Assessment of Clinical Competencies: Taking on the Attitudes

Background:
Chiropractic colleges have historically been faced with the necessity of assessing students in certain clinical competencies. This assessment is necessitated by internal, college based, quality control issues, as well as external, regulatory agency based, outcomes assessment protocols. These clinical competencies encompass a wide range of knowledge, skills and attitudes that will ensure that the emergent Doctor of Chiropractic is capable of effectively interacting with the public and providing a high quality service reflective of the excellence envisioned in the various missions of the colleges. Chiropractic educators and accreditors are charged with assuring that mastery of the several competencies is accomplished, and verified.

Objectives:
Our curriculum committee undertook a survey of faculty to determine which methods of assessing clinical competencies were currently utilized. We hoped to discover which competencies were being adequately assessed, and determine if under-assessment was a problem with any of the competencies.

Methods:
The thirteen major categories of clinical competencies contained in the Standards for Accreditation issued by the Council on Chiropractic Education Commission on Accreditation were reviewed by faculty. They compared the knowledge, skills and attitudes required for competency in each section with their individual course syllabi. They notated how each competency is addressed in their course, and also how each competency is assessed. From the raw notations, a grid was established which compiled the methods of addressing and the methods of assessing each of the many competencies. We were able to determine those competencies being adequately taught and assessed, and also determine that there were some competencies being addressed but not properly assessed.

Results:
The assessment of clinical competencies in our college has historically been done in several different formats utilizing several different assessment tools.

- **Instructor assessment at the course level** has been the primary tool of student evaluation. This involves quizzes, written and practical, midterm and final examinations, written or practical, homework assignments, short papers, major papers, oral reports, peer evaluation and student self assessments.
- **Pre-clinic evaluations** are used prior to clinic entrance, and assess the student on competencies learned in many earlier didactic courses. Students are required to synthesize knowledge and skills gained over the first 1 ½ years in order to earn the privilege of admission to the clinic. Failure here requires a re-cycle.
- **National Boards I, II, III and IV** are landmarks on the path of chiropractic education, and serve to inform us how our students are performing in the larger

community of chiropractic students. The results of NBCE exams are used in the large sense of trend detection, as well as the smaller sense of how other schools value certain informational categories. Our students' scores let us sense how they fit into the broader realm.

- **One to one faculty instruction/ observation** is primarily utilized in the clinic setting and not in lecture courses with 30-40 students. A personal mentoring relationship with feedback from the mentor is highly favored for the mastery of clinical competencies, but, is limited by budgetary constraints. This method is used in technique classes for practical quizzes and exams, and to a minor extent during in-class practice time. In exams, the student will generally have full face to face attention from the instructor, but for practice, the effect is more a "drive-by".
- **Clinic exit exams** occur very near the end of the educational experience, and are meant to assess the clinician as an entry-level professional. Failure to demonstrate minimal competency results in a recycle and re-test with financial consequences.
- **Clinician surveys** both early and late in the clinical experience give an idea of how the chiropractic student perceives his / her quest for clinical competency is going.
- **Faculty surveys,** as to adequacy of competency training, are regular and ongoing, indicating levels of satisfaction with the process, from an educator's point of view.
- **Alumni surveys** allow graduates, with protection of anonymity, to blow off steam about the path to clinical competency, and perhaps, give an outsider's point of view with a recent insider's grasp of facts.
- **State Board of Examiners** feedback on clinical proficiency, has, in the past, been valuable, but, in light of NBCE part IV, is less informative.

Obviously, some of these assessment methods work better than others for particular clinical competencies. Knowledge based competencies lend themselves to instructor assessment at the course level, and to National Board exams. Skill competencies may be assessed effectively in a number of ways, including "demonstrate and imitate", and pre-clinic evaluations. Most instructors, when asked, easily listed their assessment methods for the knowledge and skill based competencies. The attitude competencies, however, are perplexing to faculty, and do not bring forth an avalanche of responses, when the question is asked, "How do you assess attitudinal clinical competencies?"
We found that there were definite shortcomings in our assessment of attitudinal competencies, which we set out to improve.

Discussion:
In fact, some in the education world, question whether attitudes can be changed, evaluated or assessed. *(Manogue, et al, "Assessing Attitudes in Dental Education: Is It Worthwhile?", British Dental Journal, December 21, 2002, p. 703)* The conclusion of the article is "a cautious yes."

Our committee reviewed this article, and a few others in the sparse literature of attitudinal evaluation, and noted that recommended assessment tools for the attitudinal competencies are:

- **Direct observation** of clinical interactions (or videotapes of clinical interactions). Obviously there are opportunities for direct observation of our student D.C.s when they are interacting with patients in their clinical experience, but the observation and assessment tends to focus on skills, and knowledge, with not much emphasis on attitudes. Part of the problem here, is that the discussion of preferable attitudinal competencies is done in the classroom, not the clinic, and may have been done 4 to 6 quarters before the clinical experience begins. The idea, here, is that a student who displays behavioral evidence of professional attitudes when being observed by a faculty D.C., will *probably* continue that suitable behavior, evocative of professional attitudes when he/she is *not* being observed by a faculty D.C.

- **Conventional methods** of assessment may be converted slightly to assess attitudes. Written and oral tests, essay tests, written cases with attitudinal issues, vignettes and portfolios all have possibilities in the assessment of competencies of attitude. The danger of several of these methods is that a witty student, once exposed to the instructor's opinion as to the "correct" attitude, or the textbook's supposed "right" answer, will mimic the instructor or the textbook, and give the "correct" response, no matter what his/ her real attitude. The hope, using this approach, is that the student will become accustomed to exuding the "correct" attitude on tests, and will therefore; continue to have the "correct" attitude when all the tests are finished. We have used the "clinical vignette" approach in our *Ethics and Jurisprudence* course. 15 written scenarios are given, each requiring a written *judgment,* reflecting an *attitude.* Students frequently give thoughtful responses, and say they enjoy the opportunity to evaluate and assess the ethical responses of others (the written scenarios).

- **Self-Assessing methods** such as questionnaires, personality inventories, and personality trait scales, have some use, in a self reflective way. These instruments may help chiropractic students identify tendencies and personality traits that might be of concern in their professional careers. The instruments give students an opportunity to explore their own attitudes, and discuss them, with a faculty member in a mentoring position.

Conclusions:

We have asked faculty in the clinical sciences to examine the clinical competencies, and state how they assess each of them that are addressed in their respective courses. Quite universally, the responses indicate a fairly intensive assessment agenda in the **knowledge** and **skills** competencies, and a less than stellar assessment in the **attitude** competencies. In order to rectify this shortcoming we have implemented, or are planning to implement, the following measures:

- Use of a **standardized assessment form** in all **technique** courses, which will have categories for faculty to assess not only practical skills, and necessary knowledge, but will also include space for scoring attitudinally driven behaviors.

Heretofore, each faculty member was responsible for designing his/her own assessment form. These varied greatly from grossly inadequate to mildly inadequate.

- Use of a **standardized assessment form** in all physical exam and diagnosis courses. Attitudinal competency categories have been added to the skills and knowledge categories, and will be assessed at each practical encounter.

- Inclusion of an **Ethics and Attitudes Station** on the pre-clinic exam and the exit exam. Discussions have been held among course instructors, and clinic faculty as to what attitudes are required or desirable in order to enter clinic. We will construct a suitable attitude assessment mechanism, probably a "hypothetical scenario" for these two important milestones of chiropractic education.

- Encourage faculty to use **teaching methods** that are most likely to foster the "professional" attitudes which we endorse. Lecture format courses, are least likely to give students reason to question their own attitudes and assumptions. Active learning techniques, such as small group discussion, group projects, and internet searches with oral reports are far more likely to bring up discussions of attitudes. We have geared some of our in-service training sessions toward giving instructors new ideas in educational methods.

- The periodic use of **self assessment instruments**. An open end reflective assignment which asks students to inventory their own attitudes, and gives them a chance to discuss in writing some issues of professionalism. The idea, here, is that before attitudes are changed and improved, they have to be brought out into the open and talked about. The assessment instruments are relatively short, usually 5 essay type questions, taken directly from the list of attitudinal competencies. These give the student opportunity to consider appropriate attitudes, and write about them briefly. Appropriate faculty members may assign these self-assessment instruments, and receive the completed documents by e-mail. Faculty members, upon reviewing the assignments, then have an opportunity to discuss the responses in class or in office hours with individual students.

  We have mounted the 7 assessments on the Clinical Sciences home page on the intranet. Students may open them, complete them, and submit them to faculty with great ease. We will place a link on the front page of the student intranet, as this methodology becomes accepted. Faculty members are enthusiastic about this method, and it is being widely utilized.

- The **Health Center experience** is one and a half years long, and students are assessed hundreds of times on skills and knowledge competencies, but relatively few times on attitudinal competencies. We propose that **EVERY** assessment done by a faculty member on a student D.C., whether it is for adjustments, physical exams, taking x-rays or doing a patient education lecture, contain an attitudinal component. This will require either (a. a lot of new forms or (b. a

supplementary form. It will require some attitude adjustments on the part of overburdened faculty, but will take us out of the shady territory of not knowing if attitudes are properly assessed, into the territory of knowing that, if, indeed, attitudes can be assessed, we are doing it at every possible occasion, and in the best possible way.

Reference:

1. Manogue, et al, "Assessing Attitudes in Dental Education: Is It Worthwhile?" British Dental Journal, December 21, 2002, p. 703