Assuring Education Programs
Graduate Competent Students
and Fulfill Program Goals

ACME Webinar

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Public Member on ACME’s Board of Review the past two years.
Webinar Theme

How the Commission on Dental Accreditation looks at:
- curriculum evaluation
- outcomes assessment

Food for thought for the ACME BOC when it reviews the ACME Criteria for Accreditation of Midwifery Education Programs
Webinar Topics

- CODA Overview, Philosophies, and Expectations
- CODA’s View of Assessing Competence of Graduates
  - Examples from Midwestern University-Arizona
- CODA’s View of Goals and Outcomes Assessment
  - Examples from Midwestern University-Arizona
Accreditation Scope
- Predoctoral Dental Education (DDS or DMD)
- Advanced Dental Education (residencies)
- Allied Dental Accreditation (dental hygiene, assisting, lab tech)

Organizational Considerations
- 30 Commission members represent wide variety of stakeholders who select their reps; four public members selected by CODA
- Operates under the auspices of the American Dental Association
- Perceived conflicts of interest and undue influence
CODA’s Accreditation Goals
The assessment of quality in educational programs is the foundation for CODA Standards, with these additional goals.

- to protect the public welfare
- to promote an educational environment that fosters innovation and continuous improvement
- to guide institutions in developing their academic programs
- to guide site visit teams in making judgments regarding the quality of the program
- to provide students with reasonable assurance that the program is meeting its stated objectives

Like ACME, CODA’s processes focus on program improvement
CODA’s Accreditation Standards Are Living and Dynamic

Specific objectives of the current version of the Standards emphasize:

- an educational environment that promotes learning
- A focus on competency statements in curriculum-related standards
- A focus on goals and programmatic outcomes assessment
Components of CODA’s Expected Educational Environment

- Comprehensive, Patient-Centered Care
- Critical Thinking
- Self-Directed Learning
- Humanistic Environment
- Application of Research
- Evidence-based Dentistry
- Student Self-Assessment
- Application of Technology
- Faculty Development
- Interprofessional Education
- Diversity
CODA expects more than:

- Listing of courses taken
- Numbers of mannequin procedures completed
- Numbers of patient procedures completed
2-4. The stated goals of the dental education program must be focused on educational outcomes and define the competencies needed for graduation, including the preparation of graduates who possess the knowledge, skills and values to begin the practice of general dentistry.

Intent: Assessment of student performance should measure not only retention of factual knowledge, but also the development of skills, behaviors, and attitudes needed for subsequent education and practice.

Intent: The evaluation of competence is an ongoing process that requires a variety of assessments that measure not only knowledge and skills but also assess the process and procedures necessary for entry level practice.
CODA Expects a Competency-based Curriculum

Intent: Graduates should possess the basic knowledge, skills, and values to practice dentistry, independently, at the time of graduation.

The school identifies the competencies that will be included in the curriculum based on the school’s goals, resources, accepted general practitioner responsibilities and other influencing factors.

The comprehensive care experiences provided for patients by students should be adequate to ensure competency in all components of general dentistry practice and readiness to enter the practice of general dentistry.
CODA Expects a Competency-based Curriculum

Evidence to demonstrate competence may include:

- **Narrative descriptions of student performance and professionalism** in courses where teacher-student interactions permit this type of assessment (a general subjective evaluation after repeated observations)
- **Objective structured clinical examination** (OSCE, or station to station exam)
- **Clinical skills testing** (mannequin-based or patient-based, completed independently)
At a minimum, graduates must be competent in providing oral health care within the scope of general dentistry, as defined by the school, including:

a. patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent;

b. screening and risk assessment for head and neck cancer;

c. recognizing the treatment complexity and identifying when referral is indicated;

d. health promotion and disease prevention;

e. local anesthesia, and pain and anxiety control;

f. restoration of teeth;

g. communicating and managing dental laboratory procedures in support of patient care;

h. replacement of teeth including fixed, removable and dental implant prosthodontic therapies;

i. periodontal therapy;

j. pulpal therapy;

k. oral mucosal and osseous disorders;

l. hard and soft tissue surgery;

m. dental emergencies;

n. malocclusion and space management; and

o. evaluation of the outcomes of treatment, recall strategies, and prognosis.
Establishment and Maintenance of Oral Health - Graduates must be competent to:
6.3 Prevent, identify, and manage pain and anxiety in the dental patient.
6.4 Prevent, identify and manage periodontal diseases.
6.5 Manage preventive and restorative procedures that preserve tooth structure, are esthetic, and promote soft and hard tissue health.
6.6 Recognize and manage developmental or acquired occlusal abnormalities.
6.7 Manage the replacement of teeth for the partially or completely edentulous patient.
6.8 Prevent, identify, and manage pulpal and periradicular diseases.
6.9 Manage oral surgical procedures.
Competencies at Midwestern University’s College of Dental Medicine-Arizona (examples)

Endodontic Clinical Competency Evaluation (1)
Student dentists demonstrate clinical competency in endodontic treatment by independent completion of endodontic treatment from patient assessment to completion of endodontic therapy. (6.1, 6.2, 6.3, 6.8)

Fixed Prosthodontic Clinical Competency: Single-crown preparation (2)
Student dentists demonstrate clinical competency in fixed prosthodontics through independent treatment planning, preparation, completion, and delivery of two crowns – one as an anterior crown and one as a posterior crown. One of the two crowns must be CAD-CAM generated. (6.1, 6.3, 6.5, 6.15)
Competencies at Midwestern University’s College of Dental Medicine-Arizona (Examples)

**Medical Emergencies Simulated Competency Evaluation (1)**
Student dentists demonstrate clinical competency in management of medical emergencies by independently completing a computer-based examination simulating medical emergency patient experiences. (6.10, 6.13)

**Special Needs Simulated Competency Evaluation (1)**
Student dentists demonstrate clinical competency in management of special needs patients by independently completing a computer-based examination covering a variety of special needs patients. (6.14)
Subjective Evaluation at Midwestern University’s College of Dental Medicine-Arizona (Examples)

MWU College of Dental Medicine
Assessment of Student Dentist Clinical Performance

<table>
<thead>
<tr>
<th>Class:</th>
<th>DM-3</th>
<th>DM-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter:</td>
<td>Fall 2016</td>
<td></td>
</tr>
<tr>
<td>Select Mid or End</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluator:</td>
<td>Student Self-assessment</td>
<td></td>
</tr>
<tr>
<td>Dr.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: This assessment is based on fulfillment of expectations for this stage in the student dentist’s education.

**Diagnosis and Treatment Planning:**
Demonstrates the ability to gather information; to apply scientific information in the diagnosis and selection of treatment options, to make accurate diagnoses; to develop, document, and present planned treatment and sequences; to follow the content and sequence of treatment plans; and to revise the plan as necessary.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>rarely</td>
<td>sometimes</td>
<td>often</td>
<td>usually</td>
<td>frequently</td>
</tr>
</tbody>
</table>

Weaknesses and suggestions for improvement in diagnosis and treatment planning:
Subjective Evaluation at Midwestern University’s College of Dental Medicine-Arizona *(Examples)*

**Clinical Skills:**
Uses scientific evidence in the treatment of dental patients; exhibits appropriate abilities in all areas of comprehensive care; demonstrates the clinical skills needed to achieve appropriate treatment outcomes; and provides appropriate quality of care.

<table>
<thead>
<tr>
<th>1 rarely</th>
<th>2 sometimes</th>
<th>3 often</th>
<th>4 usually</th>
<th>5 frequently</th>
</tr>
</thead>
</table>

Weaknesses and suggestions for improvement in clinical skills:

**Management Skills:**
Demonstrates acceptable record management, patient management, pain control, time utilization, efficiency of care, and appointment follow-up; exercises control of overhead; and provides safety for the patient and safety for the oral health care team.

<table>
<thead>
<tr>
<th>1 rarely</th>
<th>2 sometimes</th>
<th>3 often</th>
<th>4 usually</th>
<th>5 frequently</th>
</tr>
</thead>
</table>

Weaknesses and suggestions for improvement in management skills:

**Self-evaluation:**
Demonstrates the ability to evaluate treatment outcomes, self-assess clinical competence, self-assess management skills, and seek faculty opinion when appropriate.

<table>
<thead>
<tr>
<th>1 rarely</th>
<th>2 sometimes</th>
<th>3 often</th>
<th>4 usually</th>
<th>5 frequently</th>
</tr>
</thead>
</table>

Weaknesses and suggestions for improvement in self-evaluation:
Subjective Evaluation at Midwestern University’s College of Dental Medicine-Arizona (Examples)

MWU College of Dental Medicine
Assessment of Student Dentist Professionalism

Class:  
- DM-3
- DM-4

Fall 2016  
Select Mid or End

Student Dentist: ____________________________  
Evaluator: ____________________________

Student Self-assessment

Dr.

NOTE: This assessment is based on fulfillment of expectations for this stage in the student dentist’s education.

Professionalism:
Demonstrates professionalism in interactions with patients, faculty, staff, and peers; shows respect to others; exhibits a professional appearance and demeanor; avoids tardiness and unexcused absences; and follows directives of the group leader and other faculty.

1 rarely  
2 sometimes  
3 often  
4 usually  
5 frequently

Weaknesses and suggestions for improvement in professionalism:
Subjective Evaluation at Midwestern University’s College of Dental Medicine-Arizona (Examples)

**Preparation:**
Demonstrates appropriate preparation for the treatment provided, including understanding the importance of the patient’s time, the specific service to be provided, the materials and equipment needed, and the unique and unusual conditions and circumstances the patient presents.

1. rarely 2. sometimes 3. often 4. usually 5. frequently

Weaknesses and suggestions for improvement in preparation:


**Ethical Behavior:**
Demonstrates ethical and courteous behavior and adherence to professional codes of conduct, always in the best interest of the patient, including informed consents, appropriate care, asepsis, radiological safety, proper instrument management, and the availability of emergency care.

1. rarely 2. sometimes 3. often 4. usually 5. frequently

Weaknesses and suggestions for improvement in ethical behavior:


**Integrity:**
Demonstrates honesty and avoids deception, lies, misinformation, or misrepresentations.

1. rarely 2. sometimes 3. often 4. usually 5. frequently

Weaknesses and suggestions for improvement in integrity:


1-2 Ongoing planning for, assessment of and improvement of educational quality and program effectiveness at the dental school must be broad-based, systematic, continuous, and designed to promote achievement of institutional goals related to institutional effectiveness, student achievement, patient care, research, and service.

The Commission on Dental Accreditation expects each program to define its own goals and objectives for preparing individuals for the practice of general dentistry.
The assessment process should include:
- a clearly defined mission (education, patient care, research, service)
- goals consistent with the mission
- outcomes measures to determine progress toward the goals
- measurement data compiled for review
- feedback to interpret results
- recommendations to improve the program
- re-evaluating the program in light of the outcomes
CDMA Mission

The mission of the Midwestern University College of Dental Medicine-Arizona is to graduate well-qualified general dentists and to improve oral health through research, scholarly activity, and service to the public.

CDMA Goals (partial listing)

- foster a humanistic and character-developing environment for students
- ensure the respectful treatment of students as professionals
- graduate competent dentists prepared to begin professional practice
- develop and implement a curriculum that leads to competency
- foster a holistic and compassionate approach to patient care
- create patient-friendly clinics and demonstrate our respect for patients
- promote research and scholarly activity among faculty
- promote learning through student research and scholarly activity
### Goal: foster a humanistic and character-developing environment for students

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Benchmark</th>
<th>Result</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual student survey</td>
<td>95% of students agree</td>
<td>98%</td>
<td>None</td>
</tr>
<tr>
<td>Annual faculty survey</td>
<td>95% of faculty agree</td>
<td>96%</td>
<td>None</td>
</tr>
</tbody>
</table>

### Goal: foster a holistic and compassionate approach to patient care

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Benchmark</th>
<th>Result</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press-Ganey Report</td>
<td>90% of patients satisfied with care</td>
<td>95%</td>
<td>None</td>
</tr>
<tr>
<td>Press-Ganey Report</td>
<td>90% of patients satisfied with doctor-patient interaction</td>
<td>94%</td>
<td>None</td>
</tr>
</tbody>
</table>
Goal: graduate competent dentists prepared to begin professional practice

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Benchmark</th>
<th>Result</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Written Board Results</td>
<td>95% of students pass by graduation date</td>
<td>100%</td>
<td>None</td>
</tr>
<tr>
<td>Regional Clinical Board Results</td>
<td>95% of students pass by graduation date</td>
<td>99%</td>
<td>None</td>
</tr>
<tr>
<td>CDMA Clinical Competencies Completed</td>
<td>100% of students complete by graduation date</td>
<td>100%</td>
<td>None</td>
</tr>
<tr>
<td>Student Exit Survey</td>
<td>95% of students will rate the DMD program highly</td>
<td>98%</td>
<td>None</td>
</tr>
</tbody>
</table>
## CDMA Assessment of Outcomes

### Goal: promote research and scholarly activity among faculty

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Benchmark</th>
<th>Result</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Published print journal articles</td>
<td>5 by faculty per year</td>
<td>8</td>
<td>None</td>
</tr>
<tr>
<td>e-Published journal articles</td>
<td>2 by faculty per year</td>
<td>3</td>
<td>None</td>
</tr>
<tr>
<td>Oral presentations at national meetings</td>
<td>5 by faculty per year</td>
<td>3</td>
<td>Encourage more submissions</td>
</tr>
<tr>
<td>Poster presentations at national meetings</td>
<td>5 by faculty per year</td>
<td>6</td>
<td>None</td>
</tr>
</tbody>
</table>

### Goal: promote learning through student research and scholarly activity

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Benchmark</th>
<th>Result</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students with research stipends</td>
<td>8 students per year</td>
<td>5</td>
<td>Promote research stipends</td>
</tr>
<tr>
<td>Presentations at meetings</td>
<td>8 by students per year</td>
<td>9</td>
<td>None</td>
</tr>
</tbody>
</table>
The assessment process should include:
- a clearly defined mission (education, patient care, research, service)
- goals consistent with the mission
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- feedback to interpret results
- recommendations to improve the program
- re-evaluating the program in light of the outcomes
The dental school must conduct a formal system of **continuous quality improvement** for the **patient care program** that demonstrates evidence of:

- **standards of care** that are patient-centered, focused on comprehensive care
- an ongoing review and analysis of compliance with the **standards of care**
- an ongoing review of a representative **sample of patients and patient records** to assess the appropriateness, necessity, and quality of the care
- **mechanisms** to determine the cause(s) of treatment deficiencies
- **corrective measures** as appropriate.
Factors the Board of Commissioners May Want to Consider in Its Review of ACME Accreditation Criteria

Criterion IV: Curriculum and Student Learning

❑ Should the curriculum criteria become less process-based, and more outcome-based?
❑ Should the curriculum criteria introduce the concept of a competency-based curriculum?
❑ How prescriptive should any criteria for competency be?
❑ How might competency be measured, given midwifery education’s preceptor model of clinical education?
❑ Can preceptors evaluate clinical competence?
Factors the Board of Commissioners May Want to Consider in Its Review of ACME Accreditation Criteria

Criterion VI: Assessment and Outcomes

- Should the assessment and outcomes criteria permit the program to select goals and outcomes that fit its mission?
- Should the criteria require the use any specific outcomes measures?
- How prescriptive should benchmarks be for any specific outcome measures?
- Should ACME be concerned about preceptor quality of care?
- While student debt is a concern, is it a measure of quality?
- It is feasible to track job placement, as the DOE may require?
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Questions and Discussion