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 Associate Dean for Academic and Student Affairs within the School of Health Profession (SHP) and the Chair of the SHP IPE Committee are leading the development and implementation of program-specific IPE plans through the contributions and efforts of SHP IPE Committee members and program leaders within each SHP department.

Profession-Specific Accreditation Mandate
The Commission on Accreditation in Physical Therapy Education (CAPTE) requires the integration of interprofessional education into the UT Health San Antonio Doctor of Physical Therapy Program curriculum, as evidenced by the following standard:

**CAPTE Criteria 6F:** The didactic and clinical curriculum includes interprofessional education; learning activities are directed toward the development of interprofessional competencies including, but not limited to, values/ethics, communication, professional roles and responsibilities, and teamwork.

Narrative:
- Describe learning activities that involve students, faculty and/or practitioners from other health care professions.
- Describe the effectiveness of the learning activities in preparing students and graduates for team-based collaborative care.

Doctor of Physical Therapy 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 mission of the UT Health San Antonio Department of Physical Therapy in accordance with the School of Health Professions and UT Health San Antonio is to make lives better by promoting health and wellness through excellence in education, research, patient care and service while advancing the profession of physical therapy.
The goals of the program state that our Physical Therapy Department will:

1. Through its faculty & students, demonstrate a commitment to the public and professional communities through activities of health promotion, continuing education, service, and advocacy for the PT profession,
2. Deliver an accredited, entry-level physical therapy education program which incorporates the core values of the profession,
3. Prepare the graduate to be an autonomous Doctor of Physical Therapy who practices in a safe, ethical, and legal manner, and
4. Prepare the graduate to accept the responsibility for continuous professional development.

To meet these goals physical therapists must work together with other healthcare professionals and the community they serve. This is even more important as physical therapists have recently been granted the ability to see patients without a referral. The physical therapist must understand the roles and responsibilities other healthcare providers play so patients can be appropriately referred when patient presents with a condition that is outside the scope of physical therapy practice.

The Physical Therapy Department will also be aligned with the departments in the School of Health Professions and UT Health campus partners through the University’s QEP.

Outcome-based Goals
The Physical Therapy Department uses the Interprofessional Education Collaborative (IPEC) core competency framework to guide curricular development to enable graduates to work effectively with other health care providers for optimal patient outcomes. We use the four Core Competencies for Interprofessional Collaborative Practice to assess student objectives for collaborative practice.

Competency 1: Values/Ethics for Interprofessional Practice - 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 lifespan. Manage ethical dilemmas specific to interprofessional patient/population centers care situations.

The Physical Therapy Department values the following sub-competencies in this area:

1. Embrace the cultural diversity and individual differences that characterize patients, populations, and the health team
2. Demonstrate high standards of ethical conduct and quality of care in contributions to team-based care.
3. Act with honesty and integrity in relationships with patients, families, communities, and other team members.

Competency 2: Roles and Responsibilities for Collaborative Practice - Communicate with team members to clarify each member's responsibility in executing components of a treatment plan or public health intervention. 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.

The Physical Therapy Department values the following sub-competencies in this area:

1. Recognize one’s limitations in skills, knowledge, and abilities.
2. Communicate with team members to clarify each member’s responsibility in executing components of a treatment plan or public health intervention.
3. Use unique and complementary abilities of all members of the team to optimize health and patient care.

**Competency 3: Interprofessional Communication Practice** - Listen actively and encourage ideas and opinions of other team members. Communicate information with patients, families, community members, and health team members in a form that is understandable, avoiding discipline-specific terminology when possible.

The Physical Therapy Department values the following sub-competencies in this area:
1. Communicate information with patients, families, community members, and health team members in a form that is understandable, avoiding discipline-specific terminology when possible.
2. Listen actively, and encourage ideas and opinions of other team members.
3. Communicate the importance of teamwork in patient-centered care and population health programs and policies.

**Competency 4: Interprofessional Teamwork and Team-based practice** - Engage health and other professionals in shared patient-centered and population-focused problem solving. Perform effectively on teams and in different team roles in a variety of settings.

The Physical Therapy Department values the following sub-competencies in this area:
1. 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.
2. Share accountability with other professions, patients, and communities for outcomes relevant to prevention and health care.
3. Use available evidence to inform effective teamwork and team-based practices.

Assessment of the student’s learning effectiveness will be measured using Kirkpatrick’s Four Levels of Training Evaluation (Reaction, Learning, Behavior, and Results). This is measured through several mechanisms to include role playing practical exams, community activities such as health fairs and health promotion activities, and group presentations/activities. Finally, assessment of the student’s application and use of the learned knowledge and skills is continually measured in their day-today performance during clinical rotations through onsite evaluations by the clinical instructor.
# Deliberate Design

## Table 1. IPE Activities within the Doctor of Physical Therapy 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><strong>NTD 5031</strong></td>
<td><strong>Bobby Belarmino</strong></td>
<td><strong>LINC Didactic IPE Initiative Members:</strong> Meredith Quinene (SHP-PAS), Kaur (SOD), 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)</td>
<td>Fall (Sept to Oct)</td>
</tr>
<tr>
<td>Year 1 Fall</td>
<td><strong>TeamSTEPPS</strong> (Didactic IPE – Collaborative Online Learning)</td>
<td>PT, SLP, MLS, RC, PA Year 1</td>
<td><strong>NTD 5032</strong></td>
<td><strong>Greg Ernst</strong></td>
<td><strong>David Henzi</strong> (SHP)</td>
<td>Fall (Nov)</td>
</tr>
<tr>
<td>Year 1 Fall &amp; Spring</td>
<td><strong>Faculty</strong> and <strong>student</strong> grand rounds (throughout the 3 years) (Co-Curricular IPE)</td>
<td>PT, SLP, MLS, RC, PA, Year 1</td>
<td></td>
<td><strong>Greg Ernst</strong></td>
<td><strong>David Henzi</strong> (SHP) and faculty from other programs</td>
<td>Fall &amp; Spring</td>
</tr>
<tr>
<td>Year 1 Fall</td>
<td><strong>Interdisciplinary Rounds: The Role of Physical Therapy</strong> (Didactic IPE)</td>
<td>PT Year 1 MD Year 1</td>
<td><strong>PHYT 7001</strong></td>
<td><strong>Brad Tragord</strong></td>
<td><strong>Elizabeth Hanson</strong> (LSOM)</td>
<td>Fall (Sept)</td>
</tr>
<tr>
<td>Year 1 Spring</td>
<td><strong>Professional Issues in Healthcare</strong> – with PT, OT, MLS (Didactic IPE)</td>
<td>PT Year 1 MLS Year 1 &amp; 2 OT Year 1</td>
<td><strong>PHYT 8122</strong></td>
<td><strong>Michael Geelhoed</strong></td>
<td><strong>Ricky Joseph</strong> (SHP-OT) George B. Kudolo (SHP-MLS)</td>
<td>Spring (May)</td>
</tr>
<tr>
<td>Year 2 Fall and Spring</td>
<td><strong>Ergonomics and Musculoskeletal Disorder Interprofessional Education</strong> (Co-Curricular IPE)</td>
<td>PT Year 2 DDS Year 1</td>
<td><strong>PHYT 8002</strong></td>
<td><strong>Brad Tragord and Michael Geelhoed</strong></td>
<td><strong>Lozano-Pineda</strong> (SOD) <strong>Ricky Joseph</strong> (SHP-OT)</td>
<td>Fall and Spring</td>
</tr>
<tr>
<td>Year 2 Fall and Spring</td>
<td><strong>Musculoskeletal Journal Club</strong> (Co-Curricular IPE)</td>
<td>PT Year 2 MD Year</td>
<td><strong>PHYT 8002 and 8114</strong></td>
<td><strong>Brad Tragord and Greg Ernst</strong></td>
<td><strong>Aditya Raghunandan</strong> (LSOM)</td>
<td>Fall and Spring</td>
</tr>
<tr>
<td>Year 2 Fall and Spring</td>
<td><strong>Student-Faculty collaborative clinics with MD students</strong> (Co-Curricular IPE)</td>
<td>PT Year 2</td>
<td></td>
<td><strong>Michael Geelhoed</strong></td>
<td><strong>Ruth Morgan</strong> (LSOM) <strong>Richard Usatine</strong> (LSOM)</td>
<td>Fall (Dec) and Spring (May)</td>
</tr>
<tr>
<td>Year 2 Spring</td>
<td>Critical Care Simulation Experiences of Students from PT/OT/Nursing (Didactic IPE)</td>
<td>PT Year 2 OT Year 2 BSN Year 4 RC Year 1</td>
<td>PHYT 8013</td>
<td>Bobby Belarmino</td>
<td>Autumn Clegg (OT), Mei-Ling Lin (OT), Isabell Stolz (SON) and Kevin Voelker (SON), Megan Llamas (RC)</td>
<td>Spring (May)</td>
</tr>
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</tr>
<tr>
<td>Year 3 Spring</td>
<td>Rehabilitation Research Day (Co-Curricular IPE)</td>
<td>PT Year 3 PM&amp;R residents</td>
<td>Greg Ernst</td>
<td>Brian Connolly (LSOM)</td>
<td>Spring (May)</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>LINC Simulation IPE Experience (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>LINC Simulation IPE Experience (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>
</tr>
<tr>
<td>TBD</td>
<td>LINC Clinical IPE Experience (Didactic IPE - Collaborative Online Learning &amp; Clinical IPE)</td>
<td>Learners from all programs at UT Health San Antonio are placed in interprofessional groups of 4 and group composition will vary as a result.</td>
<td>TBD</td>
<td>LINC Clinical IPE Initiative Members: Temple Ratcliffe (LSOM), Angela Kennedy (SHP), Rebecca Moote (LSOM), Elena Riccio Leach (SOD) and Marta Vives (SON) with support from the LINC Faculty Council Members: Moshtag Farokhi (SOD), Rekha Kar (GSBS), Meredith Quinene (SHP), Kathleen Stevens (SON), and Joseph Zorek (LINC Director)</td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

**DEFINITIONS**

**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
Table 2. Learning Activities Relevant to Preparation for Interprofessional Practice that DO NOT Meet the Formal Definition of Interprofessional Education

<table>
<thead>
<tr>
<th>Program Year &amp; Semester</th>
<th>Name of IPE Activity (Type of IPE Activity)</th>
<th>Associated Course/Place in Curriculum (If Applicable)</th>
<th>Faculty Leader(s) from Program</th>
<th>Interprofessional Partners Included</th>
<th>Timeframe to be Completed (Month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2 Summer</td>
<td>Clinical practice in a multidisciplinary environment</td>
<td>PHYT 7021, 8021</td>
<td>Michael Geelhoed</td>
<td></td>
<td>Summer (Aug)</td>
</tr>
<tr>
<td>Year 3 Fall</td>
<td>Clinical practice in a multidisciplinary environment</td>
<td>PHYT 8121</td>
<td>Michael Geelhoed</td>
<td></td>
<td>Fall (Dec)</td>
</tr>
<tr>
<td>Year 3 Spring</td>
<td>Clinical practice in a multidisciplinary environment</td>
<td>PHYT 82221</td>
<td>Michael Geelhoed</td>
<td></td>
<td>Spring (May)</td>
</tr>
</tbody>
</table>

**DEFINITION**

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. 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). **Student-to-trainee and/or student-to-practitioner/professional IPE should be included in this table if it exists in the program.**

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

Co-Curricular Learning = 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

Our Doctor of Physical Therapy Program Curriculum is logically sequenced. The first year consist of basic science courses as well as foundational clinical course. Much of this assessment and evaluation is based on theory exams with some of the foundational clinical content based on performance in practical exams. In addition, the students in the first year have several projects where they work as a team on various clinically based projects. They are assessed on their final product, delivery, and teamwork.

During the second year, the course work progresses to largely clinical courses where the students apply the information learned from the first year to real clinical situations. The assessment and evaluation during this year is based equally on their exams and performance in simulated clinical situations. In addition, the have a professional issues course which discusses the role of PT in the larger realm of the healthcare environment to include how to work with other healthcare professionals. This is a very practical oriented class to prepare the students for the professional aspects of work in hospitals and clinics.

In the third year, students are out in clinics and hospitals seeing patients under supervision. The assessment and evaluation include aspect professionalism, patient management, and the overall management of healthcare delivery.

In addition to the above, every year, students make their own self-assessment and faculty assess students on generic professional abilities as follows:

Generic Abilities

Generic abilities are attributes, characteristics or behaviors that are not explicitly part of the profession’s core of knowledge and technical skills but are, nevertheless, required for success in the profession. Ten (10) generic abilities were identified through a study conducted at UW-Madison. The ten abilities and definitions developed are:

<table>
<thead>
<tr>
<th>Generic Abilities</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Commitment to Learning</td>
<td>The ability to self-assess, self-correct and self-direct to identify needs and sources of learning and to continually seek new knowledge and understanding.</td>
</tr>
<tr>
<td>2. Interpersonal Skills</td>
<td>The ability to interact effectively with patients, families, colleagues, other health professional and the community and to deal effectively with cultural and ethnic diversity issues.</td>
</tr>
<tr>
<td>3. Communication Skills</td>
<td>The ability to communicate effectively (i.e. speaking, body language, reading, writing, listening) for varied audiences and purposes.</td>
</tr>
<tr>
<td>4. Effective Use of Time Resources</td>
<td>The ability to obtain the maximum benefit from a minimum investment of time and resources.</td>
</tr>
<tr>
<td>5. Use of Constructive Feedback</td>
<td>The ability to identify sources of and seek out feedback and to effectively use and provide feedback for improving personal interaction.</td>
</tr>
</tbody>
</table>
### 6. Problem Solving
The ability to recognize and define problems, analyze data, develop and implement solutions & evaluate outcomes.

### 7. Professionalism
The ability to exhibit appropriate professional conduct and to represent the profession effectively.

### 8. Responsibility
The ability to fulfill commitments and to be accountable for actions and outcomes.

### 9. Critical Thinking
The ability to question logically; to identify, generate and evaluate elements of logical arguments; to recognize and differentiate facts, illusions, assumptions, and hidden assumptions; and to distinguish the relevant from the irrelevant.

### 10. Stress Management
The ability to identify sources of stress and to develop effective coping behaviors.

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In addition to the above, the Department of Physical Therapy assesses itself in the manners it meets the following criteria set forth by the Commission on Accreditation in Physical Therapy Education (CAPTE):

**6E:** The curriculum plan includes a series of organized, sequential and integrated courses designed to facilitate achievement of the expected student outcomes, including the expected student learning outcomes described in Standard 7. The curriculum includes organized sequences of learning experiences that prepare students to provide physical therapy care to individuals with diseases/disorders involving the major systems, individuals with multiple system disorders, and individuals across the lifespan and continuum of care, including individuals with chronic illness. The clinical education component provides organized and sequential experiences coordinated with the didactic component of the curriculum. Clinical education includes both integrated, and full-time terminal experiences.

**6F:** The didactic and clinical curriculum includes interprofessional education learning activities are directed toward the development of interprofessional competencies including, but not limited to, values/ethics, communication, professional roles and responsibilities, and teamwork.

**6I:** The curriculum plan includes a variety of effective instructional methods selected to maximize learning. Instructional methods are chosen based on the nature of the content, the needs of the learners, and the defined expected student outcomes.

**6J:** The curriculum plan includes a variety of effective tests and measures and evaluation processes used by faculty to determine whether students have achieved the learning objectives. Regular, individual testing and evaluation of student performance in the cognitive, psychomotor, and affective domains is directly related to learning objectives and includes expectations for safe practice during clinical education experiences.

**6L:** The curriculum plan includes clinical education experiences for each student that encompass, but are not limited to:
6L1 management of patients/clients with diseases and conditions representative of those commonly seen in practice across the lifespan and the continuum of care;
6L2 practice in settings representative of those in which physical therapy is commonly practiced;
6L3 involvement in interprofessional practice.

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 are included. Table 4 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>
<tbody>
<tr>
<td>Level 1 Reaction</td>
<td>Interprofessional Reactions Tool (IPRT)</td>
<td>Preparation, Relevance, Importance, Satisfaction</td>
<td>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</td>
</tr>
<tr>
<td>Level 2a Attitudes/Perceptions</td>
<td>Student Perceptions of Interprofessional Clinical Education–Revised, Version 2 (SPICE-R2)</td>
<td>Interprofessional Teamwork and Team-based Practice, Roles &amp; Responsibilities for Collaborative Practice, Patient Outcomes from Collaborative Practice</td>
<td>10 self-reported, quantitative items using a 5-point Likert-type response scale</td>
</tr>
<tr>
<td>Level 2b Skills</td>
<td>Interprofessional Education Collaborative Competency Self-Assessment Tool, Version 3 (IPEC-3)</td>
<td>Interprofessional Interactions, Interprofessional Values</td>
<td>16 self-reported, quantitative items using a 5-point Likert-type response scale</td>
</tr>
<tr>
<td>Level 3 Behaviors</td>
<td>Interprofessional Collaborative Competency Attainment Scale–Revised (ICCAS-R)</td>
<td>Communication, Collaboration, Roles &amp; Responsibilities, Collaborative patient-family centered approach, Conflict management/resolution, Team functioning</td>
<td>21 self-reported, quantitative items using a 5-point Likert-type response scale</td>
</tr>
</tbody>
</table>

* 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 May, LINC Core IPE Measure B is administered in December and January, and LINC Core IPE Measure A2 (post) and C are administered in April.

The PT IPE Plan was initially approved by the SHP IPE Committee and SHP Curriculum Committee on November 12, 2020.

The initial PT IPE Plan was then updated and approved by the Department of Physical Therapy on October 25, 2022.

The approved AY2022-2023 PT IPE Plan was submitted to LINC on October 25, 2022.