UT Southwestern School of Health Professions
Assessment and Strategic Recommendations Work Group
Executive Summary

On October 11, 2022, UT Southwestern President Daniel Podolsky and Provost W. P. Andy Lee formed a special School of Health Professions (SHP) Assessment and Strategic Recommendations Work Group. The charge to this work group (Appendix A) was to conduct stakeholder interviews, perform a strategic assessment, conduct vision casting sessions, and develop strategic priorities and recommendations, supported by data and benchmarking, to be presented to the President and Provost for consideration. The first meeting of the Steering Committee (Appendix B) was held on November 9, 2022. Additional Self-Study and External Review Subcommittees (Appendix B) were formed. The Self-Study Subcommittee provided, for each of the existing programs, the following information in a document format that was made available for review by the External Review Subcommittee prior to a series of scheduled oral presentations to this committee.

1. Overview of history, missions, and goals
2. Data and metrics for each educational program that includes:
    a. Program size, duration, didactic and clerkship curriculum
    b. Student recruitment and qualifications data
    c. Degrees awarded, professional licensure achieved by graduates, outcomes on licensure or other standardized exams.
    d. Graduate employment success to include, to the extent available, salary ranges offered, practice locations/affiliations of program graduates.
    e. Post-graduate (residency) training programs – size, affiliated practices/hospitals
3. Program Faculty:
    a. Recruitment and attrition history
    b. Typical professional effort distribution
    c. Gender and racial diversity
    d. State / National recognition, including membership in honor organizations of specialty.
    e. Leadership structure
4. Clinical Practice:
    a. Overview of clinical activities, including interdisciplinary programs
    b. Major competencies and limitations
    c. Productivity, patient satisfaction, access, quality
    d. Growth opportunity
5. Overview of research activities and research funding
6. List of regional and/or national peer programs that are considered to offer similar or superior quality educational programs. For each peer program indicate the governance structure/relationship of the program to either a general academic university or to Schools of Health Professions, Medical or other School.

Following preparation of the above self-study reports, each existing program conducted a SWOT (Strengths, Weakness, Opportunities, and Threats) analysis and prepared a 30-minute presentation delivered to the External Review Subcommittee in a series of meetings conducted during the last two weeks of December 2022. Each program presentation was accompanied by a 30-minute question and answer session. Copies of these presentations and analyses are included as Appendix C.

During subsequent meetings, the External Review Subcommittee reviewed key facts and financial data provided by the Provost Office staff; evaluated the overall quality of each of the existing programs; and then addressed fundamental questions raised during the assessment process. These included an assessment of the current versus potential alternative organizational and reporting structures for the school and an exploration of the potential for expanding current, high quality programs and/or development of additional new programs. Two external consultants, Dr. Kyle Meyer, Dean, College of Allied Health Professions, University of Nebraska Medical Center and Dr. David Shelledy, Dean, School of Health Professions, UT Health Science Center at San Antonio and former Dean, College of Health Sciences, Rush University, reviewed all documents contained in this report and then met with members of the External Review Subcommittee in two separate meetings.

Strategic Assessment of Existing Programs

The UT Southwestern School of Health Professions (SHP) is unique among the four UT Southwestern Medical Center (UTSWMC) schools in a number of respects. Most notable is that, in contrast to faculty in each of other the other three UTSWMC schools, who typically devote the majority of their professional effort to research or direct clinical care activities, the faculty in the SHP spend a far greater percentage of their effort directing educational programs. However, two of the programs, Physical Therapy (PT) and Prosthetics-Orthotics (P-O), have substantial faculty effort committed to clinical practices that are structured to maximize educational and training activities for their students or residents. As detailed in Table 1, the SHP has the highest student to teacher ratio of any of the three established UTSWMC schools and, while the SHP faculty (58 in September 2022) comprised <2% of the >3,200 UTSWMC faculty members in 2022, their programs accounted for 30% of all degrees conferred by UTSWMC in 2022. However, as noted by external consultants, the UT Southwestern School of Health Professions is small with respect to both numbers of programs and size of student cohorts in several of the existing programs relative to other state supported Schools of Health Professions aligned with large academic medical centers.

Table 1
UT Southwestern Faculty and Student Numbers by School
September 2022

	Health Professions	Graduate School	Medical School	Public Health
Faculty	58	524*	3201	39
Students	387	552	923	
Degrees conferred 2022	127	85	211	

*Full Members, faculty with primary appointments in SOM (516) or SPH (8)

Reports from programs that lead to licensure as a health care professional indicate that SHP graduates exhibit uniformly excellent initial pass rates on licensure exams and achieve near 100% employment rates within 1 year of graduation. As

detailed in Table 2, graduates of these established programs are entering professions that in most cases are projected to have very high areas of job growth over the next decade and can expect to earn incomes above the average for all US workers. Not surprisingly, it is notable that the ratio of student applications to student admissions for each of the existing programs correlates with the level of expected median income after graduation.

Table 2

Program	Verified Applications/yr	Annual Enrollment	Median Income*	Predicted Job Growth
Physician Assistant	2,428	60	$139,100	28%**
Physical Therapy	1,275	≈ 40	$95,620	17%**
Prosthetics-Orthotics	99	15	$75,440	17%**
Clinical Nutrition	55	20	$61,550	7%***
Genetic Counseling	TBD	8-15 projected	$80,150	18%**

* 2021 Median Pay per U.S. Bureau of Labor Statistics

** Projected increase in employment 2021-2031, much faster than average per U.S. Bureau of Labor Statistics

*** Projected increase in employment 2021-2031, as fast as average per U.S. Bureau of Labor Statistics

Following review of the attached self-study documents and presentations, members of the External Review Subcommittee were asked to rate each of the current programs in categories such as quality of applicants and training provided, external educational, clinical and/or research program recognition, and contribution to community health care workforce needs. The overall summative ratings for three of the existing programs-- the Physician Assistant (PA), the Physical Therapy (PT), and the Prosthetics-Orthotics (P-O) Programs – were judged to be in the very good to excellent range and worthy of continued and, as opportunities arise, additional investment to support future growth. Another long-standing program, Clinical Nutrition, was judged to be a good to very good program worthy of continued support as long as costs do not detract from other programs. The final relatively new program, Applied Clinical Research, was rated to be fair to good in quality at present with need for ongoing monitoring of long-term impact as more graduates are produced.

As part of considerations for expansion of existing programs, the status of the SHP financial reserves as well as ongoing sources of revenue received by UTSW to support these programs were reviewed. Over the past five years, the beginning of the year balances in SHP accounts have grown from $12.8 million to $18.9 million, a level sufficient to cover >16 months of expenditures. However, some of these financial reserves are committed to capital projects – such as renovations of additional clinical space for the PT and P-O Programs, and to subsidize some of the start-up costs of the new Genetics Counseling Program and the programs in the Department of Applied

Clinical Research. The Provost Office staff also provided an overview of total revenues from external sources in 2022 that were available to cover both the direct cost expenditures within the SHP budget and institutional administrative and facilities support costs. As detailed in Table 3, the total revenues of approximately $18 million are sufficient to cover the approximately $13.5 million in direct costs of these programs while also providing another 25% or $4.5 million to cover indirect institutional administrative and facilities costs.

Table 3

Review of FY22 Gross Revenue for the School of Health Professions
Prepared as of 1/18/2023

Gross Revenue to UT Southwestern for SHP by Source (1)			% of Source by Program					$$ Revenue by Program				
Source	FY 22	% of total	PA	PT	P & O	CN	ACR	PA	PT	P & O	CN	ACR
Education Mission												
Tuition and Fees	$ 5,214,174	29%	46%	31%	9%	10%	4%	$ 2,395,724	$ 1,600,112	$ 479,209	$ 512,303	$ 226,826
State Instructional and Operations Formula Funding	5,021,655	28%	52%	29%	8%	10%	2%	2,142,736	1,216,964	309,576	391,319	74,850
Clinical Care Mission												
Clinical Revenue	6,211,839	35%	0%	47%	51%	2%	1%	-	2,892,535	3,143,338	124,924	51,042
Research and Other Missions												
Grant and Contract Revenue (2)	1,511,874	8%	43%	0%	8%	1%	49%	645,228	-	115,905	19,857	736,882
Total	**$ 17,959,542**	**100%**	**29%**	**32%**	**23%**	**6%**	**6%**	**$ 5,183,688**	**$ 5,709,611**	**$ 4,048,028**	**$ 1,048,403**	**$ 1,089,600**

(1) Not listed are smaller amounts of gift, endowment or other State Allocations in Infrastructure and Research Formulas

(2) Indirect Cost Recovery (ICR) allocations made directly to these programs have been excluded from the gross totals, but actual indirect revenue from awards have been added.

Total Expenditures in SHP in FY 2022 - $13,527,408

Overall, revenue sources provided to support educational activities such as Tuition and Fees, State Instructional and Operations Formula funding, and the large HSRA PA scholarship grant, represent 60% of total SHP revenue. Clinical practices within departments with licensed health providers who can bill and practice independently generate 35% of total SHP revenue, and, in the two departments with the largest clinical practices (PT and P-O), clinical practices generate 50-75% of gross revenue. Research grants and other contracts represent only about 5% of total SHP revenue. Of note, tuition, fees, and State instructional formula funding are all tied directly or indirectly to numbers of students enrolled and thus, only in the largest programs, are these revenues sufficient to cover all faculty, staff, and overhead costs in the current funding model. Programs such as Clinical Nutrition struggle to generate significant revenue streams from professional billings due to the very limited numbers of medical diagnoses for which Medicare or other insurance carriers will provide reimbursement for medical nutrition therapy. Based on professional revenues currently generated by UTSW employed Genetic Counselors, it is anticipated that this program, like Clinical Nutrition, will not be able to support a significant amount of faculty effort from direct billing for professional effort. For Physician Assistant, there are no current opportunities for independent practice in Texas.

Organizational and Reporting Structure for the School of Health Professions

Each existing Health Professions' programs provided examples of the organizational and reporting structure for similar regional and national peer programs. In

other institutions, PA, PT or P-O Programs are, not infrequently, departments or divisions of departments within Medical Schools. Peer Dietetics and Master of Clinical Nutrition programs in some institutions reside in Schools of Public Health or in hospitals or health systems that offer internships. The current Dean of the SHP proposed a model in which the SHP would report to the Health System.

The External Review Subcommittee reviewed each of the above organizational and reporting models for the current SHP programs. The current SHP faculty and leadership were noted to be highly committed to the excellence of their education programs and were judged to be knowledgeable and attentive to all aspects of program accreditation, student recruitment, and performance. These faculty members currently supervise >20% of the students and administer programs that confer 30% of the degrees granted by UTSW. Although the SHP clinical practices are integral to the support of high quality educational and training programs, and their commitment to scholarly activities laudatory, the overall scope of SHP clinical practices is relatively modest, representing ≈0.4% of total UTSWMC practice plan revenue, and the SHP administers research programs representing <0.2% of total research expenditures at UTSW.

The consensus of the External Review Subcommittee was that:

- **The current SHP programs should continue to be part of an education-focused, education-intense School of Health Professions that has a major reporting relationship with the Vice Provost for Education and the Provost of UTSWMC.**

- **However, for the SHP to continue to excel and grow educational, clinical care**, **and research missions there needs to be much better integration of the Health Professions clinical practices and training programs with those in the Medical School and a more matrixed reporting structure in the Provost's Office.** For instance, programs such as Applied Clinical Research would benefit from support and guidance from the Vice Provost for Clinical Research. Designation of a senior SHP leader(s) with clinical practice leadership experience to serve as an advocate for SHP clinical practices in interactions with the Health System should also be considered. A senior Health System leader also needs to be identified who will meet regularly with SHP clinical leaders to discuss SHP practice opportunities and opportunities for Health Professionals employed by Health Systems to participate in SHP clerkship and residency or fellowship training programs.

- **One opportunity for better integration of SHP and Medical School programs would be to bring together School of Health Professions and Medical School Chairs and Program Directors with Health System leadership in strategic planning for the ongoing development of inpatient and outpatient musculoskeletal and rehabilitation service lines.** Another opportunity would be to expand upon current interactions between SHP programs and the training programs in Orthopaedic Surgery and Physical Medicine and Rehabilitation in teaching clinics

and educational conferences. The Physical Therapy Program and the Office of Medical Education in the School of Medicine have common needs to grow ambulatory clerkship sites while continuing to develop inpatient clerkship opportunities. More frequent interactions and meetings to identify and develop such sites would seem mutually beneficial. In addition, all the program leaders in the SHP would seem to be well qualified to play an active role in working towards completion of the #1 priority of the 2022-2028 Six-Year Plan Medical Education Subcommittee, to establish a centralized Office of Education with expertise in and resources to support the educational mission of UTSW.

- **There is the opportunity to thoughtfully review the current leadership, organizational and academic structure of the School of Health Professions to optimize faculty recruitment, development and administrative support**.

- Relative to other Schools of Health Professions or to Schools of Medicine, a surprisingly high percentage (>50%) of current Deans and Department Chairs in the UT Southwestern SHP are not licensed health care professionals in the fields that they supervise and lead. As opportunities present to fill vacant or new leadership positions, it is recommended that a concerted effort be made to recruit licensed allied health care professionals with doctoral degrees who can serve as role models for junior faculty in these fields.

- In addition, the current academic tracks available for faculty appointment and promotion in the SHP appear to be merely copied from Medical School policies without adaptation to provide relevance to the academic missions and effort assignments of current SHP junior faculty. During the internal review process, multiple examples were provided of cohorts of junior faculty assigned to academic tracks with expectations for promotion that they were unlikely to ever meet. The SHP leadership should work with Provost Office leadership to review academic track options and consider eliminating inappropriate tracks and promotion expectations while perhaps creating a true instructional or educator track.

- While there are examples of adjunct faculty appointments for non-UT Southwestern employed professionals that contribute to didactic courses or clerkship experiences in the SHP, there has not been any apparent effort to include UT Southwestern employed dieticians, physician assistants, physical therapists, etc. as part of the faculty of SHP programs. Changes in UT System Regent's Rules and UT Southwestern policies for granting uncompensated faculty appointments to professionals who receive a full time salary for other roles in the institution, now make this possible without incurring significant financial cost or risk for the SHP . By linking the recognition associated with a faculty title to a clear set of expectations for following best practices in clinical care and education, a larger faculty inclusive of practicing health care professionals could further enhance the quality and student cohort size of existing programs.
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Finally, the SHP appears to have mimicked Medical School organization structures by creating departments around every individual program, irrespective of size or scope rather than looking for opportunities to re-organize educational programs into a smaller number of more meaningful departmental structures that can more efficiently and effectively provide administrative and academic support to the faculty and students in thematically related programs.

Visioning for the Future

In considering the future role of a SHP at UTSW, both the potential for expansion and strengthening of existing programs and opportunities for adding additional programs were considered. The Self-Study Subcommittee pointed out that:

- **Clarification of long-term plans for location of future inpatient and outpatient rehabilitation facilities for the School of Health Professions is needed before opportunities for expanding PT or P-O programs can proceed.** The size of current teaching and clinical facilities in the School of Health Professions building prevents immediate growth of either the PT or the P-O Program. These facilities are located in an aging building with deferred maintenance issues. All recent versions of the 2035 campus master plan have included demolition of this building and construction of hospital-based facilities on its current site. Thus, there has been reticence to invest in renovation projects expanding academic or clinical facilities in the current Health Professions Building. This has also impacted student satisfaction with outdated educational resources. In the recent SACS annual student survey, >40% of SHP students were either dissatisfied or very dissatisfied with the quality of their lounge and study spaces. With the growth of educational programs locally in high demand disciplines such as PA and PT, and the institutional investments in state of the art health profession educational facilities by many Texas institutions, Area schools that compete with the UTSW SHP for highly qualified student applicants can almost routinely demonstrate superior educational facilities and learning resources to those available to SHP students at UT Southwestern. This has a progressive impact on the UTSW SHP programs being seen as “school of choice” for the investment in their professional education.

- **Until more UTSW based clerkship sites can be identified and/or financial support mechanisms for community-based clerkship sites can be identified, it is difficult to recommend immediate expansion of this program.**
  The Physician Assistant clerkships are supervised by physicians and /or advanced practice providers not directly compensated by the SHP. Many of these clerkship supervisors are faculty of the medical school and thus employed by UT Medical School but others are community physicians in private or Texas Health Resources employed practices. These practices are frequently approached by other PA or Nurse Practitioner programs with offers of compensation to offset the cost of hosting students in their clinical practices. It is unclear whether, in the future, payments will be required to maintain the necessary number of clerkship sites for PA student rotations. If all non-UT Southwestern affiliated PA clerkship sites were compensated

at a level similar to current contracts with non-UT Southwestern Family Medicine Clerkship sites that host Medical Student Clerkships, the increased cost to the PA program would be approximately $900,000 per year. Nevertheless, the current program leadership has been highly effective in developing uncompensated clerkship sites across the rapidly growing North Texas region and external consultants do identify this as a high quality, high demand profession with large applicant pool that should be explored for ongoing growth in parallel with growth of UT Southwestern and its affiliated health care systems.

- **Success in the development of subspecialty residency programs in Physical Therapy should be viewed as an attractive strategy for continued expansion and adding training programs in other health professions disciplines.** Recent success in development of residency and fellowship programs for both Physical Therapists and Physician Assistants suggests another strategy for building upon the strengths of these two educational programs is to expand offerings from these programs as well as other health professions subspecialties. The Physical Therapy Program has developed Physical Therapy subspecialty residency programs in Orthopedics, Neurology, Sports, and Cardiopulmonary Physical Therapy. Graduates have routinely achieved board certification following program completion and a high percentage of PT residency program graduates have been initially employed and, in many cases, are still employed by UTSW. The strength of the SHP Physical Therapy academic program along with extensive resources of the Health System and its partners offer significant opportunities for further expansion in residency programs to develop clinical expertise and leadership to meet future plans and such as the developing pediatric enterprise. There is currently only one accredited pediatric residency in the State of Texas and UTSW would offer a significant opportunity to attract highly qualified applicants for training and workforce retention. Expansion in the areas of neurology, acute care and geriatrics are also possible. In addition, UTSW Medical Center Advanced Practice Provider (APP) fellowship programs started more than a decade ago, and have grown in recent years with a current offering in eight clinical specialties. Current fellowships for physician assistants or nurse practitioners include programs in Urology, Adult Critical Care, Emergency Medicine, Oncology, Orthopaedics, Palliative Care, Psychiatry, and Pediatric Critical Care. Although these programs are typically administered primarily by the Health System Office of Advanced Practice Providers, there exists great collaboration with both Medical School clinical departments for program oversight, and the SHP for candidate recruitment and matriculation. Historically, approximately 40% of APP fellows were prior UTSW employees or students, including graduates of our PA program. The fellowship programs holistically have a 95% completion rate, with more than 70% of graduates retained for full-time employment at UTSW. These APP fellowships provide APPs with additional knowledge and experience, allowing them to take on specialized and complex roles within the clinical enterprise. Further, and aligned with our academic mission, these programs encourage participation in scholarly pursuits, leading to multiple national podium and poster presentations and publications.

- **It is recommended that the SHP, in collaboration with the UTSW Health System, explore opportunities for developing residency programs in Occupational Therapy in subspecialties such as Mental Health, Pediatrics or Physical Rehabilitation in parallel with the growth of behavioral health, pediatric and rehabilitation service lines at UTSW.** Specifically, there are already 16 master's or doctorate degree programs in Occupational Therapy in Texas including programs offered in the Dallas Fort Worth region by Texas Women's University (TWU). In addition, nationwide, the number of applicants to OT programs has declined by > 20% over the past 5 years (American Occupational Therapy Association), However, subspecialty Occupational Therapy residency program opportunities appear to be much more limited and job satisfaction in the field is high. UT Southwestern and its affiliated hospital systems offer a broad range of clinical training experiences for Occupational Therapy program graduates not available at general academic institutions.

- **Additional opportunities for development of health professions training programs in Behavioral Health were also explored.** Texas is ranked last in the US on access to mental health care (Mental Health Care America, Annual report 2021). Furthermore, in youths surveyed in high schools across the US, Texas had a higher rate of suicide attempts (12.3%) compared to the US at large (7.4%) — a rate 66% higher than the US rate (Texas Department of State Health Services, 2018). Currently in the psychiatry outpatient clinics at UTSW and Children's, there are long waiting times for appointments and both clinics are no longer accepting patients that are not internal referrals. With the opening of the Texas Behavioral Health Center at UT Southwestern and the Joint Pediatric Enterprise, we anticipate needing to recruit more mental health clinicians and faculty in the coming years. However, the national and statewide shortage in clinical providers trained to deliver behavioral health services restricts our ability to meet this recruiting demand.

Within UTSW there are rich clinical training sites for mental health clinicians, including Parkland, Children's, Clements University Hospital, Physical Medicine & Rehabilitation, Simmons Comprehensive Cancer Center—just to name a few currently used as training sites in the Clinical Psychology Program. Developing internship and fellowship programs for master's prepared social workers, psychologists, rehabilitation counselors, and mental health counselors would expand our own behavioral health work force. In addition, it would allow the interns/fellows to obtain their supervised hours for licensure and would increase the permanent workforce needed in psychiatric services both locally and in the State of Texas. Of note, UT Health Science Center at Houston, a participant in the Texas Child Mental Health Care Consortium, as is UTSW, is capitalizing on opportunities created by the State to increase the services and the workforce in mental health services by creating a new School of Behavioral Health Sciences.

It should be noted that internship, residency or fellowship programs will require support from the Health System or the Health Professions practice plan to be fiscally sustainable as there currently is no associated tuition or state educational formula funding revenue for these types of GME programs.

- **Another area of program development that is recommended for further exploration is the potential for developing educational programs in areas of institutional workforce needs such as offering a Master's in Health Administration, Health Care Education and/or Health Care Simulation Based Education.** An initial whitepaper drafted by UTSW's Simulation Center leadership has proposed development of a program offering a Master's in Health Care Simulation Based Education. Only three programs in the US currently offer a master's degree in simulation. The unique simulation center facilities and programs already in existence at UTSW suggest that UTSW has the existing expertise and infrastructure to develop a program of excellence in Health Care Simulation Based Education that would also fill a regional and national need. However, initial financial analyses indicate that such a program would not be financially self-sustaining if supported only by tuition, fees, and State Instructional formula funding revenue.

Discussions with Health System leadership and Deans of other Schools of Health Professions in Texas suggest that development of programs leading to the Master's Degrees in areas such as Clinical Laboratory Sciences, Pathologists' Assistant or Respiratory Therapy should be considered for development as partnerships with the Medical School Department of Pathology, Health System clinical laboratory and anatomic pathology and pulmonary and critical care service lines. Such programs would address areas of institutional and regional workforce needs and current applicant interest, as, at other institutions, such programs are reported to attract four to five applicants per position offered.

As is the case for current programs in the School of Health Professions, it is recommended that development of new Health Professions Education and Training programs be a collaborative effort of faculty from both the School of Health Professions and the Medical School with support and input from Health System leadership. Development of clear expectations for the goals of new programs such as training health care professionals to specifically fill UTSW health system workforce needs vs. training larger numbers of health care providers to fulfil regional / state workforce needs will be important in building sustainable financial models. Only programs of significant size (30-40 or more students per cohort) are likely to achieve the economies of scale and levels of tuition and state formula funding support that allow then to be self-supporting from educational revenue alone. Other, smaller cohort programs, are likely to need other forms of support from health system or other academic partners.