



Treating Today's Medically Complex Patients

A Cross-Departmental Approach to Train Students and Faculty

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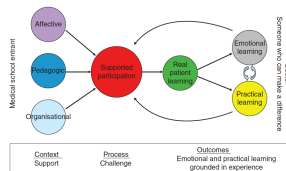


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Introduction

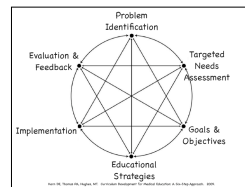
Patients are coming to the dentist with longer lists of medications, elaborate histories of hospitalizations and surgeries, and medical illnesses that impact the safe delivery of dental care. Healthcare is moving in the direction of interprofessional education and collaborative care to better manage such patients. The next generation of dentists will need to be adept at (1) developing doctor-patient relationships, (2) eliciting targeted but thorough health histories, (3) determining when overall health impacts safe delivery of dental care by applying foundational science knowledge to clinical care, and (4) communicating with other members of the health care team. Models for patient-doctor courses, patient interviewing, and patient presentation already exist in other health professions. In order to teach these concepts, a cadre of faculty must also be trained.

The Commission on Dental Accreditation (CODA) has acknowledged that dentists now need these skills. Using Dorman's model of experience-based learning, Kern's 6-step approach to Curriculum Design, and Kolb's Spiral of Experiential Learning, UCSF is building an innovative and cross-departmental solution to train the next generation of dentists.



Dorman's Experience-Based Learning Model

Methods

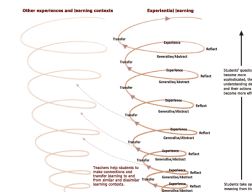


Kern's 6-step Approach to Curriculum Development

- 1. Problem Identification:** Patients are living longer with more chronic medical conditions. Dentists need to be prepared to evaluate patient's health to determine suitability for elective dental care and need for referral to other members of the health care team.
- 2. Targeted Needs Assessment:** Student performance on competency exams, exit evaluations, focus groups, and review of medical emergencies protocol for student teaching clinic.
- 3. Goals and Objectives:**
 - Elicit health histories to assess patient's stability for dental care, and modifications needed
 - Present patients in a systematic fashion, consistent with other health professions
 - Apply foundational sciences to patient care
 - Develop faculty to learn new concepts and skills
- 4. Educational Strategies & Assessment:**
 - a. D1 patient evaluation module-** 10 students watch faculty interview a medically complex patient. Each student has 5 mins to present to a faculty member using the standardized patient presentation format. Videotaped.

- b. D2 patient evaluation module-** 15 mins: student interviews a medically complex standardized patient (SP). 15 mins: look up medical conditions and medications. 5 mins: present to faculty using the standardized patient presentation format. 5 mins: receives feedback from faculty. SP evaluates student. Interview & presentation videotaped.
 - c. D3 Medical Risk Assessment competency exam-** Student interviews real patient with complex health history. Has 15-20 minutes to present to faculty, determine suitability for urgent and elective dental care, list modifications to management and treatment planning, and answer faculty questions on application of basic science to clinical care.
 - d. D4 Training on Managing Medical Emergencies-** Small-group seminars on preventing, recognizing, and managing common medical emergencies within the framework of a Basic Life Support-trained healthcare provider.
 - e. Faculty Training in Medical Risk Assessment-** Review of systemic physiology/pathophysiology and impact on dental care, review when and how to consult primary MD or NP, observe videotaped competency exams, calibrate.
 - f. Faculty Training on Managing Medical Emergencies-** Interactive presentation on systemic physiology/pathophysiology, identification and management of most common and most life-threatening medical emergencies.
- 5. Implementation:** Item d has been long-standing in the curriculum. Items a and b implemented in 2011 by the Oral & Maxillofacial Surgery. Items c and f were created by Preventive & Restorative Dental Sciences (PRDS) in 2013. Item e is planned for June of 2016 by PRDS.

6. Evaluation and Feedback: Student satisfaction surveys and course evaluations show they are highly satisfied. Possible future outcomes measures include patient surveys, trends in medical emergencies in the teaching clinics, and audits of consultations to MD and NP colleagues.



Kolb's Spiral of Experiential Learning

Conclusions

As our patient population and health care systems change, so must our curricula. In this example, cross-departmental collaboration allowed retrospective alignment of independent curricular projects to build on prior learning.

Support & Acknowledgement

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