

Standard Setting Example #4

Development of Enduring Educational Materials

Structured Summary (serves as a Table of Contents for the Personal Statement and Structured Abstracts)

(Updated 6/15/07)

Faculty Profile: DO in a Clinical Department

Personal Statement	
Personal Goals	<ul style="list-style-type: none"> • Develop technology-based educational materials that can be widely disseminated • Train new generation of osteopathic physicians • Utilize technology to educate students in OPP at remote locations
Personal Preparation	<ul style="list-style-type: none"> • Interest in technology • Experience gained from years of clinical teaching • Participation in Costin Institute
Personal Reflection/ Process for Improvement	<ul style="list-style-type: none"> • Using technology can increase the durability and accessibility of educational materials • Share what I have learned about the value of technology in fundamentally improving what we do in osteopathic medical education by giving presentations at the national level
List of Structured Abstracts included in Mini-Portfolio	
<ol style="list-style-type: none"> 1. On-line Case Studies: Improving Glycemic Management In Type 2 Diabetes: Program incorporates osteopathic tenets in treatment of diabetes. 2. Printed Instructional Program: Jump Into Action, a non-insulin dependent diabetes mellitus (NIDDM) prevention program for 5th grade students 3. Videotape CME Activity – NIDDM Update: Review Year1* Videotape CME educational activity developed from a live CME conference 	
Discussion of Breadth	
<p>I have been instrumental in the development of technology-based teaching materials for practicing physicians, residents, fellows, and nurses in endocrinology, internal medicine, primary care, and other specialties and subspecialties who treat patients with diabetes mellitus. I have created a variety of types of enduring educational materials.</p>	

Personal Statement:

A teacher's work should have influence on a greater circle of people than those with whom they have direct contact. While touch is an important aspect of every osteopathic physicians care, technology can touch and train docs in a manner that if done correctly and can complement the direct observation and teaching that occurs at every COM.

The programs that I developed have multiple audiences. Practicing osteopathic physicians, their patients, potential patients, and future patients are all part of the audience that I have pursued and taught in the videotapes and online programs that I developed.

The online case studies that I have developed are broad based cases that look at patients as a whole and encourage exercise, lifestyle modifications. I look at the life stage of each individual patient to maximize and personalize the care that is best for that person.

It is important to make education easy to obtain and accessible to broad audiences. And to have the osteopathic philosophy incorporated into the teaching materials will foster a greater acceptance of our approach to patient care. For students to "get it", they have to "see it" in action. The cases I have developed and the program for children in diabetic families puts the osteopathic philosophy into action in a way that is clear to students and participants.

There are no other programs that take the lifestyle issues that will help diabetics care for themselves and expands it to the family. And this program is one that comes to the individual through computers and DVD's, there is not a large resource need to participate.

The materials I developed are unique because of the breadth of the material, and audience that it addresses. They introduce the osteopathic way of caring directly to the patients, as well as reinforcing it with physicians and physicians in training.

More and more teaching will be done remotely. Having established programs will be of great value to our students, physicians and patients. I am proud to have contributed to our knowledge and represented what we are capable to doing to potential patients.

Structured Abstract (Descriptive information about items listed in the Structured Summary including references to documentation of descriptions of quality in an Appendix)

1. On-line Case Studies

Title/Citation: Improving Glycemic Management In Type 2 Diabetes: Case Studies

Format - web-based CME program with multiple components.

Goals/Learning Objectives - To stress the importance of timely therapeutic and lifestyle interventions for the patient with Type 2 diabetes. At the conclusion of the activity, the participant should be able to describe and identify: the clinical data including laboratory results as they relate to pathophysiologic processes; the pathophysiologic defects underlying the development of Type 2 diabetes; the temporal progression of the disease; and the role of lifestyle in disease progression and treatment.

Content - Highlights the importance of timely therapeutic intervention for the patient with Type 2 diabetes. Activity uses a case study approach to demonstrate the importance of aggressive glycemic control and risk complication management. Appropriate therapeutic interventions are also presented. This activity was originally presented live in New York City in May 2003.

Audience - Endocrinologists, primary care physicians and diabetologists, including nurses and pharmacists, who treat patients with Type 2 diabetes.

Size - Components: A pre-test evaluation, 3 lecture presentations, a question-answer session, online references, and a post-test evaluation. Contact time: approximately 1.75 hours required to complete entire program.

My Roles - (1) course director and a speaker at the original CME activity, (2) developing the content for presentation, (3) requested that the presentations be made into an online resource, (4) advised in the development of the website, and (5) key player in the publicity effort to let the diabetes community know about this educational resource. Other contributors included 2 speakers, an evaluation expert, a peer reviewer, programmers, graphic designers, and database managers.

Methods - Modified original conference presentations into interactive online educational activity.

Peer Review - Prior to its launch in June 2006, this educational activity was reviewed by: John Doe, DO, Assistant Professor, BestCOM. Content will be reviewed again in September 2007.

Usage Statistics - Since it went live online in September of 2006, this site has had 816 visitors. Of these, 523 people have worked through the entire site and 244 osteopathic physicians have completed and submitted the post-test evaluation form necessary to receive CME credit.

Ratings of Learners - 10 questions incorporated into the online post-test to assess learners' perceptions of the educational activity. (e.g.: How [if at all] has your mastery of the content changed as a result of this activity?) Results indicate positive learner perception (i.e., >4.2 on a 5 point scale). See Appendix A for details.

Ratings of Peers - As part of the evaluation process, feedback was solicited from two members of the faculty who were typical of the user audience and not involved in the

development of this program. Letters written by these faculty that include their qualitative assessment of the website have been included in Appendix B.

2. Printed Instructional Program

Title/Citation: **Jump Into Action:** A NIDDM Prevention Program for Fifth-Grade Students

Format/Type: **Jump Into Action (JIA)** is a printed instructional program on non-insulin dependent diabetes mellitus (NIDDM/Type 2 diabetes) prevention. It includes a teacher's guide and a student workbook designed for fifth-grade instruction.

Goals/Purpose: *JIA* is based on the premise that impaired glucose tolerance can be reversed or prevented with changes in diet and exercise. Therefore, the thrust of *JIA* is to help children develop healthy habits that decrease the likelihood of obesity and sedentary lifestyles. *JIA's* objectives are to (1) increase students' knowledge of NIDDM, (2) develop students' self-efficacy toward preventing NIDDM in their lives, and (3) influence students' behaviors with respect to nutrition and exercise.

Content: The teacher's guide includes information on diabetes, lesson plans to guide learning activities, and a resources section. The student workbook provides information and activities about the types, causes, risks, complications, incidence, facts, myths, and prevention of NIDDM.

Audience: Fifth-grade students and their teachers.

Size and Scope: The Student Workbook contains 10 pages of interactive narrative and colorful illustrations and 18 worksheets. The Teacher's Guide has 77 pages of information about NIDDM, suggested teaching strategies, and detailed lesson plans.

My Role: Led a team of OurCOM faculty members, health educators, elementary school teachers and instructional designers in developing and evaluating *JIA*. Obtained mini grant support (2 grants) for the program from AACOM.

Methods: *JIA* was developed by a team of professionals (N=9) including health and medical educators, elementary school teachers, writers, and graphic/instructional designers. In developing the program, the team was assisted by expert faculty and staff (N=6) of OurCOM and the public school district. The team developed content and learning activities suitable for fifth graders, used the expertise of graphic designers to make the program colorful and attractive to children, and had elementary teachers and health educators design appropriate instructional strategies which involved students in problem-solving and decision making activities. The program's development was supported, in part, by a grant from the American Osteopathic Foundation.

Quasi-experimental research designs were used to evaluate *JIA* in field tests in three large school districts in the area. Using comparison and intervention groups, pre, post, and four-month follow-up surveys were completed by participating students.

Usage statistics: *JIA* has been used by over 2800 students and 86 teachers in 31 elementary schools. Anecdotal reports of usage in other locations have been received.

Impact: *JIA* has been found effective in improving and sustaining participating students' knowledge of NIDDM, confidence in their abilities to prevent NIDDM in their lives, and

self-reported behaviors regarding eating more healthy foods and increasing regular exercise.

Peer Review: *JIA* has been peer reviewed at three points in its development and evaluation. First, grant proposals to develop *JIA* were peer reviewed, approved, and funded by AACOM mini-grants. Second, fifth-grade teachers provided an in-depth assessment of the program's use in their classrooms. Third *JIA* evaluation results have been published in peer-reviewed journals (*Journal of School Health; Journal of Health Education*). See excerpts from these evaluations in Appendix C.

Structured Abstract (Descriptive information about items listed in the Structured Summary including references to documentation of descriptions of quality in an Appendix)

3. Videotape CME Activity

Title/Citation NIDDM Update: Review Year2004

Format - Videotape with written learner assessment.

Type of Material - CME educational activity developed from a live CME conference held in February, 2005 [see Appendix D for agenda of CME conference.]

Goals/Purpose - To educate caregivers of patients with NIDDM in current advances. At the conclusion of this educational activity, the learner should be able to:

- Describe current strategies in evaluating and managing NIDDM
- List current strategies in diagnosing and treating new onset NIDDM
- Demonstrate an understanding of current concepts underlying pharmacologic therapy of NIDDM
- Explain how to use diet and drugs in treating NIDDM
- Evaluate current modalities for treatment of complications of NIDDM
- Compare current options available for the management of NIDDM

Content - New advances in diagnosis and management of patients with NIDDM, as well as quality issues relating to performance of ongoing patient evaluations.

Audience - Endocrinologists, Internists, Family Physicians, Surgeons, and other osteopathic specialists, Physician Assistants, Nurses, Residents, and Fellows caring for patients with diabetes.

Size - 6 hours of learner contact, plus learner assessment, for 6 hours of CME credit.

My Role - I was the course director for the original live conference, and gave 2 of the educational presentations. It was upon my initiative that the conference was developed into an enduring educational activity, and I have been very active in planning, promotion and dissemination of video.

Methods - Took video footage of live conference and re-formatted it; edited for content; made sure edited version still met original learning objectives and goals; developed learner assessment tool; promoted and disseminated resource.

Peer Review - In addition to the peer review of the content during the live conference, the video was reviewed by experts for content accuracy before being mass-produced and made available to the public.

Usage Statistics - 526 copies of this videotape have been distributed as of 12/31/06, with 387 learner assessment evaluations submitted for CME credit. [See Appendix E for copy of correspondence from CME office.]

Ratings of Learners - Content was reviewed originally by learners at the live conference and then again via the video's learner assessment instrument. Reviews have been favorable, and summaries are included in Appendix F.

Ratings of Peers - Feedback was solicited from two diabetologists. Their letters can be found in Appendix G, and have very positive comments.