Linking Interprofessional Networks for Collaboration
(LINC)

A Quality Enhancement Plan presented by UT Health San Antonio
Executive Summary

Through a process that involved multiple stakeholders over a period of several years, The University of Texas Health Science Center at San Antonio, now called UT Health San Antonio, has developed a Quality Enhancement Plan (QEP) that supports the institution’s mission of “making lives better through excellence in education, research, health care, and community engagement.” The QEP, titled “Linking Interprofessional Networks for Collaboration (LINC),” will enhance interprofessional education (IPE) at UT Health San Antonio by reframing currently disparate IPE activities occurring throughout the institution’s five schools by creating an environment that facilitates faculty and student connections and speeds innovation through a new IPE Incubator. The deliberate speed and facilitated partnerships produced by the Incubator reinforce the QEP’s design and support the schools’ aim of priming the institution’s capacity for students from different programs and professions to work together in direct clinical training and/or research experiences.

The long-term impact of the QEP initiative is to develop students who are able to contribute to interprofessional teams by providing quality patient care that leads to improved health outcomes.

Specifically, the QEP will:

1. Increase faculty, student, and staff knowledge and skills of the shared IPE framework to foster an environment that reinforces the value of interprofessional delivery of patient care;

2. Demonstrate schools’ and programs’ adoption of IPE as a strategic priority through increased activities integrated into programs’ curricula, including opportunities for student IPE experiences; and,

3. Increase the institutional capacity for students from different programs and professions to work together during their clinical training and/or research experiences.

The Incubator will provide a physical environment that fosters exploration through the development of a community of faculty and students dedicated to IPE and promotes idea exchange and strategic partnerships within the schools and programs. The Incubator not only provides a space for the development of bold ideas that support the rethinking of the current health care delivery model, but will foster awareness of IPE and the opportunities to create new models. The Incubator will provide numerous IPE resources, faculty development, opportunities for funding of innovative IPE concepts, and a recognition program for faculty and students who lead the efforts.

The Interprofessional Education Collaborative (IPEC) and its four associated competencies will guide activities at the institution: Values/Ethics for Interprofessional Practice, Roles/Responsibilities,
Interprofessional Communication, and Teams and Teamwork. These competencies will form the core base of knowledge and skills that will permeate UT Heath’s curricular and co-curricular activities. Furthermore, they also form the basis of the assessment strategy that will evaluate both students’ and faculty’s knowledge and attitudes of the IPEC framework and serve as a key marker of the plan’s impact on student learning.

The QEP’s deliberate acceleration of IPE initiatives and activities across all schools and programs is intended to identify effective IPE delivery within the program, develop common curricula and assessment methods and create meaningful team-based simulation activities to encourage direct student experiences.
# Table of Contents

Executive Summary .............................................................................................................................................. 2
Crosswalk between 2012 and 2017 SACSCOC QEP Principles ................................................................. 6
Introduction ......................................................................................................................................................... 7
Topic Identification .............................................................................................................................................. 7
   Need for Interprofessional Education at UT Health .............................................................................. 11
   Review of the Literature .......................................................................................................................... 14
   The QEP and Alignment with the Strategic Plan ............................................................................... 18
Focus On Student Success .................................................................................................................................. 21
   UT Health’s Students and Institutional Context .................................................................................. 21
   Plan Outcomes .............................................................................................................................................. 22
   Long term impact ........................................................................................................................................ 22
   Actions to be Implemented ..................................................................................................................... 24
Resources .......................................................................................................................................................... 29
   Support and Resources Required for the Incubator ........................................................................... 29
   Other contributing units ........................................................................................................................... 30
   ICE-I (IPE Incubator) Structure ............................................................................................................ 33
Timeline ............................................................................................................................................................. 34
Assessment ....................................................................................................................................................... 37
   Use for Continuous Improvement ........................................................................................................ 38
   Description of Assessment Measures .................................................................................................. 41
Summary ........................................................................................................................................................... 45
References ........................................................................................................................................................ 46
Appendix A ........................................................................................................................................................ 47
   QEP Steering Committee ...................................................................................................................... 47
Appendix B ........................................................................................................................................................ 48
   IPEC Core Competencies ..................................................................................................................... 48
   Checklist for planning an IPE evaluation ............................................................................................. 48
Appendix C ........................................................................................................................................................ 49
   UT Health San Antonio’s Mission and Values .................................................................................... 49
Appendix D ........................................................................................................................................................ 50
   Assessment Tool Models ..................................................................................................................... 50
Appendix E ........................................................................................................................................................ 51
Crosswalk between 2012 and 2017 SACSCOC QEP Principles

UT Health San Antonio’s reaffirmation and the development of its QEP coincide with the adoption of SACSCOC’s new Principles of Accreditation in December 2017. The table below is intended to aid the reviewer to decipher the changes related to the QEP from the former to the newly-adopted Principles. It describes the institution’s understanding of how the 2017 Principles correspond to the 2012 Principles aiding reviewers to locate relevant information in the QEP.

Table 1. SACSCOC’s QEP Standards Crosswalk

| 2017 Principles (7.2)                                                                 | 2012 Principles (2.12 & 3.3.2)                                                                                                                                                                                                 | Section of UT Health QEP where primarily addressed                      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Has a topic identified through its ongoing, comprehensive planning and evaluation processes | Includes an institutional process for identifying key issues emerging from institutional assessment and accomplishing the mission of the institution (2.12)                                                                                                                                 | Topic identification                                                                                                      |
| Has broad-based support of institutional constituencies                                | Accomplishing the mission of the institution (2.12); Includes broad-based involvement of institutional constituencies in the development and proposed implementation of the QEP (3.3.2)                                                                 | Topic identification; Actions to be Implemented; Resources                                                               |
| Focuses on improving specific student learning outcomes and/or student success       | Focuses on learning outcomes and/or the environment supporting student learning (2.12)                                                                                                                                                  | Actions to be Implemented; Assessment                                                                                      |
| Commits resources to initiate, implement and complete the QEP                       | Demonstrates institutional capability for the initiation, implementation, and completion of the QEP (3.3.2);                                                                                                                                 | Resources                                                                                                                  |
| Includes a plan to assess achievement                                                | Identifies goals and a plan to assess their achievement (3.3.2)                                                                                                                                                                       | Actions to be Implemented; Assessment                                                                                      |
Linking Interprofessional Networks for Collaboration: The QEP at UT Health San Antonio

**Introduction**

UT Health San Antonio is committed to preparing health care practitioners and research scientists to “make lives better” (UT Health Mission Statement). To this end, the university continually strives to anticipate emerging needs and shifts in the current health care system and proactively incorporate those changes into its curriculum in order to prepare students for those changes, thus improving student learning. UT Health’s QEP aims to prepare students for the future configuration of the health care delivery system: the concept that health care is a team effort that requires health care professionals, research scientists, patients, families, and others to work together to proactively address a patient’s health care needs. This structure is in stark opposition to the current fee-for-service model by each health care professional attending to a patient. The institution is committed to ongoing quality educational improvement and views the QEP as one of several avenues through which an institutional lens and institutional coordination will ensure all programs deliver compatible information regarding the team approach to patient care.

The following narrative, based on both the 2012 and 2017 SACSCOC Principles of Accreditation requiring institutions to develop a plan to improve student learning or the student learning environment, is UT Health’s plan to provide common interprofessional experiences for students that will enhance their ability to provide quality patient care, known in the academic health care arena as Interprofessional Education (IPE). The plan outlines the processes used by the institution for topic identification as well as the activities to be implemented leading to IPE expected outcomes. The resources available to ensure implementation, an assessment plan with associated measures, and evidence from recent published literature emphasizing the evolution of IPE as a necessary component of instruction to all students pursuing a health care profession are also presented.

**Topic Identification**

UT Health’s QEP is the product of a faculty driven and community-wide effort that began in August 2014. The Office of Academic Quality Enhancement jumpstarted the plan’s development by conducting a needs assessment during fall 2014. This assessment collected and analyzed new and existing data and information associated with a variety of institutional metrics including admissions data, alumni survey results from various schools, student course evaluation data, exit survey data, student focus group responses, an analysis of student learning objectives from various programs, and faculty survey data. This collection of information was followed by the formation of a QEP Steering Committee in fall 2014, the development of a QEP Task Force in spring 2015, and a presentation by a QEP Panel from other health-related institutions in a two-day forum held on February 25-26, 2015. To complement the information gained by the external panel of
experts, a panel of internal experts convened to consider possible QEP topics appropriate for UT Health San Antonio in spring 2015. With all of the analyzed information and the resulting proposed QEP topics developed, the QEP Task Force hosted a two-day retreat held in May 2015 for a representative group of faculty, staff and administrators that took the conversation from the ruminating stage to the visionary stage as the topics took shape. A copy of the presentation that guided the proceedings of the retreat is included in Appendix E.

Approximately 60 faculty, students, and staff from UT Health, as well as members of the San Antonio health care community, participated in the two-day retreat. President William L. Henrich’s welcome and opening remarks emphasized the importance of the participants’ contribution to making the QEP process successful. Vice President for Academic, Faculty, and Student Affairs (AFSA), Dr. Jacqueline Mok, charged participants with using their broad experiences to consider how UT Health could improve the quality of student learning and/or the learning environment. “Through the QEP process,” she said, “we are committed as an institution to an on-going process of continuous quality improvement in education.” Day one of the retreat included a panel of representatives from several health care employers throughout San Antonio, including University Health System, South Texas Veterans Health Care System, Methodist Healthcare System, Morningside Ministries, and Provenir to discuss issues related to the education of health care professionals. For two days, participants reviewed data and discussed and began to prioritize areas in which UT Health could improve student learning outcomes.

The result of this effort was the formation of four QEP Topic Teams that would spend the next year exploring and refining potential QEP topics. These cross-institutional-interprofessional ‘topic teams’ met from June 2015 through March 2016, with coordination assistance and administrative support from the Office of AFSA to develop white papers for each of the group’s proposed topics. The four cross-institutional-interprofessional QEP topics that emerged from the work of the four QEP Topic Teams included the following themes for the institution’s consideration:

**Mission Interprofessional**: The topic emphasized students being able to apply relationship-building values and the principles of team dynamics to perform effectively in different educational, research and clinical roles related to the delivery of health care.

**Critical Think Tank (CT)**: This topic focused on the processes and outcomes of students who are able to develop inquiry and discovery skills to solve the complex problems of the future.
**Art of Communication**: This topic targeted students’ ability to effectively communicate across all audiences.

**Marketplace Success**: This topic aimed for outcomes that would prepare students to be able to: 1) successfully transition into professional career roles including the development of a career path and vision; and, 2) develop the ability to evaluate financial, economic, and regulatory policies influencing their career paths.

The vision for each of the potential topics continued to evolve throughout the 2015-2016 academic year. For example, formative information and collaborative discussions led one topic team to change the name of the proposed QEP from “Market Success” to “Quest for Success.” Other modifications to the four topics originally proposed resulted in the merging of the “Mission Interprofessional” and “Art of Communication” topic teams to form the new “Interprofessional Teams: Collaborative Learning to Improve Communication Knowledge and Skills (IT CLICKS)” topic team, with a greater emphasis on IPE.

Now narrowed to three proposed topics, public presentations of the concepts contained in the white papers were held in April 2016 at the second annual Fiesta of Education (a UT Health San Antonio educational forum highlighting classroom and teaching innovation). Following the presentation of the proposed topics, an institution-wide poll was taken to identify on which topic faculty, students and staff believed the QEP should focus.

Results were surprisingly close, with different plans being favored by either students or by faculty, but without a clear frontrunner emerging. Initial plans called for all proposals to undergo a second round of review when the university began the development of its next five-year strategic plan to span 2018-2022. While each of the three initial white papers took the current strategic plan (2012-2017 Strategic Plan) into consideration during their planning, constituents recognized the need for the QEP to be unequivocally compatible with the new strategic plan in order to ensure the significance of the topic across the entire institution.

Development of the new institutional strategic plan was based upon input from representative work groups composed of faculty, staff, and students, with each work group focusing on one of the strategic plan’s proposed overarching goals (education, research, health care, community engagement, and building a culture of excellence). The Education Work Group, in particular, focused on specific strategies for the plan’s
‘Education’ goal and operated from the context of meaningful student learning and success. The Work Group revived the ongoing QEP conversation and engaged in discussions about potential topics and their place in the new strategic plan. Discussions were fueled by additional research and information-gathering, including a presentation by the external consulting firm hired to help the institution develop the strategic plan in July 2016. The information presented by Manatt, Phelps, & Phillips Consulting focused on interprofessional education (IPE) initiatives across the country as well as UT Health’s current engagement in IPE activities. The consultants highlighted data taken from the QEP surveys administered to UT Health faculty and students, case studies of other IPE initiatives across the nation, and a breakdown of the IPE competencies from the Interprofessional Education Collaborative (IPEC), the widely respected IPE framework developed by the collective efforts of dozens of health care professionals across disciplines and professions and most highly regarded by the health care community across the U.S. The Education Workgroup ultimately recommended a dedicated approach in the new strategic plan that addresses interprofessional education at the institutional level.

With the new strategic plan complete, a reorganized QEP Steering Committee convened in May 2017 under the direction of the Vice President for Academic, Faculty, and Student Affairs. The new Steering Committee brought together all previous QEP-development work in their effort to propose a topic based on the Education Workgroup’s identification of critical educational strategies that included the need for enhanced diversity and inclusiveness, continued excellence in student achievement, and the enhancement of responsive learning opportunities that reflected evolving workplace needs. This team grew to include additional faculty and program directors from all schools, a librarian, clinical faculty, representatives from institutional academic and student support areas, including the director of the South Central Area Health Education Center (AHEC). Because AHECs operate as a national network aimed at recruiting, training and retaining a health professions workforce committed to serving underserved populations, AHEC leadership provided rich information about the delivery of health care by multiple and diverse health professionals in UT Health’s service area. Appendix A presents the roster of individuals comprising the QEP Steering Committee.

The Steering Committee then examined the white papers developed by the original QEP Topic Teams in 2015, the spring 2016 survey results regarding constituents’ topic preferences, and conducted additional outreach and research. Members of the committee scheduled meetings with a variety of constituent groups including the Student Government Association, deans and associate deans from each of the schools, faculty
councils, library staff, and directors from the Academic, Faculty, and Student Affairs division. Care was taken to combine the work of the previous QEP Topic Teams and align it with the new strategic plan, while remaining mindful of the most current constituent feedback. By September 2017, the steering committee had reached consensus on a QEP topic that focused on interprofessional education (IPE) and would meet the needs of students as they prepared to work in an interprofessional health care environment providing direct patient care under the tenets of the emerging interprofessional systems of health care delivery.

Need for Interprofessional Education at UT Health

The impetus for the adoption of IPE as a QEP topic came from the institution’s faculty, researchers, and practitioners recognizing their changing roles in the patient care dynamic and their need to remain relevant in the broader context of a shifting system of patient care models. As the public and other stakeholders increasingly demand the delivery of health care services that are patient-centered, culturally competent, safe, reliable, and cost-effective, UT Health faculty and clinicians understand the obligation they have to prepare students to work in the evolving systems of care. The provision of health care in our present and future environments requires moving away from the individual practitioner providing specific patient treatments to a practice model that embraces a system of care that includes a patient care team. From the laboratory bench to the patient’s bedside, from the classroom to the clinic, from policy to practice, the deans and faculty agree that the UT Health’s students must learn to work as members of collaborative teams that provide patient-centered care.

UT Health constituents appreciate that a larger shift in health care needs and trends is occurring and have reported the incongruence of the emerging health care delivery system and the current curricula throughout all schools and programs. In a 2015 survey conducted by the QEP Task Force, the vast majority (90 percent) of UT Health faculty said they believe that IPE is of vital importance to students’ success, however the challenge for the institution is the ease with which faculty and students can engage in IPE. The density and demands of specific disciplinary-based curricula add to the complexities of integrating more IPE experiences that students need to attain the professional competencies of their educational programs. While nearly 56 percent of faculty reported that they believe students have adequate and sufficient resources working in team-based settings, only 36 percent think that it is relatively easy for students to find opportunities to work with students preparing for careers in other healthcare/research fields. Students in particular expressed a desire for further opportunities to interact with other professionals and recognize their own need to learn to work in teams, communicate effectively with a variety of audiences,
and understand the individual roles within these teams. In focus groups conducted in 2015, students were vocal about the need for more interprofessional experiences. One student commented:

Our school has a wonderful platform to promote interdisciplinary collaboration, but it is under-utilized.

Other students from across the Health Science Center expressed similar sentiments:

If we are better able to communicate the importance and results of our research, we are more likely to achieve translation to the clinical arena, generate general interest in science, and improve funding opportunities for translational research.

I feel that initiatives to teach select courses, with students from different disciplines in the same classroom, would improve teamwork and collaboration in professional practice.

...an attitude of working as a team, helping to educate each other and doing what is best for the patient is the goal.

In a subsequent 2016 institution-wide survey, students revealed their beliefs in the importance of:

- being able to speak effectively about science and health issues with peers and stakeholders (98 percent).
- understanding the roles of different medical and research professionals and effectively communicating with these colleagues (94 percent).

The same survey uncovered learners’ sentiments about the adequacy of their training for this type of health delivery model. Students reported they have been adequately trained to:

- effectively communicate with their peers (86%);
- understand the roles of other health professionals (72%); and,
- communicate effectively with other professionals or with stakeholders (employers, patients, public, and policymakers) about their work in science or healthcare (72%).

In addition to the student perceptions presented above, UT Health students also generally demonstrate respectable performance when interprofessional competencies are assessed within individual programs. For example, Bachelor’s of Science in Nursing (BSN) students received a three-year mean score of 5.3 on a 7 point scale for their performance on the program’s student learning outcome that assesses the extent to
which students "collaborate and communicate effectively with healthcare professionals to promote positive working relationships, improve patient outcomes, and deliver quality, safe patient care." Master’s of Science in Nursing (MSN) students also scored similarly on the MSN student learning outcome that rates students’ ability to "lead interprofessional teams using collaborative strategies to effect quality patient care and population health outcomes," reporting a three-year mean of 5.0 on a 7-point scale. (Source: SON exit survey data, 2015-2017).

These results indicate a desire for interprofessional education, satisfaction with current experiences, and generally positive interprofessional learning outcomes. Upon review of the data, however, the team concluded that current interprofessional experiences in the programs at UT Health, though many and of high quality, mirror the challenges and weaknesses the literature suggests about the delivery of interprofessional education: it must be enhanced by common conceptual tools that only an institutional perspective can provide; and, institutional barriers must be addressed for the experiences to permeate throughout a student’s program. While students currently have opportunities for some interprofessional education experiences within their programs, administrators and faculty believe that a more coordinated interdisciplinary, institutional perspective of IPE and its associated competencies would further enrich these experiences and better prepare the institution’s future practitioners for the changing health care landscape.

Additional information about interprofessional education needs and trends across health care and within academic health centers can be found in the literature review on pages 14-17. As part of UT Health’s efforts to develop an institutional focus on interprofessional education that pervades all programs, constituents adopted the definition of interprofessional education and the four IPE competencies embedded in the Interprofessional Education Collaborative’s (IPEC) framework. IPEC is a collaborative consisting of 15 different associations of health professionals whose mission is to “promote, encourage, and support efforts to prepare future health professionals so that they enter the workforce ready for interprofessional collaborative practice that helps to ensure the health of individuals and populations” (IPEC, 2016). IPEC delineated “Core Competencies” for interprofessional education, which were then refined in 2016. This “Update of the Core Competencies,” merged the competencies into four: Values/Ethics for Interprofessional Practice, Roles/Responsibilities, Interprofessional Communication, and Teams and Teamwork. These four competencies serve as the student learning focus for UT Health San Antonio’s QEP. Shared definitions of "interprofessional education" supplied by the IPEC, as well as common tools for teaching and assessing IPE competencies, would provide a unity of experiences for UT Health students that would, in turn, position
Linking Interprofessional Networks for Collaboration: The QEP at UT Health San Antonio

students to be leaders in providing health care and conducting health science research in an interprofessional clinical environment.

Review of the Literature

Importance of interprofessional education

A literature review was performed to examine the general principles of interprofessional education (IPE) and identify recommendations for successful implementation of an IPE effort within a health science center. Because academic health sciences centers are charged with preparing students to practice in an interprofessional collaborative manner, and due to discipline-specific accreditation requirements, many academic health centers are compelled to include Interprofessional education (IPE) within their programs’ curricula (Willgerodt et al., 2015). The literature reports that IPE contributes to the improvement of patient outcomes in acute care settings and the delivery of preventive services (Reeves, 2017). The common definition of interprofessional education, one endorsed and promoted by a variety of organizations including the Interprofessional Education Collaborative (IPEC) and the Centre for the Advancement of Interprofessional Education (CAIPE), is the one put forward by the World Health Organization: IPE “occurs when two or more professions learn with, from, and about each other to improve collaboration and the quality of care” (World Health Organization, 2010).

While the term “multidisciplinary” also is frequently used in academic settings, it should not be considered to be the same as IPE. According to the Interprofessional Education Collaborative (IPEC), multidisciplinary teams consist of people from different disciplines being involved in a given activity, but working in parallel and only coming together for specific issues and problems (2011). Because of this key distinction, UT Health San Antonio’s literature review focuses on tangible interprofessional activities that support and advance the four IPEC competencies.

Health policymakers have begun to shift their focus from traditional service delivery methods to more innovative strategies that strengthen the healthcare workforce and patient outcomes. They too acknowledge that IPE promotes the formation of a strong, flexible and collaborative workforce that can tackle the highly complex health challenges facing contemporary American society. Academic health centers that are able to promote and teach interprofessional education and collaboration to the next generation of health care providers have been pegged to answer this call (World Health Organization, 2010). Reinforcing this expectation is a shift in focus of the Association of American Medical Colleges (AAMC) that considers IPE
and interprofessional practice to be one of the key strategic areas an organization and its members should engage in (Blue, Mitcham, Smith, Raymond, & Greenberg, 2010).

**IPEC Core Competencies**

In coordination with representatives of the American Association of Colleges of Nursing, American Association of Colleges of Osteopathic Medicine, American Association of Colleges of Pharmacy, American Dental Education Association, Association of Schools of Public Health, and the Association of American Medical Colleges, the Interprofessional Education Collaborative (IPEC) was established to develop core competencies for interprofessional collaborative practice that built on each profession’s expected disciplinary competencies. The group developed competency domains as a basis for establishing learning objectives and designing learning activities for teaching interprofessional collaborative practice. The “Core Competencies for Interprofessional Collaborative Practice” were originally published in 2011, the result of these national associations within the health professions coming together to form the Interprofessional Education Collaborative, or IPEC. The report presented and detailed four core competencies: values and ethics, roles and responsibilities, interprofessional communication, and teams and teamwork. These domains aim to engage students from different professions in interactive learning with each other and to effectively work as members of clinical teams. The original 2011 report was widely disseminated and translated into multiple languages and has been cited in scholarly work over 550 times from 2011 to 2015.

IPEC updated the Core Competencies document, which was released in 2016. The updated document reorganized the four competencies under the central concept of “interprofessional collaboration.” The descriptive language for each of the four competencies was expanded and now includes references to population health. The IPEC membership was also expanded in 2016 to include nine new institutional members, bringing the total number of professional organizations represented on the collaborative to 15.

The revised 2016 document maintained the definition of interprofessional education and interprofessional collaborative practice first advanced by the World Health Organization, which identified interprofessional education as experiences occurring “when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes” (WHO 2010 as cited in IPEC 2016). Additional key terms were included in IPEC’s 2016 report which presented a definition of “interprofessional collaborative practice” as “multiple health workers from different professional backgrounds [who]work together with patients, families, [careers], and communities to deliver the highest quality of care” (WHO 2010 as cited in IPEC 2016). The four core competencies rest upon these foundational
definitions and further detail the knowledge, skills, and attitudes necessary for interprofessional collaboration. IPEC’s foundational competencies are detailed in Appendix B.

Each of the four IPEC competencies are clarified and supported by 8-10 specific sub-competencies that further define the overarching competency and assist in curricular implementation and assessment. The four Core Competencies for Interprofessional Collaborative practice have also been endorsed by the wider health care education community at large and therefore form the conceptual core of the QEP at UT Health.

Requirements for a successful IPE initiative

Historically, institutions have been somewhat disadvantaged by the lack of established competencies and coordinated institutional efforts in their attempts to deliver authentic IPE experiences as part of their programs’ curriculum. As is often seen, some individual faculty members within an institution may provide rich interprofessional learning opportunities, but because there is little to no administrative recognition or support, these activities do not flourish. To ensure successful program implementation, IPE efforts need to be organized with an administrative structure and resource base that allows for adequate mentorship, faculty development, coordination of activities that meet IPE competencies, and appropriate assessment of learner outcomes (Brashers, Owen, & Haizlip, 2015). Aston et al. (2012) reported that the development of a formal IPE department with faculty and support staff is essential for a successful and sustainable IPE program. Dedicated support and budgetary resources from the senior administration and deans is imperative to ensure IPE efforts succeed. Reeves, Boet, Zierler, and Kitto (2015) provide a checklist for planning an IPE evaluation of IPE objectives, which is included in Appendix B.

Moreover, faculty development is essential to successful delivery of IPE outcomes and provides the foundation for establishing a respected IPE center. Since faculty support and buy-in is critical, creating a coalition of faculty within the institution who have IPE expertise and could act as champions is a vital ingredient for maintaining an IPE initiative (Brashers et al., 2015). Given that the majority of faculty were not trained in an interprofessional environment during their own educational experiences, many are not sufficiently knowledgeable to teach within its framework. As a result, faculty development programs, in which faculty from different health professions learn together about teaching methods and IPE core competencies, are a critical ingredient to success (Steinert, 2005). Developing organizational structures that facilitate and coordinate interprofessional collaborations among these champions is also seen as a key
component of an IPE Center (Ho et al., 2008). However champions alone cannot ensure the sustainability of an effective IPE program which ultimately requires management’s support, faculty and staff buy-in, ownership, and commitment from all disciplines (Lawlis, Anson, & Greenfield, 2014).

**Model Programs and Best Practices**

During the course of QEP research and planning, the team examined several other institutional leaders in interprofessional education in order to see how the practices described in the literature were embodied at peer institutions. Team members reviewed conceptual frameworks, programming, institutional structure, as well as assessment strategies and tools. Faculty development and assessment tools, particularly the “IPE Training Toolkit” and the “Pre- and Post-training Assessment of Teamwork Knowledge, Attitudes, and Skills” from the University of Washington’s Center for Health Sciences Interprofessional Education Research and Practice (https://collaborate.uw.edu/ -- external link) were influential in developing programming and assessment approaches, respectively. The Jefferson Center for Interprofessional Practice and Education (http://www.jefferson.edu/university/interprofessional_education.html – external link) offers a Health Mentors Program, learning modules, and a system for recognizing and rewarding excellence in interprofessional education and collaborative practice. Long known as a leader in IPE, the National Center for Interprofessional Practice and Education at the University of Minnesota (https://nexusipe.org/ -- external link) provided a number of model resources, including the Nexus Learning System for developing IPE skills. Their Resource Center contains links to 1000 articles on IPE in areas such as Assessment and Evaluation, Collaborative Practice, and Teamwork. The Texas Tech Health Science Center Office for Interprofessional Education (https://www.ttuhsc.edu/interprofessional-education/ -- external link) grew out of their previous QEP. They provide a registry of IPE offerings for faculty and students that includes offerings from individual schools as well as from the Office of Interprofessional Education itself. Additionally, they host an annual Symposium featuring a guest speaker and presentations from faculty and students. Their series of IPE training videos has garnered national recognition as well. Structurally, they are led by a director and an assistant director, while having a steering committee that consists of constituent representatives and advises the office on programming and effectiveness. Together, these models demonstrated successful ways of programming and organizing IPE in a health science center and were a valuable resource in developing the QEP.
The QEP and Alignment with the Strategic Plan

Institutional Mission

Interprofessionalism and working in teams is part of the UT Health San Antonio’s ethos and is reflected in the mission and core values of the university, as presented in Appendix C. UT Health's mission statement and associated strategies place an emphasis on education, quality health care, and community involvement. The UT Health San Antonio community believes that health care providers and scientists in the 21st Century need to communicate more clearly, especially in interprofessional environments, in order to "make lives better."

Core Values:

UT Health San Antonio has eight core values which underlie all the activities within the institution and are embodied in the institution’s work. A successful QEP must align to these values in order to become part of the institutional fabric. The QEP has been developed with these institutional core values (presented in Appendix C) at its forefront. The four institutional values presented in Appendix C reinforce aspects of the IPEC’s foundation and the strategic vision for IPE at UT Health San Antonio.

Alignment to UT Health’s Strategic Vision

The development of UT Health’s QEP spanned two institutional strategic plans: the last 2 – 3 years of the 2013 - 2017 plan, and early stages of development of key concepts and strategies the institution set out as priorities for the 2018 – 2022 strategic plan. Interprofessional education as a key institutional undertaking is present in both plans, demonstrating the institution’s commitment to experiences that bring students of different professions together in order to learn from and with one another. The QEP development process, begun in 2014, was deliberately made a part of the strategic planning process when developing the current strategic plan. The following tables contain the strategic plan elements for each strategic plan that are closely aligned with interprofessional education.

The 2013-2017 Strategic Vision consisted of five themes: Education, Research, Health Care, Community Engagement, and Organizational Effectiveness. Each theme contained multiple goals designed to focus institutional efforts within those themes and provide measureable targets. Multiple strategies for achieving each goal were then articulated to provide concrete steps taken to achieve the goals. The following table lists the themes, goals, and strategies which align with interprofessional education efforts.
### TABLE 2: QEP Alignment with 2013-2017 Strategic Vision

#### EDUCATION

<table>
<thead>
<tr>
<th>Goal 1: Develop creative, engaging and meaningful learning experiences for students through innovative, experiential and leading edge technology.</th>
<th>Strategy 1: Construct an Academic Learning and Teaching Center to provide flexible classrooms with modern technology, including more sophisticated and computerized testing experiences of a student’s knowledge, skills and values; and, settings designed to facilitate interprofessional education experiences.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2: Design and strengthen curricular programs to meet and anticipate the future needs of the workforce and community.</td>
<td>Strategy 1: Expand and enhance curricula in new and emerging areas, such as interprofessional learning, translational science, prevention and community/population health.</td>
</tr>
<tr>
<td>Strategy 2: Emphasize active, engaged, self-directed and contextual learning that promotes continuous development of lifelong learning skills.</td>
<td>Strategy 3: Educate clinically and research-oriented students to understand the scientific basis of health care and to appreciate the central role of biomedical and behavioral research in advancing health care.</td>
</tr>
<tr>
<td>Strategy 4: Develop and enhance collaborative multidisciplinary and interprofessional education programs.</td>
<td>Strategy 5: Design, implement and evaluate innovative curricula aligned with professional accreditations and regulatory requirements to meet current and future workforce demands.</td>
</tr>
<tr>
<td>Strategy 6: Expand interprofessional community/population health care experiences designed to enhance health care experiences for students.</td>
<td></td>
</tr>
</tbody>
</table>

#### COMMUNITY ENGAGEMENT

<table>
<thead>
<tr>
<th>Goal 4: Attain international/national stature for key academic programs and a reputation for faculty excellence.</th>
<th>Strategy 2: Cultivate and reward teaching excellence.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy 5: In collaboration with the academic community, develop the 21st century Library as a national resource and research center for students and faculty.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
Goal 1: Improve the health literacy, prevention and optimal management of chronic diseases in our community and South Texas.

Strategy 4: Develop clinical teams and train students to meet the needs of the community.

The current strategic vision keeps the same basic structure as the previous plan, using themes, goals, and strategies to articulate the university’s ideal trajectory for the next five years. A single goal for each theme was developed to streamline and focus the vision, while multiple strategies were developed to achieve each goal. As the following table shows, interprofessional education is an explicit part of the 2018-2022 Strategic Vision, while additional IPE themes are present throughout the plan.

**TABLE 3: QEP Alignment with Strategic Vision 2018-2022**

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Be the university that students and faculty choose for its vibrant academic culture, innovative programs and service to the community, state and region.</td>
<td>Strategy 3: Strategically assess where UT Health San Antonio can leverage its educational program strengths to refine, change, or launch new academic programs that are responsive to the academic and professional marketplace.</td>
</tr>
<tr>
<td></td>
<td>Strategy 4: Strengthen interprofessional team-based learning opportunities across the organization.</td>
</tr>
<tr>
<td>RESEARCH</td>
<td></td>
</tr>
<tr>
<td>Goal 2: Continue to develop and grow research programs of excellence and distinction in advancing human health.</td>
<td>Strategy 2: Promote a culture that values research, collaboration, and innovation.</td>
</tr>
<tr>
<td>COMMUNITY ENGAGEMENT</td>
<td></td>
</tr>
<tr>
<td>Goal 4: Foster a UT Health San Antonio community partnership that benefits the diverse communities we serve through education, practice and research to meet mutually identified health and health education needs.</td>
<td>Strategy 2: Develop the infrastructure to support our faculty, students, and community members to address relevant health and health care issues</td>
</tr>
</tbody>
</table>
Focus On Student Success

UT Health’s Students and Institutional Context

UT Health San Antonio is one of the country’s leading health sciences universities and ranks in the top three percent of all institutions worldwide receiving National Institutes of Health (NIH) funding. The university is a member institution of the University of Texas System, which consists of eight academic universities and six academic health science centers, all governed by a nine-member Board of Regents. The State of Texas established the Medical School in 1959, and enrolled its first class of students in 1968. Since then, UT Health San Antonio has evolved through the addition of new schools, programs, and off-site locations; yet, all modifications and revisions to the mission that evolved as the institution matured remained true to the focus of health education and research. The institution’s mission is achieved through the delivery of health-related and biomedical sciences programs in its five schools: Joe R. and Teresa Lozano Long School of Medicine, Graduate School of Biomedical Sciences, School of Dentistry, School of Nursing, and School of Health Professions. The university was ranked eighth in the State of Texas for Research Expenditures in 2013, demonstrating its commitment to the advancement of knowledge and pursuit of excellence in research.

The main campus location is in San Antonio, Texas, with a branch campus in Laredo, and approved offsite locations in downtown San Antonio and in Houston. Five of the programs are delivered asynchronously fully online, while two programs utilize synchronous videoconferencing technology to student cohorts at off-site locations. Today, UT Health San Antonio is a major provider of health professions education and biomedical research in South Texas, serving 3200-plus students who are admitted through a highly selective admissions process. The U.S. Department of Education designated the institution as a Hispanic-Serving Institution (HSI), reflecting in its student body the demographics of a highly concentrated population of Hispanics and other underrepresented minorities in San Antonio due to its proximity to the Mexican border and large military, health care, and higher education industries. While drawing significant enrollment from the San Antonio and South Texas region, the university also draws considerable enrollment from non-Texas and international students.
students pursing the quality health professions and biomedical sciences programs offered by UT Health San Antonio. The institution’s student population, as of fall 2017, is 61 percent female, and 34 percent underrepresented minorities. A total of 87.3 percent of the students are Texas residents, with a median age of 25. UT Health’s five schools offer 46 degree or certificate programs, plus numerous continuing education opportunities for practicing health professionals. This diversity of programs, schools, and students make interprofessional education both a necessity and an opportunity at UT Health.

Plan Outcomes
To frame the QEP in the context of a five-year plan that coordinates activities and promotes the accepted IPEC competencies, three primary outcomes were established to guide activities, assessment and integration of IPE into program curricula. The QEP outcomes are:

Outcome 1: To increase faculty, student, and staff knowledge and skills of the IPEC framework to foster an environment that reinforces the value of its competencies in delivering patient care.

Outcome 2: To demonstrate schools’ and programs’ adoption of IPE as a strategic priority through increased IPE activities integrated into the curricula and opportunities for student interprofessional experiences

Outcome 3: To increase the institutional capacity for students from different programs and professions to work together during clinical training and research experiences.

These outcomes are further addressed in the Assessment section of this plan.

Long Term Impact
Several drivers are associated with the health care community’s collective interest in interprofessional teams as a new model of patient care. Thistlewaite attributes the drivers for IPE to “include new models of health care delivery in the context of an ageing population and the increasing prevalence of long-term chronic disease, in addition to the patient safety agenda.” To this end, one proposed solution to the delivery of patient care in a complex system is a team-based and collaborative approach. The rationale for IPE is that learning together enhances future working together. Medical and other world-wide health organizations have referred to the current structure of patient care as “a slow burning crisis caused by the mismatch of professional competencies to patient and population priorities because of fragmentary, outdated and static curricula” where graduates of the different health professions have only experienced the current “professional silos” to which much of the literature about IPE references.
While scarce, reviews of IPE research have shown some evidence that IPE fosters positive interaction among different professions and variable evidence that it improves attitudes towards other professionals. Thistlewaite believes that for a constructive alignment to actual patient care “from an education viewpoint, there is a need for educators to define learning outcomes and match these with learning activities to ensure that IPE demonstrates added value over uniprofessional learning.” UT Health’s QEP is therefore intentionally designed to find methods over the course of the five-year QEP period and beyond to better align the IPE skills and behaviors needed in the delivery of patient care to the learning and skill-attainment process delivered through each program’s curricular and co-curricular activities.

The demographic changes occurring in society therefore “require a shift in focus from acute service delivery to a chronic care model that emphasizes, among other system changes, primary health care, interactions between the health care team and patient, and patient support for self-management.” Research into IPE seems to concur that teamwork be included in health professional curricula and that exploration into the most effective way of delivering learning activities to promote future collaboration should be researched. Studies also found challenges with the practice of teamwork within collaborative teams because practitioners recognize that a team requires both leadership and membership. Students must understand how to effectively communicate with the health care team of professionals and patients, so that patients know who is leading or coordinating their care and who is their “go-to” health professional.

In the long term, UT Health will work to help add to the currently scarce evidence that deliberate interprofessional collaboration is essential for good clinical outcomes. The institution strives to contribute to knowledge that discovers how to best develop a workforce that can perform together effectively. The IPE activities directly bolstered by the QEP will help answer the key question regarding the education strategies that truly prepare learners to collaborate. To succeed in this longer-term pursuit of the discovery of successful IPE delivery, institutional constituents must agree on the internal goals of IPE within the institution and encourage innovation and experimentation to identify effective methods. This includes evaluating the outcomes that should be learned within each distinct program, attending to the needs of educators and clinicians regarding their own competence in interprofessional work through coordinated support and resources, and advancing knowledge through robust project evaluation using both qualitative and quantitative approaches.

In the development of education strategies for IPE delivery, practices will be tested that encourage students to recognize, value, and engage in practice with a range of health professionals. This supports the long-term vision and impact of the QEP which is to establish education strategies that enhance collaborative work-
along with profession-specific skills—to produce a highly skilled, proactive, and respectful workforce focused on providing safe and effective health for patients and communities.

**Actions to be Implemented**

The QEP Steering Committee analyzed and considered the information from the many data and information sources and constituents that contributed suggestions about how to operationally integrate IPE activities in a meaningful way. Mirroring the expectancies of interprofessional practice, the team represented a diverse group of individuals from all schools and key administrative offices. The membership of the QEP Steering Committee is presented in Appendix A. The following activities are the core actions of UT Health's QEP. They build upon existing institutional resources and activities, while developing new programs. They represent an institutional commitment to meeting the QEP objectives over the next five years through innovative approaches based on best practices and customized for the institution.

**Interprofessional Collaboration and Education Incubator (ICE-I)**

The key infrastructural component of the QEP is an Interprofessional Collaboration and Education Incubator (ICE-I). Modeled after business incubators or design incubators, the ICE-I will serve as the “hub” of IPE activities on campus. While not directly administering all IPE campus activities occurring throughout the programs, the ICE-I will serve as a primary resource and project accelerator, helping faculty and students develop IPE projects while ensuring consistency in the competencies such projects seek to develop. The Incubator will serve as a catalyst, helping faculty, students, and community partners come together to develop IPE experiences, resources, and curriculum.

The ICE-I will provide a suite of services to faculty, staff, and students, including but not limited to:

- Delivery and ongoing reinforcement of the standard IPEC framework to constituents
- Networking activities
- Design consultations for new IPE curricular or co-curricular activities
- Marketing assistance for new or existing IPE Co-Curricular activities or courses
- IPE research dissemination and best practice promotion
- Links to external resources, including grant funding
- Links to mentors or potential partners in IPE activities

Initially, the ICE-I will offer several formal programs designed to encourage IPE innovation at UT Health. Some of these include:

1. The development of a database of IPE activities delivered throughout the institution
2. The provision of IPE seed grants to faculty and students for the creation of innovative IPE designs and concepts
3. The collection and dissemination of IPE resources through a dedicated website
4. The hosting of an annual IPE symposium

Table 4 below summarizes the ICE-I programming, along with initial date of implementation and planned outcome measures. Each of these elements is further addressed in the sections that follow, with a complete, five-year timeline beginning on page 37.

**Table 4. QEP Implementation Plan and Timeline Summary**

<table>
<thead>
<tr>
<th>IPE Activity</th>
<th>Year First Implemented</th>
<th>Description</th>
<th>Target Audience</th>
<th>Outcome measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPE Database</td>
<td>Year 1 (2018-2019)</td>
<td>Comprehensive repository of institutional IPE activities</td>
<td>Students, faculty, administrators, community</td>
<td>Count of items in database; usage data</td>
</tr>
<tr>
<td>Seed Grants</td>
<td>Year 1 (2018-2019)</td>
<td>Mini-grants for teams to pilot IPE projects</td>
<td>Students, faculty</td>
<td>Number of applications, number of awards, survey of participants, direct assessment outcomes of student artifacts or performance;</td>
</tr>
<tr>
<td>Web resources</td>
<td>Year 2 (2019-2020)</td>
<td>Web based resources for IPE curriculum, assessment, and project development</td>
<td>Faculty, community</td>
<td>Number of resources created, Usage data (downloads, views), usage survey</td>
</tr>
<tr>
<td>IPE Symposium</td>
<td>Year 1 (2018-2019)</td>
<td>Speaker and workshop series; presentation of funded pilot projects</td>
<td>Faculty, students, community, administrators</td>
<td>Number of events, event attendance, participant survey</td>
</tr>
</tbody>
</table>

**Database of IPE Activities**

While many opportunities to experience and learn about IPE exist at UT Health, there is no central place to learn or explore the initiative or its concepts further. Additionally, there is no central means of facilitating
partnerships for faculty or programmatic collaboration about interprofessional activities. An online, searchable database will be created that will capture all existing and newly emerging opportunities in one easily accessible location. Using an online form, faculty and/or staff will submit their course or co-curricular event for inclusion in the database. These learning activities would have to meet basic requirements to be included in the repository:

- It must involve two or more professions;
- It must provide faculty and/or students opportunities to learn about, from, and with one another;
- It must intentionally integrate the IPEC definition of interprofessional education and one or more of the IPEC competencies; and,
- It must provide for significant interactivity between participants.

Inclusion of IPE activities in the database will be determined by the IPE Council (see page 31) and the Director of the Incubator.

Once approved, events will be entered into a searchable database. Students will be able to search the database for existing opportunities for IPE that fit their program and schedule. Faculty are intended to use the database to identify existing IPE opportunities of interest at the institution. This information enables faculty to request participation in an established activity or utilize the activity’s IPE concepts to modify a new activity for their own curriculum. Additionally, when faculty identify a gap in IPE programming within their own curriculum, they can develop a new activity to fill that gap. These identified gaps and proposed revisions to existing activities can be built upon to become the basis for an IPE Activity Development Grant proposal.

The database will also be useful in data gathering and measuring the achievement of key performance indicators. The number of events will be recorded, as will enrollment data for courses or events the Incubator hosts. Participating students and faculty will participate in surveys and focus groups to provide additional context to the Incubator’s effectiveness.

**IPE Seed Grants**

The heart of the Incubator’s activity will be assisting faculty and students develop IPE projects through a seed grant competition. Beginning in Year One of the QEP, the Incubator will issue a *Request for Proposals* for student or faculty teams to propose an interprofessional activity, course modification, or research project. Selected projects will be provided with a small grant award to be used for materials, equipment,
travel, or even direct stipends for the piloting of new innovative initiatives. The funded projects will serve as the pilot projects for interprofessional education or collaboration at UT Health to determine which is most effective and meaningful. Funded projects are expected to support the IPEC definition of interprofessional education and one or more of the associated competencies through a co-curricular or course-embedded activity. Mechanisms for assessing those competencies must also be detailed in the proposals. Projects which propose to research the effectiveness of interprofessional education and/or patient care will also be considered.

Individuals awarded funds to test their IPE projects will be matched to a member of the IPE Council (described in detail on page 31) who will serve as a mentor to the grantee and given access to the full-range of the Incubator’s resources for the duration of the project. Additionally, a minimum of one team per year will be selected to attend the national IPEC Institute. The Institute is held bi-annually at sites across the country and provides dedicated space and time for teams of faculty and other health professionals to learn about and plan interprofessional activities at their institutions. Expert and peer consultation is a vital part of the Institute, giving selected teams a wealth of resources from which to draw as they develop a campus plan.

**IPE Web Resources**

In addition to the IPE Database, the Incubator will also provide IPE teaching and learning resources and assistance via resources posted on its website. These resources will take a variety of forms, such as the presentation of the IPEC framework and competencies, assessment tools such as rubrics, short videos regarding IPE topics, white papers, curriculum guides, and links to research and potential grant funding. These will serve as basic catalytic tools for encouraging systematic and coordinated IPE development across the schools. Seed grant project winners will be expected to contribute to this web resource library as part of their project deliverables for funding.

**IPE Symposium**

As a means of professional development and establishing the IPEC competencies as the IPE framework at UT Health, the Incubator will sponsor an ongoing speaker and discussion series. In the initial years of the project, the symposium will focus on bringing in external experts to give lectures and lead workshops about interprofessional education and collaboration. Beginning in Year Three, there will be a sufficient critical mass of sponsored IPE projects to supplement the external speakers with a showcase of projects developed at UT
Health. This showcase will integrate a formal poster presentation format with the annual recognition of IPE champions and/or mentors identified for that year from throughout the institution.

**Institutional Barriers Analysis**

Much of the literature about interprofessional education suggests that while there is consensus about the value of IPE, it is difficult to fully implement authentic IPE at an institutional level due to academic calendars, student leveling, programmatic requirements, and other structural issues. A key project of the QEP will be to analyze whether such issues are present at UT Health, and; if they are present, how they manifest themselves. The Institutional Barriers Analysis will take a deep dive into the academic and administrative structures of the institution and its programs in order to propose solutions to remove or mitigate the barriers that make interprofessional education difficult. Recommended solutions will be presented to the university’s vice presidents and deans, as they are the key leaders who will be able to methodically act on the recommendations as appropriate.

**IPE Curriculum Mapping**

Interprofessional education opportunities already exist as part of the curriculum of various programs at UT Health. In order to better understand where these existing activities reside and where new opportunities could be integrated into each program, faculty will revisit and potentially revise their program curriculum maps to identify existing IPE activities and how they currently function or should function within the curriculum. As faculty evaluate the effectiveness of their current IPE activities, they will discuss how they might be leveraged to provide more interprofessional learning opportunities for students. Concurrently, faculty will recognize gaps in the programs’ delivery of IPE concepts and activities and make plans within the curriculum to mindfully enhance the programs’ teaching of IPE. The Incubator will work with the programs to produce thorough curriculum maps that identify places where the IPE competencies could be successfully addressed. These revised maps will allow the programs to better structure their curriculum to maximize IPE opportunities for students and encourage inter-program collaboration.

The actions to be implemented described above are constructed in order to meet the QEP’s objectives. Knowledge and skills from the IPE framework will be increased through use of resources developed by the Incubator and recipients of the seed grants, along with increased curricular IPE offerings and the Symposium. Curriculum mapping will allow existing IPE activities to be enhanced and new offerings to be planned, which also increases the institutional capacity to deliver quality IPE experiences. The Institutional
Barriers Analysis is critical to increasing institutional IPE capacity. The Incubator will coordinate all of these efforts and disseminate their results. Together, these activities represent a strategic deployment of institutional resources to meet the QEP’s objectives. These resources, described in the following section, show a broad-based institutional involvement in the QEP and commitment to its success.

Resources
Support and Resources Required for the Incubator

Director

A director will be hired to oversee the daily operations of the Incubator, coordinate QEP assessment, and ensure continuous progress toward the goals of the QEP. The director’s position will be 100% time, with a new hire from either an external search or an internal appointment to fill the role. The director’s duties include but are not limited to the following:

- Overseeing and coordinating a campus awareness plan for the Incubator, especially IPE’s associated IPEC Competencies and their role in guiding the Incubator’s programming.
- Developing and populating the IPE database, with technical assistance from library staff.
- Leading the development of the IPE website and its associated learning resources.
- Coordinating the annual IPE Symposium.
- Leading the curriculum mapping effort in partnership with the IPE Council (described in detail below) and school curriculum committees.
- Serving as the primary spokesperson for the Incubator and QEP at institutional meetings and events.
- Reporting on Incubator’s and QEP’s progress through formal annual reports.

IPE Council

Working in concert with the director will be an IPE Council, consisting of one representative from each of the five schools and a single student representative. Each school representative will work under reassigned time for QEP duties. Council members will be expected to hold office hours in the Incubator and attend all Incubator meetings and functions. The Council’s duties are as follows:

- Administer the IPE seed grant program, including issuing an annual Call for Proposals, developing and improving criteria for grant funding, and selecting the grant recipients.
- Mentoring and advising grant recipients through the implementation and assessment of their Incubator projects.
• Authoring and presenting the Institutional Barriers Analysis report biennially.
• Collaborating with the director to identify and invite speakers for the IPE Symposium
• Working with the Incubator director and library staff to populate the IPE database, including evaluating activities for inclusion, and consulting with faculty and student leaders to determine how their activity can be included.
• Advising the director about new web resources to post to the IPE website.
• Contributing to the program level curriculum mapping process, when appropriate.
• Assisting in the aggregation, analysis, and interpretation of assessment data.
• Serving as a communication channel to and from the respective schools (or the student body), particularly school curriculum committees.

IPE Advisory Group

In order to ensure broad based involvement from school and community constituencies throughout the duration of the QEP, a larger advisory body will be formed. This group will meet periodically with the director and IPE Council to help steer the direction of the QEP, communicate concerns or needs from their representative programs and update those groups on the QEP’s direction and progress. The Advisory Group will also assist in the interpretation of assessment data when presented by the director and IPE Council. The Advisory Group will consist of one faculty member from each school, one student representative from each school, one clinical faculty member from each school where appropriate, one representative from the library, one representative from the office of Academic Effectiveness, and one from student life.

Other Contributing Units

Schools

Each of UT Health’s five schools will be involved with the Incubator in a variety of ways. One faculty member from each school will be granted release time to serve on the IPE Council. The IPE Advisory Group will also have representatives from each school. This representation will continue the broad based involvement in the Incubator and help direct and assess its programming. Each school will also partner with the Incubator staff to thoroughly map curriculum in order to identify current and potential IPE course offerings in each program.
Library

The new Incubator will be housed physically and administratively within the Briscoe Library on UT Health’s main campus. The library will provide the physical space for the Incubator, including office space for the director and collaborative meeting space for faculty and students. More importantly, locating the Incubator within the Library will allow the library’s assets and librarians’ expertise to be efficiently deployed in support of the QEP. Expected library contributions include:

**Database Construction:** A key deliverable in Year One is a searchable public database of existing interprofessional opportunities at UT Health. The library’s Division of Resource Management, which has extensive experience in creating and maintaining databases, will create the IPE Database in consultation with the director and the IPE Council.

**Learning Material Creation:** The library staff has considerable experience in creating learning materials, as evidenced by their LibGuide series designed around key disciplinary topics and library resources (see [http://libguides.uthscsa.edu/](http://libguides.uthscsa.edu/); external link)—Along with school-based instructional designers, librarians will be key partners for faculty who participate in the development of seed grants. They will consult with faculty and students to find resources and materials as well as build new learning resources with faculty and student teams. These resources will include literature reviews, IPE activities and best practices which can be incorporated into courses, and scholarly articles. This duty dovetails well with the library’s new emphasis on curating and providing “Open Educational Resources,” which are free, open source learning objects such as textbooks.

**Outreach Support:** The Briscoe Library currently maintains a staff of five library liaisons. One liaison is assigned per school. They serve as a single point of contact for library services for faculty, staff, and students from that school and collaborate with faculty to plan and develop curricular content, as well as campus and community engagement activities. The library liaisons to the schools will also serve as an additional point of communication and outreach for QEP initiatives.

**Administrative Support:** The library’s existing structure will provide day-to-day administrative support for the Center’s functions. Such support will include scheduling meeting and events, maintaining the budget, and other material support for the director.
Office of Academic Effectiveness/Institutional Research (assessment support and analysis)

The Office of Academic Effectiveness provides consultation and oversight for program-level academic assessment on campus and provides resources that support institutional and programmatic compliance efforts. As a unit within the Office of Academic Effectiveness, the Office of Institutional Research handles data production and reporting tasks that provide accurate information to support decision-making for the institution. Together, these units will provide QEP support through consultation with faculty, student groups, and advisory/steering bodies regarding appropriate assessment strategies and mechanisms for the collection and reporting of institutional level data. The Academic Effectiveness Office will also assist the Incubator Director with IPE curriculum mapping for each program.

Office of Student Life (Orientation, Publicity, Programming)

As the principal voice of central outreach to the entire student body, the Office of Student Life will be a key partner in the dissemination of information related to the QEP. Specifically, the Office will assist in disseminating announcements of IPE events through its existing communication channels (student listerv, video displays) and in publicizing campus wide student assessments (student surveys). The Office of Student Life will also host numerous events (both existing and new) that are interprofessional in nature. One example of a current IPE activity sponsored by the Office of Student Life is the UT Health Voices and Speed Networking Night. Hosted each fall, an interprofessional group of current students and alumni is brought together with “the goal of bringing the student community together and, through student presentations, giving students a more holistic understanding of all health professions and sciences.” The event begins with a “speed networking” session, where current students from all schools rotate amongst each other to make professional connections. Then, one student and one alumnus from each school give short presentations focusing on their personal journey within the health care professions. The purpose of the event is to allow for interprofessional networking in an informal, social setting.

Texas IPE Task Force

Founded in 2015, the charge of the Texas Interprofessional Education Task Force was to share institutional IPE initiatives, experiences, and lessons learned across the state of Texas. The task force first met in the summer of 2015 to share information about IPE programming and initiatives for health professions education. Eleven members represented eight institutions at the first IPE Task Force that included:

- Texas Tech University Health Sciences Center
- University of North Texas Health Science Center
• Texas A&M Health Science Center
• University of Texas at Austin
• University of Texas Southwestern Medical Center
• University of Texas Health Science Center at Houston
• University of Texas Health Science Center at San Antonio
• University of Texas Medical Branch.

At their most recent meeting in October 2017, the membership had grown to 51 representatives from 25 academic institutions and 1 healthcare agency. The mission of the Texas IPE Task Force is to create a Texas Community of Practice (CoP) specializing in interprofessional practice and education in order to share best practices, facilitate the successful implementation of team-based collaborative care in a variety of practice settings, and develop collaborative, innovative, and interprofessional pedagogies that will transform healthcare education across the state of Texas. UT Health San Antonio is both a founding member and active participant in the Texas IPE Task Force.

ICE-I (IPE Incubator) Structure
The following figure is a graphical representation of the structure of the Incubator, including its basic internal structure, key supporting units, and key outputs. It summarizes the activities and organization of the QEP detailed above. The Incubator is the core of the figure; within it is embedded the two elements necessary for the Incubator to function on a daily basis – the Director and the IPE Council. The left column presents the key supporting units of the Incubator. These are the established units of the institution who will partner with the Incubator on key IPE activities. The Office of Institutional Research, for example, will provide support with the collection and analysis of institutional level data necessary for QEP assessment. The Incubator will then utilize this support to enact the initiatives and produce the deliverables shown on the right. These are the key outputs of the QEP – the elements that will directly assist faculty, staff, and students in enhancing IPE at UT Health.
Timeline
The following timeline lays out a five year plan of activities and basic assessment strategies (the full assessment plan is detailed beginning on page 41). The QEP quickly establishes the basic infrastructure of the Incubator, then proceeds to implement its key programmatic initiatives. Building the Incubator’s capacity to support dissemination of the IPEC Competencies is vital, as is working with the schools to map their curriculum and IPE offerings. Overall, the timeline reflects the institution’s desire to efficiently and effectively integrate the QEP into the structure of the institution.
Year One (AY 2018-2019)

1. Establish IPE Incubator
   a. Hire/appoint Director
   b. Appoint IPE Council
   c. Appoint IPE Advisory Group
2. Begin curating IPE events into database
3. Develop Incubator website
4. Publish/promote IPEC definition and competencies to students, faculty, staff, administration
5. Develop Request for Proposals (RFP) and issue first call for IPE proposals
6. Name Year One IPE seed grant recipients
7. Establish Year One’s IPE Symposium events
8. Begin Institutional Barriers Analysis
9. Map out School of Nursing and Graduate School curriculum highlighting IPE curriculum elements.
   Once curriculum is mapped, school leadership will identify timeline for revising curriculum and embedding IPEC Competencies.
10. Conduct initial campus-wide IPE assessment of IPEC Competencies.
11. Initial pilot of use of common rubric across the programs to assess IPEC Competencies through the direct evaluation of student artifacts, observations, or other demonstrations of competency attainment.

Year Two (AY 2019-2020)

1. Continue curating IPE events into database
2. Continue refining website
3. Coordinate Year Two IPE Symposium events
4. Issue Year Two call for IPE proposals
5. Award Year Two IPE seed grant recipients
7. Map out School of Health Professions curriculum, highlighting IPE curriculum elements. Once curriculum is mapped, school leadership will identify timeline for revising curriculum and embedding IPEC Competencies
8. Continued data collection as the direct assessment of IPEC Competencies utilizing common rubrics is expanded in Year Two.
**Year Three (AY 2020-2021)**

1. Continue curating IPE events into database
2. Issue Year Three call for IPE proposals
3. Award Year Three IPE seed grant recipients
4. Continue refining website
5. Coordinate Year Three IPE Symposium
6. Map out School of Dentistry curriculum, highlighting IPE elements. Once curriculum is mapped, school leadership will identify timeline for revising curriculum and embedding IPEC Competencies
7. Conduct “mid-term” campus-wide (faculty and students) IPE assessment of IPEC Competencies.
8. Second Institutional Barriers Analysis present to Deans Council in January
9. Continued data collection as the direct assessment of IPEC Competencies utilizing common rubrics is further expanded in Year Three.

**Year Four (AY 2021-2022)**

1. Continue curating IPE events into database
2. Issue Year Four call for IPE proposals
3. Award Year Four IPE seed grant recipients
4. Continue refining website
5. Coordinate Year Four IPE Symposium
6. Map out Long School of Medicine curriculum, highlighting IPE elements. Once curriculum is mapped, school leadership will identify timeline for revising curriculum and embedding IPEC Competencies
7. Continued data collection for direct assessment of IPEC Competencies utilizing common rubrics is again expanded in Year Four.

**Year Five (AY 2022-2023)**

1. Continue curating IPE events into database
2. Issue Year Five call for IPE proposals
3. Award Year Five IPE seed grant recipients
4. Continue refining website
5. Coordinate Year Five IPE Symposium
6. Mitigation of Identified barriers from Year Three Institutional Barriers Analysis integrated into EC/Deans Council annual strategic plan activities/ reporting
7. Conduct QEP’s third campus-wide IPE assessment of IPEC Competencies for students and faculty.
8. Continued data collection for direct assessment of IPEC Competencies utilizing common rubrics in Year Five with the development of a formal report demonstrating changes in faculty and student IPEC knowledge, skills, behaviors that occurred between Year One and Year Five.

The above timeline sets out an ambitious plan to implement the activities crucial to the success of the QEP. It features the establishment of a new Incubator, a database to assist students and faculty in locating IPE activities, additional resources for developing IPE programming and curriculum, grants to assist faculty in beginning new IPE activities, and comprehensive curriculum mapping. The five-year structure enables the necessary support structures to be established at the outset, then utilizing those structures to build resources and implement the plan. Key to the plan’s success, however, is measuring progress and adjusting implementation accordingly. The following section details the assessment measures that are integral to improving student learning and the environment for student success in interprofessional education that is the core of UT Health’s QEP.

Assessment
Assessment of the QEP is critical to its success. Both formative and summative, quantitative and qualitative information and data will be used together to guide the ongoing evolution of the QEP as well as other IPE activities to ensure the comprehensive attainment of the IPE strategy within the institution’s 2018-2022 Strategic Plan.

The assessment plan for the QEP details the process for evaluating its implementation and effectiveness. Generally, assessment of student and faculty IPE knowledge and skills will be at the course and program level to improve the delivery of IPE concepts within courses and programs. Other institution-wide assessments for the QEP will provide information for the IPE Advisory Council to monitor the need for centralized institutional interventions and/or additional support for activities and initiatives.

From a formative perspective, UT Health San Antonio will seek to answer the following three general questions:

- Are programs and schools intentionally integrating common assessment tools in courses or other academic experiences?
• Are faculty and students demonstrating a better understanding of the IPEC framework/competencies?
• Are the IPE activities delivered to students effective and well-received?

Information that responds and provides context to these questions will be collected each semester, analyzed and reported annually, and then used to identify needed interventions to improve faculty and staff knowledge and understanding of the IPEC framework. Summative evaluation data will be gathered each semester throughout the five years of the plan, culminating in a final report in Year 5. Analysis of summative data annually will direct the judgment of the ongoing overall effectiveness of the QEP.

Use for Continuous Improvement

The analysis of information and data collected from QEP activities and initiatives and the communication of this analysis to administrators, faculty, and students are essential elements of the QEP’s assessment plan. The Director of the IPE Incubator and the IPE Council will monitor the collection of assessment data on a continuous basis. Together they will evaluate data and information and make recommendations for improvement to administrators, deans, and faculty. Assessment data will be shared systematically with all relevant constituencies to determine if the QEP’s implementation-to-date has been effective, efficient, and timely. The IPE Council and Incubator Director will make recommendations to the appropriate institutional groups in an effort to integrate analysis of assessment data regarding IPE into the broader organizational structure of the institution for continuous improvement of its delivery.

The assessment plan focuses on measuring the impact of QEP initiatives and activities for the three expected outcomes described in the “Executive Summary” and “Focus on Student Success” sections of the QEP found on pages 2 and 22 respectively. Each of the plan’s outcomes and their associated objectives will be assessed as described in Table below.

Table 5. Summary of QEP Assessment Measures

<p>| OUTCOME 1: INCREASE FACULTY, STUDENT, STAFF KNOWLEDGE/SKILLS OF IPED FRAMEWORK |</p>
<table>
<thead>
<tr>
<th>Assessment Question</th>
<th>Summative (S) or Formative (F)</th>
<th>Assessment Method</th>
<th>Frequency</th>
<th>First Assessment Results</th>
<th>Baseline and/or Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective A: Schools and programs adopt use of common IPE assessment rubrics/evaluation systems</td>
<td>Are programs and schools</td>
<td>S</td>
<td>1. Number of IPE activities</td>
<td>Each semester (Fall, Spring, Summer)</td>
<td>Summer 2019</td>
</tr>
<tr>
<td>Objective B. Demonstrate improved ratings and results on direct assessments of student skills and knowledge based upon analysis of student IPE experiences/activities evaluated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are students demonstrating a better understanding of the IPEC framework/competencies?</td>
<td>F</td>
<td>Results of individual programs’ assessment of student IPE artifacts or performance (by individual program and in aggregate)</td>
<td>Each semester (Fall, Spring, Summer) and aggregated annually</td>
<td>Summer 2019</td>
<td>Baseline set in year 1</td>
</tr>
</tbody>
</table>

<p>| Objective C. Demonstrate UT Health faculty and students increased knowledge of IPEC framework |
|---|---|---|---|
| Do faculty and students demonstrate increased knowledge of the IPEC framework? | F | 1. Pre- and Post-test of faculty and staff regarding IPE framework 2. Faculty and staff survey data | (every other year) | Summer 2019 | Pre-test sets baseline |</p>
<table>
<thead>
<tr>
<th>Assessment Question</th>
<th>Summative (S) or Formative (F)</th>
<th>Assessment Method</th>
<th>Frequency</th>
<th>First Assessment Results</th>
<th>Baseline and/or Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTCOME 2. DEMONSTRATE SCHOOLS’ AND PROGRAMS’ ADOPTION OF IPE AS A STRATEGIC PRIORITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Objective A. Increase the number of IPE activities delivered within schools/programs**

<table>
<thead>
<tr>
<th>Assessment Question</th>
<th>Summative (S) or Formative (F)</th>
<th>Assessment Method</th>
<th>Frequency</th>
<th>First Assessment Results</th>
<th>Baseline and/or Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many IPE activities are curated into database?</td>
<td>S</td>
<td>Track number of activities initially curated and added</td>
<td>Each semester (Fall, Spring, Summer) and aggregated annually</td>
<td>Summer 2019</td>
<td>Baseline set year 1</td>
</tr>
<tr>
<td>How many hits does the IPE website get?</td>
<td>S</td>
<td>Track number of website hits</td>
<td>Each semester (Fall, Spring, Summer) and aggregated annually</td>
<td>Summer 2019</td>
<td>Baseline set year 1</td>
</tr>
</tbody>
</table>
| Are the IPE activities delivered to students effective and well-received? | F | 1. Results of activity/event evaluation reports  
2. Student survey  
3. Student Focus groups | 1. Activity/Event evaluations ongoing; aggregated each term & annually  
2. Student survey administered every other year  
3. Qualitative results of student and faculty focus groups | Summer 2018 | Evaluations, surveys, focus groups demonstrate increased and improved rating and/or student feedback from 2015 survey baseline (see pp. 10-11) |

**Objective B. Increase over time the number of seed grants proposing new, innovative IPE experiences**

<table>
<thead>
<tr>
<th>Assessment Question</th>
<th>Summative (S) or Formative (F)</th>
<th>Assessment Method</th>
<th>Frequency</th>
<th>First Assessment Results</th>
<th>Baseline and/or Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many IPE proposals are submitted and funded?</td>
<td>S</td>
<td>Track number of proposals submitted and funded</td>
<td>Each semester (Fall, Spring, Summer) and aggregated annually</td>
<td>Summer 2019</td>
<td>Baseline set year 1; Annual Target: 7</td>
</tr>
<tr>
<td>How many programs make curriculum changes annually?</td>
<td>S</td>
<td>Track number of programs making curriculum changes</td>
<td>Each semester (Fall, Spring, Summer) and aggregated annually</td>
<td>Summer 2019</td>
<td>Baseline set year 1; Target-100% of programs make curricular revisions to</td>
</tr>
</tbody>
</table>
## OUTCOME 3. INCREASE INSTITUTIONAL CAPACITY FOR STUDENTS FROM DIFFERENT PROGRAMS/PROFESSIONS TO WORK TOGETHER DURING CLINICAL TRAINING AND RESEARCH EXPERIENCES

<table>
<thead>
<tr>
<th>Assessment Question</th>
<th>Summative (S) or Formative (F)</th>
<th>Assessment Method</th>
<th>Frequency</th>
<th>First Assessment Results</th>
<th>Baseline and/or Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which and how many entities/units adjusted operations and curricula to facilitate authentic IPE student patient care delivery experiences</td>
<td>S/F</td>
<td>1. Track number of curriculum changes by school and program</td>
<td>Each semester (Fall, Spring, Summer) and aggregated annually</td>
<td>Summer 2018</td>
<td>All programs make a minimum of one curriculum change to embed IPE in the curriculum over the five years.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Track number of Executive Committee members’ reporting activities to mitigate IPE barriers in annual strategic plan reports</td>
<td>Annual analysis of EC members’ Strategic Plan Reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Analysis of faculty and student feedback on evaluations from IPE events and course evaluations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Description of Assessment Measures

A review of the literature of the short- and long-term impacts of IPE demonstrates that insufficient empirical data is available to draw firm conclusions about its efficacy. Because of the unique individual differences between academic health centers that champion and implement IPE initiatives throughout their programs and in student clinical experiences, the current literature regarding IPE assessment generally speaks only to the quality and impact of IPE on each individual institution and its constituents. Because of the countless variables impacting IPE in both its delivery within health education programs and in long-term patient outcomes in a clinical setting, assessment of the QEP will focus on the impact of IPE efforts at UT Health San Antonio and the degree to which faculty and student knowledge, attitudes, skills and behaviors change.
Some assessment methodologies described in Table 5 above will encompass feedback and evaluation results at the institutional level (i.e., pre- and post-tests of IPE framework); others will occur within the individual programs. Some will be aggregated by school and program as well as at the institutional level, while others will be specific to certain programs and school. The description of the assessment measures presented in Table 5 are detailed below, providing an explanation of each assessment methodology to be implemented for the QEP over the five-years of the plan.

**Comprehensive Campus-Wide IPE Assessment (pre/mid/post) results**

In Years one, three, and five, an institution-wide assessment of the knowledge and understanding of IPE and the IPEC framework will be administered to all faculty and students throughout the schools and programs. This same assessment will be repeated every second year to gauge changes in faculty and students after IPE activities and their promotion throughout the institution are formally introduced as an institutional priority. The IPE Council, together with the Incubator Director will select the appropriate instrument from those already being used at other institutions or health care delivery systems. The purpose is to measure changes in faculty and staff’s awareness and understanding of IPE/IPEC.

**Monitoring of Use of Common Assessment Rubrics/evaluation systems**

One of the greatest challenges to effective and reliable research into IPE is the multiple assessment methods used to evaluate student and practitioner IPE skills (i.e., teamwork, communication). A wide array of disparate instruments are currently available to evaluate different variables within the IPEC competencies that are being assessed. However, without common evaluation instruments, UT Health schools and programs will encounter the same challenge. As a results, the IPE Council will collaborate with faculty throughout all programs to agree upon a common rubric or evaluation scale that will be utilized by all programs in order to focus on the common elements of IPE faculty agree are most valuable and/or important in the institution’s development of a formal IPE initiative. Appendix D lists some of the existing assessment tools – rubrics, exams, and surveys – already examined as possibilities for adoption or use as models in the development of the institution’s own assessment instrument(s) for the Comprehensive Campus-Wide IPE Assessment (pre-, mid-, and post-tests) and the Common Assessment Rubric used to directly assess student IPE work or performance.
**Results of direct assessment of IPE artifacts/performance using common instruments**

Once a common rubric or evaluation scale is adopted and endorsed by UT Health faculty, individual IPE student activities, experiences, and artifacts within each program will be evaluated against the adopted common instrument(s)/rubrics in an effort to discover trends across programs. The common rating methods therefore allow the analysis of the sub-competencies within each IPEC domain/competency to determine the extent to which students master the individual elements of the IPEC framework. Faculty will share and submit results to the Director of the Incubator and the IPE Council who will aggregate and analyze the ratings to determine overall institutional gains by students in IPEC theories and applications.

**Monitoring of participation in and use of IPE activities/ IPE resources through identified metrics/counts**

Summative data will complement the analysis of faculty and student changes in IPEC comprehension and its application in order to determine a correlation between IPE activities and engagement and the results of pre-/post- tests and outcomes of the direct assessment of student artifacts/experiences using the common rubrics/evaluation systems described above. The extent to which UT Health constituents engage in IPE activities will be measured by tracking the following:

- Number of IPE activities delivered by each program;
- Number of IPE activities contained in the Incubator’s database of IPE activities;
- Number and counts of participants attending the IPE Symposium and other events; and,
- Counts of website hits and downloads of resource materials.

**Monitoring of curricular changes by schools and programs**

UT Health San Antonio follows a structured system of protocols when academic programs make significant changes to their curricula. The Office of the University Registrar as well as the Office of Academic Effectiveness guide programs through the process of making official changes. Ongoing monitoring and counts of the type of curricular changes being made within the programs will happen through reports from these offices as well as through reports by the IPE Council who will gather and submit a summary of changes made by programs to their courses or programs (i.e., new assignments, new course modules) and the types of revisions or enhancements made (by type of change) in each program to determine the extent to which IPE promotion and activities result in curricular modifications.
Number of faculty and student teams participating in the development of IPE mini-grants and evaluation of the effectiveness of each concept/activity

Used as both a summative and formative assessment measure, the IPE Council and Director of the Incubator will closely monitor the submission of seed grants in an effort to determine if interest and participation in the development of new IPE innovations are sufficient and whether submissions equitably represent all schools and programs. Continued efforts and promotion of IPE will be intensified and targeted toward programs finding it challenging to integrate IPE into program curriculum.

Results of student surveys, focus groups and activity/event evaluations

As part of the ongoing assessment and evaluation strategy for the QEP, student satisfaction surveys and faculty engagement surveys will collect data regarding faculty and student perceptions of IPE and the extent to which they believe sufficient activities are directed toward IPE integration into their programs. Additionally, because empirical information often lacks context, student and faculty focus groups will be held a minimum of once per year for each group to provide a qualitative view of the institution’s progress in embracing and implementing IPE. Finally, all IPE-related activities will follow the practice of ensuring participant evaluations are administered for all IPE events associated with the QEP to determine their quality and impact. Institutional activities and events that result in poor ratings will be evaluated by the IPE Council and revised or replaced with an alternate approach.

Number of Executive Committee Annual Strategic Plan Reports demonstrating activities to eliminate barriers to development of authentic IPE patient care delivery

Because the current research about IPE generally concludes that effective long-term assessment and measurement of the impact of IPE is difficult, the Incubator and IPE Council will work to deliberately identify those barriers discovered each year of the QEP to pinpoint the barriers UT Health must overcome to ensure a well-coordinated, impactful, and effective means of integrating IPE into the culture and fabric of the institution. The IPE Council will submit a biennial report to the Executive Committee (EC) each year identifying the barriers and challenges to effective IPE implementation, present solutions where possible, and encourage EC members to formally adopt the mitigation of these barriers into their annual individual goal planning. The attainment of these goals is reported in the annual Strategic Plan update. A key expectation of the Incubator will be to identify all the barriers to successful implementation of IPE and track the extent to which they can be tempered.
As part of the assessment plan, an annual impact report will be generated and shared with all institutional constituents. A five-year impact report will summarize and analyze the institution’s progression toward integrating and embedding IPE throughout the academic programs’ curriculum with the vision of priming the institution to coordinate authentic student experiences in their clinical training and research experiences.

Summary
The QEP at UT Health San Antonio, “Linking Interprofessional Networks for Collaboration” (LINC), is the result of a multi-year process of research, constituent involvement, institutional evaluation, and strategic planning. It arises out of the recognition that quality health care and the research science that supports it are increasingly interprofessional – provided by teams consisting of a variety of specialists and providers that must work together for comprehensive care and continual research. This environmental need gives rise to a student learning emphasis for developing a common set of knowledge and skills during the educational preparation of health care professionals and scientists by increasing opportunities for student interprofessional experiences and the institutional capacity to facilitate those experiences.

This outcome will be realized through the commitment of institutional resources to develop an IPE Incubator. With the Incubator’s central role of increasing students’ IPE knowledge and skills and fostering institutional capacity through a variety of activities such as seed grants, an annual IPE symposium, and a searchable database of interprofessional activities. The success of these activities will be assessed through multiple measures in order to provide constant and consistent feedback on the progress and impact of the plan. The Incubator and its activities are supported by multiple components of the institution, including the five academic schools, the library, academic effectiveness, and student life.

In order to fulfill its mission to “make lives better,” UT Health San Antonio must graduate students who are able to contribute to interprofessional teams that can provide quality patient care and who recognize the role of research scientists as part of the team working to improve health outcomes. Over the next five years, LINC will enhance student interprofessional learning as well as the environment in which that learning takes place, advancing the strategic plan of the institution and enabling student success.
References


Désirée A. Lie, Regina Richter-Lagha, Christopher P. Forest, Anne Walsh & Kevin Lohenry (2017). When less is more: validating a brief scale to rate interprofessional team competencies, Medical Education Online, 22:1, 1314751, DOI: 10.1080/10872981.2017.1314751


Appendix A

QEP Steering Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
<th>Department/Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blanca Bauer</td>
<td>Assistant Vice President, Academic Assessment and Effectiveness</td>
<td>Academic, Faculty, and Student Affairs</td>
</tr>
<tr>
<td>Jose E. Cavazos</td>
<td>Assistant Dean for MD/PhD Program</td>
<td>Graduate School of Biomedical Sciences/Long School of Medicine</td>
</tr>
<tr>
<td>Moshtagh Farokhi</td>
<td>Clinical Associate Professor</td>
<td>School of Dentistry</td>
</tr>
<tr>
<td>Lark A. Ford</td>
<td>Assistant Professor/Clinical</td>
<td>School of Nursing</td>
</tr>
<tr>
<td>Christine Gaspard</td>
<td>Lead Liaison Librarian</td>
<td>Briscoe Library</td>
</tr>
<tr>
<td>Ricky Joseph</td>
<td>Assistant Professor</td>
<td>School of Health Professions</td>
</tr>
<tr>
<td>Kristy Kosub</td>
<td>Professor/Clinical</td>
<td>Long School of Medicine</td>
</tr>
<tr>
<td>Janna Lesser</td>
<td>Professor Anita Thigpen Perry Endowment for Center of Community Based Health Promotion</td>
<td>School of Nursing</td>
</tr>
<tr>
<td>Jason Morrow</td>
<td>Howard &amp; Betty Halff Professor in Medical Humanities and Ethics</td>
<td>Long School of Medicine</td>
</tr>
<tr>
<td>Andrew Muck</td>
<td>Associate Professor/Clinical</td>
<td>Long School of Medicine</td>
</tr>
<tr>
<td>Kathy Paradise</td>
<td>Director, Academic Assessment and Compliance</td>
<td>Graduate School of Biomedical Sciences</td>
</tr>
<tr>
<td>Nakia Pope</td>
<td>Director, Academic Assessment and Compliance</td>
<td>Academic, Faculty, and Student Affairs</td>
</tr>
<tr>
<td>Lisa Serna</td>
<td>Systems Analyst</td>
<td>Office of the Registrar</td>
</tr>
<tr>
<td>Melanie Stone</td>
<td>Director, Community Service Learning</td>
<td>Center for Medical Humanities and Ethics</td>
</tr>
<tr>
<td>Paula Winkler</td>
<td>Director, Academic Programs</td>
<td>Area Health Education Center</td>
</tr>
</tbody>
</table>
Appendix B

IPEC Core Competencies

Competency 1 (Values/Ethics for Interprofessional Practice): Work with other individuals of other professions to maintain a climate of mutual respect and shared values.

Competency 2 (Roles/Responsibilities): Use the knowledge of one’s own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations.

Competency 3 (Interprofessional Communication): 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.

Competency 4 (Teams and Teamwork): Apply relationship-building values and the principles of team dynamics to perform effectively in different roles to plan, deliver, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.

Checklist for planning an IPE evaluation
(from Reeves, et al., 2015)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify conceptual model used to develop IPE, learning objectives, activities, expected outcomes</td>
<td>Look for timing/duration of IPE activity and level of learners mapped from curriculum</td>
</tr>
<tr>
<td>Identify and engage key stakeholders</td>
<td>Make sure local stakeholders agree on what is being evaluated and why (rationale). Obtain access to evaluation sites.</td>
</tr>
<tr>
<td>Define purpose and formulate evaluation questions(s)</td>
<td>IN collaboration with curriculum team and other key stakeholders (e.g. patients/families, students, health systems) identify evaluation purpose (i.e. formative and/or summative), develop questions and intended outcomes</td>
</tr>
<tr>
<td>Consider theory</td>
<td>Think about what kind of theory might be used in the evaluation to help frame data collection and analysis activities</td>
</tr>
<tr>
<td>Design the evaluation</td>
<td>Select a design that supports your evaluation question(s)</td>
</tr>
<tr>
<td>Prepare ethical approval (if needed)</td>
<td>This includes descriptors of IPE activity and evaluator, letters of support from sites, tools to be utilized, address coercion, reactivity, etc.</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Identify evaluator(s)</td>
<td>Whether internal and part of the IPE development team or external evaluator(s).</td>
</tr>
<tr>
<td>Determine resources (financial and expertise)</td>
<td>Look for who is already engaged in evaluation who can help, or build the capacity for IPE evaluators if needed (e.g. graduate students or junior faculty member)</td>
</tr>
<tr>
<td>Develop dissemination plan</td>
<td>Establish ground rules for team writing, authorship, and presentations</td>
</tr>
</tbody>
</table>

**Appendix C**

**UT Health San Antonio’s Mission and Values**

**Mission**

The Mission of The University of Texas Health Science Center at San Antonio, now called UT Health San Antonio, is to make lives better through excellence in education, research, health care and community engagement.

Strategies for achieving this mission are:

- Educating a diverse student body to become excellent health care providers and scientists.
- Engaging in research to understand health and disease.
- Commercializing discoveries, as appropriate, to benefit the public.
- Providing compassionate and culturally proficient health care.
- Engaging our community to improve health.
- Influencing thoughtful advances in health policy.

**Values**

Teamwork and Collaboration: This value, defined as "we support each other and promote interprofessional collaboration" is the heart of the QEP. The QEP explicitly supports interprofessional collaboration among faculty and students through its objectives, seeking to enhance the interprofessional competencies of students through interprofessional training. Working together in interprofessional teams is woven through every part of the QEP.

Accountability: "We are committed to responsible and transparent stewardship of university resources". Care was taken to develop a QEP that built on existing institutional initiatives and could work within existing
institutional structures to the highest degree possible. Effective stewardship of university resources involves recognizing where good work is already being done and building upon it.

Excellence: "We continue to strive for excellence through creativity, innovation, and dedication." UT Health's QEP is part of our continuing desire to provide the best educational environment for our students, in order to prepare them to "make lives better." The QEP represents another step toward excellence by implementing a creative, innovative program in order to better train students to work interprofessionally.

Professionalism: This value states that "We will maintain the highest standards of professionalism through ethical behavior, life-long learning and respect for all members of the community." UT Health's QEP contains a significant faculty-driven curriculum development component. This is certainly a testament to "life-long learning" on the part of our faculty. We recognize that a key component of professionalism is always working to refine and improve our educational processes. The QEP supports this in a variety of ways.

Appendix D

Assessment Tool Models

- A variety of instruments have already been examined for possible use as UT Health’s Common Assessment Rubric and/or the Campus Wide Assessment. These include: The PACT Tool Set, Self- and Peer-Evaluation of Teamwork Tools, and Pre- and Post-training Assessment of Teamwork, Attitudes, and Skills tools developed by the University of Washington Macy Team. [https://collaborate.uw.edu/ipe-teaching-resources/evaluation-tools/](https://collaborate.uw.edu/ipe-teaching-resources/evaluation-tools/)
- The “Evaluating Interprofessional Education and Collaborative Practice” primer (Schmitz & Cullen, 2015).
- The Interprofessional Collaborator Assessment Rubric by Curran, et al.

Appendix E
QEP Data Presentation 2015

QEP Data Presentation

Office of Institutional Research
UTHSCSA.EDU/IR
Office of Institutional Research- Services
Ad-Hoc Data Requests
State Reporting to the Texas Higher Education Coordinating Board
Federal Reporting to the Department of Education
Survey Design Support, Collection, and Analysis
Support Accreditation Data Collection Efforts
Provide Data for Professional Organization Surveys and Reports
Maintain the UTHSCSA Online Factbook
Statistical Analysis
Support Grant Reports/Proposals Needing Student/Faculty Data
And MORE!!!

Website: UTHSCSA.EDU/IR  Office Email: datarequest@UTHSCSA.edu

Why Do We Need Data for the QEP?

• For SACS -CR 2.12: The institution has developed an acceptable Quality Enhancement Plan (QEP) that includes an institutional process for identifying key issues emerging from institutional assessment and focuses on learning outcomes and/or the environment supporting student learning and accomplishing the mission of the institution.
• UTHSCSA should/is always be looking for ways to improve the educational environment.
• Data is always a good start.
Student Enrollment
QEP Needs to Have Institutional Impact

QEP Needs to be Inclusive

Clinical and Biomedical Research
Students Fall 2014

- 2798 - Clinical Programs
- 349 - Research/Lab Programs

Students at Different Levels Fall 2014

<table>
<thead>
<tr>
<th>Fall 2014 Enrollment by Student Classification</th>
<th>0</th>
<th>100</th>
<th>200</th>
<th>300</th>
<th>400</th>
<th>500</th>
<th>600</th>
<th>700</th>
<th>800</th>
<th>900</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRESHMAN</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JUNIOR</td>
<td>161</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SENIOR</td>
<td>351</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POST-BACCALAURETAL</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MASTER'S LEVEL</td>
<td>587</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOCTOR'S LEVEL RESEARCH/SCHOLARSHIP</td>
<td>287</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOCTOR'S LEVEL PROFESSIONAL PRACTICE</td>
<td>517</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DDS/MD</td>
<td>945</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POSTDOCTORAL SPECIALTY DENTAL</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Who are our students?

Most of our students were born on or after what year.....

<table>
<thead>
<tr>
<th>Student Classification</th>
<th>Median Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduates</td>
<td>24</td>
</tr>
<tr>
<td>Post-Baccalaureate</td>
<td>32.5</td>
</tr>
<tr>
<td>Master's Level</td>
<td>29</td>
</tr>
<tr>
<td>Doctor's Level Research/Scholarship</td>
<td>28</td>
</tr>
<tr>
<td>Doctor's Level Professional Practice</td>
<td>24</td>
</tr>
<tr>
<td>Dental/Medical</td>
<td>25</td>
</tr>
<tr>
<td>Postdoctoral Specialty Dental/Medical</td>
<td>29</td>
</tr>
<tr>
<td>UTHSCSA</td>
<td>26</td>
</tr>
</tbody>
</table>

Fall Enrollment by Ethnicity

![FALL 2014 ENROLLMENT BY ETHNICITY](image)
Student Satisfaction with UTHSCSA

<table>
<thead>
<tr>
<th>Statement</th>
<th>% Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think UTHSCSA has a good reputation in the community.</td>
<td>96.0%</td>
</tr>
<tr>
<td>I would encourage my friends and family to receive their education at UTHSCSA.</td>
<td>83.0%</td>
</tr>
<tr>
<td>My education at UTHSCSA is worth the cost.</td>
<td>89.5%</td>
</tr>
<tr>
<td>I feel student concerns are addressed by UTHSCSA leadership.</td>
<td>79.5%</td>
</tr>
</tbody>
</table>
Student Satisfaction with UTHSCSA

- I often want to take courses offered outside of my school: 43.6%
- It is easy to take courses taught in other schools: 57.2%
- Classes are scheduled at times that are convenient for me: 86.1%
- Courses required to complete my degree are available when I need to take them: 92.8%

Student Satisfaction with UTHSCSA

- Quality of guidance provided by major professor/mentor (professional report, thesis, and dissertation): 84.9%
- Quality of teaching: 79.8%
- Professionalism of the faculty: 86.7%
- Curriculum and course content: 79.9%
Student Satisfaction Survey- Revision

- Student Satisfaction Survey will undergo a revision May 2015 to August 2015
- Next collection is targeted for October 2015
- An opportunity to collect information vital to the QEP

Student Success (Graduation Rates)

- Professional Doctoral Graduation Rate
  - Cohort 09-10= 95%
  - Cohort 08-09= 93%
- Bachelors Graduation Rate
  - Cohort Fall 2011= 88%
  - Cohort Fall 2010= 93%
- Research Doctoral Rate
  - Cohort Fall 2006= 67%
  - Cohort Fall 2005= 73%
Student Success (Professional Exams)

- Allied Health Pass Rates
  - FY 2014= 93.0%
  - FY 2013= 87.0%
- Bachelor Nursing Pass Rates
  - FY 2014= 83.5%
  - FY 2013= 84.7%
- Dentistry Students (DDS) Pass Rates
  - FY 2014= 94.0%
  - FY 2013= 94.0%
- Medical Students (MD) Pass Rates
  - FY 2014= 96.0%
  - FY 2013=97.7%

Student Success (Texas Workforce)

- For AY 2012-2013 Graduates, 71% were employed in Texas by the 4th Quarter of 2013 with a 4th quarter mean wage of $14,336.
- Most low employment rates could be explained by students seeking work out of state (PhD programs and programs requiring residency)
The Data Black Box (UTHSCSA Institution Wide)

- Alumni Satisfaction with their education
- Employer Satisfaction with the training we provide
- Student Graduation Survey Information

Faculty
Complexity

Faculty FTE and Reported Percent Effort

<table>
<thead>
<tr>
<th>School of Dentistry</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81.33</td>
<td>17.05</td>
<td>22.88</td>
<td>9.07</td>
<td>2.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School of Health Professions</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51.47</td>
<td>2.29</td>
<td>4.54</td>
<td>4.3</td>
<td>2.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School of Medicine</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>151.62</td>
<td>525.55</td>
<td>248.63</td>
<td>98.1</td>
<td>23.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School of Nursing</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64.92</td>
<td>0.6</td>
<td>8.07</td>
<td>6.27</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UTHSCSA</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>349.3</td>
<td>565.69</td>
<td>284.1</td>
<td>113.3</td>
<td>44.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Linking Interprofessional Networks for Collaboration: The QEP at UT Health San Antonio