



**School of Dentistry  
Doctor of Dental Surgery  
Interprofessional Education Plan  
Academic Year 2022-2023**

**Background**

UT Health San Antonio's Strategic Vision for fiscal years 2018-2022 identifies Teamwork & Collaboration as a core value, and it also highlights strengthening interprofessional team-based learning opportunities across the organization as a key strategy. The Quality Enhancement Plan (QEP), Linking Interprofessional Networks for Collaboration (LINC), is an institution-wide effort to advance our Strategic Vision by enhancing interprofessional education (IPE) at UT Health San Antonio. Key measures of success include increasing student knowledge and skills related to IPE, demonstrating schools' and programs' adoption of IPE as a strategic priority through increased activities integrated into programs' curricula, and increasing opportunities for student IPE experiences across the institution. To contribute to the coordinated implementation of the QEP and to demonstrate compliance with program-specific IPE accreditation standards, the School of Dentistry's (SOD) Associate Dean for Academic, Faculty and Student Affairs led the development and implementation of the Doctor of Dental Surgery (DDS) IPE Plan with contributions from an IPE Task Force made up of members drawn from SOD.

**Profession-Specific Accreditation Mandate**

The Commission on Dental Accreditation requires the integration of IPE into the DDS program curricula, as evidenced by the following standards/expectations:

**Doctoral Dental Surgery Program**

There are two standards that address IPE.

- **CODA Standard 1-9** says the dental school must show evidence of interaction with other components of the higher education, health care education and/or health care delivery systems.
- **CODA Standard 2-20** says graduates must be competent in communicating and collaborating with other members of the health care team to facilitate the provision of health care. The intent of this standard is to attain competence in understanding the roles of members of the health care team and have educational experiences, particularly clinical experiences, that involve working with other healthcare professional students and practitioners. Students should have educational experiences in which they coordinate patient care within the health care system relevant to dentistry.

**School of Dentistry Doctor of Dental Surgery IPE Plan**

In accordance with HPAC recommendations, this IPE plan consists of four components: rationale, outcome-based goals, deliberate design, and assessment & evaluation. Details for each component are included below:

**Rationale**

Alignment with campus partners through the University's QEP provides a framework and justification. In addition, graduates need to be competent in communicating and collaborating with other members of the health care team. Collaboration among health professionals is critical for dental disease

prevention and optimal oral health. Moreover, an aging population with an increased prevalence of polypharmacy and polymorbidity place growing demands on dental practitioners for coordinated care to achieve safe outcomes.

### Outcome-based Goals

As an institution, we have chosen IPEC as our shared framework, and the IPEC sub-competencies will serve as the overarching outcome-based goals of the DDS program. In addition to the outcome-based goals, each program needs to meet educational outcomes. Each educational outcome is tied to IPEC sub-competencies under the four broad IPEC Competency Domains.

**Table 1. Doctor of Dental Surgery IPE Plan – Goals Identified through Crosswalk of Interprofessional Practice-Relevant Competency Frameworks**

IPE Experience/ SOD Program/ Program Objective	IPEC Domains of Competence	IPEC Sub-Competencies Targeted
<p>Ergonomics SHP</p> <p>Promote values and ethics for interprofessional education</p> <p>Recognize roles and responsibilities of each profession to enhance collaborative practices</p>	<p>Roles and Responsibilities</p> <p>Interprofessional Communication</p>	<p>RR4 -Explain the roles and responsibilities of other providers and how the team works together to provide care, promote health, and prevent disease.</p> <p>CC5 - Give timely, sensitive, instructive feedback to others about their performance on the team, responding respectfully as a team member to feedback from others.</p>
<p>LINC Common IPE Experience All UTHSA Schools</p> <p>Demonstrate communication skills and collaboration with other members of the health care team to facilitate the provision of health care.</p>	<p>Teams and Teamwork</p> <p>Interprofessional Communication</p>	<p>TT1 -Describe the process of team development and the roles and practices of effective teams</p> <p>TT8 -Reflect on individual and team performance for individual, as well as team, performance improvement</p> <p>TT10 -Use available evidence to inform effective teamwork and team-based practices</p>
<p>HENOT-Head, Ear, Nose, Oral Cavity &amp; Throat SOD &amp; SOM</p> <p>Foster interprofessional communication practices</p> <p>Promote values and ethics for interprofessional education</p>	<p>Teams and Teamwork</p>	<p>TT7 -Share accountability with other professions, patients, and communities for outcomes relevant to prevention and health care.</p>

<p>SBP – School-Based Prevention Program SOD &amp; SON</p> <p>Improving the experience of health care and integrating oral to overall health</p> <p>Addressing cultural humility and social determinants of health as an interprofessional collaborative addressing population health outcome with emphasis on inclusion and equity training</p>	<p>Values and Ethics</p>	<p>VE1 -Place interests of patients and populations at center of interprofessional health care delivery and population health programs and policies, with the goal of promoting span.</p> <p>TT5 - Apply leadership practices that support collaborative practice and team effectiveness.</p>
<p>San Antonio Refugee Health Clinic SOD &amp; SOM</p> <p>Improving the experience of health care and integrating oral to overall health</p> <p>Addressing cultural humility and social determinants of health as an interprofessional collaborative addressing population health outcome with emphasis on inclusion and equity training</p>	<p>Values and Ethics</p> <p>Interprofessional Communication</p>	<p>VE4- Respect the unique cultures, values, roles/responsibilities, and expertise of other health professions and the impact these factors can have on health outcomes.</p> <p>CC7 - Recognize how one's uniqueness (experience level, expertise, culture, power, and hierarchy within the health team) contributes to effective communication, conflict resolution, and positive interprofessional working relationships (University of Toronto, 2008</p>
<p>LINC Simulation IPE Experience</p>	<p>Teams/Teamwork</p> <p>Interprofessional Communication</p>	<p>TT3: Engage health and other professionals in shared patient-centered and population-focused problem-solving</p> <p>TT4: Integrate the knowledge and experience of health and other professions to inform health and care decisions, while respecting patient and community values and priorities/preferences for care</p> <p>TT6: Engage self and others to constructively manage disagreements about values, roles, goals, and actions that arise among health and other professionals and with patients, families and community members</p>

		<p>CC1: Choose effective communication tools and techniques, including information systems and communication technologies, to facilitate discussions and interactions that enhance team function.</p> <p>CC2: Communicate information with patients, families, community members, and health team members in a form that is understandable, avoiding discipline-specific terminology when possible.</p> <p>CC6: Use respectful language appropriate for a given difficult situation, crucial conversation or conflict</p>
LINC Clinical IPE Experience	<p>Interprofessional Communication</p> <p>Team and Teamwork</p> <p>Roles/Responsibilities</p>	<p>CC7. Recognize how one’s uniqueness (experience level, expertise, culture, power, and hierarchy within the health team) contributes to effective communication, conflict resolution, and positive interprofessional working relationships (University of Toronto, 2008).</p> <p>TT2. Develop consensus on the ethical principles to guide all aspects of team work.</p> <p>TT8. Reflect on individual and team performance for individual, as well as team, performance improvement.</p> <p>RR9. Use unique and complementary abilities of all members of the team to optimize health and patient care.</p>
Building Clinical Collaboration within a Dental Clinic: The Crossroads of Dental and SLP Service Delivery	<p>Interprofessional Communication</p> <p>Team and Teamwork</p>	<p>CC1: Choose effective Communication tools and techniques, including information systems and communication technologies, to facilitate discussions and interactions that enhance team function.</p> <p>TT8 -Reflect on individual and team performance for individual, as well as team, performance improvement</p>
Inter professional Training between Dietetic, Dental, and Nursing Students: A Clinical Approach	<p>Roles/Responsibilities</p> <p>Interprofessional Communication</p>	<p>RR2. Recognize one’s limitations in skills, knowledge, and abilities.</p> <p>RR4. Explain the roles and responsibilities of other providers and how the team works together to provide care, promote health, and prevent disease.</p> <p>TT3. Integrate the knowledge and experience of health and other professions to inform health and care decisions, while respecting patient and community values and priorities/preferences for care.</p>

		TT4. Integrate the knowledge and experience of health and other professions to inform health and care decisions, while respecting patient and community values and priorities/preferences for care
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**Deliberate Design****Table 2. IPE Activities within the Doctor of Dental Surgery IPE Plan**

Program Year & Semester	Name of IPE Activity (Type of IPE Activity)	Learners from Other Programs Involved (Abbreviation & Year)	Associated Course/Place in Curriculum (If Applicable)	Faculty Leader(s) from Program	Faculty Leader(s) from Other Programs	Timeframe to be Completed (Month)
Year 1 Fall	<a href="#">LINC Common IPE Experience</a> (Didactic IPE – Collaborative Online Learning)	Learners from all programs at UT Health San Antonio are placed in interprofessional groups of 4 and group composition varies as a result.	IP5001-DS1-requirement	Noorpreet Kaur	LINC Didactic IPE Initiative Members: Meredith Quinene (SHP-PAS), Bobby Belarmino (SHP-PT), Daniel Saenz (GSBS), Sadie Trammell Velasquez (LSOM) and Cynthia L. Wall (SON), with support from the LINC Faculty Council Members: Moshtagh Farokhi (SOD), Rekha Kar (GSBS), Temple Ratcliffe (LSOM), Kathleen Stevens (SON), and Joseph Zorek (LINC Director)	Fall (Sept to Oct)
Year 1 Spring	<a href="#">Ergonomics and Musculoskeletal Disorder Interprofessional Education</a> (Didactic & Simulation IPE Longitudinal)	DDS Year 1 SHP-OT Year 2 SHP-PT Year 2	DIPC 5001	Juanita Lozano-Pineda	Michael Geelhoed (SHP-PT) Ricky Joseph (SHP-OT)	
Year 1 Spring	Ergonomics module with OT (Didactic & Simulation IPE Longitudinal)	DDS Year 1 SHP-OT Year		Juanita Lozano-Pineda	Kimatha Oxford Grice (SHP-OT)	
Year 2 Fall	<a href="#">Interprofessional Education to Enhance the Integration of Oral Health and Medicine: A Longitudinal Study</a> (Didactic/Clinical IPE Longitudinal)	DDS Year 2 MD Year 2	DIPC-6002	David Ojeda Diaz Arthur Shaw	Sadie Trammell Velasquez (LSOM)	
Year 2 Fall	2nd Year Patient Care Foundations (Simulation/Didactic IPE)	SON Year 4	DIPC-6002	Moshtagh Farokhi	James Cleveland (SON) Wesley Richardson (SON)	
Year 2 Spring	<a href="#">TeamSTEPPS and Leaders/Managers Didactic Interprofessional Training</a> (Simulation/Didactic IPE)	SON Year 4	DIPC-6002	Moshtagh Farokhi	James Cleveland (SON) Wesley Richardson (SON)	

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Year 2 Spring	<a href="#">Population Health – Oral Health Education with Dental Students</a> (Didactic/Clinical IPE)	DDS Year 2 SON Year 4	DIPC-6002	Moshtagh Farokhi	Rebekah Salt (SON) Adelita Cantu (SON)	
Year 2 Spring	Building Clinical Collaboration within a Dental Clinic: The Crossroads of Dental and SLP Service Delivery (Didactic/Clinical IPE)	DDS Year 2 LSO Year 2	TBD	Noorpreet Kaur	Angela Kennedy (SHP-SLP) Casey Taliancich-Klinger (SHP-SLP)	
Year 2 Spring	Inter professional Training between Dietetic, Dental, and Nursing Students: A Clinical Approach (Didactic)	DDS Year 2 SON UTSA	DIPC6002	Georgiana Gross	Liset Leal-Vasquez (UTSA) Moonju Lee (SON) Beatriz Hicks (DH)	
Year 3 Spring	<a href="#">Leadership in Interprofessional Community Service Learning</a> (Clinical and Co-Curricular IPE)	DDS Year 4 SON Year 4 MD Year 2 MD Year 3 MD Year 4	Selective 7115	Moshtagh Farokhi	Heidi Worabo (SON) <a href="#">Branden Skarpiak (LSOM)</a>	
Year 4 Fall	<a href="#">Interprofessional Community Service Learning</a> (Didactic IPE)	DDS Year 4 MD Year 2	Selective 7114	Moshtagh Farokhi	Melanie Stone (LSOM) Jason Rosenfeld (LSOM)	
Year 4 Spring	<a href="#">Leadership in Interprofessional Community Service Learning</a> (Clinical and Co-Curricular IPE)	DDS Year 4 SON Year 4 MD Year 2 MD Year 3 MD Year 4	Selective 7115	Moshtagh Farokhi	Heidi Worabo (SON) <a href="#">Branden Skarpiak (LSOM)</a>	
TBD	LINC Simulation IPE Experience (Didactic IPE – Simulation)	Learners from all programs at UT Health San Antonio will be placed in interprofessional groups of 4 and group composition will vary as a result.	TBD	David Ojeda	LINC Simulation IPE Initiative Members: Sadie Trammell Velasquez (LSOM), James Cleveland (SON), Diane Ferguson (LSOM), Rebecca Moote (LSOM), Kathryn Parke (SON), and Bridgett Piernik-Yoder (SHP-OT) with support from the LINC Faculty Council Members: Moshtagh Farokhi (SOD), Rekha Kar (GSBS), Meredith Quinene (SHP), Temple Ratcliffe	TBD

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					(LSOM), Kathleen Stevens (SON), and Joseph Zorek (LINC Director)	
TBD	LINC Clinical IPE Experience (Didactic IPE – Collaborative Online Learning & Clinical IPE)	Learners from all programs at UT Health San Antonio are placed in interprofessional groups of 4 and group composition will vary as a result.	TBD	Elena Riccio Leach	LINC Clinical IPE Initiative Members: Temple Ratcliffe (LSOM), Angela Kennedy (SHP), Rebecca Moote (LSOM), and Marta Vives (SON) with support from the LINC Faculty Council Members: Moshtagh Farokhi (SOD), Rekha Kar (GSBS), Meredith Quinene (SHP), Kathleen Stevens (SON), and Joseph Zorek (LINC Director)	TBD
<b>DEFINITIONS</b> <b>Interprofessional Education (IPE)</b> = Proposed by the World Health Organization and endorsed by IPEC, takes place “when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010; IPEC, 2016). This emphasis on students aligns well with UT Health San Antonio’s QEP, and the expectation is that student-to-student interprofessional learning will constitute the majority of IPE activities on campus. This table is reserved for student-to-student IPE activities. <b>Didactic IPE</b> = IPE activities that take place in classroom and simulation settings as part of formal curricula (i.e., credit-bearing coursework) <b>Co-Curricular IPE</b> = IPE activities that take place outside of formal curricula (volunteer experiences that augment learning/professional development) <b>Clinical IPE</b> = IPE activities that take place in clinical settings as part of formal curricula (i.e., credit-bearing coursework). <b>IPE Partners</b> = Students from other professions/programs involved including their year(s) of study						

**Table 3. Learning Activities Relevant to Preparation for Interprofessional Practice that DO NOT Meet the Formal Definition of Interprofessional Education**

Program Year & Semester	Name of IPE Activity (Type of IPE Activity)	Associated Course/Place in Curriculum (If Applicable)	Faculty Leader(s) from Program	Interprofessional Partners Included	Timeframe to be Completed (Month)
2022/Fall	Didactic Lecture/1 hour Cultural Assessment-communication	DIPC6004	Isabel Contreras Developmental Dentistry Department	Adelita Cantu (SON)	December
<b>DEFINITION</b> <b>Interprofessional Education (IPE)</b> = Proposed by the World Health Organization and endorsed by IPEC, takes place “when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010; IPEC, 2016). This emphasis on students aligns well with UT Health San Antonio’s QEP, and the expectation is that student-to-student interprofessional learning will constitute the majority of IPE activities on campus. That said, HPAC provided guidance that offers an expanded interpretation of “from” and “with” highlighting the importance of student learning that takes place from and/or with post-graduate trainees (e.g., residents) or practitioners/professionals (HPAC, 2019). <i>Student-to-trainee and/or student-to-practitioner/professional IPE should be included in this table if it exists in the program.</i> <b>Didactic Learning</b> = Learning activities that take place in classroom and simulation settings as part of formal curricula (i.e., credit-bearing coursework) <b>Co-Curricular Learning</b> = Learning activities that take place outside of formal curricula (volunteer experiences that augment learning/professional development)					



**Clinical Learning** = Learning activities that take place in clinical settings as part of formal curricula (i.e., credit-bearing coursework).  
**Interprofessional Partners** = Post-graduate trainees (e.g., residents) or practitioners/professionals from other professions.

### Assessment and Evaluation

Experts in assessment, evaluation, and compliance are led by the Associate Dean for Academic, Faculty and Student Affairs and academic leaders of the SOD. The SOD IPE Task force was formed to support achievement of QEP goals through measurement of IPE learning outcomes. The production of valid and reliable IPE outcomes data is essential to not only understand the impact of interprofessional learning, but also to support faculty efforts to refine and strengthen approaches to IPE instruction and the IPE learning environments they create. It is for this reason that IPE Assessment and Evaluation was identified as a vitally important component of IPE plans recommended by HPAC and the National Center. Furthermore, robust data are also required for QEP/LINC reporting to SACSCOC and for program-level reporting to national accrediting bodies. Importantly, stakeholders within the QEP/LINC project aspire to elevate the stature of UT Health San Antonio through IPE research and scholarly activities, and an intimate understanding of IPE assessment and evaluation is essential to maximize opportunities through such endeavors.

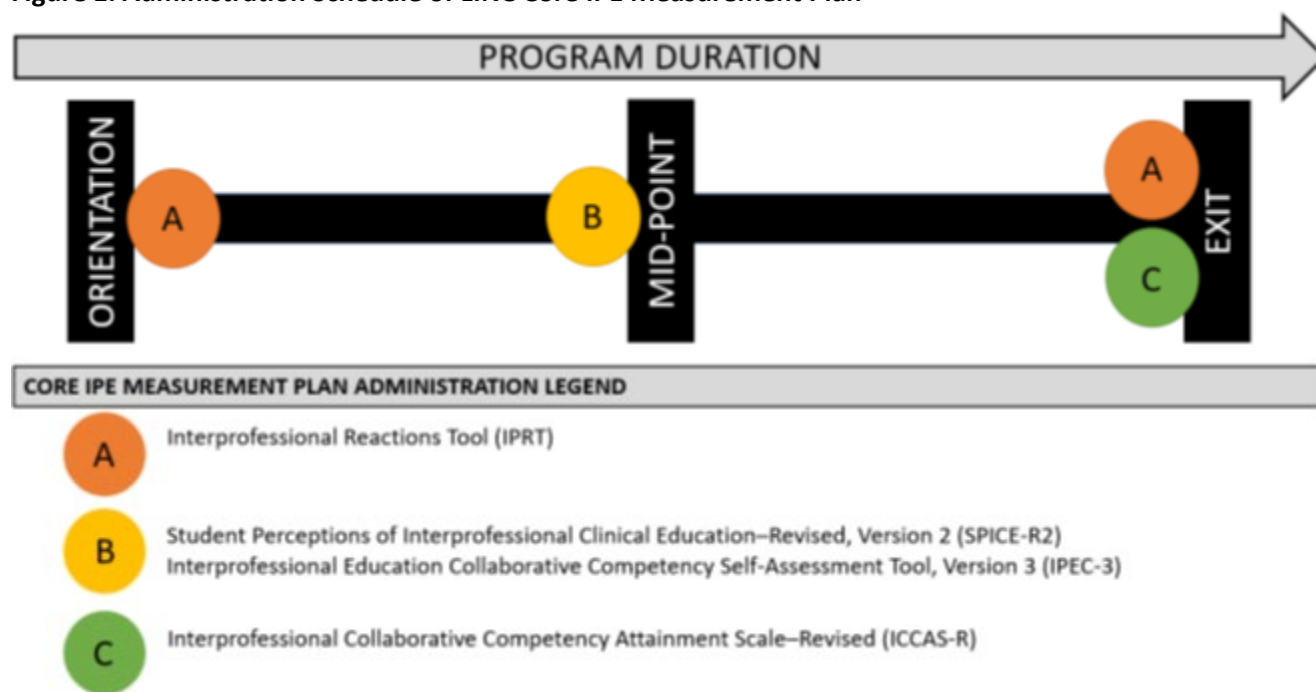
The LINC Core IPE Measurement Plan at UT Health San Antonio consists of four tools administered at three timepoints. Collectively, these tools measure changes in students' reactions, attitudes/perceptions, skills, and behavior related to interprofessional education and teamwork.

**Table 4. Tools and Targeted Learning Outcomes of the LINC Core IPE Measurement Plan**

Level*	Measurement Tool**	Constructs	Items
Level 1 Reaction	Interprofessional Reactions Tool (IPRT)	<ul style="list-style-type: none"> <li>• Preparation</li> <li>• Relevance</li> <li>• Importance</li> <li>• Satisfaction</li> </ul>	13 self-reported items: <ul style="list-style-type: none"> <li>• 9 quantitative items using a 5-point Likert-type response scale; and,</li> <li>• 4 qualitative items soliciting written responses to open-ended prompts</li> </ul>
Level 2a Attitudes/ Perceptions	Student Perceptions of Interprofessional Clinical Education—Revised, Version 2 (SPICE-R2)	<ul style="list-style-type: none"> <li>• Interprofessional Teamwork and Team-based Practice</li> <li>• Roles &amp; Responsibilities for Collaborative Practice</li> <li>• Patient Outcomes from Collaborative Practice</li> </ul>	10 self-reported, quantitative items using a 5-point Likert-type response scale
Level 2b Skills  Level 3 Behaviors	Interprofessional Education Collaborative Competency Self-Assessment Tool, Version 3 (IPEC-3)	<ul style="list-style-type: none"> <li>• Interprofessional Interactions</li> <li>• Interprofessional Values</li> </ul>	16 self-reported, quantitative items using a 5-point Likert-type response scale

	Interprofessional Collaborative Competency Attainment Scale–Revised (ICCAS-R)	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Collaboration</li> <li>• Roles &amp; Responsibilities</li> <li>• Collaborative patient-family centered approach</li> <li>• Conflict management/ resolution</li> <li>• Team functioning</li> </ul>	21 self-reported, quantitative items using a 5-point Likert-type response scale
<p>* Modified Kirkpatrick levels 2b (skills) and 3 (behaviors) are combined in this table because IPEC-3 and ICCAS-R report to measure both levels</p> <p>** See Appendices I-IV for complete versions of selected measurement tools</p>			

Figure 1. Administration Schedule of LINC Core IPE Measurement Plan



LINC Core IPE Measure A1 (pre) administered in August, LINC Core IPE Measure B administered in July, and LINC Core IPE Measures A2 (post) & C administered in mid-February.

Approval of the DDS IPE Plan via faculty governance within the School of Dentistry is not required.

The approved AY2022-2023 DDS IPE Plan was submitted to LINC on October 31, 2022