About the Capital Area Healthcare Industry Analysis

About the Healthcare Industry Analysis ................................................................. 2
About the Consulting Team.................................................................................. 5

Workforce Alignment

Themes, Goals, and Strategies Summary ............................................................ 6
Theme 1 ................................................................................................................. 8
  Goal 1
  Goal 2

Theme 2 ............................................................................................................. 13
  Goal 3
  Goal 4
Travis County lies at the heart of one of the country’s best performing economies. During the past five years, employment in Travis County and the broader Austin metro region has increased at twice the national rate of growth. Since 2012, employers in the Austin metro region have added nearly 170,000 jobs, more than 70% of which have been located within Travis County. During this period, the Healthcare industry grew by 16,000 workers and was one of the largest job creators in the region.

The Workforce Solutions Capital Area Workforce Board (the “Board”) serves as the leadership and governing body for the Austin/Travis County workforce system. The Board produced a Master Community Workforce Plan, the overarching vision of which is a more demand-driven workforce system that effectively engages employers, community-based organizations, and educational institutions, and successfully prepares economically disadvantaged residents for good jobs in high-demand, middle-skill occupations. Middle-skill jobs require more than a high school diploma but less than a bachelor’s degree.

Given the expected strong demand for Healthcare workers, especially among middle-skill jobs, it is crucial that the region possess a pipeline capable of producing the talent necessary for growth. The Board has collaborated with several regional healthcare workforce development stakeholders to launch a new workforce initiative known as the Central Texas Healthcare Partnership (the “Partnership”). This nascent group of healthcare employers has committed to working together to advance two goals:

1. Identifying shared middle-skill workforce needs that are common among Central Texas healthcare businesses
2. Identifying and implementing joint solutions.

In support of these goals and with funding from the Texas Workforce Commission’s Texas Industry Partnership program, the Board commissioned a Healthcare Industry Analysis to better understand the labor market landscape and discover potential strategies to increase alignment between regional supply and demand for middle-skill healthcare careers.
Report 1 focuses on better understanding the supply and demand dynamics related to high-demand, middle-skill healthcare careers. The Master Community Workforce Plan and early convenings of the Central Texas Healthcare Partnership found that middle-skill healthcare occupations are of particular concern in the Austin metro region. Report 1 provides quantitative validation of those findings by determining the makeup of the metro region’s labor force and identifying the occupations that are thriving and those that are undersupplied. Occupations of particular interest include:

- Nursing Assistants (CNA)
- Registered Nurses
- Dental Hygienists and Assistants
- Licensed Practical/Vocational Nurses (LVN)
- Home Health Aides
- Ophthalmic Medical Technicians
- Pharmacy Aides and Technicians
- EMTs/Paramedics

Report 2 provides a framework of strategic recommendations to address gaps and challenges identified in the first phase of this work and strengthen the region’s middle-skill healthcare workforce pipeline. Report 1 exposed two key alignment challenges:

1. Insufficient career pathway advising and awareness
2. Barriers to scaling education and training programs

This report builds on the findings from Report 1 by first exploring the two alignment themes. Within each theme we’ve developed 2 broad goals and 2 more specific strategies for achieving each goal. For each strategy, we outline potential tactics and highlight best practices. Through the Partnership, regional stakeholders have already begun facilitated conversations around these issues and are well-primed to prioritize action over planning moving forward.
This report outlines goals, strategies, and tactics for the Board, the Partnership, regional training providers, employers, community based organizations (CBOs), and other regional stakeholders to consider while working to ensure education and workforce development efforts are aligned with the needs of employers and to coordinate existing education and workforce development initiatives currently underway throughout the region. Each strategy offers a different mix of Collaboration, Communication, Capacity, and Content tactics. Utilize this framework when considering tactics, stakeholders, and roles in implementation plans.

**Collaboration**

Improved collaboration across the region within and between education, workforce development, economic development and industry leadership. Develop creative solutions to common issues and increase capacity through collaboration.

**Communication**

Improved communication leads to a better understanding about system offerings, initiatives to increase employer engagement, and participation in workforce alignment efforts. Communication to students, job seekers, and the workforce about high-growth career opportunities is important, but communication across regional systems, community leaders, and workforce stakeholders is also critical.

**Capacity**

Increase limited capacity of systems and key stakeholders to workforce development, alignment and attraction efforts by focusing on a collective impact approach to their work across the region. Consider the resources across stakeholders and if collective efforts may increase capacity.

**Content**

Accurate, aligned, and accessible content in all communication and collaboration efforts. Consider how adjusting content and curriculum in education and training programs to align with the needs of employers can reduce workforce skills gaps.
CAEL

The Council for Adult and Experiential Learning (CAEL) is a national non-profit organization whose mission is to expand learning opportunities for adults. CAEL works to remove policy and organizational barriers to learning opportunities, identifies and disseminates effective practices, and delivers value-added services.

Avalanche Consulting’s mission and passion is to help communities become more vibrant and prosperous. We are a leading national consultancy specializing in strategic planning, workforce analyses, and customized research for economic and workforce development organizations.
The following sections explore each of the two themes identified in Report 1. Within each theme, we developed 2 broad goals and 2 more specific strategies for achieving each goal. We then outlined potential tactics and highlight best practices that support each strategy.

THEME 1: INSUFFICIENT CAREER PATHWAY ADVISING AND AWARENESS
Goal 1: Create support for healthcare career pathways.
   1.1: Develop and promote the use of consistent messaging and career pathway resources in collaboration with employers, training providers, and CBOs.
   1.2: Promote healthcare career pathways for front-line staff and low wage middle-skill, healthcare occupations.

Goal 2: Improve processes for directing job seekers into healthcare careers.
   2.1: Formalize processes for identifying potential healthcare workers and referring them to resources in the Workforce system.
   2.2: Expand partnerships with community based organizations.

THEME 2: BARRIERS TO SCALING EDUCATION AND TRAINING PROGRAMS
Goal 3: Improve collaboration to address capacity challenges.
   3.1: Explore collective solutions to experiential learning, facility, and faculty capacity challenges between training providers, local healthcare employers, and workforce stakeholders.
   3.2: Increase awareness of training programs for which there is strong demand for workers and underutilized enrollment capacity.

Goal 4: Expand partnerships across regional stakeholders.
   4.1: Grow programs and processes to strengthen the connection to K-12 institutions.
   4.2: Provide a forum for training providers to find shared solutions to completion, enrollment, and capacity issues.
The following matrix plots each strategy onto one of four quadrants based on where it falls on the continuum of two metrics:

**Investment**: The level of resources that may be required for success on a continuum from **high** to **low** investment

**Impact**: The type of change that occurs ranging from immediate, **transactional** change to long-term, **systematic** change

Transactional change refers to activities that are more quickly implemented, with shorter-term payoffs within the current systems in place. Systems change refers to activities that fundamentally shift the way systems run and work together, with longer-term efforts that subsequently result in more significant outcomes. This graphic supports decision-making when prioritizing strategies for short- and long-term implementation. The Partnership can assign value to the metrics and use each strategy’s relative positioning when determining where to focus their efforts moving forward.
The range in employment and advancement opportunities, wage potential, working environments, and skills required for success in middle-skill healthcare careers is wide. Helping students, job seekers, and incumbent workers understand how their interests, experience, and abilities align with in-demand opportunities in the region is a key element of success in the region’s healthcare education and employment pipeline.

Job seekers and students interested in training programs at capacity are sometimes provided with career exploration services and encouraged to enroll in other healthcare programs by training providers, however there doesn’t appear to be established processes across all entities that provide career and academic advising, including training providers, CBOs, and the Workforce system. To alleviate misalignment between industry demand and workforce supply in the region, stakeholders should create common processes that identify student and job seekers’ potential career pathways early to increase chances of program completion and employment.

In conjunction with improving career awareness and job matching, it is imperative that stakeholders consider additional underlying reasons for misalignment between supply and demand in the region. The average wage and advancement potential for some middle-skill healthcare careers, such as Certified Nursing Assistants (CNAs), does not align with the cost of living in the region, however there is still significant demand for workers. Some hospital systems in the region offer incumbent worker training for current CNAs to develop skills required for more advanced Patient Care Technicians jobs, for which the skills and experience that may benefit workers considering returning to school for an Associate or Bachelor’s degree in nursing. Exploring ways to ensure that workers can advance through the industry supports a healthy workforce pipeline, interest in the field, and more sustainable careers for workers.

Education and training providers, as well as employers, that partner with organizations providing support services may see improved outcomes for students and workers. For example, the Austin-based organization, Capital IDEA, is a nationally-recognized, evidence-based model supporting low-income adults’ transition into high-paying careers. Capital IDEA partners with Austin Community College District (ACC) to support students before enrollment, throughout the program, and as they transition into employment and beyond. CBOs are critical to advising and navigation, helping students navigate funding (often braiding together funding from multiple sources to pay for training), and brokering supports that can address barriers. Partnering with organizations to provide comprehensive services throughout the education and career lifecycle supports a route not just to a job, but through advancement in a broader career pathway.
GOAL 1: CREATE SUPPORT FOR HEALTHCARE CAREER PATHWAYS

Why it's important: markets career pathways in the healthcare industry, expands access to advancement opportunities and sustainable careers, improves training program completion and persistence rates, reduces employee turnover

Strategy 1.1: Develop and promote the use of consistent messaging and career pathway resources in collaboration with employers, training providers, and CBOs.

Employ a marketing campaign
• The Partnership develops a marketing campaign for the healthcare industry in the region, with shared goals and language. Invite the Rural Capital Workforce board into these strategies to unite efforts across the region.
• Create an Austin-specific website to promote the healthcare industry in the region that connects students and job seekers to training programs and employment opportunities. Explore ways to use as an advising or recruiting tool, such as employers helping to fund and populate content as part of a talent attraction campaign for the region.

Create shared resources
• Develop career pathway resources that inventory the pathways into and through middle-skill healthcare occupations, including information on credentials, skills, and wages. Inventory wage and advancement opportunities within and across occupations.

Strategy 1.2: Promote healthcare career pathways for front-line staff and low wage middle-skill, healthcare occupations.

Support incumbent workers
• Employers partner with training providers to upskill incumbent workers. Regularly communicate to staff around opportunities, such as tuition assistance programs, and actively identify potential recipients. Employ flexible scheduling, the use of employer resources for school work, and upfront cost assistance over reimbursement. Provide benefits to a wider range of occupations and to both full- and part-time employees.
• Education and training providers award credit for prior learning, including employer training and informal experiential learning, to improve training persistence rates and accelerate credential attainment.

Investigate retention challenges
• Employers identify high-turnover middle-skill healthcare occupations and determine reasons for turnover. Identify occupations that are common steps in a larger career pathway as well as those paying uncompetitive or non-sustainable wages for the region.
Area Health Education Centers (AHEC) is a national initiative for increasing accessibility to quality healthcare in regions across the country by encouraging partnerships between training providers and regional stakeholders. Wisconsin’s AHEC organization created a healthcare career awareness site, Wisconsin Health Careers, to promote healthcare careers and pathways in the region. The website is easily navigable, and provides information on in-demand healthcare occupations and their relevant skills, activities, salaries, and growth potential. The site highlights training providers with healthcare programs, AHEC programs such as internships and special events, and professional organizations for more information on specific areas of healthcare. This model can be adapted to create a highly localized site that promotes career awareness but also connects students and job seekers to local education and training programs and job opportunities and can be used as a recruiting tool for local employers.

Since 2005, Baltimore Alliance for Careers in Healthcare (BACH) has been a successful network of 11 local hospitals who came together to develop and coordinate hospital job training efforts for local residents. BACH works with local agencies, healthcare institutions and other career service organizations to combat the critical shortage of healthcare workers and increase access to career opportunities for Baltimore’s residents. The BACH initiatives includes a number of programs that aid in addressing this issue, including targeted career coaching and mapping. In addition to foundational career services, BACH provides specialized programs such as:

• **Pre-Allied Health Bridge Program:** Incumbent employees and job seekers that are interested in the healthcare field and also need short-term remediation for pre-college level courses.
• **BACH Fellows Program:** Rising high school seniors attend a career building workshop and paid work experience in hospitals around the Baltimore region. This program focuses on allied health students and guides them in their career pathways.
GOAL 2: IMPROVE PROCESSES FOR DIRECTING JOB SEEKERS INTO HEALTHCARE CAREERS

Why it’s important: promotes more efficient and effective services to job seekers, expands pool of job seekers benefiting from available programs and services, and develops a talent pipeline more aligned to regional needs

Strategy 2.1: Formalize processes for identifying potential healthcare workers and referring them to resources in the Workforce system.

Support front-line staff
- Explore ways to better equip Board and one-stop employment center staff in understanding healthcare employment and training opportunities. Provide front-line staff with relevant labor market information and training for utilizing data in career advising. Consider employing healthcare-specific front-line staff to provide more comprehensive industry counseling to job seekers.
- Train one-stop employment center staff to recognize non-traditional job seekers who may be a fit for healthcare careers, such as job-seekers with retail and customer service experience.
- Improve collaboration and communication between the Board and one-stop employment centers around healthcare programming.

Capture and sustain job-seeker interest
- Expand methods of capturing job seeker interest, including ways to flag interest or potential fit for healthcare, and use that to refer job seekers to relevant staff.
- Sustain engagement with job seekers beyond initial contact. Consider providing incentives for reengagement, capturing contact information for active outreach, and follow-up after services.

Strategy 2.2: Expand partnerships with community based organizations.

Utilize community support services
- Better understand the range of CBOs in the region by inventorying organizations, programs, and target populations.
- Seek partnership opportunities to increase awareness around career pathways and available resources, such as Board services. Include relevant organizations in the Partnership.
- Invest in the ability to significantly grow proven support systems— such as those provided by organizations like Capital IDEA— for students exiting K-12, incumbent workers, and students of health programs across programs of study.
Jewish Vocational Service in Boston (JVS), an affiliation of organizations across the country that serve adults, children, and families through a variety of programs and services, provides adult education and workforce development services in the Greater Boston region. JVS Boston supports a diverse set of job-seekers and students as they navigate education and training and employment opportunities. Two of JVS Boston’s healthcare programs provide replicable models for supporting a local healthcare worker pipeline.

- **Spaulding Rehabilitation Network CNA Pipeline**: JVS Boston partnered with a local rehabilitation teaching hospital to help solve a shortage of Certified Nursing Assistant (CNA) candidates. JVS recruited and screened potential candidates from which JVS created a cohort to complete their Essential Skills training, including developing professional communication and customer service skills for healthcare. The cohort concurrently received technical training from a local training provider in order to gain the technical knowledge for industry certification. Spaulding ultimately selected 23 candidates from this program to hire. JVS reports an 86% retention rate for these employees.

- **Boston Children’s Hospital Incumbent Worker Pipeline**: JVS worked with Boston Children's hospital to create an incumbent worker upskilling program. JVS provided their Essential Skills training to newly hired front-line staff, greatly improving skill sets and decreasing onboarding time for the hospital. Through this program, JVS also supported incumbent worker’s transition from front-line staff to administrative and clinical positions by providing career coaching and skill training, while using their pre-employment services to backfill front-line positions as individuals moved along a career ladder within the hospital.
Training providers characterized enrollment in many healthcare programs as strong due to an “infinite supply” of people wanting to work in healthcare. Some programs across providers are at capacity, particularly in nursing, creating fierce competition for the most popular programs at the larger training providers, while other programs at the same or different education and training institutions are under-utilized.

Barriers to program capacity and scale are driven by the following four issues.

**Issue 1: Limited local capacity for work-based, experiential learning**
Acute care facilities are increasingly limiting the number of clinical nursing spots below the maximum allowed by the Board of Nursing, due to resource limitations (sometimes owing to the number of new-hires going through orientation), fluctuation in hospital census, and faculty shortages. Sub-baccalaureate providers face competition from 4-year nursing programs for clinical placements, with some local hospital systems no longer accepting certain programs, (e.g. LVN programs). Community colleges are restricted from sending students to clinical rotations outside of their jurisdiction without the permission of the institution with authority. Students at 4-year institutions, which are not under those same restrictions, routinely commute more than an hour to their clinical placement locations.

Non-acute care clinicals are primarily used in CNA and LVN training. Some providers, such as the Austin Community College District (ACC), have recently begun to utilize non-acute care settings for first-year nursing students, however the capacity at a smaller institution restricts the cohort size. It is also unlikely that all of the learning objectives required by the Board of Nursing and education providers would be fulfilled in a non-acute care setting. While acute care systems have offered more evening and weekend rotations, these may not be utilized because faculty are unable or unwilling to work those hours as well as concern from training providers that students will not get enough hands-on experience.

Simulations can be used as an alternative to on-site rotations, but the degree to which education and training institutions are using simulation varies widely across programs. While simulations have been increasingly incorporated into some training programs, this solution does not solve the capacity issue as employers have continued to reduce the number of clinical spots, training providers have expanded program enrollment, and demand for healthcare training continues to grow.
THEME 1: BARRIERS TO SCALING EDUCATION AND TRAINING PROGRAMS

Issue 2: Insufficient laboratory and facility space
The availability of laboratory and facility space for instruction and experiential learning can be another barrier to scale for programs at enrollment capacity. For example, experiential learning for Dental Hygienist programs can be a resource intensive process as best practice in the field requires programs to hold clinical hours with patients in-house under the supervision of faculty and dentists.

Instruction facility space can also limit a program’s capacity for scale. For CNA students, program location can be a barrier due to insufficient public and private transportation available to attend classes. Offering courses in multiple locations near where students live and work, rather than a centralized hub, may increase enrollment into those programs.

Issue 3: Limited availability and supply of qualified faculty
For both of the above two barriers, limited qualified faculty in the region further strains programs’ ability to increase enrollment and produce qualified candidates for the region’s demands. Most experiential learning, including clinicals, laboratory learning, and simulations require trained faculty on-site. Training providers across the region report that finding qualified faculty for experiential learning, as well as advanced courses such as anatomy and physiology, can be an issue for healthcare programs.

Issue 4: Lack of student demand
In some cases, student demand rather than program capacity limits enrollment and completions in healthcare programs. There are a variety of reasons student demand might lag behind program capacity, including lack of student awareness about a program or occupation, lack of student interest in the program or the occupation itself (for example, due to low wages or intensive program requirements), and a lack of understanding of how their interests and skills align with different healthcare occupations. For example, Pharmacy technician and EMT/Paramedic programs sometimes face issues of student interest due to the specialized nature of the occupation and unique work environment. Ophthalmic Technician programs have significant requirements from the regulatory authority that may deter students, particularly working adults.
Why it’s important: expands labor pool for qualified candidates, increases capacity to scale training programs, aligns workforce supply with industry demand, improves training program completion/persistence rates, creates efficiencies of scale, encourages shared risks and benefits

Strategy 3.1: Explore collective solutions to experiential learning, facility, and faculty capacity challenges between training providers, local healthcare employers, and workforce stakeholders.

Increase Experiential Learning Capacity

- Training providers continue to expand nursing clinicals from acute care to other services (e.g. long-term care facilities) for students in early stages of training. Four-year institutions adopt similar processes to relieve local competition for acute-care clinical placements. Healthcare Workforce Alliance of Central Texas expands services to non-acute care providers.
- Employers expand the number of clinical placements. Encourage, incentivize, and support staff to engage with clinicals.
- Training providers explore creative ways to expand simulations, such as sharing simulation facilities and/or creating flexible scheduling between simulation and clinicals.

Expand access to qualified faculty

- Consider collective solutions to insufficient faculty, including joint training for current faculty, faculty-sharing between institutions, joint appointments with local hospitals, and flexible scheduling for part-time adjuncts.

Utilize the Partnership

- Utilize the Partnership as a forum for directly expressing capacity needs and brainstorming common solutions.

Strategy 3.2: Increase awareness of training programs for which there is strong demand for workers and underutilized enrollment capacity.

Encourage common career advising

- Standardize career navigation across the community and provide professional development to career navigators.
- Prior to program enrollment, utilize career and academic advisors across organizations (e.g. the Board, employment one stop centers, training providers, employers, CBOs). Students explore a range of middle-skill healthcare occupations.

Leverage Workforce funding

- The Board uses WIOA funds for cohort, bulk purchasing, or specialized training models with programs for which there is strong demand for workers and underutilized enrollment capacity.
- The Board considers appropriate changes to the distribution and administration of city and county training funding.
Tufts University uses rural *longitudinal integrated clerkships* (LICs) as opposed to “block” training programs that are comprised of a series of short rotations in specific disciplines (psychology, obstetrics, surgery, etc.). A LIC is a prolonged period of training during the third year of medical school that gives medical students the opportunity to provide care to a panel of patients over time. This long-term, flexible scheduling approach to experiential learning may help combat overcapacity in clinical placements through flexible scheduling and longer-term placement.

The *New York Simulation Center for Health Sciences* (NYSIM) is a collaboration between the City University of New York (CUNY) and NYU Langone Medical Center created to educate emergency and healthcare workers the New York City region to be better prepared in the event of a medical disaster. The partnership established a 25,000 square-foot simulation center housed at one of the city’s hospitals with multiple rooms focused on different aspects of healthcare that is being used by students and incumbent workers at local health organizations.

In response to its limited capacity to increase enrollments in nursing programs due to a shortage of available clinical placements, the University of Portland collaborated with local healthcare employers to create its first *Dedicated Education Unit* (DEU). DEUs are patient care units devoted to educating students in a clinical environment while still providing quality healthcare to patients. University of Portland’s DEU program has since expanded beyond acute care to ambulatory, surgical, post-acute care, and mental health facilities.

**GOAL 3: BEST PRACTICES**
GOAL 4: EXPAND PARTNERSHIPS ACROSS REGIONAL STAKEHOLDERS

Why it’s important: promotes early career planning and awareness, supports quicker credential attainment, increases capacity and ability to scale training programs

Strategy 4.1: Grow programs and processes to strengthen the connection to K-12 institutions.

Expand secondary and postsecondary partnerships
• Expand partnerships between post-secondary training providers and K-12 institutions around healthcare education. Promote dual credit and industry credential attainment. Education and training providers award credit for prior learning through K-12 institutions to improve training persistence rates and accelerate credential attainment.

Connect with K-12 students
• Utilize the Partnership to expose middle and high school students to a “day in the life” of different kinds of healthcare careers and provide career pathway resources.
• Identify barriers to K-12 student job shadowing, internship, and volunteer opportunities and determine which are internal policy versus external regulations. Advocate for and apply state policy* that allows creative solutions. For example, some states permit high schools to extend their liability insurance to cover enrolled students participating in work-based learning.
• Mitigate liability concerns around student engagement. Employers and secondary schools that require student liability insurance provide funding and navigation support for students. The Partnership works with human resource or staffing firm to design a shared model for the region. Utilize alternative venues for connecting healthcare employers and current employees to K-12 students.

Strategy 4.2: Provide a forum for training providers to find shared solutions to completion, enrollment, and capacity issues.

Create partnerships between sub-baccalaureate, secondary providers
• Large training providers, such as ACC, partner with smaller providers to alleviate capacity issues for in-demand programs. For example, develop a referral system for wait-list programs.

Collect and share data
• Create a central repository of demand data that can be used by all so everyone (and all materials) are on the same page.
• Collect non-credit completion and program outcome data from educators once per year. Education and training providers collect and share data on industry credential attainment.

*See note on page 18
The Tech Ready Apprentices for Careers in Kentucky (TRACK) is a youth pre-apprenticeship program that provides work-based learning opportunities for high school students. TRACK partnered with a staffing agency to mitigate liability for student work-based learning. The staffing agency functioned as the “employer of record”, allowing students to be covered under the firm’s liability insurance, eliminating the need for the employer or training provider to provide or require additional insurance for youth workers.

The Charleston Youth Apprenticeship Program, a partnership between Trident Technical College and 26 local high schools in the metropolitan area, is a two-year youth apprenticeship program aligned with manufacturing, information technology, health science, construction, and hospitality and tourism. To address employer’s legal concerns around employing youth workers, the program was added to the college’s existing student liability insurance policy, removing the barrier from the employers, students, and secondary institutions.

Note: Texas House Bill 639, signed into law 5/26/2017: “Relating to authorizing the purchase of certain insurance coverage by public schools for the benefit of businesses and students participating in career and technology programs and providing for immunity from liability of certain public school students participating in career and technology programs”