

CHAPTER 2: HISTORY AND DESCRIPTION OF THE QEP TOPIC FOCUS

Introduction

In January 2006, TCC initiated a project aimed at improving the quality of the graduates of the Doctor of Chiropractic (DC) Program. This became known as the TCC Graduate Project, and the group formed to spearhead this project was named the TCC Graduate Task Force. The task force is composed of a group of faculty from the basic and clinical science divisions, teaching faculty from the clinics division, and several administrators with educational backgrounds. The initial charge to the task force was to review the current Council on Chiropractic Education (CCE) required clinical competencies (Table 2.1) and ensure that these competencies were sufficient to train a graduate for current chiropractic practice. The task force then identified 11 additional clinical competencies thought to be “essential attributes” of a graduate (Table 2.2).

Table 2.1: CCE Clinical Competencies

History Taking	Physical Examination	Neuromusculoskeletal Examination	Psychosocial Assessment	Diagnostic Studies
Diagnosis	Case Management	Chiropractic Adjustment or Manipulation	Emergency Care	Case Follow-Up and Review
Record-Keeping	Doctor-Patient Relationship	Professional Issues	Wellness	Ethics and Integrity

Table 2.2: TCC Clinical Competencies

Business Aspects of Practice	Communication	Complementary and Alternative Medicine	Evidence Based Practice/Research
Health Care Informatics	Nutritional Counseling	Public Health	Quality Assurance/Quality Improvement
Referral/Collaborative Care	Special Populations	Physical Therapeutic Procedures	

The task force then utilized all of the identified competencies to create a living document that details three essential components: (1) what the TCC graduate doctor is able to do; (2) how the TCC graduate doctor approaches clinical practice; and (3) a clear definition of the TCC graduate doctor as a professional. Each of the three components is characterized by domains, learning outcomes, assessment strategies and related clinical competencies.

Process for Topic Identification

During the development of this document, the task force identified three areas that need more emphasis in the curriculum: clinical reasoning, communication, and evidence-based practice. It was determined that these three areas merited consideration as potential Quality Enhancement Plan (QEP) topics. The evidence for pursuing these choices was derived from analysis of both internal and external performance measures. These measures included performance on the National Board of Chiropractic Examiners

(NBCE) examinations, parts II and III; Clinical Skills Competency Exams (CSCE) I and II; and the Intern Global Assessment (IGA). The CSCE I, CSCE II, and IGA are administered to students during various stages of their clinical experience and are the most direct institutional measures of clinical competency.

The NBCE is an organization that develops, administers and scores examinations used to evaluate various areas of competency. Licensing agencies that regulate the practice of chiropractic within each state use NBCE examination scores in their evaluation of candidates for licensure. Parts II and III of the NBCE exams address topics related to clinical competency. Analysis of data from the NBCE exams related to the potential QEP topics was analyzed where applicable. TCC students performed below the national mean scores as well as institutional expectations (Table 2.3).

Table 2.3: National Boards Mean Scores 2005 – 2007*

	Case History	Clinical Diagnosis	X-ray Diagnosis	Special Imaging	Clinical Lab	Case Mgmt
Part II						
General Diagnosis	490	521				
Neuromusculoskeletal Diagnosis	489	491				
Diagnostic Imaging			468	467		
Physiotherapy	479					
Part III	442	447	426		468	443
Composite Mean	475	486	447	467	468	443
Part IV	80/80		66/67			79/79

*Mean scores for Parts II and III are relative means compared to a national mean of 500. Mean scores for Part IV are TCC Pass rate compared to the all colleges pass rate (TCC/All Colleges).

The CSCE I and CSCE II are conducted in Objective Structured Clinical Examination (OSCE) format at defined intervals during a student’s clinical experience. The IGA’s are summary evaluations conducted by clinic faculty. Data from these evaluations related to the specific topics of diagnostic reasoning and communication provide insight into student attainment of competency in these areas. While diagnostic reasoning is not measured directly by these assessments, several areas that require specific diagnostic reasoning skills were analyzed (see Table 2.4).

Diagnostic reasoning, as indicated in Table 2.4, consistently falls below overall performance levels on all three clinical competency measures (CSCE I, CSCE II and IGA). The students performed particularly poorly in areas such as differential diagnosis

and selecting appropriate diagnostic procedures, which require higher levels of diagnostic reasoning skills.

Performance measures related specifically to diagnostic reasoning topics are presented as mean scores in Table 2.4. The “Overall Exam Mean” indicates the combined score on all competencies measured in the specific assessment, not just those related to diagnostic reasoning. Passing scores for a given competency are set at 70%.

Table 2.4: Diagnostic Reasoning

Performance Measure	CSCE I	CSCE II	IGA
Information collected lead to diagnosis	61.3%	64.6%	75.0%
Differential diagnosis	59.2%	61.2%	69.3%
Diagnosis	68.4%	72.4%	69.3%
Appropriate diagnostic tests or procedures	57.3%	57.7%	76.2%
Case Management	69.0%	71.8%	77.0%
Overall Exam Mean	79.0%	81.3%	78.0%

Communication skills, indicated in Table 2.5, are measured both by faculty observation and standardized patient feedback during the CSCE I and CSCE II exams. Skills include both verbal and written communication. While there are some areas of deficiency in communication compared to overall performance, there are other areas at or above the overall exam mean. Several areas of this competency are not equally measured in the assessment methods and cannot be compared (Table 2.5).

Table 2.5: Communication

Performance Measure	CSCE I	CSCE II	IGA
Vocabulary consistent with patient understanding	69.2%	78.0%	76.0%
Clear and organized explanations	72.6%	71.4%	NA
Communicated with genuineness and empathy	83.2%	84.1%	NA
History	77.0%	78.3%	76.0%
Record Keeping	NA	NA	75.2%
Doctor Patient Relationship	NA	80.4%	81.0%
Overall Exam Mean	79.0%	81.3%	78.0%

In conjunction with the Southern Association of College and Schools-Commission on Colleges (SACS-COC) requirements to develop a QEP, a QEP Steering Committee (see Appendix I for list of members) was formed in January 2008. Based on two years of effort by the TCC Graduate Task Force, a recommendation was forwarded to the QEP Steering Committee that clinical reasoning, communication, and evidence-based practice be considered as three possible QEP topics. In order to select the final topic for the QEP, key focus groups were identified to review the potential topic choices, solicit additional topic choices and to rank all choices by their perceived importance. The

following groups met in January and February of 2008 either in meetings or through email and voice mail:

- Executive Committee of the TCC Board of Regents;
- Executive Committee of the TCC Alumni Association;
- TCC President’s Cabinet;
- 60% of the Faculty Association membership;
- Approximately 45% of the student body leadership, representing students from each trimester who, in turn, discussed the rankings with their classmates from each term.

The complete results of these focus groups are found in Table 2.6, with “Clinical Reasoning” being the number one choice by four out of the five groups. After receiving input from all focus groups, the QEP Steering Committee reviewed the topic rankings and discussed the merits of each possible topic. Ultimately, the Committee decided upon “Clinical Reasoning” as the best choice for the QEP topic.

Table 2.6: Topic Ranking

Topic	Board of Regents	Alumni Association	Cabinet	Faculty Association	Student Leaders	Priority
Clinical Reasoning	1	2	1	1	1	1
Communication	2	1	2	2	3	2
Evidence-Based Practice	3	3	3	3	2	3

QEP Title and Definition

On Feb. 14, 2008, the Steering Committee met and decided on a title for the QEP topic. This proposed title was forwarded to and approved by the TCC SACS Leadership Team:

“From Student to Clinician: Enhancing Clinical Reasoning Across the Curriculum”.

On March 6, 2008, after reviewing the literature on clinical reasoning, the QEP Steering Committee developed the following working definition:

“Clinical reasoning is a problem-solving process that enhances the development of clinical thinking and decision making in patient care. It involves the movement from accumulation of knowledge to the incorporation of skill, expertise and evidence leading to sound clinical judgment.”

Delegation of Responsibilities

Once the working definition was determined, the QEP Steering Committee was divided into subcommittees (see Appendix II) with each subcommittee charged with writing a specific chapter for the document. However, the entire QEP Steering Committee

discussed different curricular and teaching models and other methods of incorporating or enhancing clinical reasoning into learning. Some of the ideas were: restructuring the curriculum, improving course syllabi, enhancing teaching methodology and assessment measures, and expanding the current use of standardized patients in the assessment process and in the classroom. The QEP Steering Committee also discussed the need to increase the amount of student feedback in the assessment process. The Committee stressed that assessment measures must be of sufficient quality and quantity to accurately ascertain outcomes at both the course and programmatic levels. The QEP Steering Committee and/or various subcommittees met on a regular basis to review, critique, and discuss the progress made on the plan preparation and implementation until the document was completed.

Anticipated Benefits of the QEP

While the goal of the QEP is enhancement of the students' clinical reasoning skills, the long-term effect is the benefits to the patients the graduates will treat in practice. Thus, the QEP addresses patient-centered care as expressed in the College's mission and vision statements. An important corollary of the QEP is anticipated to be increased student learning through greater focus on the active learning process and, thus, student satisfaction with the academic program. The improved curriculum should enhance the College's stature as an educational institution within the profession and enable the College to recruit and retain quality students. An associated benefit of the QEP should be an improvement in National Board Scores.