Assessing Competency in the “Other” Standards
2-09, 2-10, 2-14, 2-15, 2-16, 2-17, 2-18, 2-19, 2-20, 2-21, 2-22 & 2-24

What Evidence Can Schools Provide?

Bill Hendricson
Assistant Dean, Education
UTHSCSA Dental School
Senior Consultant,
Academy for Academic Leadership

The Overall “Domain” of General Dentistry Consists of 27 Components
Professional Role, Demeanor, Values
(N = 12; 44%)
Patient Care / Clinical Skills
(N=15; 56%)

<table>
<thead>
<tr>
<th>Std</th>
<th>Role, Demeanor, Values (12)</th>
<th>Assessment</th>
</tr>
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<tbody>
<tr>
<td>2-09</td>
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Experience – Evaluation Continuum

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<tr>
<th>Assessment Toolkit</th>
<th>Albino (JDE; 2008) Kramer (JDE; 2009)</th>
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<tr>
<td>Written Tests</td>
<td>Context Free MCQ Case-Based MCQ Brief Focused Essay Extended Essay</td>
</tr>
<tr>
<td>Feedback &amp; Reflection</td>
<td>Self Assess Reflective Writing Learn Plan 360° Eval</td>
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<td>Inquiry</td>
<td>CATs Critically Appraised Topics RRR Research, eRie, Report</td>
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<td>Technology Simulation</td>
<td>Virtual Reality Computer-based Models Lab Simulators</td>
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<tr>
<td>Station Exams</td>
<td>OSCE Triple Jump Exercise</td>
</tr>
<tr>
<td>Work Samples</td>
<td>Case Present Portfolio of cases &amp; products Chart Audit With Oral Exam (CPR)</td>
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<tr>
<td>Observation Based Assessment</td>
<td>Single Task/Product Rate with Checklists Test Cases Global Ratings Overall performance across time</td>
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2-14: Apply biomedical science knowledge in patient care

- Pathophys OSCE
- Pathophys Case With Q & A
- CPR Case Prompted Review With Pathophys Focus
- Student Created Case with BSK

2-16: Assessing Students’ Competency for Multi-Cultural Health Care

- Qualitative assessment
- Quantitative assessment
- Observed performance / professional judgment
- Self-Assessment


Qualitative Assessment

- Case presentations – multicultural care
- Portfolios – CSL projects & diverse patient care
- Dilemma analysis essays
- Reflection journals
- Debriefing seminars
Quantitative Assessment for MCC
Buyer Beware: Many Instruments; Few Validated

• Providers Guide to Quality & Culture Quiz
  HRSA; 23 items; assess CC knowledge

• Cultural Competence of Health Practitioners’ Assessment
  HRSA / National Center for Cultural Competence
  Assess cross-cultural communication & decisions

• Home-grown CC tests – be careful!


Checklists & Evaluation Suggestions:
Cultural Competency in Medical Education: A Guidebook for Schools.
HRSA. 2004
www.HRSA.Gov

http://www.hrsa.gov/culturalcompetence/index.html
Cultural Competency OSCE Resources

**Objective** - candidates are assessed with the same stations
**Structured** – stations have specific tasks.
**Clinical Exam** – candidates apply knowledge & skills to important tasks


**Triple Jump**
Self-Assessment Inventories
Buyer Beware: Many Instruments; Few Validated

- **Example:** Clinical Cultural Competency Questionnaire
- Accuracy of self-appraisal / report?
- Untested psychometric properties
- May be useful as learning activity


Competency in Health Care Team Leadership
2-18
SPP Rotation
Group Practice Team
OSLO
Objective Structured Leadership Observation

2-19:
Graduates must be competent in communicating & collaborating with other members of the health care team to facilitate provision of health care.

- Understand roles of other health providers
- Have educational / clinical experiences that involve working with other health care students and practitioners
- Coordinate patient care within health care system relevant to dentistry
- Primary care physicians, nurses & medical students
- Public health care providers
- Nursing home care providers
- Pharmacists & other allied health
- Social workers
IPE Opportunities

- IPCSL Teams (IPE Courses)
- IP Care Rotations (PCR)

2013 CODA Standards

Std. 2 – 21 (EBP)
Graduates must be competent to assess, critically appraise, apply and communicate scientific and lay literature as it applies to providing evidence-based patient care.

Intent:
The educational program should introduce students to the basic principles of translational research, including how such research is constructed, evaluated, applied and explained to patients.

Critical Thinking 2-09
Self Assessment & Self-Directed Learning 2-10
Critical Appraisal EBP 2-21
The CAT will serve as a mechanism to infuse science & critical thinking skills into dental education at all levels.

**Central Hypothesis:**

**CRITICALLY APPRAISED TOPICS (CATs)**

CAT

5-step evidence search process
1. PICO question
2. Systematic search
3. Critical appraisal
4. Decision
5. Write summary (CAT)


**View the CAT**

**Table:**

| Effort of Control of Periodontal Disease on Uncontrolled Type II Diabetes |
| Clinical Question: In a patient with uncontrolled Type II diabetes and corresponding periodontal disease, will therapeutic management of their periodontitis improve their glycemic control? |
| Clinical Bottom Line: There is no definitive evidence supporting the idea that improving periodontal health in a Type II diabetic directly improves that patient’s glycemic control. Several studies support the idea while others (not included in this CAT) show no effect. |

<table>
<thead>
<tr>
<th>Study type (Level of Evidence)</th>
<th>Published ID</th>
<th>Author / Year</th>
<th>Patient Group</th>
<th>Key Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randomized Controlled Trials</td>
<td>40717548</td>
<td>Rugh, S. / 2009</td>
<td>Diabetes Patients (Type I and II included)</td>
<td>Average HbA1c levels for all patients decreased by 0.2% while specifically type 2 diabetic patients decreased by 0.6%. Change in HbA1c levels was not statistically significant. Limitation of the study due to the inclusion of Type I diabetes who have more tightly controlled baseline levels whereas only Type II diabetes were included (may have shown less anemic effects of periodontal treatment).</td>
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http://cats.uthscsa.edu/
Assessment Pertinent to Standard 2-21

• Written assessment: KACE
• Students' EBP Case Presentations
• EBP OSCE
• Assessment of students' CATs

KACE
Hendricson@uthscsa.edu

• EBP Knowledge, Attitudes, Access, Confidence Evaluation 4 scales 35 total items Self-report

<table>
<thead>
<tr>
<th>Scales</th>
<th>Items</th>
<th>Response</th>
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<td>Knowledge of critical appraisal</td>
<td>10</td>
<td>5 option MCQs</td>
</tr>
<tr>
<td>Attitudes about EBP</td>
<td>10</td>
<td>5 options: SA to SD</td>
</tr>
<tr>
<td>Methods for Accessing evidence</td>
<td>9</td>
<td>5 options: Very Frequently to Never</td>
</tr>
<tr>
<td>Confidence in critical appraisal</td>
<td>6</td>
<td>5 options: Very Confident to Not at All</td>
</tr>
</tbody>
</table>


EBP / CAT Case Presentations in Group Practices

Clinical Presentations - CATS
UTHSCSA Predoctoral Curriculum
**CATs OSCE Stations**

1. Write a PICO for provided scenario
2. Rank order journals by evidence quality
3. Access Pubmed at computer & conduct search
4. Read abstract & identify study type
5. Read abstract & identify evidence level
6. Answer questions about threats to validity
7. Assess claim in an advertisement
8. Verbally analyze an abstract


**Readiness Self Assessment for Standards 2-14 to 2-24**