

Members Present: Drs. Tad Mabry (Chair), Saulo Sousa Melo, William J. Synan, Bruno Cavalcanti, Sherry R. Timmons, David C. Holmes, Ronald Elvers, Lily T. Garcia, Mike Kanellis, Ms. Becky Todd, Ms. Michelle Krupp and Emillie Kenne (D3)

Absent: Drs. Nidhi Handoo, Erica C. Teixeira, Paula Weistroffer, Terry J. Lindquist, Michael Murrell

Meeting called to order at 12:13pm.

I. **Approval of May 19, 2017 minutes**

No quorum present.

II. **P.A.S.S. Implementation & Documentation** – Dr. Lily T. Garcia

A. First-time successful P.A.S.S. completion rates will need to be documented.

During accreditation, the site visitor will want to know what the success rate is for the assessment mechanism.

B. Examples of progress toward competency assessment mechanisms would be helpful for the group to share and discuss.

III. **Systemic Health Clinical Guides & Implementation** – Dr. Saulo Sousa Melo (see attachment)

A. Pilot implementation will begin in early OD. Topics were based on responses from the survey conducted among clerkship directors that was distributed earlier in the 2016-17 academic year. Key goals included to have a pocket-sized reference for students on systemic health issues, and to have students, residents, and faculty with similar focus; this information is based on *The ADA Practical Guide to Patients with Medical Conditions*. The initial six (6) conditions in the booklet will be used in early oral diagnosis, July 2017. A final version is planned for August/September 2017.

B. It is anticipated to create a pocket-sized booklet similar to the pediatric dentistry pocket guide. Larger versions can be available chairside as a guide for students to ask about systemic health issues. If dental students learn this reference early in the curriculum, students will reference the information and apply use for their patients. Faculty responsible for curriculum in D1 and D2 should receive copies in order to align curriculum and prepare students of what the student will need to know.

C. Dr. Larry Newman, nurse practitioner in Geriatric & Special Needs Clinic, may also be a good resource to read/edit the booklet.

IV. **EBD in the Clerkships** – Dr. Lily T. Garcia

The current course, Application of Critical Thinking (OPRM 8370), has four evidence-based dentistry patient scenario cases in four clerkships. Additional discussion is needed on how to document and embed application further and within all clerkships.

V. **Survey Research – information** – Dr. Leo Marchini (see attachment)

- A. For informational purposes.
- B. Dr. Marchini spoke on his Dental Clinical Learning Environment Instrument (DECLEI). He consulted with Dean Solow prior to the research project. She expressed interest in receiving results and suggested presenting to the Clerkship Directors Committee. Please see presentation for more detailed information.
- C. Dental schools are refusing to apply the questionnaire due to the nature of the questions. While the original study was used to assess the impact of changes, some schools use them as an assessment instrument only to find their strengths and weaknesses. D3 and D4 questionnaires were applied in the beginning of the fall semester. The survey will be sent out at the end of their D3 and D4 years as well. Both samples were done in August/September of their D3/D4 years. This is a great way to allow students to evaluate the clerkships and FamD. This may be a great supplement to the course evaluations. University of Texas will be participating as well. It was brought up that it may be difficult to compare us to other schools, due to our unique curriculum.

VI. **Additional Comments**

- A. Information regarding the upcoming the D3 to D4 Transition Meeting was discussed.
 - Class photos will be made available during the meeting to ease the process.
 - Any negative student information brought up in the meeting, must have been discussed with the student first.
 - The meeting is scheduled for July 19, 2017, from Noon – 4:00 p.m.
 - It is required to send a rep in the place of those who cannot attend, who is aware of the comments that need to be made that represent the department.
- B. Dr. Kanellis spoke briefly on the new Medicaid program – dental wellness plan.
- C. Dr. Handoo will be taking over the Clerkship Directors Committee as a chair.

ACTION ITEM: Dr. Kanellis will send information regarding changes to the Medicaid program.

Next Meeting: **July 19, 2017 – D3-D4 Transition Meeting**

Minutes recorded: Ms. Lauren Moniot

Cerebrovascular Accident (Stroke)

Definition: Neurological event when blood supply to part of the brain is suddenly interrupted due to ischemia (thrombus/embolus) or an arterial rupture (hemorrhagic) causing necrosis and infarction of affected tissue.

Risk factors: Smoking, sedentary lifestyle, obesity, old age, familial history, other systemic diseases (hypertension, diabetes, prior stroke, atrial fibrillation) etc.

Symptoms: Remember FAST – Face droop, Arm weakness, Speech difficulty (slurred/incoherent), Time to call 911.

Commonly used drugs and/or drug classes: Antiplatelet drug (aspirin, clopidogrel, prasugrel) or an anticoagulant (warfarin, dabigatran, rivaroxaban, apixaban).

Questions to ask patients:

1. What type of stroke did you have? What activities are difficult for you?
2. Any long term effects of your stroke?
3. How long ago? And where were you when you had a stroke?

Dental implications:

- 6 months following stroke is considered the acute period, highest risk of recurrence (avoid elective dental care during this period).
- Excessive bleeding during surgical/invasive dental treatment. (In general, pts taking warfarin, INR <3.5 acceptable for invasive procedures).
- Risk of aspiration (depends on severity of stroke) – limit ultrasonic scaling and air-water syringe, use rubber dams for restorative procedures, use stress reduction techniques.
- Monitor BP during invasive procedure, aspirate anesthetic and limit epinephrine.

Diabetes Mellitus (High blood sugar)

Definition: Hormonal metabolic disorder resulting in chronic hyperglycemia caused by deficiencies in insulin secretion or function, or both.

	Blood glucose level	HbA1c	Age	Problem
Prediabetes	100-125 mg/dL	5.7-6.4%		
Diabetes	≥ 126 mg/dL	≥ 6.5%		
Type 1			< 40	Autoimmune
Type 2			> 40	Insulin resistance

Risk Factors: over age 40, male gender, family history, hypertension, overweight and sedentary lifestyle

Symptoms: Type 1 – excessive thirst, frequent urination, excessive hunger.

Oral – xerostomia, burning mouth, delaying wound healing, increased infections (i.e. multiple periodontal abscesses).

Commonly used drugs and/or drug classes: Insulin or analogs (rapid-, short-, intermediate- or long-acting) and/or oral hypoglycemics (sulfonylureas, meglitides, biguanides, thiazolidinediones, alpha-glucosides)

Questions to ask patients:

1. When you were diagnosed?
2. How do you monitor your blood sugar levels?
3. What was your last HbA1c and when was it measured?
4. When was the last time you saw your doctor? Were there any changes to your medications?
5. Did you take your insulin/medications today? Have you eaten normally today?

Dental implications:

- Hypoglycemia (low blood sugar) can be a medical emergency
- Diabetics more likely to have chronic periodontitis, undiagnosed/ uncontrolled diabetes more likely to have more severe disease.
- Undiagnosed/uncontrolled diabetic patients may have poor/delayed healing after periodontal therapy or oral surgery procedures
- Controlled diabetics should respond normally to periodontal therapy and heal within normal limits
- May need to alter a Type 1 diabetic's medication schedule if NPO for dental procedure (i.e. sedation for oral surgery)

Hypertension (High blood pressure)

Definition: Systolic blood pressure above 140 mmHg and/or diastolic BP above 90 mmHg (see Stage 1).

	Systolic	Diastolic
Normal	< 120	80
Prehypertension	120-139	80-89
Stage 1	140-159	90-99
Stage 2	>160	100

Background: Risk factor for many diseases including cardiovascular disease (CVD), stroke, renal failure and heart failure; often no primary cause (termed essential hypertension); can lead to hypertrophy of left ventricle.

Symptoms: None or dizziness, headache, nosebleeds, fatigue.

Commonly used drugs and/or classes: ACE inhibitors, Beta blockers, Calcium channel blockers, diuretics.

Questions to ask patients:

1. How long has your blood pressure been this high?/Is this a normal blood pressure for you?
2. Do you measure your blood pressure at home at the pharmacy?
3. When was the last time you saw a physician/your physician?
4. Do you take medications?/Did you take your medications today?

Dental implications:

- No **elective** (routine) dental care if >160/100; due to increased risk of stroke.
- If Emergency dental care and dental pain contributes to BP – treat and monitor BP q10-15 min; consider anxiety reducing techniques.
- If Emergency dental care and >180/109 – seek MD consult.

Smoking

Definition: cigarette smoking

Background: Smoking will stimulate inflammatory response in the airways. Nicotine and tobacco cause vasoconstriction and inhibit chemotaxis, which impedes healing throughout the body, including the oral cavity.

Symptoms: Chronic cough. Tobacco odor. 20% of smokers have some degree of COPD (severity of COPD increases as the number of cigarettes and duration of smoking increases)

Questions to ask patients:

1. Do you use or have used tobacco products? Which one?
2. If current, how many per day?
3. If past, when did you stop?
4. How many years of use?
5. Interested in stopping?

Dental implications:

1. Dry socket (instruct patient to avoid smoking after tooth extraction for at least 48 hours)
2. Overall delayed healing
3. Patients that smoke tend to present with more severe periodontal disease and smoking reduces the results of periodontal therapy by 50%

Chronic obstructive pulmonary disease (COPD)

Definition: Preventable respiratory disorders that involves airway obstruction such as chronic bronchitis, bronchiolitis, and emphysema.

Background: Chronic inflammation causes narrowing of the small airways that decreases airway flow and destroys lung parenchyma and alveolar walls, resulting in COPD.

Risk factors: smoking and occupational (asbestos exposure)

Symptoms: Cough and sputum production that may precede the development of chronic and progressive shortness of breath (dyspnea).

Commonly used drugs and/or drug classes: Anticholinergics (inhaler), Inhaled corticosteroids, theophylline, antibiotic therapy (when clinical signs of infection occurs).

Questions to ask patients:

1. Do you smoke? (Apply smoking questions above)
2. How much can you do before getting short of breath?
3. What causes your symptoms to get worse?
4. What medicines do you take for your COPD? Do you have it with you?

Dental implications:

- Avoid respiratory-depressing drugs (barbiturate and narcotics).
- Avoid antibiotics (erythromycin, clarithromycin, ciprofloxacin) and antifungals (azole) in patients taking theophylline (it can elevate the concentration of theophylline to a toxic level).
- In stable patients, most dental treatments can be safely delivered. Care should be taken not to compromise the airway.
- Patients presenting with dyspnea at rest, cyanotic changes, or acute infection are not good candidates for elective procedures and should be rescheduled and referred to physician (pulmonologist).

General Anxiety Disorder

Definition: pathologic disorder when it is excessive and uncontrollable, requires no specific external stimulus, and results in physical and affective symptoms and changes in behavior and cognition.

Background: Psychiatric disorders often coexist with anxiety disorders, including posttraumatic stress disorder, substance abuse, and depression.

Commonly used drugs and/or drug classes: SSRIs, SNRI's, benzodiazepines, sedative-hypnotics, antihistamine.

Questions to ask patients (or caregiver):

1. Is there a specialist you are seeing for your condition? Do you feel your condition under control?
2. What types of behaviors/symptoms do you have when the condition is not under control?
3. Are there certain things that we can do in the office to make you more comfortable?

Dental implications:

- Combinations of meds could lead to xerostomia – for these patients Fluoride in the form of F varnish & /or Rx Prevident (22,000ppm) is indicated.
- Meds may cause bruxism – in case of symptoms, fabrication of a mouth guard maybe indicated.
- Anxiety management – iatrosedative interview (soothing, inviting tones), tell-show-do, patient should feel as part of the team making the decisions.
- Desensitization.



THE UNIVERSITY OF IOWA

COLLEGE OF DENTISTRY
& DENTAL CLINICS

Evaluation of the clinical learning environment in Iowa Dental School, using the Dental Clinical Learning Environment Instrument (DECLEI)

Nicole Krois
Anastasia Kossioni
Patrick Barlow
Cheryl Straub-Morarend
Leo Marchini

The development and validation of a questionnaire to measure the clinical learning environment for undergraduate dental students (DECLEI)

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Conclusions: The 24-item DECLEI seemed to be a practical and valid instrument to measure a dental school's undergraduate clinical learning environment.

1	I feel I can freely ask any question I have	STD	D	SLD	SLA	A	STA
2	My clinical teachers are approachable	STD	D	SLD	SLA	A	STA
3	In the clinics there is a feeling of mutual respect between the teachers and the students	STD	D	SLD	SLA	A	STA
4	The dental study programme prepared me adequately for the clinics	STD	D	SLD	SLA	A	STA
5	I undertake patients with similar demands and difficulties as my colleagues	STD	D	SLD	SLA	A	STA
6	I am learning a sufficient amount of clinical techniques	STD	D	SLD	SLA	A	STA
7	The clinical infrastructure of the school is satisfactory	STD	D	SLD	SLA	A	STA
8	My association with my patients leads to many problems	STD	D	SLD	SLA	A	STA
9	I am confident that this year I will complete my clinical responsibilities	STD	D	SLD	SLA	A	STA
10	I adequately organize my patients' folders	STD	D	SLD	SLA	A	STA
11	We use up-to-date materials and equipment in the clinics	STD	D	SLD	SLA	A	STA
12	The patients are polite towards the students	STD	D	SLD	SLA	A	STA
13	I am disappointed with my overall study experience	STD	D	SLD	SLA	A	STA
14	The topics in the clinical seminars helped me in my clinical training	STD	D	SLD	SLA	A	STA
15	The dental units' technical problems are quickly dealt with	STD	D	SLD	SLA	A	STA
16	The patients are on time for their appointments	STD	D	SLD	SLA	A	STA
17	I am satisfied with the community service that I provide as a dentist	STD	D	SLD	SLA	A	STA
18	The clinical teachers fulfill their duty and uphold the work-hours of clinics	STD	D	SLD	SLA	A	STA
19	I systematically self-evaluate my progress	STD	D	SLD	SLA	A	STA
20	The clinical teachers are chosen with strict and proper criteria	STD	D	SLD	SLA	A	STA
21	I have great research opportunities in my school	STD	D	SLD	SLA	A	STA
22	The clinical cases which I handle adequately prepare me for my profession	STD	D	SLD	SLA	A	STA
23	I am too tired to be able to work effectively in the clinics	STD	D	SLD	SLA	A	STA
24	The teachers are not adequately prepared for their class	STD	D	SLD	SLA	A	STA

SCORING AND INTERPRETATION OF THE SCALE

strongly disagree =0, disagree=20, slightly disagree=40, slightly agree =60, agree=80, strongly agree=100

QUESTIONS 8, 13, 23, 24 are negative statements and scored in reverse:
strongly disagree =100, disagree=80, slightly disagree =60, slightly agree=40,
agree=20, strongly agree=0.

Interpretation of the scale: $\leq 19.9\%$ very poor, 20–39.9% poor, 40–59.9% moderate, 60–79.9% good, $\geq 80\%$ excellent

Our study aimed to provide preliminary data on DECLEI validation in an American dental school (University of Iowa), thus providing guidance for a definitive validation study to be implemented in a larger American sample. A validated instrument will be very instrumental in measuring the impact of dental education interventions in multi-center studies across borders, which might facilitate more global networking in dental education research.

Methods

A panel of five experienced UI faculty assessed DECLEI's items relevance and content validity using the content validity index (CVI). DECLEI was then distributed to 144 students, tabulated and submitted to principal component analysis with an orthogonal (Varimax) rotation to assess internal structure of the measure. Internal consistency reliability was assessed using Cronbach's α coefficient and corrected item-total correlations. Discriminant validity was assessed by investigating gender, race, and student class differences among the resulting factors using independent samples t-tests.

Results

CVI was ≥ 0.8 for most items, except for 4 items which were re-worded to achieve consensus. From the initial 24 items, principal component analysis allowed only 18 items grouped in five domains related to student/faculty interaction, equipment and patient issues, didactical/clinical components interaction, negative perceptions and self-assessment. The Cronbach's α coefficient for the 18-item DECLEI was 0.80. The instrument presented adequate discriminant validity as differences were recorded related to gender and student class.

Question	EV1	EV2	EV3	EV4	EV5	CVI	Suggested change
1	4	4	4	4	4	1	
2	3	4	4	4	4	1	
3	3	4	4	4	4	1	
4	2	3	4	4	4	0.8	
5	4	4	4	3	3	1	
6	4	4	4	4	4	1	
7	3	3	4	3	4	1	
8	2	1	2	3	1	0.2	I do not feel confident to deal with the human aspect of my patients
9	4	4	4	3	3	1	
10	2	2	2	3	3	0.4	I complete my patients records in a timely manner
11	4	3	4	4	4	1	
12	2	3	4	4	3	0.8	
13	4	3	4	4	4	1	
14	4	4	4	4	4	1	
15	3	4	3	3	4	1	
16	2	3	4	3	4	0.8	
17	2	4	4	3	4	0.8	
18	2	4	4	3	4	0.8	
19	4	4	4	4	4	1	
20	2	1	1	3	1	0.2	Clinical teachers are enthusiastic about teaching
21	3	4	4	2	3	0.8	
22	3	4	4	4	4	1	
23	1	4	4		4	0.6	I am too tired to be able to work because of my school workload
24	2	4	4	3	4	0.8	

Sandra, Nidhi, Kecia and Justine: Thanks much!!

Component (Cronbach's Alpha)		Factor Loading
Student /Faculty Interaction ($\alpha = 0.80$)		
	Q1 I feel I can freely ask any question I have	.803
	Q2 My clinical teachers are approachable	.849
	Q3 In the clinics there is a feeling of mutual respect between the teachers and the students	.745
	Q20 Clinical teachers are enthusiastic about teaching	.681
Equipment & Patient Issues ($\alpha = 0.64$)		
	Q11 We use up-to-date materials and equipment in the clinics	.596
	Q12 The patients are polite towards the students	.783
	Q15 The dental units' technical problems are quickly dealt with.	.666
	Q16 The patients are on time for their appointments	.689
Didactic/Clinical Components Interaction ($\alpha = 0.61$)		
	Q4 The dental study program prepared me adequately for the clinics	.658
	Q5 I undertake patients with similar demands and difficulties as my colleagues	.667
	Q14 The topics in the clinical seminars helped me in my clinical training	.476
	Q21 I have great research opportunities in my school	.664
Negative Perceptions ($\alpha = 0.55$)		
	Q13 I am disappointed with my overall study experience	.638
	Q23 I am too tired to be able to work because of my school workload	.575
	Q24 The teachers are not adequately prepared for their class	.664
Self-Assessment ($\alpha = 0.52$)		
	Q9 I am confident that this year I will complete my clinical responsibilities	.678
	Q10 I complete my patients records in a timely manner	.779
	Q19 I systemically self-evaluate my progress	.578

Conclusions

Data presented here showed that DECLEI has the potential to be used as a reliable instrument to measure the clinical learning environment for undergraduate American dental students. These results encourage taking the next step of validating DECLEI in a larger American dental students sample. If DECLEI is also validated in many other countries, it may provide a reliable tool to compare dental education interventions to improve clinical learning in multi-center studies, thus facilitating dental education global networking.

But, what REALLY matters to us is...

Final DECLEI score

D3- 72.7 ± 9.1 (good)

D4- 70.9 ± 6.66 (good)

Combined – 71.5 ± 8.2 (good)

Q1. I feel I can freely ask any question I have

D3- 70.5

D4- 55.4

Combined – 63.2

Q2. My clinical teachers are approachable

D3- 69.2

D4- 66.3

Combined – 67.8

**Q3. In the clinics there is a feeling of mutual respect
between the teachers and the students**

D3- 69.2

D4- 66.3

Combined – 67.8

Q4. The dental study programme prepared me adequately for the clinics

D3- 76.2

D4- 76.6

Combined – 76.4

Q5. I undertake patients with similar demands and difficulties as my colleagues

D3- 73.2

D4- 74.3

Combined – 73.7

Q6. I am learning a sufficient amount of clinical techniques

D3- 82.2

D4- 76.0

Combined – 79.2

Q7. The clinical infrastructure of the school is satisfactory

D3- 80.0

D4- 74.8

Combined – 77.5

Q8. My association with my patients leads to many problems

D3- 76.5

D4- 82.8

Combined – 79.6

Q9. I am confident that this year I will complete my clinical responsibilities

D3- 76.7

D4- 82.0

Combined – 79.3

Q10. I adequately organize my patients' folders

D3- 74.3

D4- 82.0

Combined – 78.0

Q11. We use up-to-date materials and equipment in the clinics

D3- 77.3

D4- 69.4

Combined – 73.5

Q12. The patients are polite towards the students

D3- 76.2

D4- 73.1

Combined – 74.7

Q13. I am disappointed with my overall study experience

D3- 72.7

D4- 75.1

Combined – 73.9

Q14. The topics in the clinical seminars helped me in my clinical training

D3- 75.4

D4- 75.1

Combined – 75.2

Q15. The dental units' technical problems are quickly dealt with

D3- 74.6

D4- 71.1

Combined – 72.9

Q16. The patients are on time for their appointments

D3- 56.2

D4- 50.1

Combined – 53.3

Q17. I am satisfied with the community service that I provide as a dentist

D3- 78.9

D4- 72.6

Combined – 75.8

Q18. The clinical teachers fulfill their duty and uphold the work-hours of clinics

D3- 73.0

D4- 70.0

Combined – 71.5

Q19. I systematically self-evaluate my progress

D3- 78.1

D4- 77.1

Combined – 77.6

Q20. The clinical teachers are chosen with strict and proper criteria

D3- 67.0

D4- 62.0

Combined – 64.5

Q21. I have great research opportunities in my school

D3- 77.8

D4- 79.1

Combined – 78.5

**Q22. The clinical cases which I handle adequately
prepare me for my profession**

D3- 82.2

D4- 77.4

Combined – 79.9

Q23. I am too tired to be able to work effectively in the clinics

D3- 44.0

D4- 48.3

Combined – 46.1

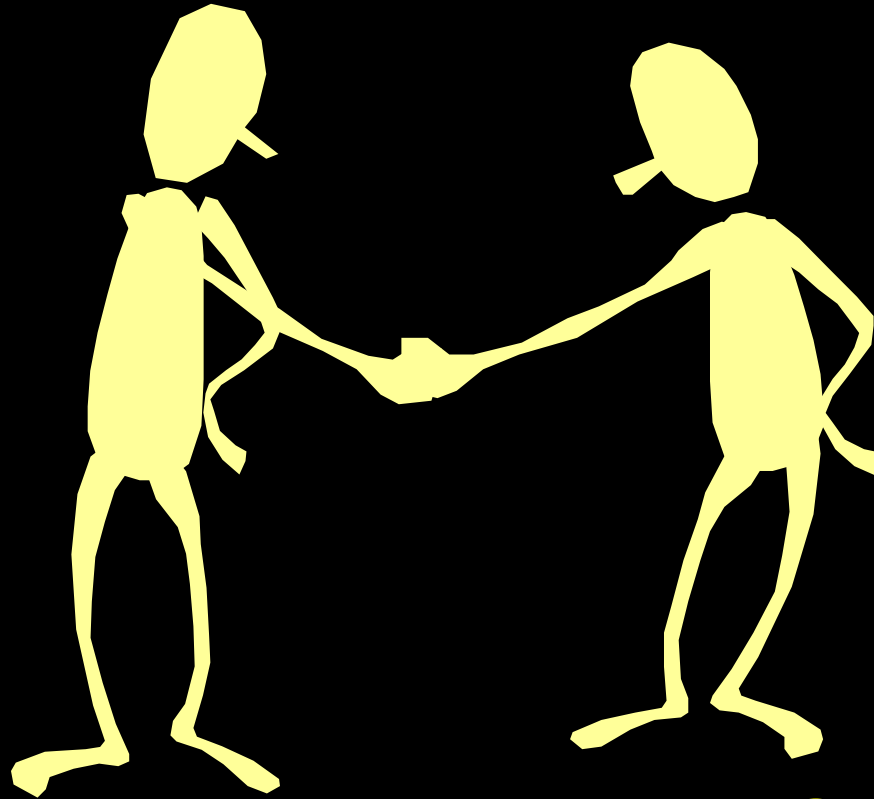
Q24. The teachers are not adequately prepared for their class

D3- 72.7

D4- 73.1

Combined – 72.9

Thank you for



your attention!