Background
UT Health San Antonio’s Strategic Vision for fiscal years 2018-2022 identified Teamwork & Collaboration as core values, and it also highlighted 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 Associate Dean for Graduate Studies in the School of Nursing (SON) led the development and implementation of an IPE plan for the Doctor of Nursing Practice (DNP) program through the contributions and efforts of an IPE Task Force that recently transitioned into a formal standing Committee on Interprofessional Education (CoIPE), which is made up of members drawn from SON.

Profession-Specific Accreditation Mandate
The Commission on Collegiate Nursing Education (CCNE) recommends the integration of IPE into the graduate nursing program curriculum, as evidenced by the following standards/expectations:

The American Association of Colleges of Nursing (AACN) promotes excellence in academic nursing and publishes The Essentials Series. The Series outlines the necessary curriculum content and expected graduate competencies for each degree. The accrediting arm of AACN is the Commission on Collegiate Nursing Education (CCNE). Because the SON Graduate programs (BSN to DNP; Post MSN to DNP) are accredited by CCNE, the integration of IPE into the Graduate Program curricula is an essential element. This is evidenced by the following standards/expectations found in The Essentials: Competencies for Professional Nursing Education (AACN, 2021).

Domain 6: Interprofessional Partnerships
Intentional collaboration across professions and with care team members, patients, families, communities, and other stakeholders to optimize care, enhance the healthcare experience, and strengthen outcomes.

The Doctor of Nursing Practice program prepares the graduate to:

1. Employ effective communication and collaborative skills in the development and implementation of practice models, peer review, practice guidelines, health policy, standard of care, and/or other scholarly products.
2. Lead interprofessional teams in the analysis of complex practice and organizational issues.
3. Employ consultative and leadership skills with intraprofessional and interprofessional teams to create change in health care and complex healthcare delivery systems.
Commission on Collegiate Nursing Education (CCNE): “Officially recognized by the U.S. Secretary of Education as a national accreditation agency, the Commission on Collegiate Nursing Education (CCNE) is an autonomous accrediting agency, contributing to the improvement of the public's health. CCNE ensures the quality and integrity of baccalaureate, graduate, and residency programs in nursing. CCNE serves the public interest by assessing and identifying programs that engage in effective educational practices. As a voluntary, self-regulatory process, CCNE accreditation supports and encourages continuing self-assessment by nursing programs and supports continuing growth and improvement of collegiate professional education and nurse residency programs.” CCNE https://www.aacnnursing.org

Doctor of Nursing Practice 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
The purpose of this plan is to align with campus partners in the 4 other schools through the University’s Quality Enhancement Plan while also enhancing current student achievement of DNP Essential Domain 6. Additionally, in 2019, AACN published the goals and vision for academic nursing. A major goal is “to increase collaboration between education and practice through expanded and more formalized academic-practice partnerships”. Specifically, to:

- Engage around curricular design and implementation, joint faculty appointments, preceptor and mentor sharing, joint research and scholarly projects, and joint nursing and interprofessional education initiatives
- Jointly design and offer short courses or learning modules; and,
- Co-create robust models for transition to basic or advanced practice.

Outcome-based Goals
IPE is an essential curricular activity whereby students can achieve the IPEC competencies necessary for preparation for advanced nursing practice. The 15 identified IPEC sub-competencies will be mapped to IPE activities within specific courses and distributed across the program. Not all 15 IPEC sub-competencies are addressed by current course activities. IPE experiences will be developed, or current activities revised, to ensure all 15 IPEC sub-competencies are reflected in future IPE Plans. Achievement of the IPEC sub-competencies build toward satisfactory completion of the activity and course level objectives. The DNP program outcomes are mapped to the IPEC sub-competencies below.
### Table 1. Doctor of Nursing Practice IPE Plan – Goals Identified through Crosswalk of Interprofessional Practice-Relevant Competency Frameworks

<table>
<thead>
<tr>
<th>DNP Program Outcomes</th>
<th>IPEC Sub-Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Integrate nursing science, ethics, biophysical, psychosocial, analytical, and organizational sources to provide the highest level of specialty nursing practices.</td>
<td>VE1 VE3 RR5 CC2 TT4</td>
</tr>
<tr>
<td>2. Develop, implement, and evaluate healthcare practices in healthcare systems that ensure quality improvement and patient safety.</td>
<td>RR5 CC7 CC8</td>
</tr>
<tr>
<td>3. Use analytic methods and evidence-based practices to improve practice outcomes and the practice environment.</td>
<td>RR10</td>
</tr>
<tr>
<td>4. Implement and evaluate ethical healthcare information systems and patient care technology to improve the quality of patient health outcomes and care systems.</td>
<td>VE8</td>
</tr>
<tr>
<td>5. Advocate for healthcare practices that advance social justice, equity, and ethical policies within all healthcare arenas.</td>
<td>VE1 VE3 VE4 VE8 CC2 CC7 CC8</td>
</tr>
<tr>
<td>6. Employ interprofessional collaborative teams to improve patient and population health outcomes and healthcare delivery systems.</td>
<td>RR3 RR5 RR7 RR10 CC7 TT4 TT6 TT9</td>
</tr>
<tr>
<td>7. Lead the integration and institutionalization of (evidence based) clinical prevention and population-based health guidelines.</td>
<td>RR10</td>
</tr>
<tr>
<td>8. Use clinical judgment, systems thinking, accountability, and specialized knowledge to design, deliver, and evaluate evidence based, culturally proficient care to improve patient, population, and health systems outcomes.</td>
<td>VE1 VE3 VE4 CC7</td>
</tr>
</tbody>
</table>

**Values/Ethics Sub-competencies:**

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 health and health equity across the life span.

VE3: Embrace the cultural diversity and individual differences that characterize patients, populations, and the health team.

VE4: Respect the unique cultures, values, roles/responsibilities, and expertise of other health professions and the impact these factors can have on health outcomes.

VE8: Manage ethical dilemmas specific to interprofessional patient/population centered care situations.
Roles/Responsibilities Sub-competencies

RR3: Engage diverse professionals who complement one’s own professional expertise, as well as associated resources, to develop strategies to meet specific health and healthcare needs of patients and populations.

RR5: Use the full scope of knowledge, skills, and abilities of professionals from health and other fields to provide care that is safe, timely, efficient, effective, and equitable.

RR7: Forge interdependent relationships with other professions within and outside of the health system to improve care and advance learning.

RR8: Engage in continuous professional and interprofessional development to enhance team performance and collaboration.

RR10: Describe how professionals in health and other fields can collaborate and integrate clinical care and public health interventions to optimize population health.

Interprofessional Communication Sub-competencies:

CC2: Communicate information with patients, families, community members, and health team members in a form that is understandable, avoiding discipline-specific terminology when possible.

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.

CC8: Communicate the importance of teamwork in patient-centered care and population health programs and policies.

Team and Teamwork Sub-competencies:

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.

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.

TT9: Use process improvement to increase effectiveness of interprofessional teamwork and team-based services, programs, and policies.
# Deliberate Design

## Table 2. IPE Activities within the Doctor of Nursing Practice IPE Plan

<table>
<thead>
<tr>
<th>Program Year &amp; Semester</th>
<th>Name of IPE Activity (Type of IPE Activity)</th>
<th>Learners from Other Programs Involved (Abbreviation &amp; Year)</th>
<th>Associated Course/Place in Curriculum (If Applicable)</th>
<th>Faculty Leader(s) from Program</th>
<th>Faculty Leader(s) from Other Programs</th>
<th>Timeframe to be Completed (Month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Fall</td>
<td><strong>LINC Common IPE Experience</strong> (Didactic IPE – Collaborative Online Learning)</td>
<td>Learners from all programs at UT Health San Antonio are placed in interprofessional groups of 4 and group composition varies as a result.</td>
<td></td>
<td>Cynthia L. Wall</td>
<td>LINC Didactic IPE Initiative Members: Meredith Quinene (SHP-PAS), Bobby Belarmino (SHP-PT), Noorpreet Kaur (SOD), Daniel Saenz (GSBS), and Sadie Trammell Velasquez (LSOM) 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)</td>
<td>Fall (Sept to Oct)</td>
</tr>
<tr>
<td>Year 2 Spring &amp; Summer</td>
<td><strong>Interprofessional Training with Family Nurse Practitioner and Physician Assistant students using Interprofessional Education Objective Structured Clinical Examinations</strong> (Didactic IPE – Simulation)</td>
<td>DNP – Year 2 PA – Year 2</td>
<td>NURS 6453, NURS 6454</td>
<td>Paula Christianson-Silva Patricia Simpson</td>
<td>Steven Skaggs (SHP-PAS) Leticia Bland (SHP-PAS)</td>
<td>Spring (April) Summer (July) and ongoing annually</td>
</tr>
<tr>
<td>TBD</td>
<td><strong>LINC Simulation IPE Experience</strong> (Didactic IPE – Simulation)</td>
<td>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.</td>
<td>TBD</td>
<td>Kathryn Parke</td>
<td>LINC Simulation IPE Initiative Members: Sadie Trammell Velasquez (LSOM), James Cleveland (SON), Diane Ferguson (LSOM), Rebecca Moote (LSOM), David Ojeda Diaz (SOD), 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 (LSOM), Kathleen Stevens (SON), and Joseph Zorek (LINC Director)</td>
<td>TBD</td>
</tr>
<tr>
<td>TBD</td>
<td><strong>LINC Clinical IPE Experience</strong> (Didactic IPE – Collaborative Online Learning &amp; Clinical IPE)</td>
<td>Learners from all programs at UT Health San Antonio are placed in interprofessional groups</td>
<td>TBD</td>
<td>Marta Vives</td>
<td>LINC Clinical IPE Initiative Members: Temple Ratcliffe (LSOM), Angela Kennedy (SHP), Rebecca Moote (LSOM), Elena Riccio Leach (SOD)</td>
<td>TBD</td>
</tr>
<tr>
<td>Year 1, 2, 3, year-round</td>
<td>Student – Faculty Collaborative Free Clinics (Co-Curricular)</td>
<td>Learners attend a clinic session at a student-faculty collaborative clinics, including the Refugee Clinic, Pride Clinic. Learners provide patient care in collaboration with the School of Medicine, Dentistry, and undergraduate nursing students.</td>
<td>Throughout the program</td>
<td>Rebekah Salt</td>
<td>Heidi Worabo</td>
<td>Ruth Grubesic</td>
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<tr>
<td>Year 2 Fall &amp; Spring</td>
<td>Global Health Foundations (Co-Curricular)</td>
<td>Learners from School of Medicine, School of Health Professions, and School of Nursing attend monthly class and journal club x 9 months. The course is a prerequisite to going on a global health trip offered through the Center for Medical Humanities and Ethics.</td>
<td>ELEC 5047</td>
<td>Danet Lapiz Bluhm</td>
<td>Moshtagh Farokhi (SOD)</td>
<td>Elena Jimenez Gutierrez (LSOM)</td>
</tr>
<tr>
<td>Year 3 Fall, Spring, Summer</td>
<td>Green Wellness Program Student-Faculty (Co-Curricular)</td>
<td>Clinical Program at Wellness 360 Clinic; students from School of Nursing and UTSA Dietetics participate in Shared Medical Appointments; DNP Project; BSN students in NURS 7305, 7306, 7307</td>
<td></td>
<td>Paula Christianson-Silva</td>
<td>Christiane Meireles</td>
<td>Heidi Benadives</td>
</tr>
</tbody>
</table>
Interprofessional Education (IPE) = 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.

Didactic IPE = IPE activities that take place in classroom and simulation settings as part of formal curricula (i.e., credit-bearing coursework)

Co-Curricular IPE = IPE activities that take place outside of formal curricula (volunteer experiences that augment learning/professional development)

Clinical IPE = IPE activities that take place in clinical settings as part of formal curricula (i.e., credit-bearing coursework).

IPE Partners = Students from other professions/programs involved including their year(s) of study
Assessment and Evaluation

The LINC Core IPE Measurement Plan at UT Health San Antonio forms the backbone of IPE assessment/evaluation for all UT Health San Antonio program-specific IPE plans. Valid and reliable tools to measure change in reactions, attitudes/perceptions, skills, and behaviors, as depicted in the progression of learning outcomes. Table 5 and Figure 1 below provide additional information on tools and administration schedules for the LINC Core IPE Measurement Plan.

Table 3. Tools and Targeted Learning Outcomes of the LINC Core IPE Measurement Plan

<table>
<thead>
<tr>
<th>Level*</th>
<th>Measurement Tool**</th>
<th>Constructs</th>
<th>Items</th>
</tr>
</thead>
</table>
| Level 1 | Reaction | Interprofessional Reactions Tool (IPRT) | • Preparation  
• Relevance  
• Importance  
• Satisfaction | 13 self-reported items:  
• 9 quantitative items using a 5-point Likert-type response scale; and,  
• 4 qualitative items soliciting written responses to open-ended prompts |
| Level 2a | Attitudes/Perceptions | Student Perceptions of Interprofessional Clinical Education–Revised, Version 2 (SPICE-R2) | • Interprofessional Teamwork and Team-based Practice  
• Roles & Responsibilities for Collaborative Practice  
• Patient Outcomes from Collaborative Practice | 10 self-reported, quantitative items using a 5-point Likert-type response scale |
| Level 2b | Skills | Interprofessional Education Collaborative Competency Self-Assessment Tool, Version 3 (IPEC-3) | • Interprofessional Interactions  
• Interprofessional Values | 16 self-reported, quantitative items using a 5-point Likert-type response scale |
| Level 3 | Behaviors | Interprofessional Collaborative Competency Attainment Scale–Revised (ICCAS-R) | • Communication  
• Collaboration  
• Roles & Responsibilities  
• Collaborative patient-family centered approach  
• Conflict management/resolution  
• Team functioning | 21 self-reported, quantitative items using a 5-point Likert-type response scale |

* Modified Kirkpatrick levels 2b (skills) and 3 (behaviors) are combined in this table because IPEC-3 and ICCAS-R report to measure both levels

** See Appendices I-IV for complete versions of selected measurement tools
Figure 1. Administration Schedule of the LINC Core IPE Measurement Plan

LINC Core IPE Measure A1 (pre) is administered in August, LINC Core IPE Measure B is administered in March, and LINC Core IPE Measures A2 (post) and C are administered in June.

Approved by SON Committee on IPE on October 28, 2022.
Approved by COGS on November 4, 2022.

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