# Interprofessional collaboration to integrate oral health into medical education

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## Introduction

North Carolina fails to meet the oral health needs for the majority of its population, ranking 37th in the USA in dentist to population ratios and 70 of 100 counties having a shortage of dental health professionals. This will continue to worsen through 2025.

By integrating oral health into the medical curriculum, these disparities can be decreased.

## Objectives

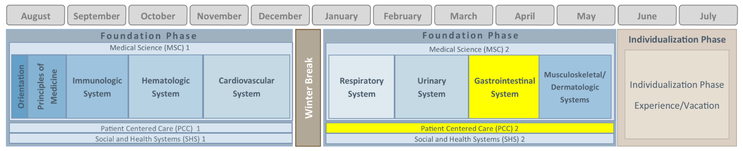
1. To incorporate oral health knowledge and head, neck, oral examination skills as part of the physical examination component in medical education.
2. To evaluate medical school faculty and students perceptions of the effectiveness of interprofessional education experience and attitudes toward integrating oral health into primary care.

## Methods

### Design

1. A team of dental and medical faculty and students reviewed the medical school curriculum to identify potential integration of oral health content into its Foundational Phase (first 18 months).
2. Developed a head, neck and oral examination instructional video as part of the *Smiles for Life* teaching materials
3. Head, neck, and oral exam taught during GI block in the small groups of the associated Patient Centered Care Course.

School of Medicine First Year Curriculum
Translational Education at Carolina (TEC)



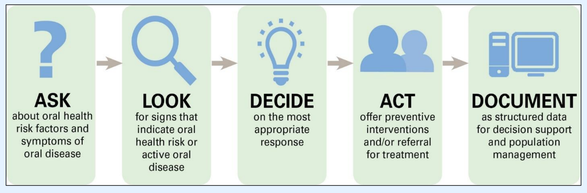

**Subjects** First-year medical students and the small group faculty facilitators in the Patient-Centered Care Course

- 301 Medical Students (86% return rate)
- 43 Medical School Faculty (89.6% return rate)
- 12 DDS/MS students (60% return rate)

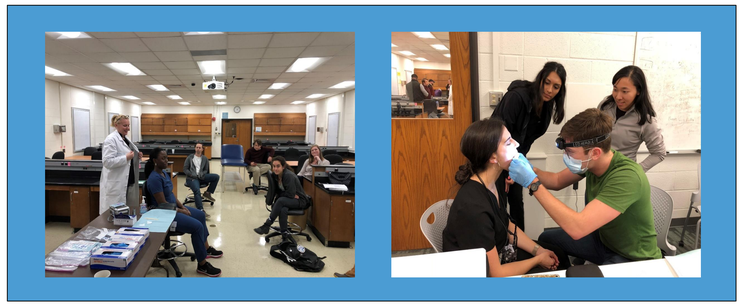
### Intervention

**The *Smiles for Life*** video *"Oral Health for the Primary Care Provider"* was developed and reviewed before the live session by medical students and faculty


The ***Qualis*** *"Oral Health Delivery Framework"* was utilized as a guideline.




**Hands-on Interprofessional Education**: Dental students and Faculty delivered a demonstration of the oral head and neck exam followed by supervised practice on simulated patients or peers.

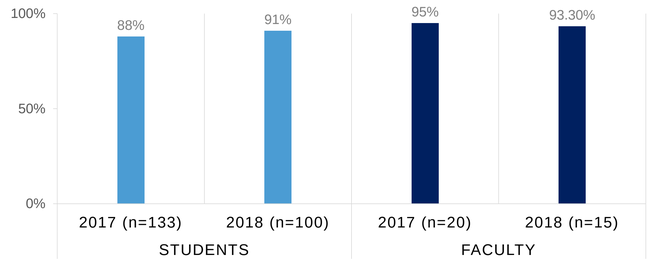


### Evaluation

Medical students and faculty, and dental students were surveyed regarding the usefulness of the oral health video, the efficacy and effectiveness of the demonstration and hands on session, and their post-intervention attitudes regarding oral health in medical education. Quantitative and qualitative data were collected and descriptive statistics performed.

## Results

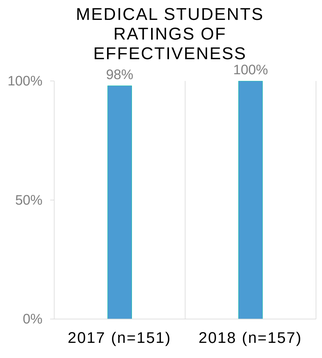
**EFFECTIVENESS OF THE VIDEO *"ORAL HEALTH FOR THE PRIMARY CARE PROVIDER"* TO PREPARE FOR THE ORAL HEALTH SCREENING SESSION [1]**




[1] Rated "*Very Effective*" or "*Effective*" on a 4-point rating scale from "Very Effective" to "Not at All Effective"

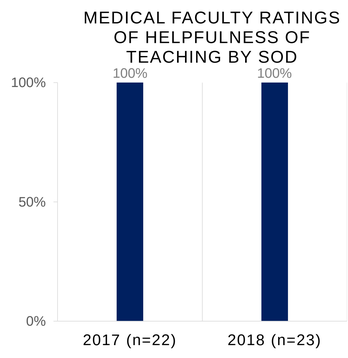
**PRACTICE SESSION**

MEDICAL STUDENTS RATINGS OF EFFECTIVENESS



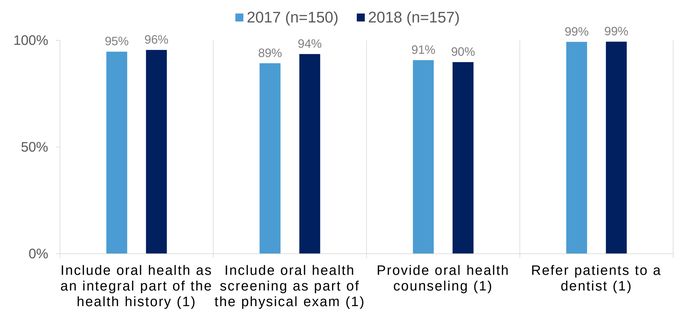

Rated "Very Effective" or "Effective" on a 4-point rating scale from "Very Effective" to "Not at All Effective"

MEDICAL FACULTY RATINGS OF HELPFULNESS OF TEACHING BY SOD



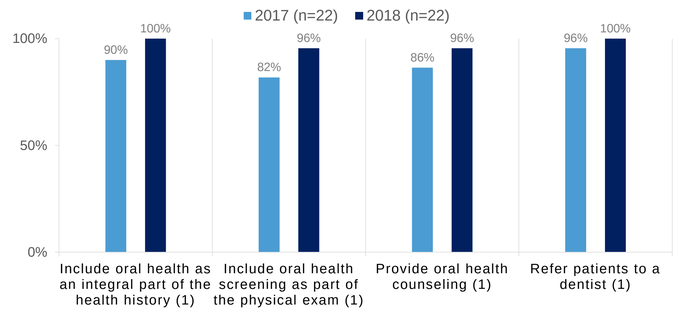

Rated "Very Helpful" or "Helpful" on a 4-point rating scale from "Very Helpful" to "Not at All Helpful"

**STUDENTS ATTITUDES TO INTEGRATE ORAL HEALTH***




(1) Rated "Very Important" or "Important" on a 4-point scale from "Very Important to "Not Important".

**FACULTY ATTITUDES TO INTEGRATE ORAL HEALTH***




(1) 1 Rated "Very Important" or "Important" on a 4-point scale from "Very Important to "Not Important".

### SELECTED COMMENTS

**Medical Students**
- "Repetition of material 1) video 2) demo 3) practice"
- "Explaining importance behind particular physical exam findings- why check particular areas and what to look for"
- "Having the demonstration and having lots of student/residents to give individual feedback/instruction"
- "practicing on a dental student was helpful so they could give immediate feedback"

**Medical Faculty**
- "I liked that we had the dental faculty come teach! I learned a lot- I would not have done nearly as well!"
- "Brilliant. love the interdisciplinary nature of this session. I learned a lot."

**Dental Student**
- "By teaching the head and neck exam . . . I will be more prepared to do it on patients in the future. I know what to look for and how to communicate with those who may not understand dental jargon at our level. I believe more (if not all) first year students should do this!"

## Conclusions

- The Schools of Dentistry and Medicine successfully integrated oral health education into the medical school curriculum.
- Medical faculty and students evaluated the interprofessional education experience positively and rated the integration of oral health into primary care as important.
- Collaboration among health affairs schools is resource intensive and requires "champions" at each schools to maximize its success.

## References