

## ABSTRACT

Interprofessional education (IPE), although not a new concept, is currently one of the hottest topics in dental education. The momentum behind IPE has not only resulted in education standards but also innovative programs in health professional schools. This is because proper interprofessional care should optimize patient outcomes.

**Objective:** To investigate the current level of IPE in U.S. dental education

**Methods:** An 18-item survey was sent to all U.S. dental schools (N=68). This study was part of a HRSA-funded grant with a focus on the integration of oral health in primary care training.

**Results:** 29 schools responded, for a response rate of 43%. 96% reported engaging in IPE. Medical (90%), pharmacy (76%), and nursing (62%) students were the most common learners to have participated. 79% of schools had faculty teaching in other health professional schools, while 93% had faculty from other health professions teaching in their curriculum. However, while the majority of dental leaders reported engagement in IPE, fewer strongly agreed that they were satisfied with the level of preparation (8%) and competence (0%) of students in IPE by graduation.

**Conclusions:** These results show that, while IPE is widely prevalent, involvement is not enough. Educators must be challenged to take the next step and ensure IPE translates into behavioral change because when students become practitioners, the true value of IPE lies in improved patient care.

## TIMELINE OF IPE IN HEALTH EDUCATION

- **1960's** – IPE first published in health professional education literature<sup>1</sup>
- **1972** – Institute of Medicine's (IOM) first conference on IPE<sup>2</sup>
- **1980's** – World Health Organization (WHO) publishes IPE reports<sup>1</sup>
- **2003** – IOM report on health professional education quality improvement through interdisciplinary teams
- **2010** – WHO publishes "The Framework for Action on Interprofessional Education and Collaborative Practice"<sup>3</sup>
- **2011** – Interprofessional Education Collaborative (IPEC) created/set standards<sup>4</sup>
- **2011** – ADEA Team Study Group on Interprofessional Education formed
- **2012** – ADEA IPE team published study on current IPE activities<sup>5</sup>
- **2013** – CODA standards related to IPE implemented<sup>6</sup>
- **2014** – ADEA surveyed U.S. dental schools on IPE activities<sup>7</sup>
- **2016** – IPEC standards revised

## OVERVIEW OF CIPCOH

### Mission

The Center to Integrate Primary Care and Oral Health (CIPCOH) serves as a national resource to consolidate the evidence base for systems-level oral health integration into primary care training.

### Vision

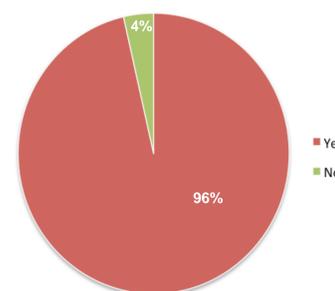
CIPCOH envisions the role of integrative training and practice leading to cost-effective, patient-centered, and improved patient outcomes within the delivery of primary care.

## METHODS

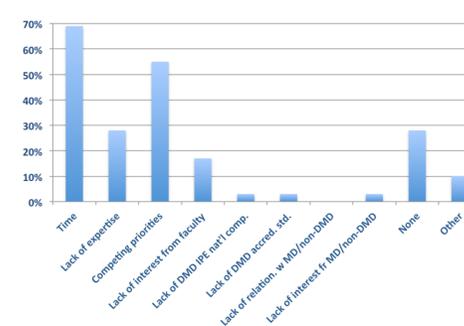
- 18-item survey, adapted from original CIPCOH survey of primary care disciplines, sent to 68 Deans of U.S. dental schools (Feb – Jun 2017)
- Web-based survey tool and data collection software application used (SurveyMonkey, Inc., Palo Alto, CA)
- Data analysis conducted with SPSS statistical software (SPSS V23, IBM Corporation, 2015)
- Most items described with univariate statistics (frequencies, percentages, means, etc.)
- Bivariate analyses conducted to assess the relationship between number of barriers to teaching more IPE and satisfaction with students' level of competence in IPE by graduation

## RESULTS

Number of schools with IPE sessions:



Barriers to more IPE sessions:



### Types of learners in the IPE sessions: Methods of evaluating IPE competency in learners:

#### Top 3:

1. Medical students (90%)
2. Pharmacy students (76%)
3. Nursing students (62%)

#### Bottom 3:

1. Physical therapy students (7%)
2. Internal Medicine residents (3%)
3. Obstetrics residents (3%)

Evaluation Method	%
Written test	3
OSCE	41
Simulation	28
Direct observation (clinical)	38
Review clinical documentation	41
No evaluation	17
Other: Portfolio	3

## RESULTS (cont'd)

### Respondents' level of agreement on the importance of IPE, student preparedness for IPE, and their satisfaction with students' competency in IPE

- 96% of respondents **strongly agree/agree** that it is important for medical providers to address their patients' basic oral health care issues.
- 96% of respondents **strongly agree/agree** that it is important for dental providers to address their patients' systemic health issues.
- 60% of respondents **strongly agree/agree** that upon graduation, their dental students are well prepared to work collaboratively with medical providers on oral health issues.
- 24% of respondents **strongly agree/agree** with the statement: "I am satisfied with the current level of competence that our dental students achieve in IPE by graduation."

## NEXT STEPS

- Evaluation, Evaluation, Evaluation
- Further define what competence means in IPE
- Transition beyond IPE and focus on Interprofessional Practice (IPP) – moving interprofessional efforts from classroom to practice
- Establish and/or strengthen IP partnerships
- Establish measures and evaluation methods of IPE/IPP's impact on improving patient outcomes

## REFERENCES

- <sup>1</sup>Fransworth TJ, Seikel JA, Hudock D, Holst J. History and development of interprofessional education. 2015. At <https://www.omicsonline.org/open-access/history-and-development-of-interprofessional-education-jpay-1000101.php?aid=63418>. Accessed: November 8, 2017.
- <sup>2</sup>Institute of Medicine. Educating for the health team. Washington, D.C.: National Academy of Sciences, 1972.
- <sup>3</sup>Health Professions Network Nursing and Midwifery Office, Department of Human Resources for Health. A WHO report: framework for action on interprofessional education & collaborative practice. Geneva: World Health Organization, 2010.
- <sup>4</sup>Interprofessional Education Collaborative Expert Panel. Core competencies for interprofessional collaborative practice: report of an expert panel. Washington, D.C.: Interprofessional Education Collaborative, 2011.
- <sup>5</sup>Formicola, AJ, Andrieu, SC, Buchanan, JA et al. Interprofessional education in U.S. and Canadian dental schools: an ADEA team study group report. J Dent Educ 2012;76(9):1250-1268.
- <sup>6</sup>Commission on Dental Accreditation. Accreditation standards for dental education programs. Chicago: American Dental Association, 2017.
- <sup>7</sup>Palatta A, Cook BJ, Anderson EL, Valachovic RW. 20 years beyond the crossroads: the path to interprofessional education at U.S. dental schools. J Dent Educ 2015;79(8):982-996.

## IRB & ACKNOWLEDGEMENTS

The University of Massachusetts Medical School (#H00012069) and Harvard School of Dental Medicine (#17-0189) Institutional Review Boards approved this study and gave exemption waivers.

We would like to acknowledge HRSA and the larger CIPCOH team for their support and help in this study.