



**School of Health Professions
Medical Laboratory Sciences
Interprofessional Education Plan
Academic Year 2021-2022**

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 National Accrediting Agency for Clinical Laboratory Sciences Programs suggests the integration of IPE into the Medical Laboratory Science curriculum, as evidenced by the following standards/expectations:

National Accrediting Agency for Clinical Laboratory Sciences Programs: <http://www.nacls.org/>

- See Program Directors page for accreditation resources: <http://www.nacls.org/Program-Directors.aspx>
 - [2012 standards \(updated 11/2020\)](#). "NACLS Standards for Accredited and Approved programs." Adopted 2012, Revised through 11/2020. Includes MLS, DCLS, and other programs under NACLS.
 - "Principles of interpersonal and interdisciplinary communication and team-building skills" mentioned throughout, including pp 57, 61, 73, 80 of .pdf document. These pages are specific to programs other than MLS or DCLS.

Medical Laboratory Science 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

Medical Laboratory Sciences (MLS) is known as the "hidden profession" and does not interact directly with patients. However, medical laboratory scientists are responsible for resulting out diagnostic tests of which physicians base over 70% of their clinical decisions. Alignment with campus partners through the University's

QEP provides a framework by which the MLS can interact with other healthcare professions, including clinicians, physicians, nurse practitioners, physical and occupational therapists, speech language pathologists, and respiratory therapists who treat patients. These patients often have comorbidities diagnosed by lab results which were produced by medical laboratory scientists. Interprofessional education allows all professionals to learn from each other and it reduces professional hierarchy while helping to promote equality and respect. MLS helping other medical health professionals to understand the processes involved once a laboratory requisition has been initiated. The laboratory role begins with the preanalytical component (everything involving correct specimen collection), through the analytical component (actual testing of the specimen) ending with the post-analytical component of reporting a result. This aids in explaining and clarifying the role, expertise and responsibilities that each profession contributes to the total care of the patient. Through these IPE activities we not only enhance the student's education but address and correct the inefficiencies and ineffectiveness of a disjointed healthcare team that does not communicate, and which can negatively impact the health of the patient. Through various IPE activities our profession strives to improve both the laboratory testing process and patient safety.

Outcome-based Goals

Table 1.

Expected Behavior for MLS Student	Domains of Competence	IPEC sub-competencies	Division of MLS sub-competency
Demonstrates the ability to communicate effectively with patients, families, and healthcare professionals as individuals and in teams	Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease.	<p>CC4: Listen actively and encourage ideas and opinions of other team members.</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>CC6: Use respectful language appropriate for a given difficult situation, crucial conversation, or conflict.</p>	Communicate opinions based on unique expertise with confidence, clarity and respect to the healthcare team providing patient care, including constructive feedback to team members to enhance patient care and outcomes.

Deliberate Design

Table 2.

Program Year & Semester	Name of IPE Activity (Type of IPE Activity)	Learners from other Programs Involved & Year	Associated Course/Place in Curriculum	Faculty Leader(s) from MLS	Faculty Leader from Other Programs	Timeframe to be Completed (Month)
Year 1 Fall	LINC Common IPE Experience (Didactic IPE –	Learners from all programs at UT Health San	INTD 5031	N/A	LINC Didactic IPE Initiative Members: Meredith	Fall (Sep to Oct)

	Collaborative Online Learning)	Antonio are placed in interprofessional groups of 4 and group composition varies as a result.			Quinene (SHP-PA), Bobby Belarmino (SHP-PT), Kelly Lemke (SOD), Daniel Saenz (GSBS), Sadie Trammell Velasquez (LSOM), and Cynthia L. Wall (SON), with support from the LINC Faculty Council Members: Moshtagh Farokhi (SOD), Gretchel Gealogo (SON), Keith Krolick (GSBS), Temple Ratcliffe (LSOM), Joseph Zorek (LINC Director)	
Year 1 Spring	TeamSTEPPS Training (Didactic IPE – Collaborative Online Learning)	PT, SLP, MLS, RT, PA, EHS Year-1	INTD 5032	Cordelia Kudika	Dr. Venessa Kodosky (SHP) Dr. David Henzi (SHP)	Spring (May)
Year 2 Fall	MLS/MS1 (Didactic IPE)	MLS-Year 2	MLSC 6002	Cordelia Kudika Terri Murphy-Sanchez		Fall (Nov)
Year 2 Fall	Student Grand Rounds (Co-Curricular IPE)	MLS-Year 2				Fall (Nov)
Year 2 Fall	Transfusion Reaction (Didactic IPE)	MLS- Year 2, PA Year 2, SON Year 1		Cordelia Kudika	Dr. Leticia Bland (SHP-PA) Dr. Lark Ford (SON)	Fall (Nov)
Year 2 Spring	Student Grand Rounds (Co-Curricular IPE)	MLS-Year 2		Terri Murphy-Sanchez		Spring (Apr)
Year 2 Spring	Professional Issues in Healthcare (Didactic IPE)	MLS-Year 2 OT- Year 2 PT- Year 1	MLSC 4006/6008 OCCT 7019 PHYT 8122	Dr. George Kudolo	Dr. Ricky Joseph (SHP-OT) Dr. Michael Geelhoed (SHP-PT)	Spring (Mar)

The World Health Organization's definition of **IPE**, which is endorsed by IPEC, is "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 practitioners or professionals (HPAC, 2019). Student-to-practitioner and/or student-to-professional IPE should be included in this table if it exists in the program.

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
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Assessment and Evaluation

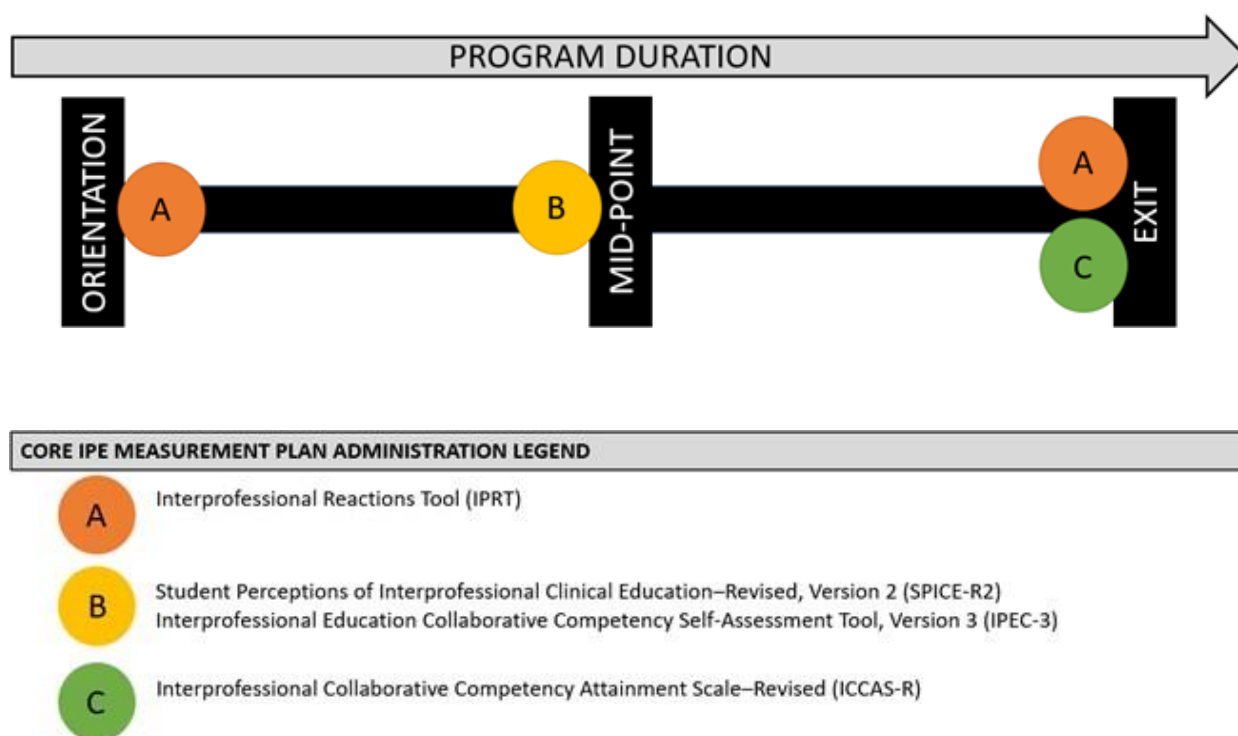
The LINC Core IPE Measurement Plan at UT Health San Antonio forms the backbone of IPE assessment/evaluation for all UT Health San Antonio program-specific IPE plans. Valid and reliable tools to measure change in reactions, attitudes/perceptions, skills, and behaviors are included. Table 3 and Figure 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

Level*	Measurement Tool**	Constructs	Items
Level 1 Reaction	Interprofessional Reactions Tool (IPRT)	<ul style="list-style-type: none"> • Preparation • Relevance • Importance • Satisfaction 	13 self-reported items: <ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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
<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 the LINC Core IPE Measurement Plan



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

The initial MLS IPE Plan was then updated and approved by the MLS Division within the Department of Health Sciences on October 4, 2021.

The approved AY21-22 MLS IPE Plan was submitted to LINC on October 12, 2021.