that might be missed by a cruder numerical rating scale" (CPI Manual, p.iii). Students beginning their clinical education would not be expected to achieve the same level of performance as students more advanced in their academic programs and clinical experience.

Of specific interest to the authors was the validity of the VAS as an interval measure and the assumption that CIs were able to distinguish among "100 distinct levels of response categories, or stimuli" (p.33). The authors used a Rasch Measurement Model[12] to determine how clinical instructors used the VAS and to quantify the response categories that they were able to distinguish.

The final VAS scores (raw scores) were analyzed for the performance criteria on 256 CPI forms of students at all levels of clinical experience and from three physical therapy programs. Initially, 11 category groupings from "1-10 mm = 0, 11-20 mm = 1, 21-30 mm = 2, etc to category 11" (p.35) were identified. Through a stepwise process of analyses and regroupings, the categories were condensed into six evenly spaced response categories from "Low" to "High."

The authors grounded the discussion of their results in the psychological literature about absolute judgment. When humans rate observations, the following three components are involved:

> *(1) The amount of information in the stimulus presented to the individual, (2) the amount of information in the response of the individual, and (3) the amount of transmitted information by the individual.* (p.33)

The studies emphasized the influence that multiple variables can have on a person's absolute judgment and that humans have limited capacities to discriminate among multiple levels of stimuli.

Straube and Campbell (2003) also reviewed literature about the interpretation of VAS scores for rating pain and depression, and pointed out that "constructs are unique phenomena"

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[6] "The Rasch Model is a probability model based on the assumption that the consequence of an encounter between a subject and a test item is determined by the ability of the subject and the difficulty of the item." (Portney & Watkins, 2000)

(p.37). Thus, applying the psychometric properties of a VAS from that type of research to the evaluation of clinical performance may be problematic.

Straube and Campbell (2003) observed that the clinical instructors appropriately understood the VAS anchors and that the CPI captures student performance that exceeds expectation, "regardless of where the student's performance is marked on the VAS" (p.36). However, since the "With Distinction" designation most frequently indicated performance that exceeded "Entry-level Performance," the authors considered the "With Distinction" to be unnecessary — in effect, redundant. Straube and Campbell (2003) concluded that clinical instructors were unable to distinguish between 100 gradations of the VAS and that the raw VAS scores should not be used as interval measures. While the six-level response categories were identified, the authors expressed the need for further psychometric study using different research designs. The authors also recommended further psychometric testing of the CPI to improve support for inferences about its educational value.

How PT Schools Use the CPI

In 2004, English et al. published the results of a survey of the ACCEs (n = 179) for American physical therapy programs to determine how many were using the CPI and how the evaluation results contributed to their students' grades. Nearly 90% of the 134 respondents were using the CPI and 61% of those converted the VAS scores to a percentage for grading purposes. Other ACCEs used quartiles or combinations of VAS scores and comments for grading students' clinical performance. Fifty-three percent of all respondents considered the clinical instructors' comments when they determined the students' grades; most often the comments were used to clarify the VAS scores. While 58% (n = 78) of the ACCEs were generally satisfied with the CPI as a grading tool, 35% (n = 46) were not (English et al., 2004). Positive features of the CPI were its format, and language that was consistent with the *Guide to Physical Therapy Practice,*[13] as well as its emphasis on professional behaviours rather than the performance of skills. However, there were recommendations to include more specific skills in the sample behaviours, and to provide additional definitions to the current VAS anchors.

[13] *Guide to Physical Therapy Practice,* 2nd Ed. Alexandria, VA: APTA; 2001.

Some criteria, as well, were considered redundant. A number of ACCEs (n = 26) expressed concern about the "extensive education" required to decrease interrater errors among new users. English et al. (2004) suggested that the development and evaluation of standardized CI education programs might improve interrater reliability of the CPI. Based on their findings and the literature reviewed for the study, the authors recommended further investigation into: (a) the practicality, reliability and validity of increased markers along the VAS, and (b) to examine "clinical instructors' satisfaction with the CPI for ease of use and comprehension" (English et al., 2004. p.90).

Sliwinski et al., (2004) reported results of a preliminary study using survey questionnaires to compare the anticipated CPI results of academic faculty, CIs, and PT students who had completed only one clinical experience. The authors hypothesized that there would be no differences between the groups for the expected levels of performance for an initial clinical experience as indicated on the VAS for the 24 performance items. The response rates were 48% (n = 28) academic faculty, 18% (n = 53) clinical instructors and 67% (n = 124) students. The mean VAS scores for all of the groups were scored at less than the 100 mm, indicating that they did not expect Entry-Level for the first clinical experience. The Red Flag items were rated the highest across all groups (range 83 - 95 mm) which the authors felt supported the CPI Task Force assertion that they represented "foundational elements of practice." The clinical instructors and academic faculty agreed in their evaluations for all of the performance criteria; however, the students had significantly higher levels for the performance criteria "Management of Patient Resources" and "Wellness and Health Promotion" than the CIs. Sliwinski et al., (2004) suggested that the difference in ratings may have reflected the students' sense that the skills would be expected of them as soon as they began clinical practice, whereas the CIs would expect the skills to develop with progressive clinical experience. Since health promotion and wellness is an evolving aspect of clinical practice, the students may have felt better prepared than the clinical instructors to perform in that area.

The authors recognized the limitations of their small sample size and limited geographic area but the study addressed anecdotal evidence of inconsistent expectations of academic faculty, CIs and PT students for the first clinical experience. The authors recommended future study to determine how practice setting influences clinical evaluation (Sliwinski et al., 2004).

Questions of Reliability and Validity

The lack of reliability and validity of assessment instruments will negatively influence student evaluation (Vendrely & Carter, 2004). This may undermine both the students' and the CIs' confidence in the evaluation process; it may be considered the weak link in evaluating the integration of students' knowledge and skills between the school and the clinic (Cross, Hicks & Barwell, 2001).

> *Even where the assessment process has been made explicit to all concerned, with assessment criteria clearly defined, it will be open to variations in interpretation and hence in behavioural consequences.* (Usherwood et al., 1995, p.144)

Assessors and students may vary in their interpretations of the evaluation requirements: (a) CIs may base their evaluation on personal criteria inconsistent with the formal evaluation criteria (Usherwood et al., 1995), (b) they may consider general impressions rather than specific observations, or (c) they may be inappropriately influenced by the student's personality (Cross, 1998). Researchers have even observed that students look for cues to the behaviours that their CIs favour as a means of obtaining more favourable evaluations (Alexander, 1995; Cross, 1998).

Alexander (1996) presented findings about clinical judgment that can negatively affect clinical evaluation and call into question its validity. The author reported the negative impact that assessors' subjective judgments can have on a student's clinical experience. These can result in students doubting that they have been fairly or consistently evaluated, or that they were evaluated based on performance expectations that were inappropriate for the learning situation. Alexander (1996) concluded that clinical evaluation was based on some combination of subjective judgments and the formal criteria defined by the evaluation. The author urged that instructors be made aware of the concept of "judgmental heuristics" and the influence that inappropriate subjective judgment can have on clinical evaluation (p.365).

Hager and Butler, (1996) recognized that subjectivity cannot be removed from clinical evaluation and stated that it would even be undesirable to do so. Evaluation of clinical competence depends on astute judgments that are based on the assessors "tacit knowledge and expertise" (p.371). The authors described objectivity as "the intelligent learned use of

subjectivity" (p. 371). Hager and Butler (1996) also maintained that the judgment model of evaluation enables the assessor to use evidence from a broader range of experience rather than rigidly defined data. The judgement mode, for example, offers the opportunity for self-assessment and can facilitate a dialogue between the person being assessed and the evaluator; thus, it can promote the integration of learning and clinical evaluation (Hager & Butler, 1996).

It has been suggested that the success of a clinical instrument can largely be determined by the CI's level of acceptance of it (Hrachovy et al., 2000; Task Force for CPI, 2002); yet it is difficult to find studies reporting clinical instructors' opinions about the instruments they use. Researchers have consistently recommended further study of: (a) the effect that training to use the CPI may have on clinical instructors' use of it (Task Force for CPI, 2002; Vendrely & Carter, 2004.; English et al., 2004; Straube & Campbell, 2003), (b) the ease of grading students based on the evaluation (Task Force for CPI, 2002) and, (c) CIs' satisfaction with the Instrument (Task Force for CPI, 2002). Qualitative research is beginning to point out the challenges that clinical instructors experience as teaching clinicians and evaluators of students' competence within the healthcare environment, however little of it has specifically addressed the CPI.

Chapter 3

METHODOLOGY

Chapter Three describes the choice of using a qualitative framework for this research and provides support for using focus groups as the means of data collection. The details necessary to conduct the research, to manage the data, and to analyze and interpret the findings are described in the methods section.

The purpose of my research was to explore perceptions and experiences, to ask clinical instructors directly about how they used the CPI. I sought a research framework that would enable me to capture the discussions of CIs not only in response to my questioning but as they shared their views about the CPI in conversations with colleagues. Clinical education of physiotherapy students, in my experience, is a highly interactive process in which instructors often share responsibilities for educational activities and student evaluation. The physiotherapy community of practice developed the CPI (Task Force for CPI, 2002); it is a reification of the behaviours that clinical instructors, academic educators and students agreed were the necessary competencies for clinical practice. The evaluation process itself can enhance the interaction between the clinical setting and the academic institutions. Thus, I selected the research paradigm of the interpretative/constructivist in which a guiding assumption is that knowledge is socially constructed — the researcher and the subjects are involved in an interactive process in which each influences the other (Mertens, 1998).

> *The assumption is made that data, interpretations and outcomes are rooted in contexts and persons apart from the researcher and are not figments of the imagination. Data can be tracked to its sources, and the logic used to assemble interpretations can be made explicit in the narrative.* (Mertens, 1998, p.13)

A qualitative research strategy, which is a label associated with the interpretative/constructivist paradigm, was used for this project (Mertens 1998). Discussions that arose from the open-ended questioning during the focus groups constituted the research data, which was analyzed

with the primary intent of identifying themes that emerged across the focus groups (Creswell, 2003).

Qualitative Research Using Focus Groups

> *When the research topic involves understanding the success or failure of a particular program in a specific setting, focus groups may well be the most efficient and effective tool for uncovering the reasons behind this outcome.* (Morgan & Krueger, 1993, p.9)

Morgan (1988) stated that the focus group method relies on "the explicit use of the group to produce data and insights that would be less accessible without the interaction found in a group" (p.12). Focus groups can result in a broader range of information as the ideas of participants "keep building on themselves, thus making room for the unexpected" (Tipping, 1998).

Focus groups have been used recently by educational researchers for such purposes as identifying students' learning needs (Tipping, 1998), studying the perceptions of educators and students for curricular-development purposes (Frasier et al., 1997; Hayward et al., 1999) and probing the delivery of student education within a clinical environment (Currens & Bithell, 2000). Focus groups enable the academic researcher to observe spontaneous interactions on a topic and can promote a high degree of participation among the group members, thus lessening the direct researcher/participant interaction of individual interviews (Morgan, 1988).

Morgan (1988) emphasized that learning about participants' *experiences* was more likely to stimulate a lively group dynamic than merely asking for their opinions. People are more willing to share their own experiences than to challenge or comment on someone else's opinion. Thus, focus groups are recommended for qualitative research projects that are trying to answer "how-and-why questions" (Morgan & Krueger, 1993).

Clinical instructors are familiar with "group processes" and collaboration. The purpose of this study — to explore experiences and perceptions of physiotherapy clinical instructors — was considered compatible with a strategy that would enable the probing of participants' views and would facilitate the sharing of experiences through which unanticipated ideas might emerge.

Additionally, there is support for using focus groups to study issues related to clinical education of physiotherapists (Currens & Bithell, 2000; Hayward et al. 1999). Thus, the focus group was considered an appropriate qualitative method to collect the data necessary to develop explanations (Morgan & Krueger, 1993) about the way the clinical instructors used the CPI.

> *Qualitative research is susceptible to erosion of quality from the pervasive influence of the people who make judgements about the nature of the questions to be asked, subjects to be studied and the analysis to be done.* (Krueger, 1993, p.66)

The researcher frequently moderates the focus groups and supplies the discussion topics (Krueger, 1993). The author described useful skills for focus group moderators including common-sense suggestions such as the ability to listen, to make "neutral" comments, and to promote the participation of the entire group (Krueger, 1993). It is important that the moderator does not fall into a pattern of conducting individual interviews with the group participants (Tipping, 1998). According to Morgan and Krueger (1993) a skilled moderator will be able to:

- *Promote an atmosphere of respect*
- *Listen to participants' points of view*
- *Provide an environment that invites them to share their feelings, opinions and experiences*

Though I had not directed focus groups before this study, I had facilitated many group projects and I was comfortable working in such groups. My additional preparation to moderate the focus groups is described in the Methods section.

Morgan and Krueger (1993) suggested that, "a match between the researcher's topics of interest and the participants' topics of ordinary conversation" has a significant impact upon the focus group dynamics (p.8). I believe that my experience as a clinical instructor and my understanding of student education within the healthcare context offers me insight into the challenges and issues faced by the focus group participants. Inevitably, this familiarity, my personal experiences and my exposure to the views of my colleagues introduces a bias that

may have influenced my interpretation of the data (Creswell, 2003). I began this study with the view that the CPI was unnecessarily time-consuming, primarily due to the number of performance criteria. While I did not consider it worse than the forms I had used previously, I also did not find it to be an improvement. I have tried to represent the data objectively, and have used peer-debriefing and member-checking in an effort to minimize bias in my interpretation of the data (Mertens, 1998).

Qualitative research is an iterative process requiring the researcher to analyze data throughout the gathering process and to make appropriate modifications along the way to promote the quality of the research (Krueger, 1993).

> *Central to an analysis of qualitative data such as focus group transcripts is the process of coding the material into analytically distinct segments that can then be examined together when drawing conclusions concerning one or more of the topics and related concepts under investigation.* (Knodel, 1993, p.45)

Research Design: Qualitative, Quantitative and Mixed Methods Approaches (Creswell, 2003) and *Successful Focus Groups Advancing the State of the Art*, (Morgan, 1993) were used to assist with the data analysis. The coding and data analysis as well as the theme development are described in the Methods section.

Ethical Considerations

The questions posed by Creswell (2003) in *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* helped me take a broader view of the ethical issues associated with research; it guided the submission for ethics approval and included the following key considerations:

- *Do those being studied understand the purpose and the potential benefit of the study?*

Selected clinical instructors were sent a copy of the "Letter to Participants" to introduce them to the purpose of the study (see Appendix A). When clinical instructors indicated their interest in participating, they were contacted by phone or email and the structure of the focus groups and the study's purpose was explained again.

- *The researcher must not make promises that cannot be met.*

I offered a selected number of clinical instructors the opportunity to discuss their experiences and perceptions of the CPI for the purpose of a study. I did not imply that this research would result in any structural change to the CPI. The results would be shared with the ACCE at the Dalhousie University School of Physiotherapy who evaluates all CPI results for Dalhousie University's School of Physiotherapy. Participants were informed of my plan to submit the research for presentation at a national physiotherapy conference.

- *The anonymity of participants is to be maintained and they are not to be identified in the research results.*

Non-personal identifiers were used for coding the data and no participants were identified in the research report. Participants were able to use pseudonyms during the focus groups if they so chose. While few clinical instructors chose to use pseudonyms, it would have been impractical to report findings that included participants willing to be identified and others who chose to remain anonymous; that type of reporting, in itself, might result in the identification of participants expecting anonymity. The clinical instructors were informed that due to the nature of focus groups, the confidentiality of their discussions could not be guaranteed (Morgan, 1998).

- *The data analysis and interpretation require the researcher to make "good ethical decisions" and the accuracy of findings must be validated.*

The validity of qualitative research depends on determining the accuracy of findings for the researcher, the participants, and the readers (Creswell, 2003). "Member-checking" assists the researcher to determine if the participants agree with the accuracy of the researcher's description of the encounter (Creswell, 2003). The participants can also be asked to comment on the themes identified by the researcher. "Negative or discrepant information" should also be included to improve the credibility and "real-life perspective" of qualitative research (Creswell, 2003). In addition, "peer-debriefing" can enhance the accuracy of the research analysis; in peer-debriefing the analysis is viewed and questioned by a colleague who has had no involvement in the research. As mentioned, the researcher brings a personal bias to the study and I provided a personal description to help the reader understand my "location"

within the research topic (Creswell, 2003). The efforts taken to promote the validity of this research will be mentioned as they were used during the focus groups and data analysis.

Research Method

Ethical Approval

Ethical approval for this research was granted by the University Research Ethics Board of Mount Saint Vincent University.

Focus Group Interview Guide

I developed an "Interview Guide" (see Appendix D) based on the literature review and my experience as a clinical instructor. This is considered to be an acceptable base from which to develop the questioning strategy (Creswell, 2003), and I further assessed this questionnaire for clarity and content during a practice focus group. A Clinical Coordinator of Education and two experienced clinical instructors from two different teaching facilities participated. They stated that the questions were generally clear and relevant to the research purpose. When asked to identify any additional issues that they thought would be "critical" for the focus group discussions (Mertens, 1998) the following suggestions were made:

- *Ask the clinical instructors if they were "comfortable" using the CPI.*
- *Add to the demographic information a question asking clinical instructors how long it took them to complete the CPI.*

Both suggestions were adopted.

Participants

Participants for the focus groups were selected by purposeful sampling, which is appropriate for qualitative research (Mertens, 1998; Creswell, 2001). Mertens (1998) explained that:

> *Researchers working in the interpretive/constructivist paradigm typically select their samples with the goal of identifying information-rich cases [to enable their in-depth study]* (p.261).

Purposeful sampling enabled the selection of participants such that the groups would be comprised of physiotherapists working on a variety of clinical services. I intended the focus groups to have a composition similar to the clinical environment where both junior and senior staff members regularly contribute to departmental activities. I was *not* looking to generalize the results to *all* clinical instructors who had used the CPI; however, the goal was to gather rich data, and through coding and analysis, classify their views about using the CPI. I wished to provide an *insightful* description of how the CPI contributed to their evaluation of physiotherapy students, the factors that influenced their use of it, and to report their overall impressions of the Instrument. Therefore, I sought participants who had used the CPI to evaluate one student as a minimum, as well as those who had extensive experience using it.

SELECTION OF PARTICIPANTS

The focus groups were comprised of clinical instructors from two tertiary academic health centres in Halifax, NS; one such facility in Saint John, NB; and from private-practice physiotherapy clinics within a reasonable proximity of the Halifax facilities. The facilities were selected because they regularly offer clinical education placements to physiotherapy students. The group size was determined: (a) by anticipated participant availability, (b) to promote participation of all group members, and (c) to complete the discussion within 1.5 hours. The group size was consistent with the proposed five-to-seven participants and was within the recommendations of Morgan (1988), and Marshall and Rossman (1995).

The Clinical Coordinator of Education (CCE) at each of the facilities was contacted to explain the purpose of the study and they were provided with a copy of the "Letter to Participants" (see Appendix A). The CCEs were considered appropriate to identify clinical instructors who had used the CPI at least once and those who had used it multiple times. Thirty-one letters were forwarded to clinical instructors who had been identified by the CCEs.[14] Seventeen clinical instructors who had expressed interest in the study were contacted and scheduled to

[14] I had no management relationship with the clinical instructors recruited to this study.

participate in a focus group. Two physiotherapists initially planning to participate withdrew for scheduling reasons.

The ACCE at Dalhousie University's School of Physiotherapy identified the private-practice physiotherapy clinics that regularly participated in the clinical education program. Since there is no CCE structure in private practice, the clinic owners were initially contacted by letter or email. The study's purpose was outlined and they were provided with a copy of the "Letter to Participants." They were requested to inform their staff about the study and to suggest that interested physiotherapists contact the study investigator. Since only one private-practice clinical instructor participated in the study, her comments were not included in the data analysis or on **Table 1**.

With the exception of the single private-practice physiotherapist, the 16 clinical instructors that participated in the study were working with adults or paediatric patients (or both) on either inpatient or outpatient services in acute-care and rehabilitation settings. The clinical instructors had a mean of 15.5 years of clinical experience and they had instructed a mean of 4.6 students. Clinical practice-related demographic information is described in **Table 1**.

Table 1: Demographic Information

How many years of clinical experience do you have? (N=16)		
average years of experience	16.3	
median years of experience	14.8	
standard deviation	8.6	
In what type of setting do you clinically instruct students? (N=16)		
general hospital	11	69%
rehabilitation centre	5	31%
In which practice area(s) do you clinically instruct students? *		
paediatrics	5	
adults	9	
in-patient service	3	
out-patient service	2	
mixed service	2	
acute-are service	3	
Approximately how many students have you evaluated using the CPI? (N=16)		
average number of students supervised	4.9	
median number of students supervised	4.5	
standard deviation	2.9	
How long does it usually take you to fill out the CPI? (N=16)		
average length of time to fill out the CPI	65 minutes	
standard deviation	22.2	
Have you attended a CPI training in-service? (N=16)		
yes	5	31%
no	9	56%
no response	2	13%
As a student, were you evaluated using the CPI? (N=16)		
yes	2	13%
no	13	81%
no response	1	6%
Have you used a clinical evaluation instrument other than the CPI? (N=16)		
yes	14	89%
no	2	13%
no response	0	0%

* More than one practice area could be specified

Focus Group Process

PREPARATION TO MODERATE THE FOCUS GROUPS

In preparation to conduct the focus groups, I conducted a practice focus group:

- *To seek feedback from clinical instructors about the Interview Guide for content, clarity and relevance*
- *To practice moderating the focus groups*
- *To assess practical aspects of running a focus group: the length of time that it would take to run a focus group and to check audio-taping clarity*

The focus group was videotaped and audiotaped. I reviewed the videotape as a feedback tool to improve my performance as a moderator. The audiotape was not transcribed but showed that the room and equipment would be adequately sensitive for recording a focus group discussion. The session lasted 1 hour and 10 minutes.

CONDUCTING THE FOCUS GROUPS

Three focus groups were conducted in the winter of 2004 - 2005. The focus groups in Halifax were held in the evening at the School of Physiotherapy at a time that promoted maximum participation. The focus group in Saint John was held, at the participants' request, in the Physiotherapy department during the latter part of the workday. Participants were not financially reimbursed. Participation in this research was voluntary; the participants were informed that they could withdraw from the study at any time without penalty. Each participant signed a "Consent to Participate" (see Appendix B) immediately prior to the focus group.

The number of participants in the focus groups were as follows: Focus Group 1: six clinical instructors; Focus group 2: six clinical instructors and Focus Group 3: five clinical instructors. Two clinical instructors scheduled to participate withdrew due to scheduling conflicts. A CI stepped in to replace a colleague who had withdrawn. Each of the Halifax focus groups was comprised of clinical instructors from both of the affiliated teaching hospitals and in one case the clinical instructor from private practice. For logistical reasons, the focus group held in Saint

John was composed entirely of clinical instructors from the selected facility. The focus groups lasted from 1.25 to 1.5 hours.

I moderated each of the focus groups providing a brief review of the study and reminded the clinical instructors about the voluntary nature of their participation before the discussions began. As a form of participant verification, points raised in the discussion were periodically summarized and the participants were asked to confirm the moderator's correct interpretation (Creswell, 2003).

The research assistant took field notes, managed the tape-recorder and collected the Consent Forms (Appendix B) and Demographic Questionnaires (Appendix C). The research assistant did not contribute to the focus group discussion in any way but assisted with the preparation of the moderator's summary.

MEMBERS CHECKING

At the end of each focus group's discussion, I met with the research assistant to review the field notes and to summarize the key points in the conversation. I presented the summary to the group to check the accuracy of my understanding and again asked for any additional comments (Creswell, 2003).

Following each focus group, the field notes and audiotapes were reviewed and a written summary of key points of the discussion was prepared and sent to each participant. I invited them to comment on the accuracy of my interpretation of the groups' discussion. This form of member-checking contributes to the validity or trustworthiness of the data analysis (Mertens, 1998). The summaries were forwarded a second time and again the clinical instructors' comments were invited. Only one clinical instructor responded. The comments have been included in Chapter 4: Results and Discussion.

Data Analysis:

DATA MANAGEMENT

North Star Business Inc.[15] transcribed verbatim each focus group audiotape, provided hardcopies, and forwarded a copy of each focus group transcription by email attachment. I formally requested that North Star Business Inc. delete their electronic copies of the transcripts. The tapes were returned with the transcripts and were securely filed in a home office. I compared each focus group transcript to the audiotape for accuracy and inserted dialog that the transcriptionist had been unable to complete. I then reviewed the modified transcripts to familiarize myself with their overall contents. The transcribed data comprised 70 pages.

CODING AND ANALYSIS

Coding began with the preparation of the summaries that were sent to the participants following each focus group. Key topic areas generally followed those in the Interview Guide (Appendix D). The issue about the lack of feedback from the universities about CPI results was an unanticipated topic raised by the clinical instructors in the first focus group. It had not been included in the Interview Guide but it was addressed in subsequent groups.

Flexibility is considered a positive feature of qualitative research but it also requires of the researcher ongoing analysis and adjustments to the methods of data collection to ensure its quality (Knodel, 1993). For example, if analysis of the data obtained from the third focus group had revealed perspectives that varied significantly from the previous groups, holding a fourth group would have been recommended (Mertens 1998). However by the end of the third group, the issues raised and the "threads" of the discussion did not reveal unanticipated issues and saturation was considered to have been achieved (Creswell, 2003).

Initially, one transcript was completely reviewed and a list of words and related phrases and their location within a transcript was compiled. The remaining transcripts were then reviewed for similar words and phrases that were either grouped or listed as a new item (Creswell, 2003).

[15] North Star Business Centres Incorporated, 310-1657 Barrington Street, Halifax, NS B3J 2A1.

The groups of words/phrases were compared to the member-check summary sheets and a general fit with the key topic areas was found. Word-processor highlighting was used to mark similar quotations and blocks of discussion related to a topic colour.

Coding the electronic versions of the transcripts facilitated an easy movement between the three focus group transcripts. As the colour coding was carried out, links with similar discussions in the other transcripts were noted and comments about the emerging categories were made in the transcript margins (Creswell, 2003). At this point three categories were identified and related topics were linked to them (Creswell, 2003). An example of an initial cluster of topics around the category heading "Utility of the CPI" is included in **Figure 1**. The following three topic clusters were constructed:

- *Utility of the CPI*
- *Deficiencies of the CPI*
- *Learning to use the CPI*

As can be seen in **Figure 1**, the category was broad and there were topics that were interrelated (Creswell, 2003). The "Comments" section of performance criteria appeared to represent a sub-cluster of ideas that related more to student learning than the utility of the Instrument. The other two groupings were checked for topics that also related to the concept of using the CPI to promote student learning. Patton (1995) recommended that in order to maintain the integrity in analysis, as themes emerge the researcher should look for competing organizing schemes and the data to support alternative explanations. It was not my intent to evaluate the structure and content of the CPI as such. Thus, I returned to the role of clinical evaluation and the purpose of the research, to investigate CIs experiences using the Instrument as a means of reconsidering the themes.

Figure 2 shows the regrouping of topics that supported the theme "The CPI for Formative and Summative Evaluation." As indicated by the dashed line, some topics crossed themes from one to another.

Of the remaining topics (Figure 1), some were related to practical application of the CPI and others were directed more toward the CIs' concept of the CPI for summative evaluation. Thus, when the initial categories had again been reviewed and regrouped the following thematic groupings emerged:

- *The CPI for formative evaluation*
- *Summative evaluation*
- *Learning to use the CPI*
- *Practicality of the CPI*

"Shared Learning" became the final theme change. The topics related to it had initially been included under "Learning to Use the CPI" but the theme was too broad and lacked focus. It was restructured and renamed "Training to Use the CPI" in order to reflect the more structured ways that the clinical instructors learned about the CPI, as distinct from *sharing* what they understood about using the CPI.

Thus, the final themes became:

- *The CPI for summative evaluation*
- *The CPI for formative evaluation*
- *Shared learning*
- *Training to use the CPI*
- *Practicality of the CPI*

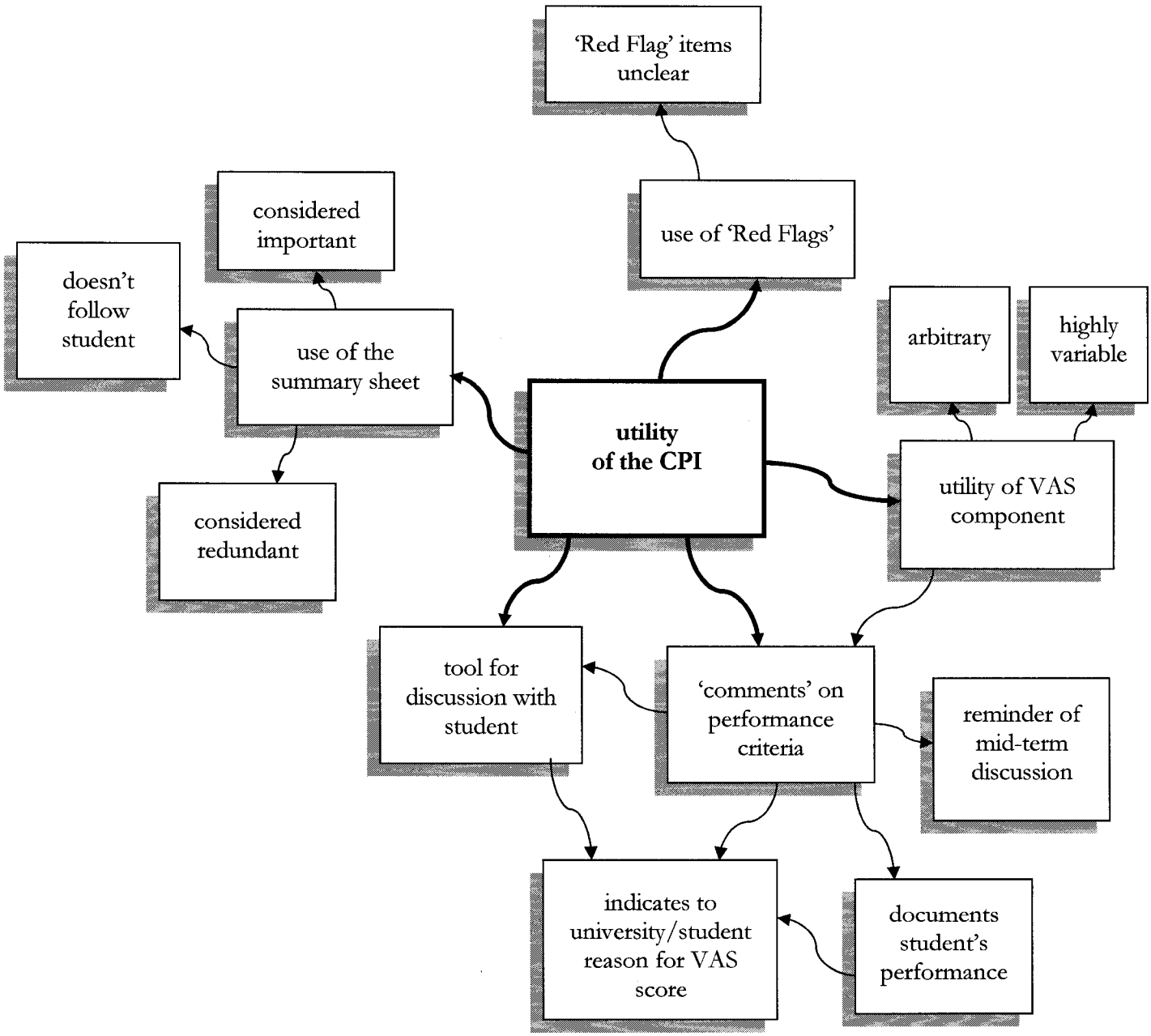

Figure 1: Topic Cluster – utility of the CPI

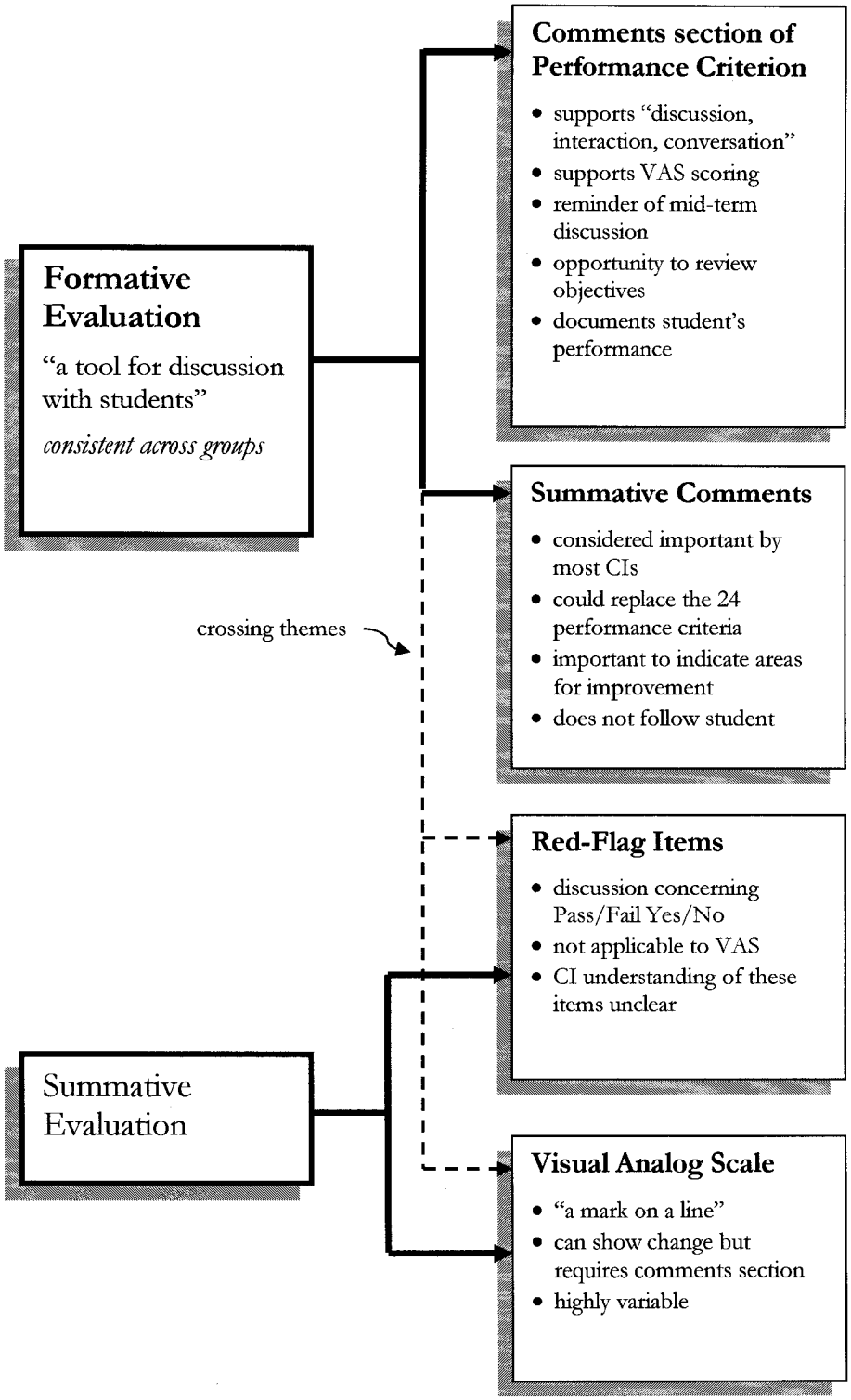

Figure 2: Emergent Themes – Formative and Summative Evaluation

INTERPRETATION

Final adjustments to the themes occurred as the results were analyzed and Chapter 4 was compiled. Decisions were made to discuss topics under the theme to which they seemed most closely related; however, there was crossover and as conversation contains interwoven thoughts, some topics are mentioned in several themes. Creswell (2003) suggested that linked topics enable the researcher to build additional layers of analysis. For example, the discussion about the Red Flags was linked between the themes about "summative" and "formative" evaluation.

A flow chart showing the overall coding and interpretation process is shown below.

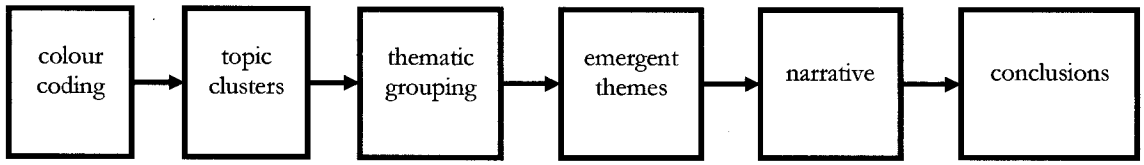

Figure 3: Coding and interpretation process

The results of this research have been reported in a narrative format that uses the participants' direct quotations to support my interpretations (Creswell, 2003). The findings were not intended to be generalized to the full clinical instructor population but, where possible, my interpretation is discussed within the context of the literature about clinical education and evaluation. The focus of the narrative was to weave together the CIs' comments as they related to each theme; in effect to show similar as well as divergent views (Creswell, 2003) across focus groups. Finally, the summary of findings includes recommendations for actions that could influence the way clinical instructors apply the CPI.

Chapter 4

RESULTS AND DISCUSSION

Five themes emerged from the process of data coding and analysis. They represent the clinical instructors' perceptions of the CPI as a tool for both clinical evaluation and as a formative instrument that contributed to the student's clinic-based learning. The CIs spoke about how they learned to use the CPI, how they shared what they knew with other CIs, and how they could improve their use of it. Throughout the conversations, the CIs made comments about the CPI's format and content that I interpreted to relate to the tool's practicality.

I was faced with the question about the order in which I would discuss the themes. I turned to the introduction to the CPI that states: "A clinical performance instrument is a central component of the assessment system and is used by the academic institution to ensure students' readiness for practice" (CPI, p.ii). It further recommended that, whenever possible, all of the Performance Criteria should be rated. Thus it seemed appropriate to begin the discussion with the theme of the "CPI for Summative Evaluation" followed by the "CPI for Formative Evaluation." The requirements for training to use the CPI were a consideration of the APTA Task Force that developed the Instrument (Task Force for CPI 2002) so "Training to use the CPI" and the associated "Shared learning" theme were listed next. The final theme to be discussed was "Practicality of the CPI."

Theme 1: The CPI for Summative Evaluation

The focus group participants talked about using the CPI for evaluation as a function distinct from their use of it as an instrument to improve performance through feedback. There was less discussion about the Summative Comments and the CIs' discussion focused mainly on the VAS. When asked for their impressions about scoring the line scale, the clinical instructors discussed the factors that influenced their scores and their concerns regarding its accuracy. They considered the CIs' subjectivity to be an issue and described how it could have an impact on student learning.

The clinical instructors' discussions specific to the "CPI for Summative Evaluation" are described under the following subheadings:

- *Scoring the VAS*
- *Lack of feedback from the universities*
- *Inconsistencies in scoring the VAS*

Theme 2: The CPI for Formative Evaluation

The clinical instructors described their approaches to completing the CPI and discussed their opinions about the relevance of the performance criteria to clinical evaluation. They discussed their rationales for completing the performance criteria, sought clarification about aspects of the evaluation they had not understood, and they spoke about the strengths and weaknesses of the Instrument. While the clinical instructors did not use the term "formative," the term was implied as they distinguished between using the CPI for "feedback" and using it for "evaluation."

The clinical instructors' experiences using the CPI to provide formative evaluation and their perceptions of the value of the performance criteria for instruction are reported under the following sub-headings:

- *Interpreting the performance criteria*
- *Weakness of performance criteria*
- *The value of comments*

Theme 3: Training to Use the CPI:

The Task Force that developed the CPI recommended that clinical instructors should be trained to use it and suggested that a lack of training may impair the clinical instructors' satisfaction with it (Task Force for CPI, 2002). The CIs' experiences and views on training to use the CPI are discussed under the following sub-headings:

- *Attendance at in-service training*

- *Views about the in-service training*
- *Recommendations for training to use the CPI*

Theme 4: Shared Learning

In the absence of formal training sessions, the clinical instructors described learning to use the CPI through activities and encounters that occurred within their clinical practice areas. They described questioning their colleagues, discussing the evaluation with students and their repeated use of the Instrument as contributing to their understanding and application of the CPI. These observations are discussed further under the following sub-headings.

- *Peer interaction*
- *Clinical instructor and student interaction*
- *Familiarity with the CPI through use*

Theme 5: The Practicality of the CPI

The clinical instructors talked about aspects of the CPI that had a direct impact on their use of the Instrument. They spoke about the language and the number of performance criteria, as well as its length and the time it took them to complete the CPI. These comments were considered to reflect the theme "Practicality of the CPI" — the clinical instructors' actual use of the Instrument rather than their perceptions of its theoretical functions for evaluation, and clinical learning. The clinical instructors' comments have been discussed under the sub-headings:

- *Format of the CPI*
- *Impact on the clinical instructors' time*
- *Suggestions for improving the CPI*

Theme One: The CPI for Summative Evaluation

SCORING THE VAS

The comments under this heading include factors that influenced the clinical instructors' scoring of the VAS. Conversation is complex and at times, a clinical instructor's remarks included thoughts that crossed themes and subheadings.

In general, the clinical instructors did not measure the VAS, but they described various marking strategies.

> *I never get out a ruler or anything ...the first few I tend to give more thought, but then generally after the first few I go with my gut instinct and put them down...I don't really think it accounted for that much, other than to tell them they're almost there, sort of halfway, or they really haven't started getting there yet ... for me, mentally its just four sections - the beginning, middle, almost there, or some things you always mark, you're always at the end. You have to be safe, or they have to be ethical.* (Group 2, p.9)

> *See, I don't bother looking at it as numbers ... I look at the Novice and I look at the Entry, and I think: Are they 50 percent there?* (Group 3, p.10)

The clinical instructors who attended in-service training considered the VAS as thirds corresponding to the student's year in the physiotherapy program and within that third, rated the level of performance.

> *That's actually how we were told to use the tool ... a third-year would be more expected to be middle to two-thirds at the end of the rotation. Then it continues on from there into your fourth year and by your last rotation in your fourth year, you should be Entry-Level practice on every item. So it's used as a continuum, but we don't get the information.* (Group 1, p.6)

As can be seen in the following response block, not everyone in the group understood the concept of using the VAS as a continuum. Not only did they have different understandings about scoring the VAS, but they were also confused about whether or not a different rule applied to scoring the Red Flag performance criteria.

[A]: *The scale [VAS] is just for them at their level.*

[B]: *But no, I didn't ...I thought they always used the whole scale.*

[C]: *For the second-year it's the first third, the best they can do is a third of the line, third year is two-thirds of the line and fourth-year it's the entire line. But a student had to tell me that.*

[B]: *But nobody told me that, I've done four students like that [scored them using the entire line] and they've all been pretty happy. Well they've been fourth-years mostly; three fourth-years and one third-year.*

[C]: *But ...aren't there some that it doesn't matter — second-year, third-year, or fourth-year — you're allowed to use the entire line?*

[D]: *I don't know. I think it's when you interpret the ethical [Red Flag item], whether you are allowed to use the whole line or not.* (Group 2, p.10)

Scoring clinical performance as a continuum was contentious. One clinical instructor expressed concern that it would lead to "hard" marking, prompting another clinical instructor's conciliatory comment that it was not the group's role to judge how people marked.

[A]: *You're saying that if you had a third-year student you don't mark them anywhere above a seven?*

[B]: *Not unless they're very exceptional* (Group 3, p.13)

The clinical instructor explained that an exceptional student might be scored at the 80 mm point on the VAS, but even that would not be Entry-Level. The group discussed the relative merits of considering the line as a continuum but no consensus was reached.

Clinical instructors in another group were concerned about the negative message that dividing the VAS into thirds might send to students, particularly if they were not aware of the concept of the VAS as a continuum.

[A]: *I think that each year should have the entire line, it just looks like you're [the student] doing a third as well as you could*

[B]: *Oh yeah, you know you're doing great but technically they're three out ten.*
(Group 2, p.10)

I [the student] didn't do as good as I could have done. (Group 1, p.6)

In addition, some clinical instructors expressed their discomfort at having to justify the VAS scores to students who did not understand the significance of Entry-Level practice.

> [B]: *I find too, students that ...are competitive [in] nature, that are Type A personalities, [with the] visual analogue scale, I'm really having to defend myself vigorously if my score is not in sync with theirs. ...They think they've done a wonderful job, and they have to their own abilities but ... they don't understand that it's performance equivalent with someone who is ready to enter practice. So I find with that I really mark them down, so let's be sure I can defend myself here. My experience has been that the student doesn't necessarily look at that as the upper end being ready to practice.*
>
> [C]: *I feel that too, I feel really uncomfortable when it's not up there at the highest it could possibly be...*
>
> [B, C]: *...and they want to know why.* (Group 1, p.6)

Understanding Entry-Level practice is a difficult concept for students who are just learning about physiotherapy practice. In fact, even clinical instructors were concerned about what specifically constituted Entry-Level. Years of clinical practice may have skewed one clinical instructor's perception of the essential requirements to begin to practice while another participant had not necessarily considered Entry-Level as meaning ready to practice.

> *I mean that's really open to interpretation too. Especially if you've been working a long time its hard to remember what was the biggest [skill] you needed. You learn so much, you know you learn this going to university and then you learn, you know [more] once you're out. So remembering what that [Entry-Level] is, you know its pretty grey.* (Group 1, p.10)
>
> *Even in our discussion here today, I discovered if your line is up toward the right hand side of the VAS, well that's Entry-Level practice skills. You know I might have thought about that but not well enough before; because where I placed my line didn't always indicate that.*
> (Group 1, p.12)

The previous quotes raise several issues. Rating a student's performance is challenging and clear communication of the clinical instructor's expectations is essential. Otherwise, the student's perception of their performance will likely be at odds with the clinical instructor's (Alexander, 1996). Furthermore, if clinical instructors are looking for the same "characteristics of qualified staff in the student then they have no chance of demonstrating these characteristics" (Alexander, 1996, p. 364). However, the VAS has Entry-Level as an anchor and the expectation is that students will perform at the level of a beginner physiotherapist by the end of their clinical practicum (CPI, 1997). Thus, the clinical instructor should clearly

communicate the performance expectations and be able to distinguish between the abilities of experienced physiotherapists and those required for physiotherapy students to qualify to practice.

In a preliminary study, Sliwinski et al., (2004) found that neither students nor clinical instructors expected students to achieve Entry-Level performance on any of the criteria for an initial clinical experience. In addition, the students rated only two criteria, "Management of Patient Resources" and "Wellness and Health Promotion," significantly higher than the CIs. The difference may have been because the clinical instructors and the students interpreted the criterion differently (Sliwinski et al., 2004). Some focus group participants suggested that "Wellness and Health Promotion" and "Fiscal Management" were not necessarily applicable to their area of practice. Though not applicable, some of the participants used "Wellness and Health Promotion," more as a discussion topic than as criterion to be evaluated. Opinions expressed by subjects in this research were consistent with the recommendation of Sliwinski et al., (2004) that future study was warranted to determine how the practice setting influences clinical ratings.

The clinical instructors also differed in their opinions of evaluating performance when students had little prior exposure to a particular clinical experience. A CI's view that even a final year student could not achieve Entry-Level performance during an initial speciality placement was questioned:

> [A]: *If it's their first placement having neuro [clinical rotation] then I can say "No" because there's so much more patient handling.*
>
> [B]: *But if they're only having one neuro placement, would you not expect them in some areas, perhaps not in all ... wouldn't you expect them to get the Entry-Level because they're never going to be able to see, under the school system they won't see another neuro patient, potentially. So hopefully they're an Entry-Level by the time they leave.* (Group 3, p.13)

The clinical instructor explained her position, and while not all of the participants shared it, there was no consensus about what method was to be preferred. The facility's CCE was one of the focus group participants and she had observed scoring patterns in evaluations that she attributed to differences in the clinical instructors' evaluation strategies.

Another group discussed the issue of the "fairness" of the evaluation when it was based on a small number of observations. A clinical instructor suggested that the student could achieve Entry-Level competence on a new placement, which the group considered reasonable, but the groups' comments sounded more like 'thinking out loud' than an endorsement of a particular view.

> [A]: *I don't feel it's always fair to the student too, because maybe you only have one opportunity to grade them or assess them on some of these behaviours. You know if they've done it one time and that's their whole mark for the whole placement [based] on the one situation, it doesn't seem right, but you have to mark them on something.*
>
> [B]: *That probably goes back to the point with the VAS and where they should be in the fourth year and specialty placements as well. You know you get to... a person and they're going to graduate in eight weeks or whatever, it, this is their first placement in neuro then. They're at the beginning of their skills [for] their first neuro-placement, so I find that kind of problematic.*
>
> [C]: *You should almost be able to take that continuum and if a lot of them don't get more than one placement of some things, if it's your first placement, you're allowed to use the whole thing.* (Group 2, p.6)

The clinical instructors discussed the Red Flag items as a distinct group of criteria and they have been referred to in both Theme 1 and Theme 2. While the clinical instructors were uncertain about the recommended method for assessing the Red Flag performance criteria, they were remarkably consistent in their views about how the items should be evaluated.

> *Like 'ethical', to me it's just a given ... so I think there should be a spot that you can comment if they go off it more but it should be expected. I just expect everyone to get top marks.* (Group 2, p.4)

The clinical instructors generally agreed that a VAS was unnecessary to evaluate the Red Flag criteria, a student's performance would be either adequate or not adequate, and could be indicated by Yes or No.

> *Safety and ethical practice to my way of thinking shouldn't need a VAS, should be a Yes or a No.* (Group 1, p.3)
>
> *The only ones I find don't need a comment so much are the first five, the flags. Because they're very obvious, I mean ethical practice ... legal practices, they're pretty much you know you either do it or you don't kind of thing.* (Group 3, p.13)

> *Another thing I routinely say is, this should not be a VAS, this should be a pass/fail, and that's 'Ethical Adherence' and 'Legal Standards of Practice.' So you don't have a choice but to fill the thing out, but there are certain questions that I always answer the same way based on my own beliefs about the tool and practices* (Group 1, p.10)

Clinical instructors in the second focus group were unsure about scoring of the Red Flags, in part because they were not all aware of the special designation. However, they agreed that "the ethical piece" should not be scored the same way as the other performance criteria. The clinical instructors were essentially using the VAS as a dichotomous evaluation for the Red Flag performance criteria; they viewed the Novice and Entry-Level Performance anchors as a choice of Yes or No, Pass or Fail, to indicate a student's competence.

The CPI instructions for use (CPI Manual, 1997) recommend that physiotherapy programs establish their own standards for passing and it suggests achieving Entry-level on the Red Flag items as an example of a standard for passing. While that is similar to the view described by the clinical instructors, their reference to the CPI Manual was so minimal that I could not assume their scoring reflected the Manual's instructions. English et al. (2004) found that the majority of American programs required that students achieve Entry-Level on the Red Flags for each of their internships in order to successfully complete their clinical practice requirement. While there is no published data about the requirements for Canadian physiotherapy programs, the CIs interviewed weighted the Red Flags higher than the other performance criteria. Clinical instructors and students both rated the Red Flag items higher than the other criteria reflecting a value for the items in keeping with the CPI Task Force's designation of them as foundational practice criteria (Sliwinski et al., 2004).

Lack of feedback from the PT Schools

Some clinical instructors carefully measured their placement of the VAS mark, but when they did not think the VAS scores contributed to a student's grade their scoring strategies changed. Scoring was, in part, influenced by the lack of feedback about how academic programs used the CPI results. Only one clinical instructor was contacted by a university about a student's low VAS scores; otherwise, clinical instructors in did not generally think they knew enough about how the results were used.

> *That is what I would be curious to know, is to go back to the clinical coordinators and say, okay, the end of the summer you've got 48 students times three rotations plus all the other ones. Do you go through these forms, or do you only go through the forms of the students with problems? How do the clinical coordinators actually use all the volumes involved? The sheets and sheets that come back to them after each rotation. Do you look at the students who did well, or do you just look at the summary sheet at end? I'm just curious to know from the university perspective how they utilize all that information when they get it back.*
> (Group 1, p.21)

> *I think it would be interesting to see how the different schools look at themselves. When they open it up, what are they looking at? One university takes a ruler and measures it out, while someone else will just say, 'yeah okay that looks about right.' Then the school may go back and look at that and say, okay no problems on that one.* (Group 3, p.20)

A clinical instructor who measured the line scale for students from one university paid more attention to the performance dimensions when she did not think the VAS scores contributed to the student's clinical mark.

> *But with students from [University X] I don't even think about measuring it, I really try to look at the ends of the spectrum, where I think they fit, that's when I go to the [performance dimensions] ... [I ask about] the consistency, the complexity, like is this a really simple, straightforward patient or ...have they had a really complex patient, and are they good at doing it or do they take an hour when they should have twenty minutes?*
> (Group 3, p.10)

While there is nothing intrinsically wrong with measuring a line scale, the *Instructions for using the CPI* recommends that CIs consider the performance dimensions for each criterion before scoring each VAS (CPI, 1997). VAS scores otherwise may be merely an end in themselves, a mark to meet a university's standard rather than a reflection of the multiple dimensions involved in physiotherapy practice. In addition, scoring to meet different program grading-standards would make it impractical to compare the results of various academic programs.

Other clinical instructors did not specifically mention the performance dimensions, yet they talked about the complexity of the patients on a student's caseload, the amount of supervision or the level of independence a student demonstrated, about the efficient management of a caseload and about the student's clinical skills. These behaviours clearly represented the performance dimensions of "supervision/guidance," "consistency," "complexity of tasks/environment," "efficiency," and "quality of care" that are listed in the CPI (CPI, 1997).

Other clinical instructors were curious to know how schools of physiotherapy used the evaluation results.

> [A]: *I'd be interested as well you know, as I've said we're all coming up with things and doing things a little bit different but does what we do end up being kind of meaningful for the School.*
>
> [B]: *I didn't quite understand how they got evaluated. It would be interesting for us to know.* (Group 2, p.20)

Without understanding how the universities used the CPI results, one clinical instructor suggested that the VAS scores were of no significance unless a student had failed. Whether she was "cynical" or simply frustrated, the clinical instructor had valid questions in light of the length of the CPI.

> *I just don't have a whole lot of faith that someone actually goes back at the end of the day and looks at all the VASs, and tries to get some meaning from them. I'm a bit cynical; I think the bottom line, is that last page, Pass or Fail. Perhaps if it was a Fail you [ACCE] might go back and then look at the VAS answers. But ... is someone taking the information, analyzing it? I'd like to see it passed on to the next clinical instructor. "There is an area of difficulty here based on these VAS scores, pay some attention to that." But you never get any of that forward or backward feedback.* (Group 1, p.4)

I had not anticipated the clinical instructors' desire for feedback from the universities so there were no questions about this aspect of the CPI in the focus group Interview Guide. The clinical instructors were looking not only for a better understanding of the relevance of their extensive commentary, "the volumes involved, the sheets and sheets that come back to them [ACCEs] after each rotation," but they were looking for their efforts to be validated. The perceptions that academic institutions weighted the VAS results differently, or not at all, resulted in inconsistent attitudes to scoring within and among CIs.

The clinical instructors' suggestions for "refresher" in-services have been discussed in the theme Training to use the CPI. These in-services could be a venue for the ACCEs to provide the type of feedback that the clinical instructors sought. The clinical instructors implied that they would be more satisfied with the CPI if they had better information about universities' use of evaluation results. Furthermore, as a CI astutely observed:

That would be good feedback for us. It would give us, perhaps, incentive to use it better or differently. (Group 1, p.21)

Authors have suggested a link between evaluators' satisfaction with the forms they use and their training/understanding of them (Harchovy et al., 2000; Task Force for CPI, 2002). Providing clinical instructors with feedback specific to the analysis of clinical evaluation results was not identified in the literature, but Walker and Openshaw (1994) found that physiotherapists wanted more communication with academic institutions about curricula; they also wanted better training about educational theory and assessing students' clinical performance. The CIs in this study implied that their satisfaction and their scoring of the VAS could be influenced by feedback. These observations point to a need for research to determine if relationships exist between CIs adherence to and/or satisfaction with the CPI and the information they receive from academic facilities about the evaluation results.

INCONSISTENCIES IN SCORING THE VAS

While talking about the VAS the clinical instructors sometimes used the terms CPI and VAS interchangeably. They criticized its reliability, particularly interrater reliability, and they were aware of inconsistencies among clinical instructors. There were concerns that scoring the VAS was subjective, which had formative as well as evaluative implications for the students. It was challenging to categorize these impressions, however considering them from a philosophical perspective with "objectivity" commonly associated with concepts such as reality, truth and reliability, and "subjectivity" implying the possibility of error,[16] it seemed acceptable to discuss them under one heading

Clinical instructors in one group were concise in their views of the VAS; the marking was arbitrary and "just not useful" (Group 1, p.7).

I think that's a problem, I don't think there's any interrater reliability. (Group 1, p.7)

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[16] See: *The Internet Encyclopedia of Philosophy:* <http://www.iep.utm.edu/o/objectiv.htm> for a succinct discussion of the terms.

Not for evaluation no, for giving feedback yes, but for evaluation no, because of lack of reliability. (Group 1, p.11)

And that's the inconsistencies of us across evaluators. And that's what needs to come back to what this is all about too, because it is an inconsistency, you know, really. (Group 3, p.14)

On the other hand, CIs felt that on an individual basis they *were* consistent when they scored the VAS.

Yeah ... it's consistent when I use it. ... I prepare my student now, but if he was to use it for mine and someone else's, I'm not confident that would be reflected. I think we all, individuals, use it individually. (Group 1, p.17)

I'm comfortable administering it myself, but I'm not sure across the board how consistent it is from one therapist to another or one facility to another. (Group 3, p.20)

There was consensus in one group that the CPI was not sensitive enough to show meaningful improvement for "good" or "middle-of-the-road[ers]" (Group 2, p.16) yet it would indicate change in a poorer student's performance.

But I must say, I think the problem is if you've got a good student, it doesn't reflect change in them because they're already good. (Group 2, p.16)

A lot of experience you feel good [about], but I'm not sure...if it reflects that, whereas it would certainly reflect change if someone was poor. (Group 2, p.16)

Conversely, another clinical instructor did not think the VAS adequately reflected change for struggling students.

[A]: *I don't like it for students who are struggling. ... I don't find it's objective enough or sensitive enough; because there's always that subjective element that comes into it, because you don't want them to go home in tears from their mid-term. You try to be as objective as you can. I don't like the tool.*

[B]: *Would that be any different from any other tool, I mean you still have that struggle of personal, you know, helping them deal with what you're telling them.* (Group 3, p.17)

As the second clinical instructor implied, the former instructor may have been alluding to the discomfort associated with giving any student a poor evaluation. Hayes et al., (1999) found that

clinical instructors found it easier to address poor performance issues when they were in the psychomotor domain. Clinical nurse instructors, too, felt that their judgments of student nurses were more subjective when they were evaluating attitude or values than when they assessed psychomotor skills (Duke, 1996). CIs were perceptive about the impact that these different evaluation strategies could have on students.

> *But in the change over time in the student's perspective, if you go from one person who interprets the VAS one way, to another therapist who interprets it another way, to another who has a different slant on it again, what kind of message are we sending? And are they really able to see growth from one placement to the next, on the broad general skills, if every examiner is using a different one?* (Group 1, p.17)

> *Well, doesn't it just go to show you how different experiences the students must receive on receiving their evaluation, when we have umpteen different ways of interpreting this form, and they have another way of interpreting the forms themselves? ... There is not consistency between one student and another student...This one goes with this therapist and interprets things differently, and this one goes with this different therapist and interprets things that way, then maybe they are very equal students, but their marks might not look anything alike.* (Group 2, p.8)

One CI related an experience with a student who challenged the VAS scores because they were lower than on a previous placement. Yet another CI thought that even students were aware of the challenges that using the CPI presented.

> *[Students] seem to be able to relate to a therapist's struggle with using the tool. So it sounds like they come from a history of their therapists admitting there being a struggle.*
> (Group 1, p. 17)

Inconsistent VAS scoring compromised the principle of fairness. Clinical instructors wondered how clinical prizes could be awarded based on such unreliable scores. One clinical instructor's reflection clearly illustrated the issue.

> *You know, when I was a student, I can remember thinking, 'How am I supposed to know if I'm being evaluated fairly?' You know you care that much about that prize that.... the thought crosses your mind because every evaluator is different.* (Group 1, p.11)

The quotations above are insightful reflections; the mixed messages and inconsistent application of the VAS could undermine the student's confidence in the value of the

evaluation. The CIs' observations were not unique, but they have not been identified in the literature specific to the CPI. Inconsistent and poorly understood processes for clinical evaluation can have a negative impact on students' learning and they may "result in new graduates who are incompetent and unsafe" (Cross 1998, p.308). Cross (1998) concluded that continued dialogue and consensus between clinical and university-based educators is essential to ensure that students understand the clinical requirements for professional competence. In writing about clinical evaluation of nursing students, Chambers (1998) stressed a need to teach students about reflective practice and considered self-evaluations to be a valuable part of that process.

Alexander (1996) suggested that there could be a mismatch between clinical performance rating scales and physiotherapists' beliefs about the essential requirements for practice. An evaluation may be based on a student's personality and the CI's general impressions of the students' abilities, rather than the explicit requirements of the assessment process.

> [A]: *I mean there is a difference between someone behaving in a professional manner, and people just not having the same personalities. You know, and you have to be able to distinguish between the two. You know they might not have a great placement or are they doing everything they should be doing and you're just not clicking personality wise.*
>
> [B]: *Yeah that's what...*
>
> [C]: *...that would be a challenge for any assessment.*
>
> [A]: *I don't know if you can really put that in an assessment form.*
>
> [B]: *It's something that very subjective. That's part of the design; it is very subjective isn't it. That's why it's so uncomfortable trying to put your finger on it, but in the case that I experienced. I'm quite sure that it wasn't just a case of 'not clicking.' It wasn't just me, even people on the floor where the student was working made comments about it to me, but it was all in retrospect. It was very difficult to put your finger on it.*
>
> [C]: *This is digressing, but some of this comes from portraying themselves as competent, and they're not really competent, and wanting to fit in when they feel they don't really fit in.*
>
> [B]: *Yeah, certainly.* (Group 1, p.16)

Clinical instructors tend to consider rating-scales to be objective measures (Cross, 1998); in this they may be misled.

> *As numbers are thought of as objective measurements it is often assumed that grades for placement experience are objective measurements. The question of how the grades are generated is generally not considered* (Cross, 1998, p.358).

Views about the usefulness or accuracy of the VAS ranged from CIs who had to "do the mental game" to make it meaningful to those who indicated that it served no useful purpose.

> *There is very little objectivity here, and yes, the visual analogue scale is supposed to give a mark, but it doesn't.* (Group 3, p.16)

> *[In some instruments] the words are clearly written out, explaining where they are and where they need to go, this doesn't explain where they are and where they need to go. It's a line on a line.* (Group 3, p.17)

No one suggested that the VAS scores could stand alone, either the accompanying comments or the discussion during an evaluation review was necessary to make the scores meaningful. English et al. (2004) observed that 72% of the ACCEs who responded to their survey used the comments to clarify VAS scores and 31% indicated that the comments heavily influenced "the student's grades regardless of the VAS mark" (p.89).

Concern was expressed about the accuracy of evaluating criteria when a student's performance had only been observed once. In that case, the clinical instructors considered the comments to be an essential explanation of the VAS. Another clinical instructor used a case-study approach to justify the evaluation of a performance criterion that had only been observed once. Again, the clinical instructor's emphasis was on the commentary as a formative process.

> *In our situation, often you're basing it on one or two examples, so it's good if you've marked them here on the scales[VAS], you show up saying it's because of the time that you [the student] did this, this, and this — that's why I've given you that mark.* (Group 2, p.15)

> *Or if you use it for the entire five weeks as a final and there was something new, it's sort of like a critical path — if they veer off we sit there and we talk about it. So this is what I hear you feel that your problem is, otherwise you're on track.* (Group 2, p.7)

The clinical education experience is highly valued; it offers the opportunity for extended performance assessment. The student is required to incorporate academic instruction with critical problem-solving and judgment, and to demonstrate skill performance in complex real-

life situations over an extended period (Vendrely, 2003). Clinical instructors are well aware of the complexity of clinical practice. The quotations indicated the tension that they experienced when evaluation was based on a "snapshot" of a student's performance rather than extended observation. This, however, represents a challenge of evaluating clinical performance not only specific to the CPI, it also relates to Cross' (1998) recommendation for more research to understand how clinical instructors evaluate students.

While the clinical instructors were concerned about the inconsistencies across evaluations one clinical instructor raised an interesting question. The clinical instructor indirectly endorsed using the VAS for summative evaluation while recognizing its formative contribution as well. She described the interaction between formative and summative evaluation; her view indicated an understanding of the dual purpose of CPI as described by the Manual (CPI, 1997).

> *But at the same time it's the outcomes, the final outcomes that are important. And you know the purpose of the tool is to have a conversation, for them to know their strengths and weaknesses ... I guess I'm wondering, does it matter how we do it individually if in the end they are at the entry level?* (Group 3, p.14)

> *It is expected that a student will achieve Entry-Level on every performance criterion, signifying readiness to enter the profession, by the end of the final clinical experience.*
> (CPI, 1997, p. vii)

Researchers have recognized that clinical evaluation is open to interpretation irrespective of clearly defined assessment criteria (Alexander, 1996; Hager & Butler, 1996; Usherwood et al., 1995). The challenge of evaluation is setting objectives that are relevant to the clinical module and that have clearly defined and measurable outcomes (Usherwood et al., 1995).

The CPI Manual urges clinical instructors to be mindful of the specific requirements of each Performance Criteria as well as the associated performance dimensions and Sample Behaviors. References in the groups' discussions to "not wanting to make students feel bad or cry during evaluations" and, in fact, the discomfort that clinical instructors mentioned when their evaluations were significantly lower than a student's implies the tug of leniency bias. CIs were mindful however that their understanding of the CPI was varied and led to a range of evaluation strategies, which they willingly shared.

The comments reported to this point have mainly been negative, but the focus groups' conversations were sprinkled with positive comments.

A clinical instructor who considered the performance criteria to be unnecessarily long and the VAS of limited use preferred the Summative Comments. While other members of the group commented that beginning at the end was interesting, no other clinical instructors mentioned completing the evaluation in this manner.

> *Yeah, I think those sections for feedback; the summary [Summative Comments] sections are far more useful. I think the topics, the individual questions [Performance criteria] suggest a conversation, suggest the various areas, but the summary is the most important thing. Often times I'll go to that first, and then we'll flip through the other stuff because it's not very useful.* (Group 1, p.14)

In no instance did the participants recommend VAS scores to the exclusion of written comments however some CIs thought the VAS could be a useful graphic, poor performance might be reinforced by seeing a low score marked on the line scale.

> *[T]he marks shows you where they are, I mean its going to show you whether they've made it better or worse.* (Group 3, p.19)

> *It's arbitrary, and I guess the way I've been using it to distinguish what areas are of concern. So if I gave somebody a seven versus a nine, then they would know that was an area of more concern than the nine. So how that VAS is relative to anybody else, or any previous rotation — it just doesn't work. But within that one section it can show a problem area versus a strength. So I probably give a lot higher scores than other people.* (Group 1, p.7)

> *Yeah I think that's probably one of the strengths of it in the way that I use it, as giving them some feedback. The question is relative to one another, so if I give somebody a mark around five on a particular thing at midterm, then that suggests to them that this is a big concern where they might have gotten seven-to-eight on other things. Then they can see that, yes, they have improved in the end. So it does point out the relative marks, the relative weakness, so that they know what areas I'm concerned about having them improve.* (Group 1, p.16)

Similarly, the "visual" could serve to clarify discordant evaluations between a clinical instructor and a student, and a graphic representation of improvement might reinforce points of discussion or the written comments.

> *It's useful if you're totally on different wavelengths and the student thinks they've achieved this goal and they're ready to practice and you know you don't think that they are.*
> (Group 2, p.9)

The extensive process used to develop the fourth version of the CPI (Task Force for CPI, 2002) attests to the Task Force's commitment to create a valid and reliable instrument. However, the comments included in this theme, Summative Evaluation, were strongly indicative of clinical instructors who did not view the VAS as a reliable means of rating student performance, — in part, because they had poor understanding about scoring it and they perceived that the ratings "didn't really count for that much with the academic facilities." On the other hand, clinical instructors felt that their own use of it was consistent and represented the behaviours that they thought were essential for clinical practice. Nevertheless, the clinical instructors' conversations indicated a need for more consistent use of the CPI, possibly through improved training and feedback from the universities. Research to study the impact of training and communication with universities on clinical instructors' application of the CPI, considering questions of adherence and satisfaction is warranted.

Theme Two: The CPI for Formative Evaluation

INTERPRETING THE PERFORMANCE CRITERIA

Embedded in the discussions about their use of the CPI were the clinical instructors' impressions of how well the performance criteria reflected clinical practice and explanations about how these criteria were dealt with during the evaluation process. The clinical instructors spoke about interpreting, moulding and manipulating the performance criteria to reflect their practice areas. The students as well, moulded the criteria during self-evaluation, and their interpretations sometimes contributed to an evaluation outcome. Not only did the CPI give structure to the evaluation process, but it promoted a conversation about clinical performance, both specific to the practice area and, in some cases, to the profession in general.

> [A]: *I manipulate the situation to use it in my own way and that is, a tool to give some students some feedback, as opposed to what the school may want as an evaluation tool.*
>
> [B]: *With respect to using it for feedback purposes, I agree that it can be great for feedback purposes.* (Group 1, p.11)

> *And the thing is; the students often find ways to mould it I think. I put Not Applicable on several [performance criteria] and yet they'll come up with instances and I'm going 'Well maybe that fits in that situation,' but that doesn't pop out as something that fits in there.*
> (Group 2, p.3)

> *I'm going to make sure I'm going to comment either in the Comment Section where I can find a relevant place or in the Summary at the end, with areas of improvements, areas of strength, suggestions for [the] future. So it's not that the tool itself is so wonderfully designed that it's just going to make it happen for me, you manipulate it to serve the intent, and to carry the message you want it to serve and carry* (Group 1, p.14).

As well as their comments about scoring the Red Flags, the CIs had varying levels of understanding about them; some had learned about them from their students, while two clinical instructors asked colleagues in their respective focus groups to explain the purpose of the items.

One participant's answer implied the value she placed on the items:

> *It means that they are not doing it, and they shouldn't really be practicing in this profession.* (Group 2, p.5)

Another clinical instructor clearly felt that the Red Flag items should be of greater value than the other performance criteria:

> *One would hope that not all the [performance criteria] are weighted equally, but again we don't know that, because you know some of the questions to my way of thinking should be a lot more important than others. Safety and ethical practice to my way of thinking shouldn't need a VAS, should be a Yes or a No, but again that should take more weight than the one [student] being able to fill out proper billings.* (Group 1, p.3)

Participants in two groups stated that the Red Flag designation was an improvement over the previous evaluation form[17] because they were explicitly reminded to evaluate the ethical and legal aspects of practice.

> *It's good to have it there, the ethical piece, so that we're paying attention to it, but it can't be marked the same way.* (Group 2, p.5)

> *Whereas I don't know that the other tool allowed you to have a discussion on what might have been inappropriate behaviour, it might have been just a general statement. This gives you an opportunity to have a discussion on it, so that if there is a problem, [students] can be made aware of it.* (Group 3, p.12)

Overall, the clinical instructors indicated their support for the Red Flag items, but as noted in the earlier discussion about the VAS, their understanding of the items varied. Venderly and Carter (2004) also suggested that poor familiarity with the meaning of the Red Flag items might have contributed to the low number of CIs who scored certain criteria in their study. The authors' suggestion to study the effect of common training programs on CIs' use of the CPI would also be supported by the focus groups' discussions.

[17] Referring to the Loomis Tool, the *Evaluation of Clinical Competence.*

Weakness of Performance Criteria

The performance criteria in some cases were referred to as "questions" the clinical instructors did not understand or as items that "didn't fly at all" (Group 3, p.2) and in some cases they were considered to be outside of the clinical instructor's teaching role.

> *I can't think of a specific example right now, but I know every time I've held it in front of me I have this frustrating feeling that I wish I understood this better. The wording of the questions, I don't know what it is.* (Group 1, p.10)

There was considerable discussion during the focus groups about the relevance of certain performance criteria. These included criteria related to billing, professional development, research activities, community involvement and health promotion. While Straube and Campbell (2003) mentioned the ACCE's negative comments about redundant criteria in the CPI, the authors did not list specific criteria. The Task Force (2003) however, did not find differences in the students' initial and final-experience scores on criteria 20, Fiscal Management and 24, Wellness and Health Promotion. If the items were related to the construct being measured there should have been a change in scores indicating that clinical learning had occurred. The Task Force suggested that the lack of change may have been due to problems interpreting Entry-Level performance in the absence of formal training to use the CPI.

> *The other one that I had some difficultly with was their own professional development and where they should be in their professional development. I don't really feel that is the role of a clinician to be assessing where they are, it's very much assessing themselves, and that comes up anyway, or I think it should come up under professional behaviour... You've got enough on your plate to try to teach them ... so I did find that a bit frustrating, that piece.* (Group 2 p.3)

> *Unless you grill them, I often say 'well what are you doing?' And you're right; it takes time to get into it and more time that it adds to the whole evaluation.* (Group 2, p.3)

> [A]: *But some of them are just so irrelevant; I just think one of the sample things is 'participating in research.' Well I would never expect a student to participate in research, aside from doing a lit review or whatever they're doing for their presentation, or you know, trying to promote the practice of physiotherapy. I mean, as a student, the last thing they're even thinking about is promoting the practice of physiotherapy — you know?*
>
> [B]: *First, they have to learn it.* (Group 3, p.6)

> *When they're [CPI] asking questions about ... community involvement? Are they doing billing? Are they doing research? I would rather have more relevant clinical questions with regards to assessment and treatment and patients, and things like that than those things.* (Group 1, p.5)

One clinical instructor took a different approach to the performance criteria that she considered irrelevant to her practice area. She used the example of health promotion, which most of the participants in her group agreed was not relevant to their acute-care setting.

> *I would at least have a discussion around the scenario ... But it does kind of cause you to shift gears from your evaluation of the student ... to try to educate them on the breadth of the profession, in these areas that aren't particularly being dealt with.* (Group 3, p.5)

Again, relying on conversation, she used the evaluation tool as a focus for discussion and teaching. Other participants in the group agreed that certain performance criteria could be used that way and subsequent discussion resulted in an example of a physiotherapy program at that particular hospital for which health promotion was the key focus. The important issue appeared to be the relevance of the performance criteria for clinical education rather than their concern about applying the CPI for summative evaluation.

The challenge of developing a generic clinical evaluation form was briefly discussed in another group and while the other participants did not dispute the view, they agreed that the CPI could be shortened by removing some of the "redundant" performance criteria.

> *But then I guess they try to capture and make some sort of a generic instrument that will be applicable over all different areas.* (Group 2, p.15)

Despite their comments about irrelevant or redundant performance criteria, clinical instructors attempted to create relevance through their written comments and discussions with the students. They used the "Not Observed" designation when a conversation was not considered appropriate or a criterion was incompatible with the practice area.

The clinical instructors appeared diligent and persistent in their consideration of the performance criteria. They were concerned that the performance criteria did not include enough clinical skills, described as the "hands-on" or "technical" abilities that they considered essential to a patient's management. There was some frustration with redundancy, "page after

page on professional stuff" that the clinical instructor implied were qualities that could not be evaluated. Only one clinical instructor was aware that Appendix B of the CPI provides a list of specific clinical skills for clinical instructors' consideration, but this appendix is not included with the CPI form that clinical instructors receive. It can be found in the *CPI Manual*, yet most of the clinical instructors did not know that their departments had a copy of the Manual and thus they were unaware of a potentially useful reference.

> *I don't find there are enough questions on the meatier things. Like different parts of their assessment skills, or different parts of their treatment. They go on for page after page on professional stuff, I mean as clinicians we're looking more at their ... technical skills and their knowledge....how did they put that to practice, how did they do with goals, and then how did they do it performing a program. This doesn't go into so much detail on that stuff, and then there are all those pages on things you can't evaluate. So I don't find it as useful.*
> (Group 2, p.8)

> *When they're asking questions about are they doing billing? Are they doing research? Well, you have enough time to do what you need to do, like you know a lot of that stuff, I just find I would rather have more relevant clinical questions with regards to assessment and treatment and patients, and things like that.* (Group 1, p.5)

> [A]: *The only thing I think is missing is, again, the actual skills. There's no way to comment, unless I add it in ...*
>
> [B]: *...specific assessment skills and treatment skills...*
>
> [A]: *...yes. I would like it divided up a little more.* (Group 3, p.15)

As noted previously, in spite of insufficient attention to the activities considered to be essential to clinical practice, assessment skills and treatment techniques, clinical instructors manipulated the evaluation to include these "technical" abilities.

> *I guess there could be some changes with respect to questions really directed to paeds, but I get around it by just putting my comments in.* (Group 2, p.20)

While the participants in one focus group agreed that the performance criteria adequately reflected the "soft" areas of practice, another group discussed the difficulty of determining how the "hard to define" personal behaviours fit within the performance criteria. They were more concerned with the challenge of defining these soft behaviours and appearing to be too

subjective than dissatisfied with the performance criteria *per se.* These observations were not unique; Chambers (1998) described the challenges that nurses face in evaluating students and about their worries of subjectivity when evaluating professional behaviours. The soft behaviours may have been the result of students trying to match their behaviours to perceived "predilections" (307) of clinical instructors in order to improve their evaluations (Cross, 1998). In these cases, the behaviours would not necessarily be compatible with the defined performance criteria, thus making them difficult to evaluate. Alexander (1996) concluded that students were evaluated not only by objective criteria but also by subjective judgments that sometimes did not reflect the explicit assessment criteria. However, the author considered her research preliminary and stated that the clinical evaluation of students was an under-researched area.

The Value of "Comments"

The "Comments" portion of each performance criterion was a focal point for the dialogue that occurred between the clinical instructors and their students during the midterm and final evaluation process.

> *The comments are some of the most, are 'the' most important thing to me, and I think the most important things to the student, probably, if they really wanted to learn.* (Group 1, p.20)

The participants discussed in general terms what influenced their written comments and why they were important. They used the Comments section to record special learning experiences and to provide positive reinforcement, to highlight areas for performance improvement, and to track objectives. The Comments clarified the VAS scores and were considered an essential written record for the student and the academic institution. The clinical instructors were describing a formative evaluation process that has been discussed in the literature about educating not only physiotherapists but also physicians and nurses (Chambers 1998; Friedman & Mennin, 1991; Mann, 2002; Vendrely, 2002).

I also find, that when I read the question [performance criteria], and I make my mark sometimes I question whether I understood what they were asking. So when I write in that comment section, I write sometimes to give whoever is reading this in the future, some understanding of how I interpreted that question. (Group 1, p.13)

I look at [the comments] as an explanation, this is the mark I give you, and this is why I've given you this mark ... and then the suggestion of what you [the student] need to work on to get better. (Group 3, p.11)

You know what went well, [so] what can we improve on? Just to try to make that vague question [performance criteria] meaningful with a concrete example. (Group 1, p.12)

The comments were being written with a conversation in mind, to encourage learning through discussion and reflection. Clinical instructors are reminded that students will benefit most from accurate feedback and the CPI recommends that clinical instructors refer to the Performance Criteria and Sample Behaviors in their evaluations (CPI, 1997). Clinical instructors were aware of the impact of their comments on students and whether or not the CPI's structure contributed to negative commentary, the instructors were cautious about striking a balance. Not only can negative feedback affect a student's learning, but also lack of feedback can be interpreted by them as disinterest on the part of the clinical instructor, thus harming the student-instructor relationship (Hayward et al., 1999).

[A]: *I use my Midterm Comments to comment on the things that if they want to get a higher mark, this is what they have to work on.*

[B]: *Or give clinical examples ... to refer to for their benefit ...specific patients that they might have done well in...* (Group 3, p.11)

I try to balance positive comments with suggestions for improvement. I find the tool lends itself for some reason to negative criticism. I don't know, I thought perhaps that was just my personality trait, that when I sat down to evaluate a student that the negatives came forth, and I really had to make sure that I included positive comments in the Comments Section. (Group 1, p.12)

The clinical instructors in one group reflected on the value they had placed on a supervisor's comments when they had been students. Their experiences influenced them to use the CPI more as a tool for formative than summative evaluation. In fact, one CI stated she would prefer not to use the VAS at all. The following quotations indicate the clinical instructors' commitment to written comments and the perceived benefit of written comments over the summative evaluation, "the ticked boxes."

When I was a student, well ... I didn't use the form, but it was the comments that your supervisor gave you that was more important than the boxes they ticked. Really you can't expect to do well in the boxes for whatever form, but it's the comments that really tell you how you're doing. I feel like that as well, you know I'd rather spend my time on that section where you actually write out what you think. (Group 2, p.13)

For most of them, I like to put a comment only because what you said, as a student I felt that was the most important thing, so I feel obliged to make them. I feel badly if there is no comment and the only time there is no comment is: "Are you safe or not?" There is really not much you can say about that. (Group 2, p.14)

Leach (2006) wrote that, "the memory of our previous experiences and our own attempts at learning" (p.55) were essential characteristics for teaching. It is through the memory of being a student that effective teachers develop empathy for their students (Leach, 2006). Clinical instructors remember the frustrations of too much or too little supervision as a student, and they become sensitive to the anxiety that students experience when they lack confidence in their knowledge or treatment skills (Shepard & Jensen, 1997). Effective teaching is collaborative; clinical teachers and students not only share a desire to assist their patients but they share in discovering their patients' reality and the process of clinical problem-solving (Shepard & Jensen, 1997).

While the comments clarified a clinical instructor's interpretation of the performance criteria, they also justified the VAS scores in the event that the results were challenged by the student or the university.

I also find that when I read the question, and I make my mark, sometimes I question whether I understood what [the developers of the CPI] were asking. So when I write in that comment section, I write sometimes to give whoever is reading this, in the future, some understanding of how I interpreted that question. (Group 1, p.13)

I feel, as well, when I put my marking on the VAS, I feel like I want to add that [comment] to back up what I did. Something in my mind tells me that, well, if I don't get this, particularly in a situation where you don't give them a great point on the VAS, is somebody going to come back and ask me later, 'Well why didn't they?' or 'Is this a consistent problem with the student?' We need something that illustrates what the problem has been and how it's changed or whatever. (Group 1, p.12)

Writing comments expressly to justify the VAS implies a sense of vulnerability but using comments to explain the interpretation of a performance criterion provides clarity to the evaluation and may enhance learning. On the other hand, it may indicate that the clinical instructor lacked understanding of the criteria and additional training was needed.

While the comments were clearly valued by the clinical instructors and considered an essential part of the evaluation process, they also contributed to the length of time it took to complete an evaluation. Some clinical instructors did not comment on each of the criteria and participants in two groups complained that they wrote fewer comments as the assessment proceeded because of evaluation fatigue.

> *Yeah, the redundancy by the end of it, I'm tired and I don't have any comments to say that I haven't said in the previous 18 questions. I fade in the end.* (Group 1, p.13)

Clinical instructors in two groups considered the Summative Comments section to be adequate to both provide the necessary performance feedback and to indicate the student's level of clinical competence. The clinical instructors' remarks about using Summative Comments for both summative and formative evaluation were not at all surprising given the section's name and the space that it provided for written comments.

Theme Three: Training to Use the CPI

ATTENDANCE AT IN-SERVICE TRAINING:

The clinical instructors discussed their in-service training to use the CPI and some explained why they had not attended any sessions. Two of the focus groups had a mix of clinical instructors who had, and had not, attended in-service training. Their reasons for not attending varied and, in some cases, clinical instructors were uncertain as to why they had not attended. Participants who had missed scheduled in-services reported that in the absence of additional in-service opportunities they had used other means to learn about the CPI. One clinical instructor was exposed initially to the CPI by a student from an American program. Since Dalhousie's School of Physiotherapy had not adopted the CPI at that point, in-service training was not an option. The clinical instructor reported that the CPI included a "fairly complete manual" but she had used it minimally.

One clinical instructor, unaware that in-service training was even an option, stated:

> *I never attended one because no one ever told me there was the option to attend one. It was you were having a student, this was the evaluation and as far as I know we never had any opportunity.* (Group 1, p.1)

Another clinical instructor's frustration with the lack of preparation to use the CPI was apparent in her choice of words to describe her first encounter with it.

> *In fact, the first time I had a student with it, when I was given the thing [CPI] that was the first thing thrown at me.* (Group 2, p.1)

Another clinical instructor had not attended a training session because she had understood that it was not relevant to the level of student she would be instructing. To her knowledge, there had not been any other in-services offered. Another clinical instructor cited a fully subscribed training session as the impediment to her attendance. One clinical instructor stated:

> *I don't think anyone in our facility has gone for training, so we're all equally ignorant.* (Group 2, p.2)

While none of the participants in another group from that facility had attended training, the clinical instructors thought there may have been training sessions held within the past two years. However, there was confusion about whether the sessions were directed toward students or clinical instructors, as indicated in the following response block:

> [A]: *Especially for the tool though?*
>
> [B]: *Well actually, I'm not positive; it might just have been for students.*
>
> [C]: *I think it was more just for students ...I don't think there was any one specifically....*
>
> [B]: *No, but I think the tool might have been addressed at some point.*
> (Group 1, p.2)

The following except from the third focus group also indicated confusion about the purpose of an in-service possibly about the CPI:

> *[The ACCE] was here again ... last year, or the year before? But I'm not sure that ... she actually did any in-servicing on the [CPI]; I think it was more setting the student objectives, wasn't it? 'Cause I didn't attend because of whatever it was, I said I don't need to go.*
> (Group 3, p.3)

Confusion about the relevance and availability of training in-services contributed to the lack of preparation to use the CPI that the clinical instructors in the three target facilities described. There appear to have been some department-based communication problems that were unrelated to the CPI.

While the evaluation of clinical performance is an expectation of a clinical instructor's role, attending training sessions to learn about clinical evaluation or educational theory is, in my experience, optional. The groups' discussions about the length of in-services, their scheduling and the advanced notice clinical instructors needed in order to attend them imply that case-load demands take priority over activities that directly support clinical education:

> *With advanced notice, you can't do it with no warning, but if it's well-known weeks in advance it's not a problem.* (Group 1, p.5)

Short in-services, an hour in length, were generally considered preferable to longer sessions. One clinical instructor's suggestion for a half-day in-service was unacceptable as indicated by another participant's response:

> *A half-day or something, and think — there's no coverage for your patients.* (Group 2, p.18)

The clinical instructor's priority was to her patients' care. Currens and Bithell (2000) found that clinical instructors were stressed when trying to balance all the aspects of their workloads with the associated responsibilities of clinical education; in some cases students were considered to be a burden and a secondary commitment to delivering patient care.

While taking time away from clinical care was considered an obstacle to learning about the CPI, two clinical instructors were introspective and shared their concern that they may not have fulfilled their responsibility to learn to use the CPI.

> [A]: *It does speak to us in a way doesn't it? Should I have taken the time first of all to take a course, or read the manual?*
>
> [B]: *And whose responsibility is it, it's surely mine in a way.*
> (Group 2, p.18)

The discussions illustrate the tension that clinical instructors experienced in meeting the requirements for patient care while carrying out the role of clinical educators. They wanted to understand how to use the CPI, but that required an investment of time that had a direct impact on patient care. Currens and Bithell (2000) found that while professional physiotherapists accepted, in principle, that clinical education was a core role, their commitment to it " was easily eroded by service pressures" (p.650).

Confusion about the relevance and availability of training in-services contributed, in part, to the lack of preparation to use the CPI that clinical instructors described. In summary, evaluation of clinical performance is an expectation but attending training sessions to learn about education theory and student evaluation is usually optional and appeared to have been less of a priority than patient care and its associated responsibilities.

VIEWS ABOUT THE IN-SERVICE TRAINING

The clinical instructors' views on training and its impact on their use of the CPI were limited. Five clinical instructors indicated on the questionnaire that they had attended training and one clinical instructor stated in her focus group that she had attended one, not so much as a clinical instructor, but because she had helped to organize it.

The discussions about training in-services varied from the clinical instructors who had difficulty recalling details of their in-service training to those who found the instruction to be "very specific about the tool." Not only was the in-service helpful, but one clinical instructor added that it would have been difficult to complete the CPI without the training. Another clinical instructor indicated her endorsement by stating, "in fact, I'd like to take another session" (Group1, p.4). One clinical instructor, unable to attend an in-service because it was full, reported that the comments from colleagues who had attended were positive and they were glad they had attended. A clinical instructor from another focus group described feeling "confident" about using the CPI during the training session but suggested the need for follow-up to address questions that arose subsequent to using it. This prompted discussion about the need for additional in-services.

> *And I guess I left that training session feeling, I thought I knew what I was doing, but as I go with students I still come across the question of, okay the year threes they're supposed to be up to seven, does that mean I grade it on the full scale, or is seven their top score, so I still have questions years later. So, questions weren't, I guess, you think you understand how you want to use the tool, but when it comes down to doing it, I still have questions.* (Group 3, p.2)

The same concern was raised in another group along with the suggestion for additional follow-up. Another participant who had not attended an in-service made the assumption:

> *I think if there was better education to use the tool it would actually be a better one.*
> (Group 1, p.5)

There was general agreement across the groups that training to use the CPI would be beneficial. This shared opinion of clinical instructors was consistent with research that suggested improved satisfaction and consistency of use would occur when clinical evaluators

understood the evaluation tools they are administering (Friemann & Meinen, 1991; Hrachovey, 2000).

Clinical instructors in general considered their facilities supportive of activities that helped them to provide clinical education; i.e., in-service training occurred within the hours of the regular workday. The clinical instructors agreed that they would be willing to attend in-services to learn how to use the CPI provided the sessions were not too long, ideally about an hour, and adequate notice enabled them to rearrange their caseloads.

Recommendations for training to use the CPI

Participants in each focus group discussed having some form of regular training session. Training clinical teachers about clinical evaluation instruments improved not only their satisfaction but it improved the consistency of their application (Friemann & Meinen, 1991; Hrachovy et al. 2000.) While the clinical instructors agreed that physiotherapists who had not used the CPI would benefit from training, the sessions would also provide a forum for experienced clinical instructors to talk about problems they had encountered using the tool. As stated, not only would the clinical instructors planning to use the CPI learn about the theoretical application, but they also could benefit from their more experienced colleagues' discussion of the practicalities surrounding its use.

One group recommended that regular training could be in the form of a "refresher" course:

> *Refresher should be routinely offered.... Yeah exactly, and to work out some of the nuts and bolts now that I've used it a few times.* (Group 2, p.4)

> [A]: *In fact, I'd like to take another session too...*
>
> [B]: *...a refresher should be routinely offered...*
>
> [A]: *... yeah, exactly, and to work out some of the nuts-and-bolts now that I've used it a few times.* (Group 1, p.4)

While another group focused more on holding regular sessions to target clinical instructors new to the CPI:

> *Oh definitely have some type of training ... I wouldn't say she'd [the ACCE] have to do it every year but at least every second year maybe, because there's always new people coming in.*
> (Group 3, p.4)

> *And make it a regular thing every year, available to the staff.*
> (Group 2, p.18)

Walker and Openshaw (1994) observed that physiotherapists who felt poorly prepared for their role as clinical teachers indicated that they wanted specific training in clinical education and student evaluation.

The focus group clinical instructors also made suggestions about the format and the logistics of the sessions, and how attendance could be facilitated. In-service training provided by the ACCE was viewed by one focus group as "effective" and "easy" (Group 2, p.18); the format enabled them to share their experiences using the CPI, as well as solve problems they had encountered while using it.

The clinical instructors agreed that training could be done within an hour if participants familiarized themselves with the CPI and prepared questions in advance of the in-service. The participants agreed with one clinical instructor's suggestion to hold the in-service during a departmental staff meeting:

> *Well, I mean, we all take students, so I mean if someone came to our staff meeting say, we'd all be pretty willing participants I would think.* (Group 2, p.18)

Another clinical instructor in the group was certain that time would be approved if the in-service needed to be held at a time outside of a staff meeting. All of the participants considered their facilities supportive of activities that helped them to provide clinical education; in-service training could be held within the regular workday.

A clinical instructor in one group suggested that if there was an instructional video about the CPI then it could be viewed at home. While the suggestion resulted in friendly laughter, it was

not supported by further discussion in that group. A CPI training video available at another facility had only been viewed by one clinical instructor who, finding it "not all that useful," had not recommended it to other staff members. This group, however, agreed with another clinical instructor's suggestion that teleconferencing would be an efficient alternative to the ACCE travelling to deliver an in-person in-service.

While only six clinical instructors had attended a CPI in-service, the generally positive attitude toward training may reflect the "professional culture" of physiotherapy for which group education is a familiar and accepted format for learning. Physiotherapists have indicated that their choice of certain commonly used treatment techniques was strongly influenced by attendance at practice-related courses (Turner & Whitfield, 1999). The impact of hour-long training sessions on clinical instructors' use of the CPI, or satisfaction with it, would be a worthwhile study given the references to training in the literature (Hager et al, 2002, Hrachovy et al, 2000; English et al., 2004; Venderly 2003). The CPI Task Force (2002) stated that a limitation of the field-testing of the CPI was their inability to know how much training study subjects had to use the CPI. The authors suggested that their results may mimic what occurs when the CPI is purchased and clinical instructors use it without training; implying their impression of the reality of clinical education (Task Force for CPI, 2002). Many of the clinical instructors in the focus groups were in fact using the CPI without formal training and as a result, their understanding of the Instrument and their use of it was varied.

Theme Four: Shared Learning

PEER INTERACTION

Learning about a new technique by attending a presentation by colleagues is a common occurrence in a physiotherapy department. In fact, clinical instructors in two groups attributed most of their learning about the CPI to colleagues who had themselves attended a CPI in-service. The following response block illustrates the clinical instructors' recognition of the shared learning process — a process of "negotiated learning" (Wenger, 1998) where peer support was valued and facilitated their understanding of the CPI.

> [A]: *So I didn't make it to the in-service, but I remember other people talking about it, and it was almost like a group effort the first year; that people were kind of working together and, you know, "How would you grade this?" and so I think it was smart to interact with our peers ... improve our consistency.*
>
> [Group]: *Yeah.*
>
> [B]: *We had the benefit of helping each other out that first year.*
> (Group 3, p.3)

While group process was not identified explicitly, the following quotations also indicate the collaborative effort and the superior value of discussing the CPI with experienced colleagues over merely reading the accompanying instruction booklet.

> *Yeah, [I] read the instructions [on] how to use it, and went and asked different co-workers to give me a brief overview of it because it was the first time I'd seen it.* (Group 3, p.3)

> *Yeah, I was just going to say, some of it was talking to some of the other physios in the department who've been, you know, out for a long time, and have used it before and trying to get information from them.* (Group 1, p.3)

> *People who went on the course reported back.* (Group 2, p.2)

The clinical instructors were describing their strategies to make sense of the information they had gathered, to help them interpret their observations and to make judgments about the students' competencies within the CPI evaluation. The group effort of learning to use the CPI,

seeking advice from more experienced colleagues and comparing evaluation results, illustrates a process that Hager and Butler (1996) suggested can bring uniformity to assessment. "Moreover, if standards can be learned, they can also be shared and brought into some relationship of uniformity with the subjective standards of others with equivalent knowledge and experience" (p. 371).

> *She and I, we work part-time, so we always share our student with someone else... and so either we each take it home and kind of do it. ... so we spend that time and then we get together and see, were we the same.* (Group 2, p.11)

The CPI literature did not mention evaluation of a single student by two clinical instructors so what, if any, influence this has on the Instrument's reliability has not been examined. However, it is a common way for physiotherapy departments to fulfill their clinical education mandate. Clinical instructors "sharing the student," described an approach to evaluation that illustrates Hager and Butler's (1996) concept of negotiating uniformity in assessment. The clinical instructors stated that they always agreed in their evaluations; however, it raises questions about resolution of conflict in the event that two clinical instructors differ significantly in their evaluations, educational philosophies, or feedback about a student's performance.

CLINICAL INSTRUCTOR AND STUDENT INTERACTION

The clinical instructors described discussions with students that they felt influenced their use of the CPI. In some cases, the CIs did not have access to the Manual and others stated that they did not have time to read the instructions. Whatever the situation, participants in each focus group described being influenced by their students' understanding of the VAS scoring.

> *The first student I had had information and she had used [the CPI] once before. She had some written information. I didn't have any written information, I just had the tool. So the written information helped a lot, but then I didn't have a copy of it for future students.* (Group 1, p.2)

Another student's response to a VAS rating resulted in the clinical instructor using a ruler from then on to mark the VAS. The CI stated that she had not had the time to review the instructions before the evaluation and assumed the student was more familiar with the Instrument.

> *I did the evaluation, I put my line where I thought it should be on the continuum... and he'd marked himself as well. And the student said, "You realize that the best I can do is here" and I said, "Oh, why is that?"* (Group 2, p.2)

A student's understanding of the weighting assigned the VAS by the home university lead some clinical instructors to take special care when marking the line scale.

> *One thing that I found, a student told me that they had to get 75 percent or higher to pass, and so that got me taking out the ruler, so I would make sure that my marks were going to average higher than 75 percent. Everyone since that first student has told me that, "No, that's not the case."* (Group 1, p.3)

> *I had a student, however, from a different university where that's how they get their grade in the course, with the university measuring there, and they had to get over about seven, or seven centimetres, or some foolish thing in order to pass on all of those things. So I know with that student, I think she was from [University X], I was much more careful about where I put my line.* (Group 3, p.10)

Not only were the clinical instructors describing their willingness to learn from the students, but also that they valued the students' understanding of the CPI enough to change the way they scored the VAS. Were the students' understandings of the CPI always the correct ones? In only one case did the clinical instructor indicate that subsequent students had refuted a previous student's explanation of the VAS. Nevertheless, the discussions implied a sense of responsibility that CIs felt to evaluate students in a manner consistent with their universities' performance standards. While the clinical instructors did not mention verifying the student's understanding of the CPI, they did want to know more about how the universities used the CPI results. Their experiences with students showed them that interpretation varied among universities.[18] It is the prerogative of the academic programs to "determine what average, total or pattern of item scores is required to pass" (Task Force for CPI, 2002, p.348). Hager and Butler (1996) considered the potential for dialogue between the person being assessed and the evaluator to be a positive feature of evaluations that are based on an assessor's judgement. In this model, "learning and assessing can become much more integrated" (p.371).

[18] In fact, the APTA Task Force was not mandated to develop guidelines for grading (Task Force for CPI, 2002).

The participants in one focus group talked about initially writing their comments in pencil. The comments could then be erased and changes made if either the clinical instructor's interpretation of the performance criteria or opinion of the student's behaviour was altered during their discussion of the evaluation.

> *And what I don't like, is ... I don't like putting my comments down in pen, after having the discussion, because there's supposed to be an interaction and maybe they have something they can say to sway me. So then, I go back, erase all my comments in pencil, and rewrite them in ink.*
> (Group 1, p.7)

This clinical instructor's description of a negotiated evaluation was supported by the other participants in the focus group who also agreed that they prepared the evaluation in pencil and were ready to make changes based on their subsequent discussions with the student. One clinical instructor gave an example of reconsidering a performance criterion that she had initially marked "Not Applicable" after listening to a student's interpretation of the criterion.

Familiarity with the CPI through use

Several clinical instructors specifically mentioned that repeated use of the CPI improved their *comfort* with using the tool. As stated previously, Vendrely and Carter (2004) concluded that prior experience using the CPI did not influence the clinical instructor ratings of student performance, however they did not discuss their results in the context of user satisfaction. Interestingly, clinical instructors experienced in using the Blue MACS reported neither better adherence to the instructions for use nor improved opinions over clinical instructors unfamiliar with the tool (Hrachovy et al., 2000). Yet a moderate correlation between self-reported adherence and the clinical instructors' positive opinion of the Blue MACS lead the authors to recommend training workshops to promote a positive opinion of physical therapy evaluation and to, potentially, influence adherence to the instructions for use.

> *For me it was assumptions and then experience, so having done it the first time, even by the second time, which was the final report, I was beginning to be a bit more clued-in.*
> (Group 2, p.2)

> [A]: *For myself, I've used the tool enough that I know how I choose to use it; so my confidence level, comfort has improved because this is the way I've deemed to use it, rightly or wrongly.*
>
> [B]: *And I think that once you become more familiar with something, your comfort level automatically increases whether or not it should.* (Group 3, p.20)

Two participants in different focus groups, who had been themselves evaluated with the CPI as students, did not indicate that the experience had any impact on their application of the tool. In fact, when the question was raised, one clinical instructor doubted that her clinical instructor, during an international clinical placement, even knew *how* to complete the CPI.

Another clinical instructor remembered wondering as a student how a clinical performance prize could be awarded based on CPI evaluations that she considered to be inconsistently applied from one CI to another. It is little wonder that these two CIs did not feel influenced in their application of the CPI by the experiences they had had as students. There is no published data about what influence being evaluated with the CPI as a student has on a clinical instructor's future application of it. Hrachovy et al., (2000) however, did not find any difference in reported adherence between CIs who were and those who were not graded using the Blue MACS when they were students.

These comments lend support to the suggestion of the CPI Task Force (2002) that training and using the CPI *should* improve clinical instructors' satisfaction. However, the type of training, the length of training sessions, and how training affects both the clinical instructor's application of, and satisfaction with, the CPI are questions that need further study.

Theme Five: The Practicality of the CPI

FORMAT OF THE CPI

Complaints about the CPI's format were related to both its length and the language of the performance criteria. Clinical instructors did not voice concerns with the overall design and layout of the Instrument; however, the sheer number of performance criteria was considered a problem.

> [A]: *Then it's hard, I think, because you get all these 24 questions, then you get the strength area, room for improvement, the comments section ...*
>
> [B]: *...and you've already commented up the ying-yang*
>
> [A]: *It's just too much...*
>
> [C]: *...and that's maybe what you should use at midterm strengths and weaknesses*
> (Group 2, page 13)

This response block illustrates the clinical instructors' frustrations with an evaluation that they felt was too long, "all these 24 questions," and had a structure that resulted in them repeating their observations in a number of sections. This was representative of conversations across the groups about the CPI's composition and CIs' discussions about ways to improve the process.

With respect to the language of performance criteria, clinical instructors cited a number of aspects with which they were dissatisfied. The terminology was not always familiar:

> *No, I think partly it's the language that's used. We don't use similar terminology in Canada, and so you kind of have to reinterpret it for yourself.* (Group 1, p.25)

One clinical instructor described some of the wording as "jargon" and others thought some of the performance criteria were ambiguous. Still other criteria were considered to be:

> *[It's] not relevant to the Canadian situation and I don't answer it — the billing thing.*
> (Group 1, p.10)

Others described performance criteria related to billing as "very American" and thus not applicable to their work settings:[19]

> *I find there are a lot of items that don't apply to us in a general hospital facility, lots of things about financial institutions and, to me, the tool seems very American, that it would fit more into an American institution or ... a more private setting.* (Group 3, p.3)

Clinical instructors also described the performance criteria as being redundant or lacking in focus.

> *There are multiple questions on the treatment; there are multiple questions on the communication style. I look at it and ask, "What are you trying to ask me differently in this [performance criterion]?"* (Group 1, p.9)

It was felt that not only did repetition directly contribute to the overall length of the CPI, but the perception that it was too long resulted in the CIs experiencing evaluation fatigue.

> *Yeah, the redundancy by the end of it, I'm tired and I don't have any comments to say that I haven't said in the previous eighteen questions. I fade at the end.* (Group 1, p.18)

> *There's a lot of override between questions, I'm finding my comments are referring back to Question 9, or refer to Question 6, because we already talked about the issue in previous comments. I think it could be much more focused. By the time I got to Question 22 I've forgotten what I answered in Question 3, and I overlap and there is repetition.* (Group 1, p 5)

One clinical instructor suspiciously suggested that the redundancy of performance criteria was done purposefully to evaluate the clinical instructors' application of the CPI.

This sentiment would imply dissatisfaction with the CPI.

> *Sometimes I think they are trying to trick us up, because it was the same question worded differently.* (Group 2, p.12)

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[19] Since the focus groups were entirely composed of clinical instructors from tertiary healthcare facilities, it was not surprising that they considered the criteria about financial aspects of healthcare delivery to be irrelevant. This is a limitation of the scope of the research and the question about the impact of the evaluation process on clinical instructors in private practice has not been addressed.

While the Summative Comments were considered by some clinical instructors to be redundant and an unnecessary restatement of the comments in the previous 24 performance criteria, several CIs suggested that, in themselves, Summative Comments would be sufficient for an evaluation. Based on the few complaints about the Summative Comments, clinical instructors appeared generally satisfied with them; they prompted clinical instructors to summarize both the positive aspects of a student's performance and to identify directions for improvement.

IMPACT ON THE CLINICAL INSTRUCTORS' TIME

The clinical instructors spoke extensively about the amount of time required to fill out a CPI evaluation, in part attributable to the challenges already mentioned, but also as a direct result of the 24 performance criteria. Most clinical instructors took the evaluations home to complete because it took on average one-to-two hours (see Table 2: Demographic Information, p.41), and if time was available during a regular workday it was usually not conducive to completing a written evaluation. In general, they were unable to write up the evaluations while carrying-out their primary role, that being patient care. Furthermore, the clinical instructors needed a block of uninterrupted time as indicated by words such as "dedicated" and "real time" in order to produce a thoughtful evaluation.

> *I did mine at home. I've always...with this one I need to sit down, think about it, real time and I just don't have the time here at work, so I end up, you know, taking time out at night.* (Group 3, p.9)

> *[I] might have started it at work. You know, I find you might have time to look through it and have a sense, but the actual sitting down, writing your comments in, would happen at home.* (Group 3, p.9)

> *Well, mostly we don't fill them out at work, we take them home. It's not done at work. I don't have time at work to fill it out and do an evaluation, so I would say anywhere from one to two hours, and that's just doing the written evaluation. That's on my own time. Then to go through the evaluation of the student; a lot of the time it's really hard to find the time to do it. You've got patients you need to see, and you know sometimes it's: "I'm sorry we have to do this during lunch hour, because we've got people to see." It is hard to fit it in.* (Group 1, p.8)

While most clinical instructors used personal time to write up evaluations, they found time to discuss the evaluations with their students at some point during the workday. However, when students did not appear to understand the CPI evaluation, discussing it with them took longer than it should have and, again, the 24 performance criteria, their associated comments, and the required explanations contributed to what clinical instructors implied was a burden of the CPI.

> *I find the students aren't very familiar with this form either, especially in their first year rotations, so they don't really understand what some of the questions are asking for. So I find it takes a long time to go through the form... instead of a quick half-hour meeting, sometimes it takes an hour, an hour and a half.* (Group 3, p.9)

It should be noted that the experiences of the clinical instructors evaluating students within a two-to-one collaborative clinical model were different. Only a few clinical instructors had experienced this model but as they became familiar with it, they were able to complete the evaluations during work hours. This was attributed to the students usually assuming their entire caseloads. One clinical instructor, however, stated that having to complete two midterm CPIs and a final CPI within a five-week rotation could deter a CI from offering to take a collaborative placement. She stated that she always had to complete evaluations at home, and while she had not refused to do collaborative placements, the evaluations were the most negative part of them.

While the relevance and language of the performance criteria indirectly influenced the length of the CPI, the clinical instructors attributed the time required to complete an evaluation primarily to the length of the CPI itself. They did not mention dissatisfaction with the CPI or a lack of training as having an impact on the time it took to complete it, and this was consistent with the findings of Hrachovy et al., (2000) who concluded that training did not effect the time required to complete the Blue MACS clinical evaluation.

SUGGESTIONS FOR IMPROVING THE CPI

As clinical instructors discussed what they did not like about the CPI, they also shared their thoughts on what would improve it. Most felt the performance criteria could be streamlined and redundancy eliminated through consolidation of criteria that were not distinctly different.

One clinical instructor suggested that as few as eight criteria might be sufficient; however, the exact number drew little comment. Clinical instructors suggested that the language should reflect the Canadian healthcare system, and that some items were irrelevant because of the assumptions about the privatized American healthcare context. One clinical instructor's statement was resoundingly supported by the group:

> *My recommendation is that they find a way to make it more applicable... my comment is that we need our own [form] that deals with our own healthcare issues.* (Group 3, p.21)

The clinical instructors in a group, who found the 24 performance criteria unnecessarily long and tedious for the midterm evaluation, agreed that the process would be improved if students' strengths and weaknesses were summarized at that point, rather than completing the entire CPI, reviewing each performance criterion, and scoring its VAS. A clinical instructor in another group, who was also frustrated with the length of the CPI, added that the entire evaluation could be adequately conveyed in the "Summative Comments" section at the end. This was not strongly endorsed by the other group participants; however, they were unconvinced that the full CPI was necessary for the mid-term evaluation

The clinical instructors in one group supported a suggestion that a computerized version of the CPI would facilitate the midterm and final evaluation process; it could show numbers on the VAS and clinical instructors could have a cut-and-paste option for comments.

> *To get it into a computer format so that you could even keep a database of your comments, rather then rewrite the book every time, just kind of cut-and-paste and just tweak it the way you want it to, to make it a much more efficient process. And far easier to adapt and change ...Midterm Comments, which is fine, I'll just kind of play with it a little more.* (Group 1, p.8)

Features of other clinical evaluation instruments were occasionally mentioned but there was no consensus in any group that one instrument was superior, and no suggestions that the CPI's use be discontinued — modified, but not discarded.

The message was clear, there were too many performance criteria and the language to describe them resulted in clinical instructors perceiving some to be irrelevant or ambiguous. Rather than ignore performance criteria that were not useful or were not understood, the clinical

instructors completed the CPIs at home where they could consider it and report the student's performance without the interruptions inherent in delivering patient care. While not explicitly stated, this implied their commitment to clinical education and the importance they placed on a student's evaluation.

It was not the purpose of this study to quantify the clinical instructors' level of satisfaction; however, comments expressed bore similarities to those of the CPI Task Force (2002) with respect to time requirements for evaluations. The authors concluded that satisfaction with the time required to complete the CPI reflected not only the time taken to fill-out the form but also the time needed to learn about it, or as the clinical instructors in this study mentioned, to "interpret" or "mould" it and time demands of providing clinical education. The CPI Task Force (2002) concluded that clinical instructors were "generally satisfied with most aspects" of the third version of the CPI. The clinical instructors in this study however, voiced their complaints and made suggestions for improvements that could not be interpreted to indicate an overall satisfaction with the CPI.

Chapter 5

SUMMARY AND CONCLUSIONS

Chapter 5 begins with a summary of the study followed by a brief discussion of the significant findings in each of the themes. In order to be true to the qualitative process of focus group analysis, I reported the data as it related to the emergent themes. Content from the themes that was relevant to the stated purpose of this research has also been reported under specific headings. Recommendations for actions (Creswell, 2003) reflect both the clinical instructors' specific suggestions as well as my own interpretation of the data. The chapter ends with suggestions for future research and concluding remarks.

Summary of the research method

In my experience, physiotherapists working in the public health system are familiar with brainstorming and with group processes for decision-making. Thus, I felt that the use of focus groups was a suitable means of data collection, the groups would facilitate discussion about using the CPI and they would generate ideas that might not surface in a questionnaire survey.

The purpose of the research was to explore clinical instructors' experiences using the CPI with respect to:

- *Descriptions of its impact on their clinical responsibilities*
- *Their perceptions of mastering its application*
- *Their adherence to the guidelines of the CPI*
- *Their opinions about the relevance of the CPI to clinical evaluation*

Three focus groups were conducted, comprising 16 physiotherapist clinical instructors working in three tertiary academic health centres affiliated with Dalhousie University. The group participants were female, and worked in either acute-care or rehabilitation settings. They

managed adult and/or paediatric caseloads, on inpatient or outpatient services. The focus groups consisted of clinical instructors who had used the CPI at least once, with some of the most experienced CIs having used it since its introduction.

The data from each focus group was transcribed verbatim, coded, and analyzed for emergent themes. The following five themes were finally identified:

- *The CPI for summative evaluation*
- *The CPI for formative evaluation*
- *Training to use the CPI*
- *Shared learning*
- *Practicality of the CPI*

Summary of the findings

The clinical instructors were grateful for the focus group discussions because their opinions about using the CPI had not previously been sought. They were frank in describing their interpretations of the CPI, and they openly discussed their different opinions and approaches to using the evaluation form. The clinical instructors were also forthright in their criticisms of the tool.

THE CPI FOR SUMMATIVE EVALUATION

The clinical instructors scored the VAS based on: (a) instructions received during in-service training, (b) consultation with other colleagues, (c) their perceptions of the value placed on scores by PT schools, (d) written instructions for using the CPI, and (e) to a limited extent, their interaction with students during the evaluation review. Clinical instructors stated that the CPI lacked interrater reliability; however, they emphasized that they were consistent in their personal administration of it. In fact, the clinical instructors considered this personal consistency to be one of the strengths of the CPI.

Entry-level performance, as described by the CPI, was not well understood and clinical instructors based their decisions on personal interpretations of performance criteria and personal standards of entry-level practice. The clinical instructors listened to each other's interpretation of the performance criteria and they described a variety of ways of scoring the VAS. Some clinical instructors were unaware of the concept of the VAS as a continuum. There were differing views about whether or not senior students could achieve entry-level when practicing in a novel clinical area. Some CIs felt that students nearing the end of their clinical program could transfer skills from previous clinical experiences, thus achieving entry-level performance. One clinical instructor was adamant that she would not mark students at entry-level when the novel placement required specialized handling techniques.

There was weak support for the view that the VAS adequately measured changes in a student's performance; but CIs stated that, even then, it required the clinical instructors' comments to clarify the score. CIs noted that the change in an average student's performance might not look significant when scored on the VAS and it therefore might not be meaningful for the student.

A few positive comments were made in support of the VAS. Students viewing the graphic as a quantitative representation of their performance might find it useful. This view was not disputed, but clinical instructors who considered the VAS "arbitrary" made no comments in support of its educational value.

The clinical instructors were insightful when they discussed the impact that inconsistent use of the CPI could have for students, clinical instructors and the universities. Their concerns were primarily phrased as questions:

- *How can students learn from contradictory evaluations and what about fairness?*
- *How can clinical instructors look credible if they each interpret and use the CPI differently?*
- *If a student's VAS scores are incongruous with the narrative evaluation, how can PT schools compare student outcomes?*

Clinical instructors agreed that they wanted to know how PT schools used the results of CPIs. They wanted to know if the VAS scores were measured and how they contributed to a student's grade; were facilities or individual CIs' results compared, and was there any comparison of results across PT schools? The clinical instructors wanted reassurance that the time they spent on CPI evaluation was valued by the universities. They did not want to waste either clinical or personal time completing evaluations if the universities were only interested in the bottom line — did the student Pass or Fail.

THE CPI FOR FORMATIVE EVALUATION

All the clinical instructors used the CPI to promote clinical teaching. The performance criteria were credited with reminding clinical instructors to discuss behaviours that might otherwise be overlooked (e.g., "Ethical Practice" or "Health Promotion"), and they gave focus to the mid-term and final evaluations. The clinical instructors also found the CPI helped them to structure the clinical experience; it functioned as a record of completed objectives and the "Not Observed" designation served as a reminder of activities or objectives that remained.

The "Comments" were considered the most useful part of the evaluation because they stimulated a "conversation" between the CIs and their students. Without written comments, "a line on a line" was perceived to be of limited use for students needing to know how to improve their performance. The dialogue resulted in clinical instructors and students sharing their perspectives on the students' knowledge and skills, as well as their individual interpretations of the performance criteria.

Clinical instructors understood the Red Flag criteria should be more heavily-weighted than the other performance criteria, but they had differing opinions about how they were supposed to be scored.

A number of criteria were suggested to be of questionable relevance; they included "Legal Practice," "Wellness and Health Promotion," "Promoting the Physiotherapy Profession," "Billing" and "Community Involvement." On the other hand, CIs expressed concern that the CPI had insufficient performance criteria to evaluate the psychomotor skills — assessment and treatment techniques that they considered to be essential elements for clinical practice.

Training to Use the CPI

The CPI is an extensive clinical evaluation tool and the majority of the CIs had not received any training in its use; reasons included: (a) limited in-service opportunities, (b) the time constraints of clinical practice, (c) initial exposure to the CPI through international students,[20] and (d) inadequate PT departmental communication.

Nevertheless, the CIs were willing to attend training sessions, and they even suggested annual refresher sessions for those already experienced using the CPI. They preferred interactive in-services provided by the ACCE to reading instruction manuals, and teleconferencing was suggested as an efficient alternative to face-to-face training.

Shared Learning

Observations made by some clinical instructors highlighted how shared learning, which is an integral process in the physiotherapy community of practice, also improved their understanding of the CPI. In some cases, the CIs learned from one another's experience and sometimes from their students when they discussed the evaluation results. Some clinical instructors became more comfortable after repeated use of the CPI and they indicated that sharing their experience might benefit others still learning to use it.

That CIs would consider the focus groups themselves to be a learning experience was unanticipated. Yet throughout the sessions, clinical instructors asked for clarification about aspects of the CPI that they had not understood. They explained where and how they had come to use it as they did. The focus groups themselves provided an illustration of CIs negotiating the meaning of the CPI.

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[20] Some clinical instructors were introduced to the CPI by students in American physiotherapy programs before the instrument was introduced locally.

The focus groups identified several practical problems with the CPI. The form was considered unnecessarily long; this was due, in part, to perceived redundancies among the performance criteria. The ambiguity and overlap of some of the performance criteria led to CIs feeling they were being asked to evaluate the same item more than once. The requirement to complete the entire CPI for both the mid-term and final evaluations was considered a burden, given the form's length.

The CIs perceived the Instrument to have a negative impact on their personal time, as few had time to complete it during their workday.[21] CIs who did 2:1 collaborative clinical models differed in their views of the burden of clinical evaluation using the CPI. Several of these CIs "usually" had time to complete the CPIs at work while another "never" had time to prepare the evaluations during the workday.

The stress of completing the CPI four times in a five-week period was a major negative factor in considering whether to instruct two students in a collaborative education model. In the case of two part-time CIs and one student, the process of comparing their individual evaluations was felt to be too lengthy.

The language used in the CPI was considered to reflect more strongly healthcare delivery in the United States (with the assumption of a largely privatised system) than healthcare delivery in Canada. This language needed to be interpreted to fit the Canadian healthcare context. The CIs complained of jargon and excessive wordage reducing clarity of the intent of certain performance criteria.

The Research Questions

The focus groups were conducted using a semi-structured questionnaire based on the four original research questions. However, a strength of group interviews is the potential for unanticipated issues to arise. Rather than structure the analysis around the original questions, I

[21] One CI suggested the redundancy of performance criteria contributed to the thoroughness of the evaluation process.

coded the data based on topics generated by the groups and structured the analysis around the emergent themes. In this section, I report the findings as they relate to the original questions.

Impact of the CPI on clinical responsibilities

Using the CPI appeared to have more of an impact on clinical instructors' personal time than on their clinical responsibilities. With the exception of several clinical instructors who did 2:1 collaborative models and completed the evaluations at work, most clinical instructors filled out the CPIs at home. A computerized version of the CPI was suggested as a more efficient way to write up the CPI. Presumably, this would facilitate completing the CPI at work.

Without exception, the midterm and final evaluations were discussed with students during clinical hours. Training could be done during the workday provided it was not too lengthy and clinical instructors had sufficient notice to rearrange their caseloads.

All of the clinical instructors delivered the CPI evaluation during the workday, but they usually did not have the time to prepare the evaluation while at work. Thus, the CPI had a significant impact on clinical instructors' personal time, a finding that was not identified in the literature.

Perceptions of mastering the application of the CPI

No clinical instructors spoke about achieving mastery in their application of the CPI. A small number of clinical instructors were content with their use of the evaluation and stated that they used it consistently. However, the concerns raised about the impact of inconsistent use were not statements of clinical instructors confident that they had mastered using the instrument. In addition, their agreement overall for additional training and/or sessions to discuss the CPI indicated a willingness to learn more and a desire to improve their application of the instrument.

Adherence to the guidelines of the Instrument

When asked about their adherence to the CPI, some clinical instructors indicated that they had no choice but to complete it. However, their conversations about applying the evaluation

actually provide better insight into how they attempted to adhere. They spoke about moulding or manipulating performance criteria to make them relevant to their area of practice. They used the "Not Observed" designation rather than simply skipping over the criteria that they considered "Not Applicable" and, in some cases, they accepted a student's interpretation. They frequently reported completing the CPI at home because the busy clinical environment was not conducive to the concentration required to consider the evaluation. The comments implied that the clinical instructors adhered to the CPI's format within their understanding of its intended use. However, their differing interpretations of some performance criteria and inconsistent strategies for scoring the VAS could not be considered to indicate their overall adherence to the instructions for using the CPI.

Opinions on the relevance of the CPI to clinical evaluation

The clinical instructors' comments about the relevance of the performance criteria to clinical evaluation were extensive and crossed the themes of formative and summative evaluation and practicality. The number of performance criteria contributed directly to the length and, subsequently, the time it took to complete an evaluation. The Red Flag criteria were more easily evaluated than the other performance criteria and were generally acknowledged to be more important than the other criteria. Irrelevant performance criteria were identified and comments were made that there was redundancy and insufficient attention to psychomotor skills necessary for practice. Thus, the clinical instructors felt that the CPI was unnecessarily long, that clinical performance could be adequately evaluated with fewer performance criteria overall, and the attention to the psychomotor skills necessary for practice was inadequate.

Recommendations

The following are suggestions that would be specific to the participants in the focus groups. The Clinical Education Coordinators at each of the three participating facilities, in conjunction with the ACCE, could assist in implementing the recommendations.

1. Provide information about Dalhousie University School of Physiotherapy's utilization of CPI results. The majority of physiotherapy students in the Atlantic Region healthcare

facilities attend Dalhousie University. Therefore, clarification about its use of CPI results could address a significant number of clinical instructors' questions and concerns.

2. Offer additional training/refresher sessions about using the CPI. These should be interactive and could be done by distance education. Questions or specific content areas could be requested of participants in preparation for the sessions. Sessions should not exceed one hour in length.
3. Investigate the option of using an on-line version of the CPI.
4. Update clinical instructors about current research or planned revisions to the CPI. This type of material is easily disseminated through physiotherapy departments' internal email systems.
5. Evaluate students' readiness to use the CPI for self-evaluation. Initially, this could be done retrospectively as part of the interviews that follow third year clinical experiences. It could result in recommendations that could be acted on before students begin their Year IV clinical education experiences.

Topics for Future research

TRAINING:

1. Undertake a larger-scale study to evaluate the training needs of clinical instructors in applying the CPI.
2. Study the impact of training on clinical instructors' application of the CPI.

FEEDBACK FROM UNIVERSITIES:

3. Study is needed to determine if clinical instructors want feedback about the CPI results and/or the way academic programs utilize them.

THE CPI STRUCTURE AND CONTENT

4. Larger-scale evaluation of the psychometric properties of the CPI is indicated. Research could take many forms, since there a growing body of research and Canadian academic institutions have been collecting CPI results for at least six years.

5. Undertake a satisfaction survey of CIs to determine how their application of the Instrument could be improved.
6. Emerging use of collaborative clinical education models may have implications for the reliability of clinical evaluation using a form developed when one-to-one instruction models were the norm.

Concluding Remarks

The results of this research cannot be generalized to all clinical instructors. The views expressed represent those of a defined group of clinical instructors, but may be similar to the experiences and the challenges of other colleagues in their respective facilities.

The methods of scoring the VAS were influenced by a range of interpretations of the performance criteria and by subjective judgements that were often inconsistent with other clinical instructors or with the instructions for using the CPI. Clinical instructors, however, felt that they were personally consistent in their use of the CPI and that their comfort administering it improved with use.

In the absence of adequate training to use the CPI, clinical instructors described interactions with students and colleagues that represented a process of shared learning. There was strong support for using the CPI for formative evaluation, while support for its value as a summative tool was mild at best. The lack of feedback from the PT schools about their use of CPI results left clinical instructors wondering how the results were used, and if their efforts to complete it were of value. The CPI was criticized for: (a) its unfamiliar terminology; (b) redundant, or even irrelevant, performance criteria; and (c) its unnecessary length.

The evaluation of students' performance in the context of patient care delivery is complex and clinical instructors' understanding and application of the CPI should not be left to chance. Group training sessions were strongly favoured by the CIs as an efficient and effective format to learn about and share their experiences using the Instrument. The variety of interpretations and strategies by which clinical instructors marked the VAS raises questions about the

reliability and validity of the CPI, and suggests the need to interpret the VAS scores cautiously. The clinical instructors perceived their administration of the CPI to be carried out in isolation from PT schools, from which they received little feedback about the analysis to which the CPI results were subjected. This research resulted in tangible recommendations that may improve the PT clinical instructors' application of the CPI and identified useful areas to direct future research.

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A written summary of the key areas discussed will be forwarded to each participant within four weeks of the focus group. Participants will be invited to contact me to discuss any points that they think do not reflect the content or opinions expressed during the focus group.

Confidentially:
The need for confidentiality will be stated at the beginning of the focus group. Participants will be asked not to repeat information and opinions discussed during the focus group once they leave. Nonetheless, there is always a risk that the focus group discussion may be repeated outside of the group and, therefore, confidentiality cannot be guaranteed. You may choose not to participate in the group discussion at any point and you may withdraw from the study at any time. You will be asked to sign a Consent Form immediately prior to participating in a focus group.

The focus group audiotapes may be transcribed to enable the analysis of the responses. Your name will not be used on any of the transcripts or in any reports. The tapes will be kept in a secure cabinet in my home office and will be destroyed five years after publication of the study.

You may contact my thesis supervisor, Dr. Joseph Murphy, at (902) 494-2567 if you have concerns about this study.

Potential benefits of the study
If you participate in this study you will have the opportunity to share your experiences with the CPI in a group discussion format. The CPI is protected by copyright so this research will not result in changes to it; however, your comments will add to the understanding of how clinical instructors use the instrument within the constraints of a demanding healthcare setting. Furthermore, your contributions may result in recommendations for improving the instrument's practical application.

Though the focus group data will be analyzed for my thesis, I will also offer to present the study results to the local physiotherapy community through departmental in-service programs.

Please contact me to indicate your willingness to participate in a focus group. I would be happy to answer any questions you may have about this study.

Thank you for taking the time to consider participating in this project.

Yours sincerely,

Gail A. Creaser, BScPT

Appendix B

CONSENT TO PARTICIPATE

An exploration of Clinical Instructors' experiences and perceptions of the Physical Therapy Clinical Performance Instrument

Principal Investigator:
Gail Creaser, BScPT

Focus Group Consent Form

I have read the explanation of this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I understand that participation in the focus group is voluntary and that I am free to withdraw from the study at any time, and that I can refuse to answer any question. I also realize that after the study all records of my participation will be destroyed.

I understand that a research assistant will be taking notes to highlight points of the **focus group discussion** such as interview questions that stimulated greater interest or unanticipated questions for the upcoming focus group or topics about which there were broadly varying opinions. The notes are intended to assist the principal investigator with the initial post-focus group debriefing and data analysis. No information will be recorded to personally identify focus group participants.

I consent to participate in the study by taking part in one focus group:

☐ Yes ☐ No

I consent to the audiotaping of the focus group:

☐ Yes ☐ No

I consent to being directly quoted in the research; any reference to me will by pseudonym only:

☐ Yes ☐ No

I choose to use the following pseudonym: _____

You may contact the Chair, University Research Ethics Board, Mount Saint Vincent University at (902) 457-6350 if you have any concerns to express about this study.

Participant's Name (printed):

_____

Participant's Signature: _____ **Date:** _____

Researcher's Signature: _____ **Date:** _____

Appendix C

DEMOGRAPHIC QUESTIONAIRE

An exploration of Clinical Instructors' experiences and perceptions of the Physical Therapy Clinical Performance Instrument

Principal Investigator:
Gail Creaser, BScPT

Please answer the following questions about yourself. Your signature is not required.

1. Number of years of clinical experience: ☐

2. In what type of setting do you clinically instruct students?

   ☐ General Hospital
   ☐ Private Practice
   ☐ Rehabilitation Centre
   ☐ Other: _____

3. In which practice area(s) do you clinically instruct students? (check all that apply)

   ☐ Paediatrics
   ☐ Adults
   ☐ Geriatrics
   ☐ Inpatient Service
   ☐ Out patient Service
   ☐ Mixed
   ☐ Acute
   ☐ Rehabilitation
   ☐ Long-term Care
   ☐ Other: _____

4. Approximate number of students that you have evaluated using the CPI: ☐

5. How long does it **usually** take you to fill-out the CPI? ☐

6. Have you attended a CPI training in-service?
   ☐ No ☐ Yes

7. As a student, were you evaluated using the CPI?
   ☐ No ☐ Yes

8. Have you used a clinical evaluation instrument **other than** the CPI?
   ☐ No ☐ Yes if *yes*, what was it _____

Appendix D

INTERVIEW GUIDE

[Sample questions only]

1) **Training to use the CPI** - *Thinking specifically about the training you have had in the use of the CPI:*

   a) How did you find the content of the training in-service?
   b) How did you find the scheduling of the training in-service?
   c) If you did not have a training session, how did you learn to use the CPI?
   d) How do you think experience using the CPI affects your use of the CPI?
   e) What changes, if any, would you suggest to the training CPI training?
   (**Probe**: additional modes of delivery, frequency of training in-services)

2) **Format of the CPI** - *With respect to the layout and format of the CPI:*

   a) How do you find the CPI for overall clarity of layout?
   b) What do you like or dislike about the layout?
   c) How do you find clarity of the instructions for the:
      i) visual analogue scale?
      ii) comments section?
   d) What is you opinion of the time taken to complete the CPI?
   (**Probe**: time to fill-out the CPI, time to deliver the evaluation.)

3) **Accuracy and relevance of the CPI** - *The assumption is that: the performance criteria of the CPI represent those required for effective practice across the various clinical environments:*

   a) What do you think leads clinical instructors to closely adhere to or stray from the CPI guidelines?
   b) How do you use Visual Analogue Scale, how useful do you find it to be?
   (**Probe**: Is it useful as a basis for grading?)
   c) How do you use the comments section for each of the performance criteria?
   (**Probe**: Do you record observations (a) for the purpose of feedback; (b) to elaborate on the level of competence indicated on the VAS?)
   d) How do you consider the performance criteria of the CPI to relate to the realities of clinical practice?
   (**Probe**: Is it comprehensive?)
   e) How does the CPI enable you to provide an accurate report of a student's level of competence?
   f) How sensitive do you consider the CPI to be to the student's changing performance?

Appendix E

PHYSICAL THERAPIST CLINICAL PERFORMANCE INSTRUMENT

PHYSICAL THERAPIST CLINICAL PERFORMANCE INSTRUMENT

American Physical Therapy Association
Division of Education
1111 North Fairfax Street
Alexandria, VA 22134-1488

December 1997

DISCLAIMER AS TO THE USE OF THE INSTRUMENT

The American Physical Therapy Association ("APTA") disclaims any and all responsibility for the use to which any other person may put the Physical Therapist Clinical Performance Instrument ("Instrument").

In particular, the Instrument is not designed or intended to control the manner in which any clinical education site may assess or evaluate any student's clinical performance or the grading policy of any educational institution.

The APTA has no control over the use of the Instrument by any clinical education site or educational institution, and the APTA assumes no responsibility to any party (including clinical education sites, educational institutions, and students) for the use to which the Instrument may be put by any person other than the APTA.

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[Publication No. E-42]

INSTRUCTIONS FOR USING THE PHYSICAL THERAPIST CLINICAL PERFORMANCE INSTRUMENT

INTRODUCTION

A physical therapist (PT) student assessment system evaluates knowledge, skills, and attitudes and incorporates multiple sources of information to make decisions about readiness to practice. Sources of information may include clinical performance evaluations of students, classroom performance evaluations, students' self-assessments, peer assessments, and patient[g] assessments. The system is intended to enable clinical educators and academic faculty to obtain a comprehensive perspective of students' progress through the curriculum and competence to practice at entry-level. The uniform adoption of this instrument will ensure that all practitioners entering practice have demonstrated a core set of clinical attributes.

A clinical performance instrument is a central component of the assessment system and is used by the academic institution to ensure students' readiness for practice. This instrument has undergone pilot and field studies and is designed to evaluate student clinical performance in relation to entry-level competence *(see Tab—Studies Investigating the Physical Therapist Clinical Performance Instrument)*. It is applicable to a broad range of clinical settings and throughout the continuum of clinical learning experiences. Every performance criterion in this instrument is important to the overall assessment of clinical competence, and most criteria are observable in every clinical experience. It is strongly recommended that all criteria be rated whenever possible. If this instrument is altered for use in such situations, it is in violation of copyright.

COMPONENTS OF THE FORM

There are 24 performance criteria, with visual analog scales (VASs) for each criterion. Sample behaviors are included in shaded boxes for each criterion. Space for comments is provided, as well as boxes to indicate when performance is "of significant concerns," "with distinction," or "not observed."

Superscript "g" — A superscript "g" after a word indicates that the word is defined in the glossary.

Performance Criteria — Items numbered 1-24 define performance areas to be evaluated. In the aggregate, these items describe all essential aspects of professional practice of a PT clinician performing at entry-level.

Red Flag Item — A flag (☐) to the left of a performance criterion indicates a "red-flag" item. The five "red-flag" items (numbered 1-5) are considered foundational elements in clinical practice. Difficulty with a performance criterion that is a red-flag item warrants immediate attention and a telephone call to the ACCE, and may include remediation and/or dismissal from the clinical experience.

Visual Analog Scale[g] — Individual competencies in the CPI are evaluated using a VAS. This provides a convenient way to indicate a student's level of performance, ranging from "novice clinical performance"[g] to "entry-level performance."[g] Placement of a mark on the line indicates the student's current level of performance on a particular competency relative to entry-level performance.

The continuous nature of the rating matches the continuous nature of the student's educational[8] experience and skill development. The VAS provides maximum sensitivity to fine gradations (0 to 100-mm line) in performance that might be missed by a cruder numerical rating scale (eg, five-point scale). This is particularly important for the evaluation of individual students. The lack of rating numbers or other labels also avoids the inherent "grade" values that often accompany use of scale points and instead emphasizes the distance from the entry-level criterion.

Sample Behaviors

The sample of commonly observed behaviors (denoted with lower-case letters in shaded boxes) for each criterion may be used to guide assessment of students' competence relative to the performance criteria. Given the uniqueness and complexity of clinical practice, the behaviors provided are not meant to be an exhaustive list. There may be additional or alternative behaviors relevant and critical to a given clinical setting. Consequently, all listed behaviors need not be present to rate students at entry-level on the VAS. Sample behaviors are not listed in order of priority, but most behaviors are presented in logical order.

Significant Concerns Box

Checking this box indicates that the student's performance on this criterion is unacceptable and places the student at risk of failing this clinical experience. When the Significant Concerns Box is checked, written comments are required and a phone call (☎) is placed to the ACCE. A box is provided for midterm and final assessments.

With Distinction Box

Checking this box indicates that the student's performance on this criterion **exceeds expectations for the clinical experience.** Record in the appropriate Midterm (M) and/or Final (F) box.

Not Observed Box

Checking this box indicates that the student's performance on this criterion was not observed. Record in the appropriate Midterm (M) and/or Final (F) box. The Not Observed Box rarely should be used. If you are considering marking this box relative to a specific criterion, please carefully review the sample behaviors located in the shaded box for that criterion.

Comments

Narrative comments should be provided by the clinical instructor[6] (CI) to elaborate on or clarify students' performance ratings. Comments are encouraged for each performance criterion. These comments may include critical incidents, problem or deficit areas, and/or exemplary areas of performance. **Comments are required when the Significant Concerns Box has been checked, when a student's performance is below entry-level at the end of the final clinical experience, and for deficiencies in psychomotor skills. Comments are also required when the "with distinction" box is checked.**

Summative Comments

The summative comments section provides a mechanism for the clinical instructor to identify, clarify, and highlight students' overall performance as related to their areas of strength, areas needing improvement, and other relevant comments during midterm and final evaluations. These comments should be based on the student's performance relative to objectives for the clinical experience. For intermediate clinical experiences, a student rated below entry-level on the VAS may, in fact, meet or exceed objectives for that experience.

USING THE FORM

Proper use of the CPI requires not only knowledge of all its components, but consideration of how to record your observations and interpretations of the students performance. Appendix A provides three examples of how one performance criterion might be evaluated at midterm and final evaluations.

Clinical Instructor

The CI(s) will assess a student's performance and complete the instrument at midterm and final evaluation periods. Sources of information may include, but are not limited to, CIs, other PTs, PTAs, other professionals, patients, and students. Methods of data collection may include direct observation, videotapes, documentation[s] review, role[s] playing, interviews, standardized practical activities, portfolios, journals, computer-generated tests, and patient and outcome[s] surveys. Clinical educators should feel free to use multiple sources and methods to assess student clinical performance. The CI reviews the completed instrument formally with the student at midterm evaluation and at the end of the clinical experience and signs the signature page (27) following each evaluation.

Student

Student(s) assess their own performance on a separate copy of the instrument. The student reviews the completed form with the CI at midterm evaluation and at the end of the clinical experience and signs the signature page (27) following each evaluation.

Recording Performance Rating

The same VAS is used for midterm and final evaluations. One vertical line is placed on the VAS at the appropriate point indicating the mid-term evaluation rating, and one vertical line is placed on the VAS at the appropriate point indicating the final evaluation rating. Label the mid-term evaluation line with an "M" above the line, and label the final evaluation line with an "F" above the line. Once the form is complete, there will be two vertical lines on the VAS, one for the midterm evaluation rating and one for the final evaluation rating *(see Appendix A —Examples)*. A new CPI will be used for each clinical experience.

✓ Marking

Marking the VAS requires you to use your professional judgment to determine whether the student's performance is consistent with entry-level practice in your specific setting. Before judging each of the performance criteria, consider each of the five performance dimensions listed on the next page:

Quality[5] of care
Supervision/guidance required[5]
Consistency[5] of performance
Complexity of tasks/environment[5]
Efficiency[5] of performance

These performance dimensions are common to all types and levels of performance. However, your expectations may change in each dimension as the student progresses toward entry into professional practice. As a reminder, the performance dimensions to be considered when marking the VAS are provided with each performance criteria on the bottom of the page.

Performance Dimensions

Quality refers to the degree of skill or competence demonstrated, the relative effectiveness of the performance, and the extent to which outcomes meet the desired goals.[5] A continuum of quality might range from demonstration of limited skill to a highly skilled performance. A student who exhibits high skill in performance but low efficiency or effectiveness would be marked lower on the VAS than one whose performance combined high skill with high efficiency or effectiveness.

Supervision/guidance required refers to the level and extent of assistance required by the student to achieve entry-level performance. As a student progresses through clinical education experiences,[5] the degree of monitoring needed is expected to progress from full-time monitoring or cuing for assistance to independent performance with consultation.[5] The degree of supervision and guidance may vary with the complexity of the patient or environment.

Consistency refers to the frequency of occurrences of desired behaviors related to the performance criterion. As a student progresses through clinical education experiences, consistency of quality performance is expected to progress from infrequently to routinely.

Complexity of tasks/environment refers to the multiple requirements of the patient or environment. The complexity of the environment can be altered by controlling the number and types of elements to be considered in the performance, including patients, equipment, issues, etc. As a student progresses through clinical education experiences, the complexity of tasks/environment should increase, with fewer elements being controlled by the CI.

Efficiency refers to the ability to perform in a cost-effective and timely manner. As the student progresses through clinical education experiences, efficiency should progress from a high expenditure of time and effort to economical and timely.

Anchors

Novice clinical performance indicates a student who provides quality care only with uncomplicated patients and a high degree of supervision.

Without close supervision, the student's performance and clinical decision making are inconsistent and require constant monitoring and feedback. This is typically a student who is inexperienced in clinical practice or who performs as though he or she has had limited or no opportunity to apply academic knowledge or clinical skills.

Entry-level performance on the VAS indicates a student who consistently and efficiently provides quality care with simple or complex patients and in a variety of clinical environments. The student usually needs no guidance or supervision except when addressing new or complex situations.

Examples of Completed Items

Appendix A provides three completed examples of a student's performance on the same criterion—Examination. Two examples illustrate competent and noncompetent student performances on final clinical experiences, and one example portrays satisfactory student performance during an intermediate clinical experience. These examples assist the evaluator in understanding how to mark the VAS and related boxes, how to substantiate markings with comments that serve to clarify and objectively describe student performance, how to use the five performance dimensions and sample behaviors in evaluating students, and how the level of clinical experience may influence performance expectations.

Reducing Rater Bias

All rating scales (numerical and VAS) are susceptible to similar response biases. The most common problems are halo bias and leniency. Halo bias occurs when a global impression of the student (eg, general liking) influences specific ratings. This leads individual behaviors to be more highly correlated than is actually true and tends to artificially increase or decrease all evaluations in response to the overall impression. This bias is avoided by careful attention to the specific behavioral criteria required for each individual competency and by conscious suppression of general impressions. Leniency is the tendency to avoid harsh evaluations, usually to avoid the discomfort associated with delivering bad news and its affect on a student's morale. This bias can be reduced by recognizing that students may achieve the entry-level criterion more efficiently if they are provided with accurate performance feedback.

Academic Coordinator of Clinical Education (ACCE)

The ACCE reviews the completed form at the end of the clinical experience and assigns a grade according to institution policy. A number of variables may be considered when assigning a grade and determining the success of the experience.

Determining a Grade

Each academic institution determines what constitutes satisfactory performance. Despite the lack of quantitatively explicit numbers, the VAS can be scored for grading purpose. Each line is 100 mm in length, allowing a number from 0 to 100 to be assigned easily to any mark. Grading decisions may consider: (a) the relative weighting or

importance of each item, (b) the level of student performance along the 100-mm VAS lines as a sum (aggregate) of all performance criteria scores or average VAS scores, (c) whether or not "significant concerns" or "with distinction" boxes are checked, and (d) the CI's narrative comments.

For example, an institution may assign a passing grade on a second clinical experience where the following conditions were met; (1) entry-level (ie, a score of 100) was achieved on each of the "red flag" items, (2) no "significant concerns boxes" were checked, and (3) the average score for the 24 VAS items was at least 75 (maximum score of 100). Academic institutions may want to develop grading schemes based on normative data accumulated over time on their own students at various levels of experience. It is expected that a student will achieve entry-level on every performance criterion, signifying readiness to enter the profession, by the end of the final clinical experience.

Support Services

For support regarding the use of the CPI for information not found in the Directions, read the section in the manual titled "Using the Clinical Performance Instrument" and "Responses to Frequently Asked Questions Pertaining to the Physical Therapist Clinical Performance Instrument" or review responses to frequently asked questions (FAQs) on APTA's Home Page (http://www.apta.org) under Education. You may also wish to contact the academic institution or individual ACCE, and/or contact APTA's Department of Physical Therapy Education.

CLINICAL PERFORMANCE INSTRUMENT
PHYSICAL THERAPIST STUDENT

STUDENT INFORMATION

Student's Name: _____

Date of Clinical Experience: _____ **Course Number:** _____

ACADEMIC PROGRAM INFORMATION

Name of Academic Institution: _____

Address: _____
(Department) (Street)

_____
(City) (State) (Zip)

Phone: (____)_____ext._____ **Fax:** (____)_____

E-mail: _____

CLINICAL EDUCATION SITE INFORMATION

Name of Clinical Site: _____

Address: _____
(Department) (Street)

_____
(City) (State) (Zip)

Phone: (____)_____ext._____ **Fax:** (____)_____

E-mail: _____

Clinical Instructor's Name: _____

Clinical Instructor's Name: _____

Clinical Instructor's Name: _____

Center Coordinator of Clinical Education's Name: _____

CLINICAL PERFORMANCE INSTRUMENT
PHYSICAL THERAPIST STUDENT

1. Practices in a safe manner that minimizes risk to patient,[s] self, and others.

M ☐ F ☐ — Not Observed | Novice Clinical Performance[s] | Entry-Level Performance[s] | M ☐ F ☐ — With Distinction

SAMPLE BEHAVIORS

a) Observes health and safety regulations.
b) Maintains safe working environment.
c) Recognizes physiological and psychological changes in patients and adjusts treatment[s] accordingly.
d) Demonstrates awareness of contraindications and precautions of treatment.
e) Requests assistance when necessary.
f) Uses acceptable techniques for safe handling of patients.
g) Protects welfare of self, patient, and others in emergency situations.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

Midterm ☐ **Final** ☐

Midterm Comments: _____

Final Comments: _____

QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

2. Presents self in a professional manner.

M ☐ F ☐ ——————————————— M ☐ F ☐

Not Observed | Novice Clinical Performance | Entry-Level Performance | With Distinction

SAMPLE BEHAVIORS
a) Accepts responsibility for own actions.
b) Is punctual and dependable.
c) Completes scheduled assignments in a timely manner.
d) Wears attire consistent with expectations of the practice setting.
e) Demonstrates initiative.
f) Abides by the policies and procedures of the practice setting.
g) Adapts to change.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

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Final Comments: _____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

3. **Demonstrates professional behavior during interactions with others.**

M ☐ F ☐		M ☐ F ☐
Not Observed	Novice Clinical Performance ——— Entry-Level Performance	With Distinction

SAMPLE BEHAVIORS

a) Maintains productive working relationships with patients, families, CI, and others.
b) Treats others with positive regard, dignity, respect, and compassion.
c) Maintains confidentiality.
d) Demonstrates behaviors that contribute to a positive work environment.
e) Accepts criticism without defensiveness.
f) Manages conflict in constructive ways.
g) Makes choices after considering the consequences to self and others.
h) Assumes responsibility for choices made in situations presenting legal or ethical dilemmas.
i) Maintains patient privacy and modesty (eg, draping, confidentiality).

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

Final Comments: _____

QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

4. Adheres to ethical practice standards.

M ☐ F ☐ — M ☐ F ☐

Not Observed	Novice Clinical Performance	Entry-Level Performance	With Distinction

SAMPLE BEHAVIORS	
a)	Abides by relevant ethical codes and standards of practice guidelines.
b)	Adheres to institutional policy and procedures.
c)	Identifies situations in which ethical questions are present.
d)	Reports violations of ethical practice.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

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Final Comments: _____

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5. **Adheres to legal practice standards.**

M ☐ F ☐			M ☐ F ☐
Not Observed	Novice Clinical Performance	Entry-Level Performance	With Distinction

SAMPLE BEHAVIORS

a) Abides by pertinent state (province) and federal laws and regulations, including those applying to state licensure laws.
b) Identifies situations in which legal questions are present.
c) Reports violations of laws governing practice of physical therapy.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

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Final Comments: _____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

6. **Communicates in ways that are congruent with situational needs.**

M ☐ F ☐ — Not Observed

Novice Clinical Performance ——— Entry-Level Performance

M ☐ F ☐ — With Distinction

SAMPLE BEHAVIORS	
a)	Communicates, verbally and nonverbally, in a professional and timely manner.
b)	Initiates communication in difficult situations.
c)	Selects the most appropriate person(s) with whom to communicate.
d)	Communicates respect for the roles and contributions of all participants in patient care.
e)	Listens actively and attentively to understand what is being communicated by others.
f)	Demonstrates professionally and technically correct verbal communication.
g)	Communicates using nonverbal messages that are consistent with intended message.
h)	Interprets and responds to the nonverbal communication of others.
i)	Evaluates effectiveness of his/her own communication and modifies communication accordingly.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

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Final Comments: _____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

7. Produces documentation[g] to support the delivery of physical therapy services.

M ☐ F ☐ — Not Observed | Novice Clinical Performance — Entry-Level Performance | M ☐ F ☐ — With Distinction

SAMPLE BEHAVIORS

a) Selects relevant information to document the delivery of physical therapy patient care.
b) Documents all aspects of physical therapy care, including screening,[g] examination,[g] evaluation,[g] plan of care,[g] treatment,[g] response to treatment, discharge planning, family conferences, and communication with others involved in delivery of patient care.
c) Produces documentation that follows guidelines and format required by the practice setting.
d) Documents patient care consistent with guidelines and requirements of regulatory agencies and third-party payers.
e) Produces documentation that is accurate, concise, timely, and legible.
f) Demonstrates professionally and technically correct written communication skills.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

Final Comments: _____

QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

8. **Adapts delivery of physical therapy care to reflect respect for and sensitivity to individual differences.**

M ☐ F ☐ _____ M ☐ F ☐

Not Observed | Novice Clinical Performance | Entry-Level Performance | With Distinction

SAMPLE BEHAVIORS

a) Exhibits sensitivity to differences in race, creed, color, gender, age, national or ethnic origin, sexual orientation, and disability or health status[6] in:

- communicating with others,
- developing plans of care,
- implementing plans of care.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

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Final Comments: _____

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9. **Applies the principles of logic and the scientific method to the practice of physical therapy.**

M ☐ F ☐ _____ M ☐ F ☐

Not Observed | Novice Clinical Performance | Entry-Level Performance | With Distinction

SAMPLE BEHAVIORS

a) Presents cogent and concise arguments or rationale for clinical decisions.
b) Makes clinical decisions within the context of ethical practice and informed consent.
c) Utilizes information from multiple data sources to make clinical decisions.
d) Seeks disconfirming evidence in the process of making clinical decisions.
e) Critically evaluates published research articles relevant to physical therapy and applies to clinical practice.
f) Participates in clinical research.
g) Describes sources of error in the collection of clinical data.
h) Demonstrates an ability to make clinical decisions in ambiguous situations.
i) Distinguishes practices based on traditional beliefs from practices that are scientifically based.
j) Uses appropriate outcome measures in the delivery and assessment of ongoing patient care.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments: _____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

10. Screens[g] patients using procedures to determine the effectiveness of and need for physical therapy services.

M ☐ F ☐ |_____| M ☐ F ☐

Not Observed	Novice Clinical Performance		Entry-Level Performance	With Distinction

SAMPLE BEHAVIORS

a) Identifies critical signs and symptoms that signal appropriateness for physical therapy examination.[s]
b) Selects appropriate screening procedures.
c) Conducts screening.
d) Interprets screening findings.
e) Based on screening, determines appropriateness for physical therapy or referral to other providers.
f) Performs physical therapy screening in a technically competent[g] manner.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments: _____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

11. Performs a physical therapy patient examination.[g]

M ☐ F ☐ | M ☐ F ☐

Not Observed | Novice Clinical Performance | Entry-Level Performance | With Distinction

SAMPLE BEHAVIORS

a) Selects reliable and valid physical therapy examination methods relevant to the chief complaint, results of screening, and history[g] of the patient.
b) Obtains accurate information by performing the selected examination methods.
c) Adjusts examination according to patient response.
d) Performs examination minimizing risk to the patient, self, and others involved in the delivery of the patient's care.
e) Performs physical therapy examination procedures in a technically competent manner.

SEE APPENDIX B FOR LIST OF TESTS AND MEASURES.[g]

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

Final Comments: _____

QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

12. **Evaluates clinical findings to determine physical therapy diagnoses[g] and outcomes[g] of care.**

M ☐ F ☐ | Not Observed | Novice Clinical Performance | Entry-Level Performance | M ☐ F ☐ With Distinction

SAMPLE BEHAVIORS

a) Synthesizes examination data to complete the physical therapy evaluation.
b) Interprets clinical findings to establish a diagnosis within the practitioner's knowledge base.
c) Identifies competing diagnoses which must be ruled out to establish a diagnosis.
d) Explains the influence of pathological, pathophysiological, and pharmacological processes on the patient's movement system.
e) Identifies other medical, social, or psychological problems influencing physical therapy and not identified through diagnosis of a patient's problem.
f) Uses clinical findings and diagnosis to establish a prognosis[g] within the practitioner's knowledge base.
g) Performs regular re-examinations of patient status.
h) Performs regular evaluations of the effectiveness of patient treatment.
i) Evaluates changes in patient status.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments: _____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

13. Designs a physical therapy plan of care that integrates goals,[g] treatment,[g] outcomes, and discharge plan.

M ☐ F ☐ | Not Observed | Novice Clinical Performance | Entry-Level Performance | M ☐ F ☐ With Distinction

SAMPLE BEHAVIORS

a) Establishes goals and desired functional outcomes[g] that specify expected time durations.
b) Establishes a physical therapy plan of care in collaboration with the patient, family, caregiver,[g] and others involved in the delivery of health care services.
c) Establishes a plan of care consistent with the examination and evaluation.
d) Establishes a plan of care minimizing risk to the patient and those involved with the delivery of the patient's care.
e) Establishes a plan of care designed to produce the maximum patient outcome(s) utilizing available resources.
f) Adjusts the plan of care in response to changes in patient status.
g) Selects intervention[g] strategies to achieve the desired outcomes.
h) Establishes a plan for patient discharge in a timely manner.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: _____

Final Comments: _____

QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

14. Performs physical therapy interventions[g] in a competent manner.

M ☐ F ☐ | M ☐ F ☐

Not Observed | Novice Clinical Performance | Entry-Level Performance | With Distinction

SAMPLE BEHAVIORS

a) Performs effective, efficient, fluid, and coordinated movement in providing technically competent[s] interventions for patients.
b) Performs interventions consistent with the plan of care.
c) Provides intervention in a manner minimizing risk to self, to the patient, and to others involved in the delivery of the patient's care.
d) Uses intervention time efficiently and effectively.
e) Adapts intervention to meet the individual needs and responses of the patient.

SEE APPENDIX B FOR LIST OF INTERVENTIONS.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments: _____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

15. **Educates others (patients, family, caregivers, staff, students, other health care providers) using relevant and effective teaching methods.**

M ☐ F ☐ — M ☐ F ☐

Not Observed	Novice Clinical Performance	Entry-Level Performance	With Distinction

SAMPLE BEHAVIORS

a) Identifies and establishes priorities for educational needs in collaboration with the learner.
b) Designs educational activities to address identified needs.
c) Conducts educational activities using a variety of instructional strategies as needed.
d) Evaluates effectiveness of educational activities.
e) Modifies educational activities considering learner's needs, characteristics, and capabilities.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments: _____

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16. Participates in activities addressing quality of service delivery.

M ☐ F ☐ | M ☐ F ☐

Not Observed | Novice Clinical Performance | Entry-Level Performance | With Distinction

SAMPLE BEHAVIORS

a) Seeks information regarding quality of care rendered by self and others under their supervision.
b) Provides recommendations for developing or modifying guidelines based on outcome measures, effectiveness studies, and clinical observations.
c) Follows established guidelines for the delivery of physical therapy services (eg, critical/clinical pathways, protocols).
d) Participates in quality assurance, peer review, utilization review, etc.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

Final Comments:_____

QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

17. **Provides consultation[g] to individuals, businesses, schools, government agencies, or other organizations.**

M ☐ F ☐ | Not Observed | Novice Clinical Performance | Entry-Level Performance | M ☐ F ☐ With Distinction

SAMPLE BEHAVIORS

a) Determines need for consultation services.
b) Recommends consultation services.
c) Uses knowledge and expertise to help others solve physical therapy-related problems.
d) Provides consultation services such as ergonomic evaluations, school system assessments, and corporate environmental assessments.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments:_____

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18. Addresses patient needs for services other than physical therapy as needed.

M ☐ F ☐ | Not Observed | Novice Clinical Performance | Entry-Level Performance | M ☐ F ☐ With Distinction

SAMPLE BEHAVIORS

a) Determines needs of and available resources for patients.
b) Recommends referrals based on expertise and effectiveness of providers.
c) Advocates for appropriate patient services and resources.
d) Assists patient in accessing resources.
e) Coordinates services of other health care providers.[8]

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments:_____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

19. **Manages resources (eg, time, space, equipment) to achieve goals of the practice setting.**

M ☐ F ☐ _____ M ☐ F ☐

Not Observed	Novice Clinical Performance	Entry-Level Performance	With Distinction

SAMPLE BEHAVIORS

a) Sets priorities for the use of resources to maximize outcomes.
b) Functions[8] within the organizational structure of the practice setting.
c) Uses time effectively.
d) Coordinates physical therapy with other services to facilitate efficient and effective patient care.
e) Schedules patients, equipment, and space.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments:_____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

20. Incorporates an understanding of economic factors in the delivery of physical therapy services.

M ☐ F ☐ — Not Observed | Novice Clinical Performance — Entry-Level Performance | M ☐ F ☐ — With Distinction

SAMPLE BEHAVIORS

a) Adapts physical therapy services to the economic factors of the health care environment.
b) Submits accurate patient charges on time.
c) Acts in a fiscally responsible manner.
d) Provides recommendations for equipment and supply needs.
e) Adheres to reimbursement guidelines established by payers.
e) Negotiates with reimbursement entities for changes in individual patient services.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

Final Comments:_____

QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

21. Uses support personnel according to legal standards and ethical guidelines.

M ☐ F ☐ — Not Observed | Novice Clinical Performance — Entry-Level Performance | M ☐ F ☐ — With Distinction

SAMPLE BEHAVIORS

a) Determines physical therapy-related tasks that can be legally and ethically delegated.
b) Delegates physical therapy related tasks to facilitate effective and efficient patient care.
c) Informs the patient of the decision to delegate the physical therapy-related care and the rationale for delegating.
e) Delegate physical therapy related tasks to the appropriate support personnel.
f) Demonstrates respect for the contributions of support personnel.
g) Monitors the care delivered by support personnel.
h) Provides regular feedback to support personnel.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

Final Comments:_____

22. Demonstrates that a physical therapist has professional/social responsibilities beyond those defined by work expectations and job description.

M ☐ F ☐ | M ☐ F ☐

Not Observed | Novice Clinical Performance | Entry-Level Performance | With Distinction

SAMPLE BEHAVIORS

a) Demonstrates a willingness to alter schedule to accommodate patient needs and facility requirements.
b) Participates in special events organized in the practice setting related to patients and the delivery of care.
c) Participates in professional organizations and service groups.
d) Promotes the profession of physical therapy.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments:_____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

23. Implements a self-directed plan for professional development and lifelong learning.

M ☐ F ☐ — M ☐ F ☐

Not Observed	Novice Clinical Performance	Entry-Level Performance	With Distinction

SAMPLE BEHAVIORS

a) Demonstrates an awareness of own strengths and limitations.
b) Seeks guidance as necessary to address limitations.
c) Modifies behavior based on self-evaluation and constructive feedback.
d) Establishes realistic goals in a plan for professional development.
e) Participates in learning experiences within the practice setting.
f) Participates in opportunities for professional growth.
g) Discusses progress of professional growth.
h) Seeks opportunities to learn.
i) Accepts responsibility for continuous professional learning.
j) Demonstrates knowledge of current professional issues and practice.
k) Periodically assesses own professional development.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

Final Comments:_____

QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

24. Addresses primary and secondary prevention,[g] wellness,[g] and health promotion[g] needs of individuals, groups, and communities.

M ☐ F ☐ | M ☐ F ☐

Not Observed	Novice Clinical Performance	Entry-Level Performance	With Distinction

SAMPLE BEHAVIORS

a) Educates patients or other individuals, groups, or communities on health promotion, prevention, and wellness by providing information on impairment, disease, disability, and health risks related to age, gender, culture, and lifestyle.
b) Incorporates the concept of self-responsibility in wellness and health promotion.
c) Proposes procedures for monitoring effects of health promotion, prevention, or wellness programs.
d) Describes potential health problems addressed by physical therapy in individuals, groups, and communities.
e) Performs screening programs appropriate to physical therapy.

Significant Concerns: Check below if performance on this criterion places student at risk of failing this clinical experience.

☎ **Midterm** ☐ **Final** ☐

Midterm Comments:_____

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Final Comments:_____

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QUALITY OF CARE ♦ SUPERVISION /GUIDANCE REQUIRED ♦ CONSISTENCY OF PERFORMANCE ♦ COMPLEXITY OF TASKS/ENVIRONMENT ♦ EFFICIENCY OF PERFORMANCE

SUMMATIVE COMMENTS

Given this student's level of academic and clinical preparation and the objectives for this clinical experience, identify strengths and areas needing improvement. If this is the student's final clinical experience, comment on the student's overall performance as a physical therapist.

Areas of Strength:
Midterm:
Final:
Areas Needing Improvement:
Midterm:

Areas Needing Improvement (continued)
Final:
Other Comments:
Midterm:
Final:

EVALUATION SIGNATURES

MIDTERM EVALUATION

We have read and discussed this evaluation.

Signature of Student	**Date**
Academic Institution	
Evaluator Name (Print)	**Position/Title**
Signature of Evaluator (1)	**Date**
Evaluator Name (Print)	**Position/Title**
Signature of Evaluator (2)	**Date**

FINAL EVALUATION

We have read and discussed this evaluation.

Signature of Student	**Date**
Academic Institution	
Evaluator Name (Print)	**Position/Title**
Signature of Evaluator (1)	**Date**
Evaluator Name (Print)	**Position/Title**
Signature of Evaluator (2)	**Date**

GLOSSARY[1]

CAREGIVER: One who provides care, often used to describe a person other than a health care professional.

CASE MANAGEMENT: The coordination of patient care or client activities.

CLIENT: An individual who is not necessarily sick or injured but who can benefit from a physical therapist's consultation, professional advice, or services. A client also is a business, a school system, or other entity that may benefit from specific recommendations from a physical therapist.

CLINICAL EDUCATION EXPERIENCES: These experiences comprise all of the formal and practical "real-life" learning experiences provided for students to apply classroom knowledge and skills in the clinical environment. Experiences would include those of short and long duration (eg, part-time, full-time, internships) and those that provide a variety of learning experiences (eg, rotations on different units within the same practice setting, rotations between different practice settings within the same health care system) to include comprehensive care of patients across the life span and related activities.

CLINICAL INDICATIONS: The patient factors (eg, symptoms, impairments, deficits) that suggest that a particular kind of care (examination, intervention) would be appropriate.

CLINICAL INSTRUCTOR (CI): Individual at the clinical education site who directly instructs and supervises students during their clinical learning experiences. CIs are responsible for facilitating clinical learning experiences and assessing students' performance in cognitive, psychomotor, and affective domains as related to entry-level clinical practice and academic and clinical performance expectations.

COMPLEXITY OF TASKS/ENVIRONMENT: Multiple requirements of the patient or environment (eg, simple, complex). The complexity of the environment can be altered by controlling the number and types of elements to be considered in the performance, including patients, equipment, issues, etc. As a student progresses through clinical education experiences, the complexity of tasks/environment should increase, with fewer elements controlled by the CI.

CONSISTENCY: The frequency of occurrences of desired behaviors related to the performance criterion (eg, infrequently, occasionally, routinely). As a student progresses through clinical education experiences, consistency of quality performance is expected to progress from infrequently to routinely.

CONSULTATION: The provision, by a physical therapist, of professional opinion or of advice.

CONSUMER: One who acquires, uses, or purchases goods or services; any actual or potential recipient of health care.

CRITICAL INQUIRY: The process of applying the principles of scientific methods to read and interpret professional literature, participate in research activities, and analyze patient care outcomes, new concepts, and findings.

DIAGNOSIS: Both the process and the end result of the evaluation of information obtained from the patient examination. The physical therapist organizes the evaluation information into defined clusters, syndromes, or categories to determine the most appropriate intervention strategies for each patient.

DOCUMENTATION: All written forms of communication provided related to the delivery of patient care, to include written correspondence, electronic record keeping, and word processing.

EDUCATION: Knowledge or skill obtained or developed by a learning process; a process designed to change behavior by formal instruction and/or supervised practice, which includes teaching, training, information sharing, and specific instructions.

EFFICIENCY: The ability to perform in a cost-effective and timely manner (eg, inefficient/slow, efficient/timely). As the student progresses though clinical education experiences, efficiency should progress from a high expenditure of time and effort to economical and timely.

ENTRY-LEVEL PERFORMANCE: A physical therapist clinician performing at entry-level utilizes critical thinking to make independent decisions concerning patient needs and provides quality care with simple or complex patients in a variety of clinical environments. The physical therapist clinician at the professional level needs no guidance or supervision except when addressing new or complex problems.

EVALUATION: A dynamic process in which the physical therapist makes clinical judgments based on data gathered during the examination.

EXAMINATION: The process of obtaining a patient history, performing relevant systems reviews, and selecting and administering specific tests and measures.

FUNCTION: The special, normal, or proper action of any part or organ; an activity identified by an individual as essential to support physical and psychological well-being as well as to create a personal sense of meaningful living; the action specifically for which a person or thing is fitted or employed; an act, process, or series of processes that serve a purpose; to perform an activity or to work properly or normally.

FUNCTIONAL LIMITATION: A restriction of the ability to perform a physical action, activity, or task in a typically expected, efficient, or competent manner.

GOAL: The long-term statement(s) that define the patient's expected level of performance at the end of the rehabilitation process; the functional outcomes of therapy, indicating the amount of independence, supervision, or assistance required and the equipment or environmental adaptation necessary to ensure adequate performance. Desired outcomes may be stated as long-term or short-term as determined by the needs of the patient and the setting.

HEALTH CARE PROVIDER: A person or organization offering health services directly to patients or clients.

HEALTH PROMOTION: Activity designed to develop healthy behaviors in such areas as exercise, diet, avoidance of drug abuse, etc.

HEALTH STATUS: The level of an individual's physical, mental, affective, and social function: health status is an element of well-being.

HISTORY: An account of past and present health status that includes the identification of complaints and provides the initial source of information about the patient. The history also suggests the patient's ability to benefit from physical therapy services.

INTERVENTION: The purposeful and skilled interaction of the physical therapist or physical therapist assistant[s] with the patient or client, using various methods and techniques to produce changes in the condition of the patient or client. Intervention has three components: direct intervention; instruction of the patient or client and family; and coordination, communication, and documentation.

NOVICE CLINICAL PERFORMANCE: A physical therapist student who provides quality care only with uncomplicated patients and a high degree of supervision. Without close supervision, the student's performance and clinical decision making are inconsistent and require constant monitoring and feedback. This is typically a student who is inexperienced in clinical practice or who performs as though he or she has had limited or no opportunity to apply academic knowledge or clinical skills.

OBJECTIVE: A measurable behavioral statement of an expected response or outcome; something worked toward or striven for; a statement of direction or desired achievement that guides actions and activities.

OUTCOME: The result of physical therapy management expressed in five areas: prevention and management of symptom manifestation, consequences of disease (impairment, disability, and/or role limitation), cost-benefit analysis, health-related quality of life, and patient satisfaction. A successful outcome includes improved or maintained physical function[s] when possible and slowed decline in function where the status quo cannot be maintained, and is considered meaningful by the patient.

OUTCOMES ANALYSIS: A systematic examination of patient outcomes in relation to selected patient variables (eg, age, gender, diagnosis, interventions performed); outcomes analysis may be used in quality assessment, economic analysis of practice, etc.

PATIENT: An individual who is receiving direct intervention for an impairment, functional limitation, disability, or change in physical function and health status resulting from injury, disease, or other causes; an individual receiving health care services.

PHYSICAL FUNCTION: Fundamental components of health status describing the state of those sensory and motor skills necessary for mobility, work, and recreation.

PHYSICAL THERAPIST: A licensed health care professional who offers services designed to preserve, develop, and restore maximum physical function.

PHYSICAL THERAPIST ASSISTANT: An educated health care provider who performs physical therapy procedures and related tasks that have been selected and delegated by the supervising physical therapist.

PLAN OF CARE: A plan that specifies the: long-term and short-term outcome/goal; predicted level of maximal improvement; specific interventions to be used; duration and frequency of the intervention required to reach the outcome/goal; and criteria for discharge.

PRESENTING PROBLEM: The specific dysfunction that causes an individual to seek attention or intervention (ie, chief complaint).

PREVENTION: Activities concerned with slowing or stopping the occurrence of both mental and physical illness and disease; minimizing the effects of a disease or impairment on disability; reducing the severity or duration of an illness. *Primary*: Preventing the development of disease in a susceptible or potentially susceptible population through specific measures such as immunization and through general

health promotion efforts. *Secondary:* Seeking to shorten the duration of illness, reduce severity of diseases, decrease the possibility of contagion, and limit sequelae through early diagnosis and prompt therapy. *Tertiary:* Attempting to limit the degree of disability and promoting rehabilitation and restoration of patients with chronic and irreversible diseases.

PROGNOSIS: The determination of the level of maximal improvement that might be attained by the patient and the amount of time needed to reach that level.

QUALITY: The degree of skill or competence demonstrated (eg, limited skill, high skill), the relative effectiveness of the performance (eg, ineffective, highly effective), and the extent to which outcomes meet the desired goals. A continuum of quality might range from demonstration of limited skill and effectiveness to a highly skilled and highly effective performance.

ROLE: A behavior pattern that defines a person's social obligations and relationships with others (eg, father, husband, son).

SCREENING: Determining the need for further examination or consultation by a physical therapist or for referral to another health care professional. *Cognitive screening:* Briefly assessing a patient's thinking process (eg, ability to process commands).

SUPERVISION/GUIDANCE REQUIRED: Level and extent of assistance required by the student to achieve clinical performance at entry-level. As a student progresses through clinical education experiences, the degree of monitoring needed is expected to progress from full-time monitoring/direct supervision or cuing for assistance to initiate, to independent performance with consultation. The degree of supervision and guidance may vary with the complexity of the patient or environment.

TECHNICALLY COMPETENT: Correct performance of a skill.

TESTS AND MEASURES: General methods and techniques used to conduct an examination.

TREATMENT: One or more interventions used to ameliorate impairments, functional limitations, or disability or otherwise produce changes in the health status of the patient; the sum of all interventions provided by the physical therapist to a patient during an episode of care.

VISUAL ANALOG SCALE (VAS): A scale used to measure any variable that allows the patient to indicate a degree of that variable by pointing to a visual representation of its intensity. In the case of this clinical performance instrument, the VAS represents the line or continuum of performance, ranging from "novice student clinical performance" to "entry-level clinical performance."

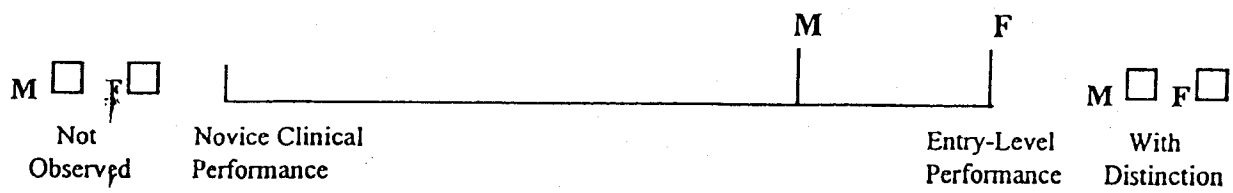
WELLNESS: A concept that embraces a proactive, positive approach to good health. Wellness advocates seek to increase a person's level of health as a preventive measure to guard against future disease or pathology.

[1]Most of the terms defined in this glossary have been taken from the *Guide to Physical Therapist Practice, Part One: A Description of Patient Management.* Alexandria, VA: American Physical Therapy Association; May 15, 1997:61-67.

APPENDIX A

EXAMPLE: COMPLETED ITEM FOR FINAL EXPERIENCE (Competent)

11. Performs a physical therapy patient examination.[c]



SAMPLE BEHAVIORS

a) Selects physical therapy examination methods relevant to the chief complaint, results of screening, and history[s] of the patient.
b) Obtains accurate information by performing the selected examination methods.
c) Adjusts examination according to patient response.
d) Performs examination minimizing risk to the patient, self, and others involved in the delivery of the patient's care.
e) Performs physical therapy examination procedures in a technically competent manner.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: He occasionally requires guidance in selecting all appropriate examination methods based on the patient's history and initial screening (Kelly, Wong). He consistently performs examinations skillfully. He had some difficulty and required assistance in completing the examination on an extremely complex patient with dementia and multiple diagnoses (Lucci). He is almost always able to complete his examination of all but the most complex patients in the allotted amount of time.

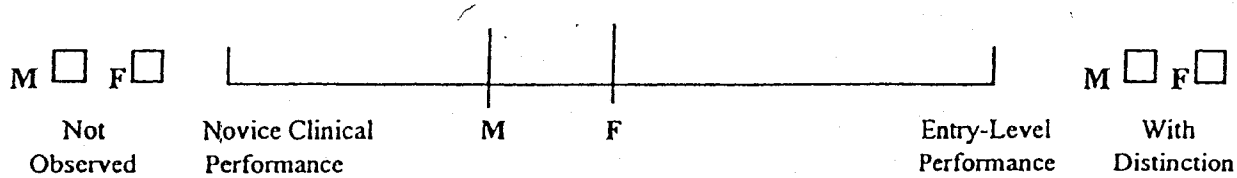
***Explanation for where the line is marked on the VAS for this example: The majority of the student's examinations are of high quality and performed efficiently. However, as the patients became very complex, the student required increased supervision to achieve an accurate outcome. Therefore, the mark was placed approximately 3/4 of the way toward entry-level.*

Final Comments: He consistently selects all appropriate examination methods based on the patient's history and initial screening and performs the examinations skillfully. He has demonstrated the ability to examine a number of complex patients with multiple diagnoses with only occasional input from the CI (Kowalski, Stein, White). He now consistently completes his examinations in the allotted amount of time.

***Explanation for where the line is marked on the VAS for this example: The student is now able to consistently perform high-quality and efficient examinations with only occasional guidance. The ability to examine complex patients has significantly improved. The student is now at entry-level.*

EXAMPLE: COMPLETED ITEM FOR FINAL EXPERIENCE (Not Competent)

11. Performs a physical therapy patient examination.[t]



SAMPLE BEHAVIORS

a) Selects physical therapy examination methods relevant to the chief complaint, results of screening, and history[s] of the patient.
b) Obtains accurate information by performing the selected examination methods.
c) Adjusts examination according to patient response.
d) Performs examination minimizing risk to the patient, self, and others involved in the delivery of the patient's care.
e) Performs physical therapy examination procedures in a technically competent manner.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☒ **Final** ☒

Midterm Comments: She frequently requires guidance to select all appropriate examination methods because she does not ask relevant background questions (Blackwell, Martinez, Williams). She selects examination methods that are inappropriate for the patient's diagnosis[s] and condition (Roark, Able) and is unable to explain her choices when questioned. She is not accurate in performing many examination techniques. For example, she frequently fails to align the goniometer correctly and tends to place patients in uncomfortable positions during testing. She is frequently unable to complete her examinations in the allotted amount of time.

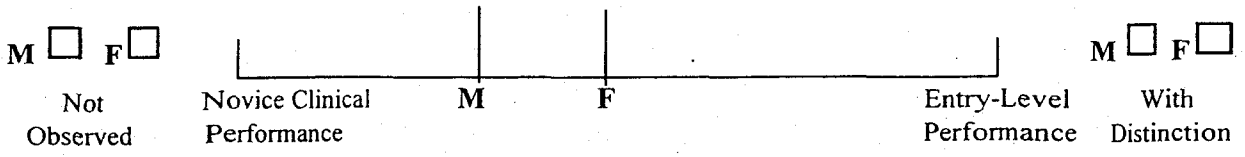
***Explanation for where the line is marked on the VAS for this example: To perform an accurate examination, this student on a final experience requires almost constant supervision. She has problems selecting appropriate examinations and performing them correctly. Her lack of skill in performing examinations causes her to exceed the time allotted for this activity. Therefore, the line on the VAS was placed about 1/3 of the way towards entry-level. These behaviors cause concern about the student's ability to successfully complete the clinical experience. Thus, the "Significant Concerns Box" was checked and the ACCE was called.*

Final Comments: She is more accurate in performing the required examination techniques, including goniometry. She still requires frequent guidance to select all appropriate examination methods and continues to occasionally select examination methods that are inappropriate for the patient's diagnosis and condition. Although she has improved somewhat, she still is often unable to complete her examinations in the allotted amount of time.

***Explanation for where the line is marked on the VAS for this example: Although the student has improved in some technical skills, she is inefficient and continues to require a high level of supervision in order to perform an appropriate examination. The score on the VAS was moved further along towards entry-level to acknowledge the noted improvements, but her overall performance in this area still remains below entry-level. Again, the Significant Concerns Box" was checked.*

EXAMPLE: COMPLETED ITEM FOR INTERMEDIATE EXPERIENCE

11. Performs a physical therapy patient examination.[5]



SAMPLE BEHAVIORS

a) Selects physical therapy examination methods relevant to the chief complaint, results of screening, and history[6] of the patient.
b) Obtains accurate information by performing the selected examination methods.
c) Adjusts examination according to patient response.
d) Performs examination minimizing risk to the patient, self, and others involved in the delivery of the patient's care.
e) Performs physical therapy examination procedures in a technically competent manner.

Significant Concerns: **Check below if performance on this criterion places student at risk of failing this clinical experience.**

☎ **Midterm** ☐ **Final** ☐

Midterm Comments: Consistent with his level of academic preparation, he is able to select appropriate examination methods for simple patients but requires extensive input from the CI for patients with more complex neurological problems (Stupanski, Shah). Only occasionally requires supervision to perform examination methods accurately (sensory testing Wilson). Sometimes overtires patients during the examination. He is usually able to complete his examinations in the allotted amount of time.

Explanation for where the line is marked on the VAS for this example: Since this is an intermediate-level clinical experience, it is not expected that the student will perform at entry-level on this performance criterion. The patient load selected for the student was based on the objectives[5] for this clinical experience. The student is able to consistently and efficiently perform an examination with minimal supervision on uncomplicated patients. When patients have more complex responses, the student's need for supervision increases. Therefore, the VAS was scored at about 1/3 of the way toward entry-level.

Final Comments: He is able to perform complete and accurate examinations of straightforward patients with orthopedic problems. He is beginning to be able to describe movement patterns often observed in patients with neurological disorders but continues to require frequent input from the CI to complete an examination on this type of patient. He now consistently monitors the patient's fatigue level during the examination. He consistently completes his examinations in the allotted amount of time.

Explanation for where the line is marked on the VAS for this example: With the patient load designed to meet the objectives for this experience, the student performs high-quality treatments consistently and efficiently. He still requires supervision to examine more complex patients, but this is expected at this level. The VAS score has moved toward entry-level (approximately ½ way) to reflect his growth in meeting the objectives of this experience.

APPENDIX B
TESTS AND MEASURES AND INTERVENTIONS[1]

Tests and Measures (see Performance Criterion #11)

Tests and measures (listed alphabetically) include, but are not limited to, the following:

a) aerobic capacity
b) anthropometric characteristics
c) arousal, mentation, and cognition
d) assistive and adaptive devices
e) community and work (job, school, or play) reintegration
f) cranial nerve integrity
g) environmental, home, and work barriers
h) ergonomics and body mechanics
i) gait, assisted locomotion, and balance
j) integumentary integrity
k) joint integrity and mobility
l) motor function
m) muscle performance (including strength, power, and endurance)
n) neuromotor development and sensory integration
o) orthotic, protective, and supportive devices
p) pain
q) posture
r) prosthetic requirements
s) range of motion
t) reflex integrity
u) self-care and home management (including activities of daily living and instrumental activities of daily living)
v) sensory integration (including proprioception and kinesthesia)
w) ventilation, respiration, and circulation

Interventions (see Performance Criterion #14)

Interventions (listed alphabetically) include, but are not limited to the following:

a) airway clearance techniques
b) debridement and wound care
c) electrotherapeutic modalities
d) functional training in community and work (job, school, or play) reintegration (including instrumental activities of daily living, work hardening, and work conditioning)
e) functional training in self-care and home management (including activities of daily living and instrumental activities of daily living)
f) manual therapy techniques
g) patient-related instruction
h) physical agents and mechanical modalities
i) prescription, application, and as appropriate fabrication of adaptive, assistive, orthotic, protective, and supportive devices and equipment
j) therapeutic exercise (including aerobic conditioning)

[1]*Evaluative Criteria for Accreditation of Education Programs for the Preparation of Physical Therapists.* Commission on Accreditation in Physical Therapy Education, APTA: Alexandria, VA; 1996:29-30.

APPENDIX C

This table provides the physical therapist academic program with a mechanism to relate the performance criteria from the *Clinical Performance Instrument* with the *Evaluative Criteria for Accreditation of Education Programs for the Preparation of Physical Therapists.*

Evaluative Criteria for Accreditation of PT Programs	Clinical Performance Instrument Performance Criteria (PC)
Communication (3.8.3.1.)	**Communication** (PC #6)
Individual and Cultural Differences (3.8.3.2.)	**Individual and Cultural Differences** (PC #8)
Professional Behavior (3.8.3.3.) (3.8.3.4.) (3.8.3.5.) (3.8.3.6.) (3.8.3.7.)	**Professional Behavior** (PC #3) **Legal Practice** (PC #5) **Ethical Practice** (PC #4) **Quality of Service Delivery** (PC #16) **Clinical Education Experience** (no specific PC)
Critical Inquiry and Clinical Decision-Making (3.8.3.8.) (3.8.3.9.-11.) (3.8.3.12.)	**Quality of Service Delivery** (PC #16) **Critical Inquiry** (PC #9) **Not found in CPI** (research requirement)
Education (3.8,3.13.)	**Education** (PC #15)
Professional Development (3.8.3.14.)	**Career Development/Lifelong Learning** (PC #23)
Screening (3.8.3.15.)	**Screening** (PC #10)
Examination (3.8.3.16.)	**Examination** (PC #11, #12, and # 7)
Evaluation (3.8.3.17.)	**Evaluation/Diagnosis/Prognosis** (PC #12)
Diagnosis (3.8.3.18.-19.) (3.8.3.20.)	**Evaluation/Diagnosis/Prognosis** (PC #12) **Communication** (PC #6) **Documentation** (PC #7)
Prognosis (3.8.3.21.)	**Evaluation/Diagnosis/Prognosis** (PC #12)
Plan of Care (3.8.3.22.-26.)	**Plan of Care** (PC #13)

Evaluative Criteria for Accreditation of PT Programs	Clinical Performance Instrument Performance Criteria (PC)
Intervention (3.8.3.27.) (3.8.3.28.) (3.8.3.29.) (3.8.3.30.) (3.8.3.31.)	**Safety** (PC #1) **Treatment/Intervention** (PC #14) **Education** (PC #15) **Documentation** (PC #7) **Safety** (PC #1)
Outcomes Measurement (3.8.3.32.)	**Plan of Care** (PC #13)
Prevention and Wellness (3.8.3.33.-34.)	**Wellness and Health Promotion** (PC #24)
Management in Various Care Delivery Systems (3.8.3.35.-37.) (3.8.3.38.) (3.8.3.39.) (3.8.3.40.)	**Management of Patient Services** (PC #18) **Plan of Care** (PC #13) **Resource Management** (PC #19) **Wellness and Health Promotion** (PC #24)
Administration (3.8.3.41.-42.) (3.8.3.43.) (3.8.3.44.-45.)	**Support Personnel** (PC #21) **Resource Management** (PC #19) **Fiscal Management** (PC #20)
Consultation (3.8.3.46.)	**Consultation** (PC #17)
Social Responsibility (3.8.3.47.-49.)	**Professional/Social Responsibilities** (PC #22)

HISTORICAL PERSPECTIVE

PREAMBLE

Assessment of student performance in the clinical setting is an essential and integral part of ensuring safe and effective patient care. The Task Force on Student Clinical Performance Instruments was charged in March 1994 by the American Physical Therapy Association (APTA) Board of Directors to develop a system to measure physical therapist and physical therapist assistant student performance during clinical education experiences. This manual and instrument relate only to physical therapist students. A positive climate of change and a growing consensus about the need to be consistent in student clinical performance evaluation prompted the commitment to develop and promote a new system for use by physical therapy educators.

The assessment system is intended to be available for widespread use and to achieve the goals of consistency, feasibility, and sensitivity to the needs of practice in our current health care delivery system. The assessment system accurately defines and advances what the profession believes represents entry-level practice. Adoption of this instrument is voluntary, however, the use of a uniform instrument may be preferred and/or strongly recommended to achieve consistency throughout the profession. Periodic reevaluation of the instrument is essential to remain valid and contemporary.

RATIONALE FOR DEVELOPING THE INSTRUMENT

To construct this instrument, multiple documents were used as reference points for describing current and forward-looking practice expectations of the physical therapist. Documents reviewed included draft versions of *A Normative Model of Physical Therapist Professional Education (Version 1997), Evaluative Criteria for Accreditation of Education Programs for the Preparation of Physical Therapists (October 30, 1996), Guide to Physical Therapist Practice, Part One: A Description of Patient/Client Management (1997),* and numerous samples of performance evaluation instruments currently in use by clinical faculty within and external to physical therapy. A distinct effort was made to ensure that the language of the Clinical Performance Instrument is consistent with the language of these resources.

The development process was aimed at achieving an instrument that will:

- protect society, assist professional decision making, and facilitate skill development;
- be accepted and owned by a wide community of physical therapists and physical therapist assistants;
- be applicable to a broad range of practice settings and academic levels;
- meet standards of reliability and validity;
- be sensitive to the interests of both academic and clinical communities;
- assess essential areas of performance for physical therapist students, including cognitive, psychomotor, and affective domains; and
- be responsive to changes in physical therapy practice expectations within a dynamic health care system.

An initiative such as this is considered essential because it serves the interests of society, academic and clinical communities, employers, and students. The development process creates a conversation within the physical therapy profession about current and future physical therapy practice and the relationship of physical therapists to physical therapist assistants in practice. The outgrowth of this work is intended to enhance the health and viability of clinical education by responding to an expressed need and to the changing needs and demands of clinical practice. Society and the profession benefit from endeavors that clarify standards, encourage high levels of performance, support consistency among a wide variety of educators, and communicate professional expectations for practitioners accurately to the public.

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