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Collaborators: Bharati Prasad, MD, MS; Clark Stanford, DDS, PhD, MHA; Susan Rowan, DDS, MS; Michelle Mariscalco, MD

Background



Core mission: advance healthcare for patients and communities through collaboration with its academic partners.

- UIC Sleep Science Center – averages 400 overnight sleep studies per month, of which approximately 70% are diagnosed with obstructive sleep apnea (OSA), a significant public health issue
- Given difficulty of adherence Continuous positive airway pressure (CPAP), many patients are referred to private dental clinics for oral appliance treatment



- UIC College of Dentistry provides a potential partnership opportunity for the provision of oral appliance treatment for OSA patients.

Aim

To perform an in-depth analysis on the potential opportunities and challenges in establishing an inter-professional clinic between the Colleges of Medicine and Dentistry, specifically a collaborative Sleep Medicine – Dental Sleep Medicine clinic

Methods

SWOT Analysis via literature review, analysis of clinical operations data, community engagement, and key informant interviews of important stakeholders for this endeavor

Results

Initiated Annual UIC Sleep and Pain Symposium (to gauge community interest):

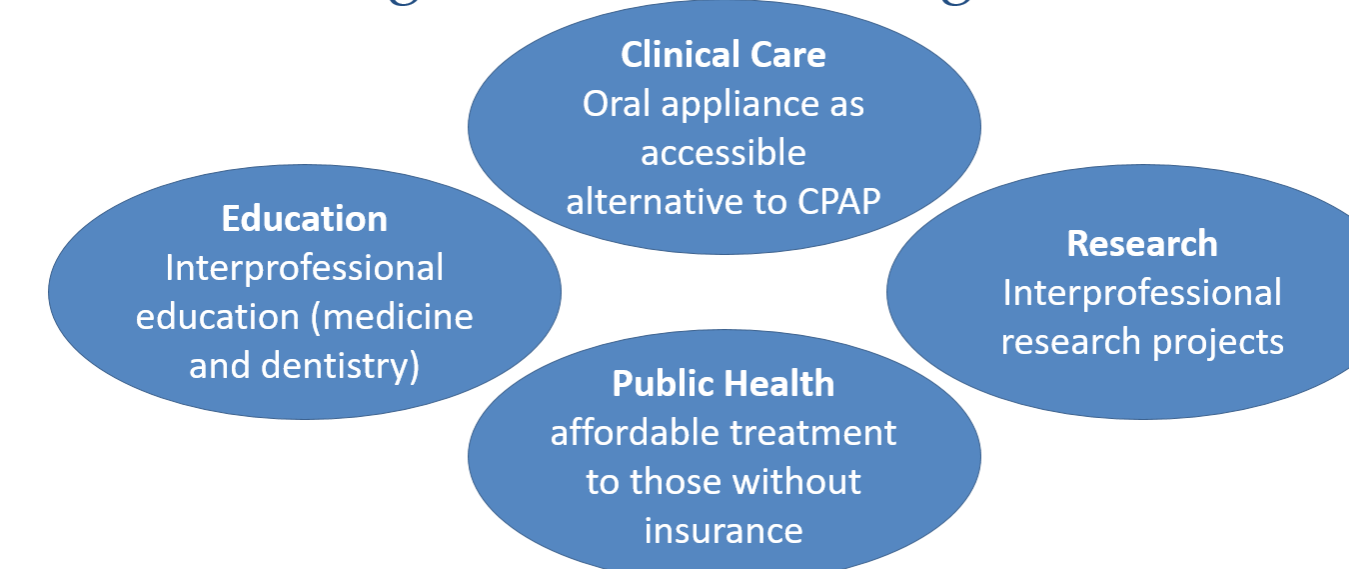
2020 - attracted attendees from 4 continents, a mix of healthcare professionals, faculty, students

2021 - attendees from 5 continents, a mix of healthcare professionals, faculty, students, and patients

Key Informants/ Stakeholders:

- UIC Sleep Center Medical Director and Clinical Operations Manager
- UIC Dentistry Dean and Associate Dean of Finance
- CEO – large local Dental Sleep Clinic
- Primary Author of paper on multidisciplinary sleep clinic in an academic setting
- UIC Vice Chancellor for Health Affairs and Asst. Vice Chancellor Health Sciences Academic Affairs

Strength Domains of Integrated Clinic



STRENGTHS:

- Enhances the institution's clinical care and educational missions
- Promotes inter-professional practice collaboration for the benefit of patients
- Tangible impact especially to the urban minority and underserved populations served by

WEAKNESSES:

- Lack of medical billing infrastructure within the dental school
- Pending universal EHR between dental school and UI Health
- Need dedicated space and trained personnel

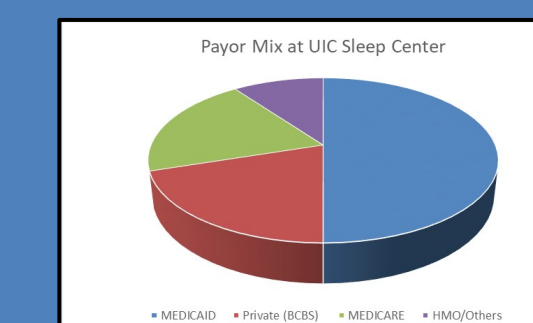
OPPORTUNITIES:

- A good incubator for more collaborative high-impact research projects
- Set in Chicago's medical district, high potential of conducting Continuing Professional Education courses for the healthcare community
- Good training opportunity for both medical fellows and dental students

THREATS:

- Lack of inter-professional practices that have robust fiscal systems in place
- Unsuccessful payor negotiations
- Largely Medicaid population at UI Health (lack of Medicaid coverage for oral appliance therapy)

SWOT Analysis



Conclusions

- The SWOT analysis revealed strengths in multiple domains: Clinical Care, Education, Research, and Public Health.
- Establishing a combined sleep medicine-dental sleep medicine clinic will promote UI Health's missions in significant ways.
- Successful implementation would bring national and international recognition to the institution.
- Next steps:
 - Attracting/ meeting with more stakeholders
 - Further discussions regarding fiscal matters
 - Potential payor reimbursement negotiations
 - Exploring partnerships with outside entities



References

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ABSTRACT: 2022 ELAM Institutional Action Project

Project Title: Developing an Integrated Sleep Medicine – Dental Sleep Medicine Clinic at UI Health

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Collaborators and Mentors: Bharati Prasad, MD, MS, Medical Director – UIC Sleep Center; Clark Stanford, DDS, PhD, MHA, Dean – University of Iowa College of Dentistry; Susan Rowan, DDS, MS, Interim Dean - UIC College of Dentistry; Michelle Mariscalco, MD, Assistant Vice Chancellor – UIC Health Sciences Academic Affairs

Topic Category: Clinical (and Education)

Background, Significance of project: The University of Illinois Hospital and Health Sciences System (UI Health) is a comprehensive clinical care enterprise, comprised of a tertiary care hospital, several outpatient clinics, federally qualified health centers, and the seven health sciences colleges. The core mission is to advance healthcare for patients and communities through collaboration with its academic partners. It is led by the UIC Vice Chancellor for Health Affairs whose office is committed to establishing unique programs and inter-professional collaborations as a means of promoting its clinical, education, and research missions for the benefit of the community. The Sleep Science Center is one of the outpatient clinics at UI Health, conducting an average of 400 overnight polysomnography and home sleep studies per month. Of these patients, approximately 70% are diagnosed with obstructive sleep apnea (OSA), a well-known public health concern. Continuous positive airway pressure (CPAP) is the primary OSA treatment. Although highly efficacious, CPAP is limited by low adherence in 40-50% of patients. Many of these patients are referred to private dental clinics for oral appliance treatment, an alternative to CPAP treatment. Located only 1 mile from the Sleep Science Center is the UIC College of Dentistry, the training ground for more than half the dental providers in the state of Illinois, providing a potential partnership opportunity for the provision of oral appliance treatment.

Purpose/Objectives: The aim of this project is to perform an in-depth analysis on the potential opportunities and challenges in establishing an inter-professional clinic between the Colleges of Medicine and Dentistry, specifically a collaborative Sleep Medicine – Dental Sleep Medicine clinic.

Methods/Approach/Evaluation strategy: The primary method was a strengths, weaknesses, opportunities, and threats (SWOT) analysis, which was conducted through a thorough evaluation of both dentistry and sleep medicine clinical operations, review of pertinent literature, and interviews with key stakeholders including: institution leaders, experts from other institutions with similar infrastructure, and healthcare providers in both clinical settings. Additionally, an inaugural Annual Sleep Symposium was held.

Outcomes/Results: The SWOT analysis revealed strengths in multiple domains related to establishing an inter-professional clinic between the Colleges of Medicine and Dentistry:

1. Clinical Care – patients unable to use CPAP treatment could obtain timely high-quality care at an affordable cost
2. Education – dental students / sleep medicine fellows could benefit from inter-professional practice
3. Research – collaboration between these units would continue to produce high impact research projects
4. Public Health – establishing this clinic would allow patients, especially the urban minority and underserved, who do not have access to state or private insurance, to receive more affordable treatment at the reduced dental college fees (25-50% less than ACR fees).

Potential weaknesses include fiscal hurdles such as medical billing. Future opportunities include emerging research collaborations, creating a dental sleep medicine residency program, and partnering with entities beyond UI Health. Finally, possible threats are unsuccessful payor negotiations and other rival providers/clinics.

Discussion/Conclusion with Statement of Impact/Potential Impact: Establishing a combined sleep medicine-dental sleep medicine clinic will promote UI Health's mission related to clinical care, education, research, and public health in significant ways. Successful implementation would bring national and international recognition to the institution.