

# Virtual caries management competency

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## 1 | PROBLEM

Due to the COVID-19 pandemic, all the DMD clinical activities were suspended at the University of Florida on March 12. Therefore, many students were unable to complete the caries management competency (CMC) before the end of the clinical course. The CMC required the physical presence of the patient and a PowerPoint presentation in which the student presented information from the initial caries risk assessment (CRA),<sup>1-3</sup> at least 2 reassessments, the caries management plan,<sup>1</sup> and how the plan decreased the patient's risk.

## 2 | SOLUTION

With the uncertainty of when the students would return to clinic, the proposal was to create a 30-minute virtual CMC. The students were asked to create a 20-minute PowerPoint presentation with the data from the initial CRA and at least 1 reassessment. Moreover, the students were

asked to be prepared to provide answers about the CRA and 2 hypothetical scenarios (better and worse prognosis). The students were evaluated using a pass/fail rubric with 8 questions that included categories for case presentation, professionalism, patient management, caries management with possible caries activity, risk factors, and risk-level changes. After the presentation, the examiners met virtually to determine the student's final grade (Figure 1). CMC sessions were scheduled in coordination with other clinical courses.

## 3 | RESULTS

Considering faculty and student feedback, the virtual CMC was considered a successful change. The advantages of this model included having better presentations, well-prepared students, and focused time to evaluate the student's critical thinking, evidence-based rationale for the management plan, and assessment of the patient's motivation, compliance, and risk. Also, the silent environment and scheduled

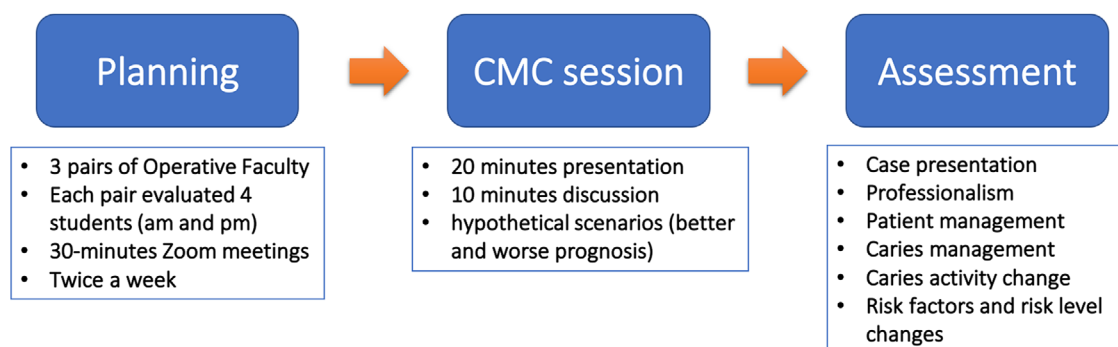


FIGURE 1 Flow chart of the virtual caries management competency (CMC) logistics

time away from the patient allowed the examiners a better opportunity for a candid evaluation of the student, whereas in the clinical environment it was a challenge to manage the competencies with a patient present and while overseeing additional clinical procedures. The addition of another examiner resulted in a better evaluation method and necessitated calibration among faculty, which also improved more consistent assessment. The difficulties found were related to missing data and infeasibility of physical access to the College. Some students were not able to obtain data from 2 reassessments or take additional pictures, and the faculty member was not able to examine the patient clinically due to patient cancellations and the unanticipated clinic closure. To overcome the problem, students were challenged to provide different possible scenarios for that patient and asked to explain how the management plan could be modified in each scenario. The virtual CMC was an unanticipated change that will definitely be considered as an addition to our curriculum. Ideally, in the future, students will gather the necessary data to complete this competency virtually. However, the challenge of missing data are solved by allowing the students the opportunity to create different scenarios in the virtual CMC, which makes

this a viable alternative when a patient does not return to complete treatment. With this model, the critical thinking, CRA,<sup>1-3</sup> caries management planning, and evidence-based rationale were better evaluated, and faculty calibration was improved.

## REFERENCES

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