

access™

An allied health industry journal



2 Essential Skills in
Today's Healthcare

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Pharmacy Technicians

36 2020 Industry
Outlook

nha 

DEAR READER,

The pathway to achieving career success is unique to each of us, though one thing we all have in common is that along our journey, we'll be met with opportunities and challenges, choices and decisions that define who we are and help us grow.

When we started researching and writing this year's edition of *access™: an allied health industry journal*, we couldn't have imagined the challenges, choices and decisions that our industry, schools, learners, healthcare employers and workers would soon find themselves facing. We are so proud of what we have seen—even in the face of great adversity, you have persevered. Our team at NHA wants to thank you for your relentless spirit and dedication to helping your colleagues, learners and those who are suffering as a result of the pandemic. It's amazing to see the generosity, collaboration and care that our industry has been able to provide, and it will only make us all stronger. You are making a difference, and we appreciate everything you continue to do now and in the future.

As aspiring healthcare professionals work toward achieving national certification, your efforts help ensure they have foundational knowledge and skills necessary to care for others, placing them on the path toward career growth. Along that path, professionals will practice both their clinical skills and their essential soft skills, making sure patients get the care they need. They'll gain trust from their employers, who in turn can help find special projects or new advanced-level skills they can learn. With support, mentorship, and hard work, they will eventually earn promotions, finding themselves leading others toward success.

Looking to the future, we can all be advocates for these professionals. After all, when they succeed, our healthcare system becomes stronger. And, most importantly, their success results in better care and outcomes for patients.

In the fourth edition of *access™*, we cover topics that are top of mind in our industry today—from addressing the soft skills gap to preventing EHR errors to embracing growing demands in the pharmacy—offering impactful learning opportunities to help healthcare professionals grow in their careers. We also see this year's issue as a way to directly help NHA certification holders. That's why we're pleased to include two articles that will also be available for continuing education credit.

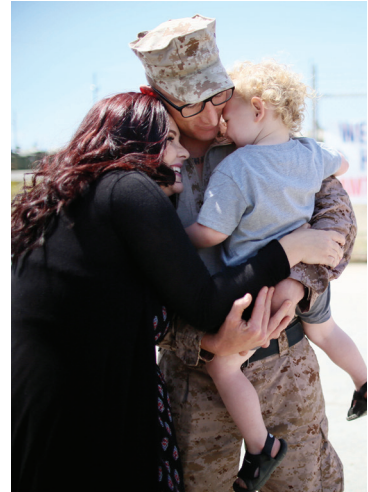
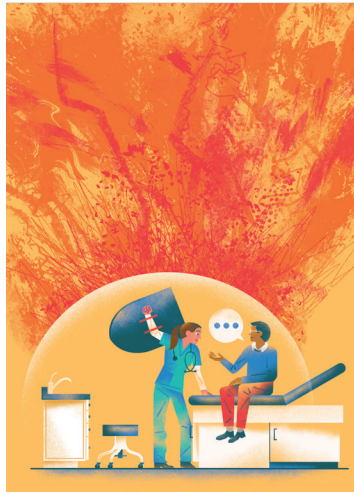
As an advocate for the frontlines of healthcare, we hope you enjoy, utilize, and share the content in this latest edition. Thank you for the role you play in helping others achieve success.

SINCERELY,

Jessica Langley, MS, B.S.R.T. (R)(CT)
Executive Director of Education & Advocacy



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Trends & Data

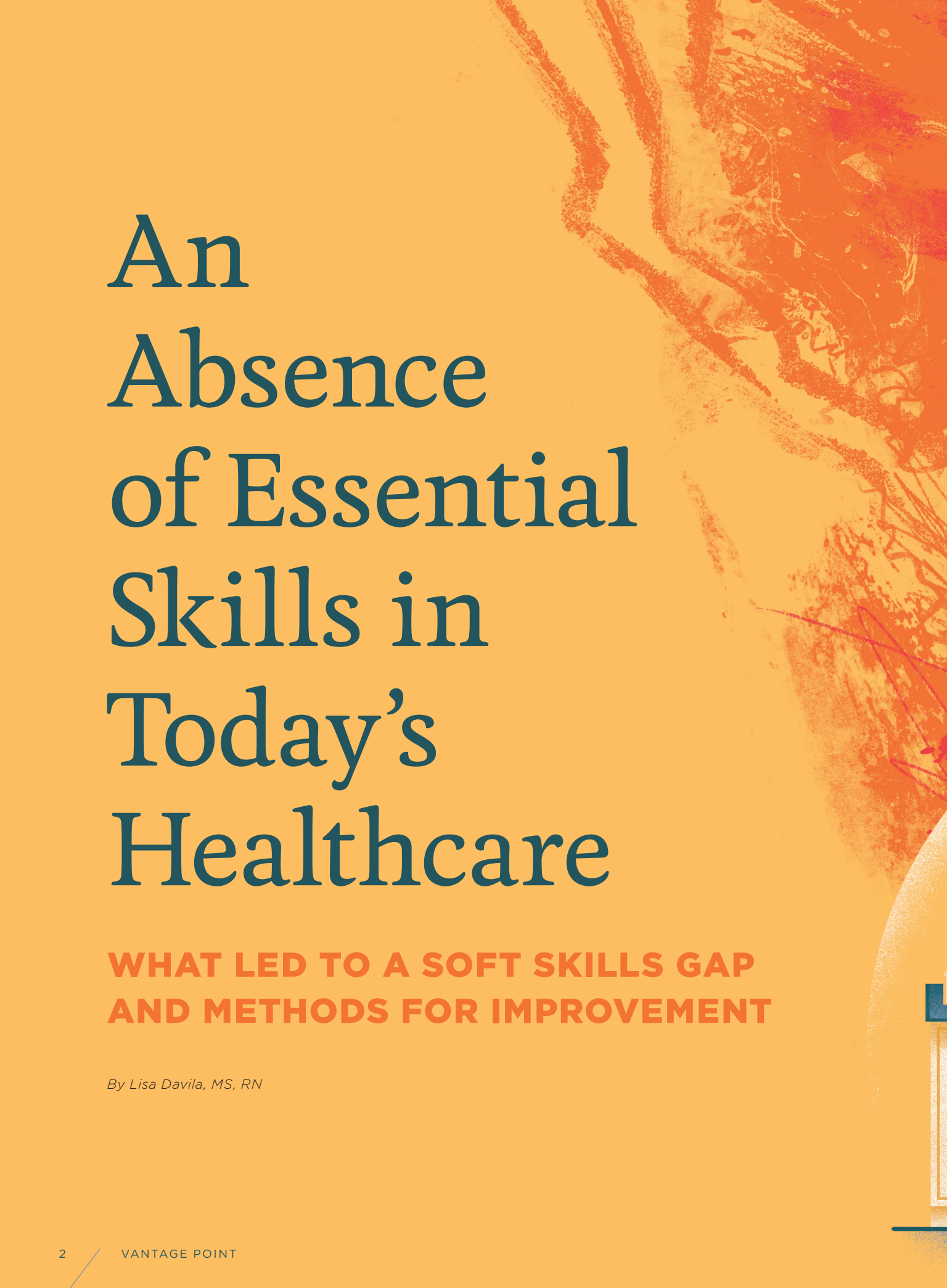
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An Absence of Essential Skills in Today's Healthcare

**WHAT LED TO A SOFT SKILLS GAP
AND METHODS FOR IMPROVEMENT**

By Lisa Davila, MS, RN



Continuing Education Objectives

At the completion of this article, the reader will be able to:

- Define essential soft skills in a healthcare setting.
- Describe how shifts in technology and education affect soft skills in the workforce.
- Describe the effect that poor soft or essential skills have on healthcare professionals and employers.
- Describe how excellent soft skills improve patient care.
- Understand how to address poor soft skills and coach healthcare professionals to improve their soft skills.

person will need in their lifetime. Because of the high stakes involved in serving patients when they are ill and feeling vulnerable, working in healthcare requires a high level of professionalism and use of soft skills. Healthcare workers are expected to deal with stressful situations every day. Maintaining a level of professionalism—defined as “having a courteous, conscientious, and respectful approach to all interactions and situations in the workplace”—is essential for navigating these stressful situations.¹

The changing healthcare landscape has compounded the stressors healthcare workers face. Because costs are rising, patients are more aware of how they spend

There’s no doubt that working in healthcare requires extensive training in specific technical skills. Historically, healthcare workers have been hired based on their skill sets and competence to perform the technical aspects of their jobs. Today, however, employers are seeking employees who not only have the know-how for the job but also display what they view as essential soft skills for being successful in a healthcare team.

There’s a soft skills gap in healthcare candidates due to several factors, including shifts in focus in the education system, technology, and stress. Employers evaluate essential skills—such as teamwork, communication, problem-solving, and

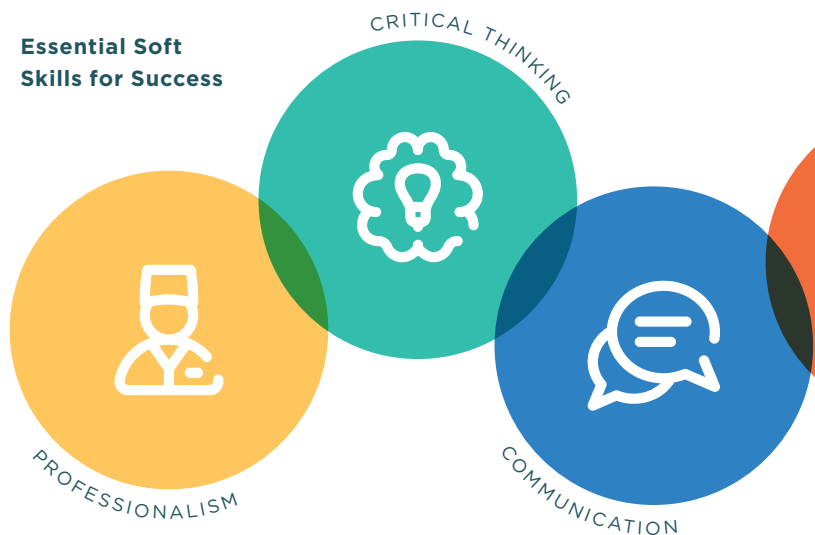
professionalism—in the hiring process to ensure newly hired professionals are on a path for success.

The healthcare industry provides some of the most important services that a



For current NHA certification holders, log into your NHA account and complete the CE activity associated with this article.

Essential Soft Skills for Success



their healthcare dollars. The rise in healthcare consumerism, value-based care, and the importance of the patient experience has translated to higher expectations for the level of service that healthcare organizations provide.

“Many patients have the option to choose where they receive their healthcare,” says Mary Kate Peterson, M.S., financial counselor, Mayo Clinic. “Choosing an organization where one feels valued, heard, respected, gains personal connections, is part of their care decisions, etc., is of utmost importance. The employees within these healthcare organizations need to truly care for the well-being of each patient and their needs.”

The Bureau of Labor Statistics (2019) projects 14% growth in healthcare jobs² from 2018 to 2028 because of the aging

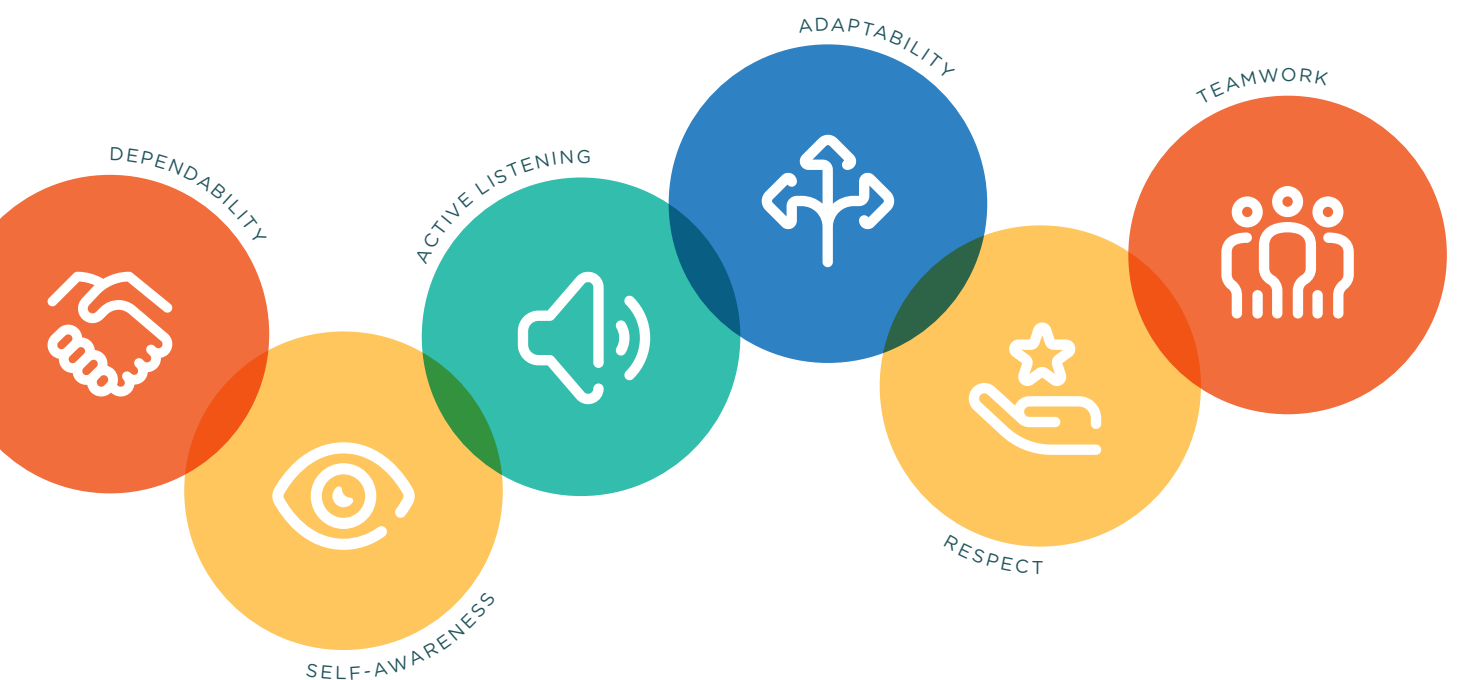
population that is increasingly sick with more chronic disease.³ This is increasing the demand for healthcare services. Now is the time to understand why there’s a gap in soft skills among new healthcare workers and determine the best way to teach these behaviors to successfully equip them to perform their jobs in a manner that is satisfactory to patients and their families.

SKILLS FOR SUCCESS IN HEALTHCARE

Healthcare workers use two different skill sets to deliver care to patients. Technical skills, or “hard skills,” are learned tasks that usually improve with experience and practice, such as measuring vital signs, administering medications, or obtaining an electrocardiogram.

Although healthcare workers perform hard skills, they should also use “soft skills” to connect and communicate with patients, making patients feel at ease. Soft skills influence how a person interacts with other people. Examples are communication, problem-solving, and ethics.⁴

“The use of soft skills increases the likelihood of a successful de-escalation of any tense situation with patients, family members, or facility visitors,” says SharaDawn Miller, MSN, RN, a senior house nurse manager. “Those who possess these skills are often more confident and calm in stressful situations, which then in turn gives them a greater ability to de-escalate a situation, convey comfort and caring, and then aid in overall better outcomes for the patient and family.”



Typically shaped during childhood and adolescence, soft skills can be challenging to instill in employees as adults. According to research conducted by Robert Schooley, Ed.D., the most important soft skills as ranked by employers were work ethic, oral communication, problem-solving, critical thinking, teamwork, and chemistry with others.⁵

Soft skills are essential skills, as they are vital for healthcare workers to use on the job every day. Meeting a technical or skills-based qualification to perform the job is not enough to be considered successful.

For example, if a patient care technician or medical assistant measures vital signs per protocol but fails to alert the nurse with an upward trend of a heart rate, this is a failure in communication, not technique. A lack of essential skills can translate to life or death for a patient.

“In today’s society, there is a push for everything to be done at hyper-speed. Great soft skills consist of taking the time to truly listen, providing empathy for each and every patient so they know they are not just a number in the system,” says Peterson. “Asking questions to glean more detailed information in order to best help the patient

is needed, and communicating that information to the provider displays teamwork. Providing employees with these necessary skills will, in my opinion, empower an organization to provide consistency and care across the continuum and increase patient satisfaction.”

Every healthcare professional should be able to convey compassion and empathy toward others. Compassion is feeling sympathy for another person or their situation with a desire to help the person feel better. Empathy is the ability to truly understand the feelings of another. Both of these essential skills can help employees gain perspective and exude kindness when someone might need it most.



Exhibiting empathy leads to better patient outcomes, increased compliance and satisfaction, and improved communication.⁶

WHY A GAP IN SOFT SKILLS EXISTS

With the rise in text messaging, email, and other electronic and automated forms of communication, face-to-face interactions happen less. Many people entering the workforce for the first time have lived their entire lives with the influence of digital communication.

“Technology has impacted how society communicates with each other. Texting acronyms, emojis, and made-up abbreviations are now being seen in healthcare communications,” says Miller. “This raises concern for appropriate documentation and the ability to send clear information. Encouraging the use of only approved healthcare abbreviations and providing learning courses regarding situational face-to-face communication, particularly including soft skills, is very important.”

It’s easy to blame technology for the gap. However, some believe the way education has been delivered to students in the U.S. has influenced how soft skills are learned. Although many factors go into the educational system, for several years, the results of standardized tests have been primary measures of

success for both students and schools. These tests have typically been designed to measure core academic skills, such as mathematics, science, reading, and writing. Standardized tests now begin at a young age and continue through high school.

This gap likely exists because society has evolved. People can learn and validate many important skills through testing and technology, but essential soft skills are difficult to teach, learn, and measure.

Regardless of why the gap exists, soft skills can make a significant impact in professional and personal life.

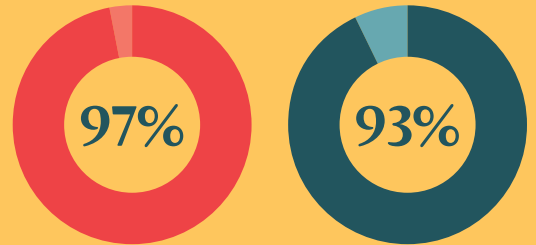
IMPROVING SOFT SKILLS IN THE HEALTHCARE WORKFORCE

Over 1.5 million new employees arrive on the job prepared and competent with the required hard skills. However, within the first year and a half of employment, 46% underperform based on issues related to work ethic and attitude. A 2016 study showed the top five soft skills required in hiring healthcare employees were meaningful communication, empathy, flexibility, teamwork, and time management.⁹

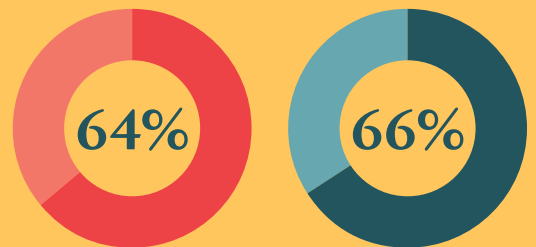
Assessing competence in a skill such as motivation or work ethic is not as straightforward as assessing proper technique to obtain an EKG. Soft skills need

Digital Generations

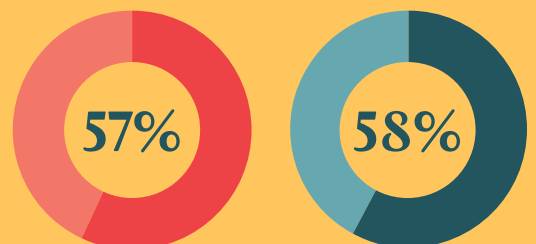
Millennials and Gen Z by the numbers



Smartphone ownership: **97% of Gen Z**⁷ and **93%⁸ of Millennials** own a smart phone.



64% of Gen Z and **66% of Millennials** say they are constantly connected online.⁷



57% of Gen Z and **58% of Millennials** feel more insecure without their mobile phone than their wallet.⁷

Note: Millennials were born between 1981 and 1996. Gen Z were born in the late 1990s.

practice, guidance, training, and ongoing assessment.

Whether managing other healthcare workers or working on the frontline with patients every day, professionals can help foster a culture where learning soft skills is a priority. There are several ways to help close the gap. Consider these methods when evaluating personal essential soft skills and the skill level of those serving patients in an organization.

Personality assessment tests

The first step is to understand oneself in order to see where improvement might be needed. Personality tests can help people identify strengths, weaknesses, and tendencies in their natural personality.

Becoming self-aware is the first step in growth.

In-person training, mentoring, and coaching

People who discover there is room to improve soft skills can consider seeking help from a mentor or asking a manager for coaching. The team will appreciate employees taking the initiative to improve essential soft skills.

For managers, in-person training will lay the groundwork and set expectations for employees. After training the team, it is important to reinforce the skills learned through ongoing mentoring and coaching. For employees who might not have a natural strength in flexibility

or exuding empathy, for example, giving them the opportunity to ask questions in a one-on-one conversation can help them trust that they can be open about their struggles. After training and mentoring, other learning opportunities can be beneficial to practice integrating the skill into their day.

Online training

Some essential soft skills like time management and prioritization can be learned through online programs. If a person feels like they could improve certain soft skills, they may consider asking their employer for recommendations for online training.

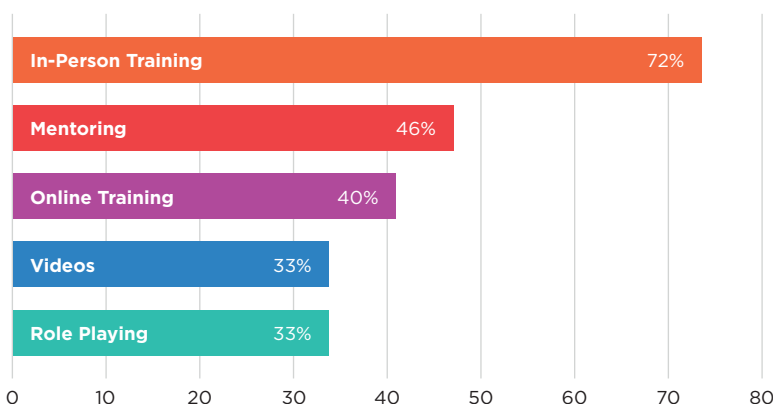
For managers, online training is a great way to annually check knowledge for large groups of employees. Video depictions can show right and wrong execution of essential skills that could be missed in didactic teaching.

Simulation-based programs can also be built into training, which can expose employees to the most common pitfalls or circumstances that might be challenging. One of the key benefits to simulations is they provide learners the opportunity to practice skills in a low-risk, online setting rather than in front of peers.

Role-playing

Role-playing offers the opportunity to practice essential

Employers' Top Soft Skills Training Methods



Source: National Healthcareer Association (2020). 2020 Industry Outlook.

Healthcare is always evolving to improve the condition and experience of patients. Just as technology and medicine can provide advances and life-sustaining products, people must evolve to foster a better human connection.

skills. Find a trusted coworker to practice different scenarios that challenge communication and teamwork skills. Pay attention to timing, inflection, tone, and body language.

Managers can use role-playing to bring teams together to elevate essential soft skills. Create a trusting environment so role-playing feels productive and low-risk for employees.

Case studies

People who feel challenged by a certain skill may be able to find a case study that shows how someone else successfully navigated a similar challenge. Case studies can also help provide better understanding of the negative consequences associated with poor skills.

When employees use essential soft skills to overcome challenges, a case study can help show the big picture of the topic being taught while recognizing the employee for good work. This will give managers the opportunity to show the use of the skill from beginning to end, resulting in success. Saving these case studies can

help with onboarding new employees so they clearly understand what success looks like in the organization.

Lectures or webinars

Listening to a subject matter expert can provide a unique perspective. If an in-person speaker isn't an option, technology provides access to world-class speakers. Webinars also offer the opportunity to hear unique perspectives and to ask questions that are meaningful to the learner.

Auditing

It is important for individuals working in healthcare to continually audit their soft skills. They can also work with their employer to ask for ongoing feedback on the skills they seek to improve.

Employers should create a transparent audit plan that helps employees understand how they will be evaluated on their performance after they have received training on essential soft skills. Without ongoing feedback, employees' behavior may revert to previous patterns until it is hardwired into practice. Be prepared to conduct

on-the-spot coaching after implementing and communicating the audit plan.

Redefining necessary healthcare skills

Educational initiatives, technological advances, societal dynamics, and the empowerment of students and young adults affect the presence of essential soft skills in applicants. Many of these factors had good intentions that led to unintended consequences. In healthcare, employees and employers must become aware of the reality of the issues and be willing to change in order to serve the patients who need support during times of stress.

Healthcare is always evolving to improve the condition and experience of patients. Just as technology and medicine can provide advances and life-sustaining products, people must evolve to foster a better human connection. Not only do healthcare workers need to administer medication and turn on the monitor, they need to be able to place a caring hand on another human being and say, "I know you are scared. I am here for you." Because that is good medicine, too. <



Can *Virtual Humans* Help Providers Achieve Better Patient Outcomes?

Contributor: Antoinette M. Schoenthaler, EdD

When improving health requires patients to change behavior, virtual humans help providers get results.

Healthcare providers can do everything “right”—the right diagnosis, the right treatment plan, the right follow-up care—but if patients don’t take an active role in their health, they likely won’t achieve optimal results.

Getting patients on board, especially when a change in attitude or behavior is required to see lasting health outcomes, requires effective communication between healthcare professionals and patients. It’s no secret that strong soft skills are in high demand in the healthcare industry, but soft skills training is often ineffective, expensive, or even absent in some facilities. A new trend is helping fill this gap: Through the power of simulation technology and virtual humans, healthcare professionals are gaining conversation skills that could make a life-saving difference for their patients.

SIMULATION TRAINING ADDRESSES CRITICAL SKILLS GAPS

Healthcare educators and employers providing continuing education often lean on the use of role-play with standardized patients

to help current and future healthcare professionals develop skills like Screening, Brief Intervention, and Referral to Treatment (SBRIT); motivational interviewing; and empathy. However, these sessions can require a great deal of time and resources, are difficult to standardize, and make some participants uncomfortable. Online simulation training is a solution growing in popularity because of its effectiveness, its ability to standardize, and its easy-to-access digital medium.

Antoinette M. Schoenthaler, EdD, is a behavioral scientist and an associate professor of public health and medicine at New York University (NYU). She has helped lead studies determining the effectiveness of simulation training in primary care settings. As someone who also leads in-person workshops, she says that one of the unique advantages to simulation training over a traditional, in-person role-play is the one-on-one feedback provided.

“Oftentimes for providers, we are offering two- to

three-hour workshops, which can be good, but it really results in just gaining knowledge. It’s not really skill acquisition,” Schoenthaler says. “As a trainer, it’s very hard for me to give good, constructive feedback when I have 35 people in the room, because there’s only so much time I can dedicate to each person. [Online] simulation [training] provides a really good opportunity to get that one-on-one feedback.”

Hospitals, primary care offices, state and local agencies, and schools of health professions are implementing these trainings to help improve conversations that can positively impact a variety of patient outcomes (see chart on page 13). Most of these simulations are used to train future and current healthcare professionals, but simulations can also be designed for patient education. For example, in a simulation developed in partnership with the Robert Wood Johnson Foundation, patients learn how to navigate conversations with their providers about topics such as antibiotics overuse. There is also an online simulation

and mobile app funded by the CDC called “Talk to Someone.” In this app, triple negative breast cancer (TNBC) patients can better understand their diagnosis and the advantages of chemotherapy by engaging with “Linda,” a virtual TNBC survivor.

THE ADVANTAGE OF VIRTUAL HUMANS

In some methods of simulated training, such as those described above, participants role-play with virtual humans. They can experiment with different clinical approaches and communication styles without fear of repercussions

to real patients or discomfort from role-playing with an actor or peer. Studies show that students and medical professionals who engage with virtual humans feel more prepared to manage health conversations effectively. They also report feeling



Standardized Patients

- Patient actors hired to mimic symptoms/problems for training purposes
- Participants may hold back or not take it seriously for fear of judgment
- Takes a lot of planning and resources
- Difficult to standardize
- Cannot be modified
- Role-play usually performed after a presentation or training

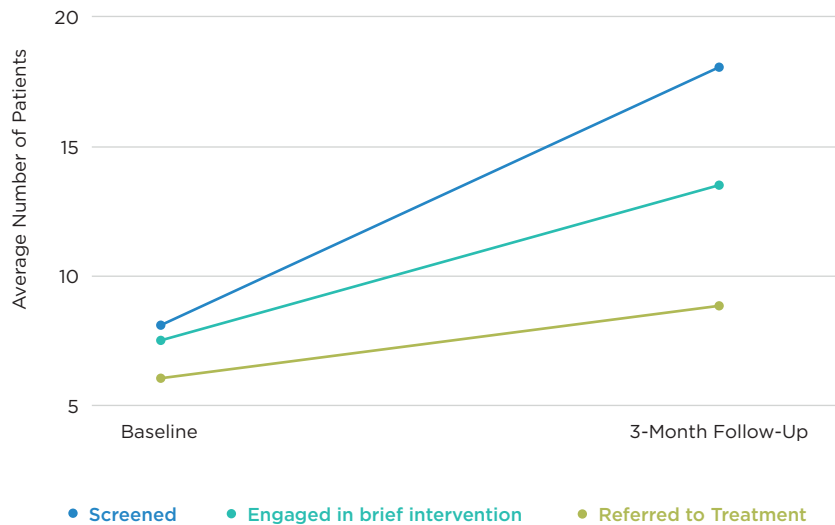


Virtual Patients

- Emotionally responsive, digitally-created humans designed to simulate symptoms/problems
- Participants are often more comfortable/feel less judged
- Can be accessed at any time digitally
- Offer true standardization
- Can easily be modified for scenarios (change gender, age, language, etc.)
- Graphics and narrative work together for better recall

How Simulation Training Changes Behavior

Changes in the number of patients that providers who participated in simulation training screened, engaged in brief intervention, and referred to treatment



Source: Kognito

more safe in a risk-free environment, less judged, and more willing to reveal information honestly.^{2,3,4}

The right level of realism in appearance, responses, and verbal and non-verbal communication can give virtual humans the power to help healthcare professionals practice in a safe environment without the risk of embarrassment or actual patient repercussions. The degree to which they are human-like is very intentional so that the user doesn't get distracted by them and start associating them with someone they know rather than focusing on the training content. In fact, the best retention, engagement, and overall learning is achieved when

virtual humans are not overly realistic.^{5,6} Research also suggests that users are more open to receiving feedback from a synthetic agent than from a human being, another advantage of virtual humans in simulation technology.⁷

IS VIRTUAL SIMULATION TRAINING IMPROVING QUALITY OF CARE?

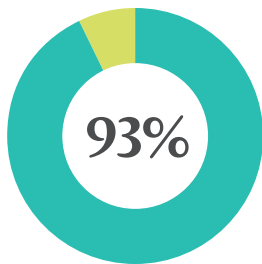
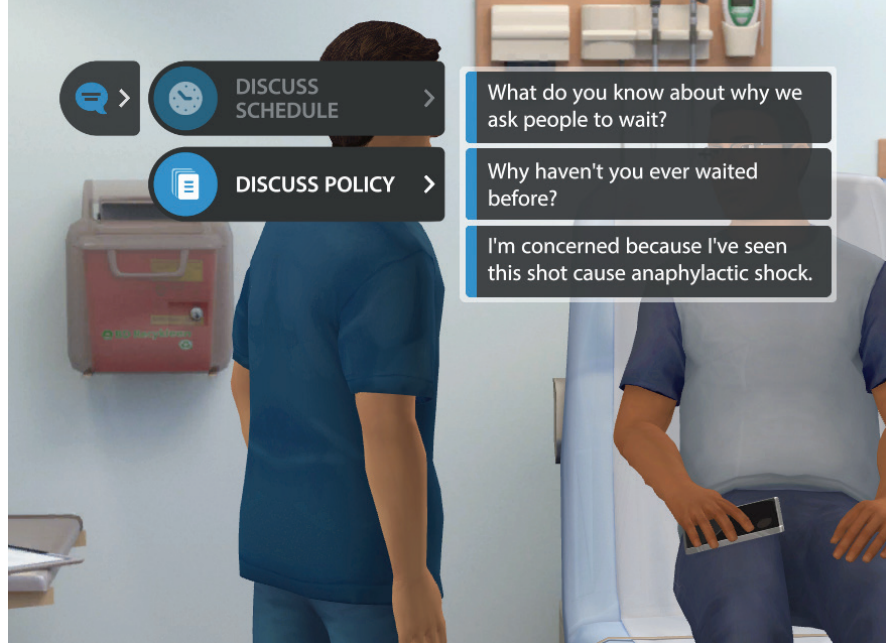
Simulation training is helping healthcare providers and clinical professionals—and patients—gain confidence in their ability to lead meaningful conversations. But does increased confidence in conversation skills lead to real results?

Kognito is the leading developer of health education simulations. Their evidence-based approach

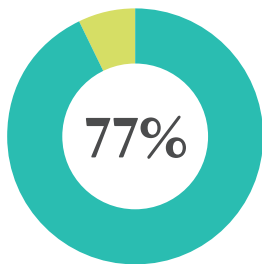
Motivational Interviewing

Motivational Interviewing is a clinical technique intended to help people make positive behavioral changes to support better health. The goal of this method is to help people resolve ambivalence and insecure feelings so that they can harness their own internal motivation to make positive change. The five core principles of motivational interviewing are:

1. Express empathy
2. Develop discrepancy
3. Avoid argument
4. Roll with resistance
5. Support self-efficacy¹



93% of users reported that as a result of the simulation training, they intended to make a change in practice to provide better patient care.⁶



77% of physicians said simulation had a positive impact on the way they communicate with patients.⁶

creates virtual human role-play training aimed at improving confidence and conversation skills. They combine the art of conversation with the science of learning, such as implementing the dual coding theory—balancing the visual with auditory learning equally to address different learning styles. The company has several simulations for healthcare professionals regarding topics such as substance use disorders and mental health concerns.

Various studies determining the effectiveness of Kognito's simulation training have shown statistically significant changes in the frequency by which healthcare professionals initiated the intended health conversation. Healthcare professionals were

also shown to implement research-backed communication strategies more often.⁸ Below are highlights from a few of these studies.

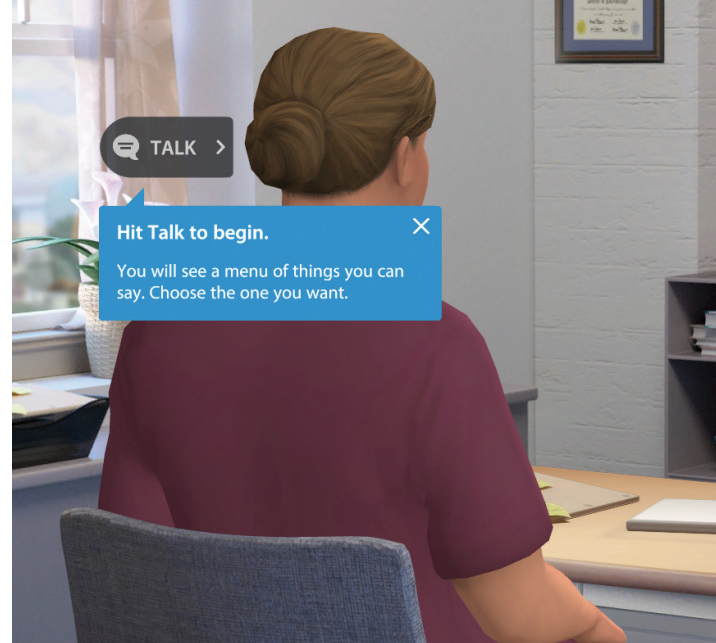
In a simulation designed to help pediatricians and other health professionals have conversations with parents and their children about healthy weight and childhood obesity, **93% of users reported that as a result of the training, they intended to make a change in practice to provide better patient care.**⁶

77% of physicians who completed a simulation aimed at helping them lead conversations with patients about the proper use of antibiotics **said it had a positive impact on the way they communicate with patients.**⁶



We have to think out of the box for training providers, healthcare professionals and even patients in how to communicate better.

ANTOINETTE M. SCHOENTHALER, EDD



After completing a simulation designed to help providers screen patients for substance use and mental health disorders, providers **increased the number of patients screened by 140%, engaged 84% more** patients in brief intervention, **and referred nearly 50% more patients to additional services or specialist treatment.**⁹

By practicing conversation skills with virtual humans, healthcare providers can learn in a comfortable environment. Virtual role-play allows them to gain confidence in their ability to have productive conversations with patients surrounding difficult topics and to do so at a higher frequency.

Additional research is in process to look at the role of simulation in impacting

long-term health outcomes of the patients who are on the other side of these conversations. However, the initial results indicate optimism in improving the dialogue and soft skills of healthcare professionals to help them better serve their patients' needs—even when those needs are outside of the medical professional's scope of practice.

Schoenthaler says that as patient-centered care becomes the norm, current and future medical professionals must have access to training to improve patient communication. "We have to think out of the box for training providers, healthcare professionals and even patients in how to communicate better," she says. "Any way that we can get people more exposure is really important." <



The number of patients screened **increased by 140%**



The number of patients engaged in brief intervention **increased by 84%**



The number of patients referred to additional services or specialist treatment **increased by 50%**⁹



From Aspiring Chef to Passionate Healthcare Professional

A surprising shift in career plans for a recent high school grad led to fulfilling work helping others.

Jordan Perry is a 19-year-old recent high school graduate from the small town of Naugatuck, Connecticut. For most of his life, he dreamed of going to culinary school, but fate had different plans. Life's timing, some encouragement from a supervisor, and a ruptured appendix led him into the healthcare field. He's currently a patient care technician at the same hospital where he had the

surgery that changed his perspective, and he's never looked back. "I found this career by accident, and it turned out to be the best decision of my life," he says.

Culinary school was always Perry's plan. After graduating from a technical high school where he was on the culinary track, unforeseen circumstances put a temporary hold on his culinary aspirations. He was working in a restaurant

when one day, he fell to the ground in severe pain. He would soon find out it was the result of a ruptured appendix. That was the moment things began to change.

After surgery, he took a step back. With the encouragement of his restaurant manager, he did a little soul searching and realized he wanted to make a difference. He began his research, and one of the first programs he found was at Griffin Hospital, which was the hospital his family had trusted and relied on for years. With little hesitation, he called to find out more about the patient care technician training program at the Griffin Hospital School of Allied Health.

Perry was a little unsure at first. Culinary school was a far cry from healthcare. After an initial interview at Griffin Hospital, he followed his instinct and decided to go for it. "I didn't think I was smart enough to know anything medical related until I took a chance," he says. "Week by week, I kept getting more confident ... towards the end of the program, that's when I thought, 'You know what? Maybe I can do this.' And then I started falling in love with it."

However, culinary school was still on his mind. After completing his program at Griffin Hospital, timing lined up, and he went to New York to take

culinary classes as originally planned. He was only two weeks into the program when he knew he belonged in healthcare. "I knew in my heart that I was supposed to be at the hospital," Perry says.

Perry quickly returned to Connecticut and took two certification exams—the Certified Patient Care Technician/Assistant (CPCT/A) exam and the Certified Phlebotomy Technician (CPT) exam. He passed both, securing a full-time position at Griffin Hospital. Now, he's making a difference in the lives of patients and his coworkers.

"Perry has a really positive attitude. The staff loves him, and he loves what he does. You can see it in the way he does his job. He has great instinct and always communicates when he has a concern about a patient," says Rob Signor, a manager over patient care technicians and Perry's supervisor at Griffin Hospital.

Perry says it means the world to him to know that he's making a difference in people's lives. He's now on a career path that will help him continue to help patients. He plans to earn his bachelor's degree in nursing so he can advance his healthcare career.

"You never know what you're capable of," Perry says.

"Honestly, I had thought I was going to be a chef my entire life leading up to my appendix rupturing, and the allied health school changed that completely... Now I have a whole life of experiences that are coming my way, and I can't wait for those to happen. I can't wait to make a difference." <

Why choose the patient care tech path?

According to Tracy Huneke, CP, NPA, CHI, an instructor at Griffin Hospital School of Allied Health careers, patient care technicians learn in-demand skills that make them valuable in a variety of settings.

"Our patient care technician program includes instruction on phlebotomy. After completing the program, students are eligible to sit for not only a national patient care technician certification exam, but also for phlebotomy certification exam. Our program graduates are also eligible to take the state of Connecticut CNA certification exam. With those three certifications, patient care technicians can really go anywhere. They could work clinically in a hospital, in long-term care facilities, on rehab floors, in dialysis, or in a lab, including lab processing, if they want."

PATHWAYS



THROUGH



CTE ACROSS



AMERICA

By Laura Flynn, Director of Career and Technical Education at National Healthcareer Association

At its core, Career and Technical Education (CTE) prepares students to enter the workforce job-ready in growing fields such as healthcare. The reality is that CTE goes far beyond this one goal, providing pathways for upward mobility into many professions that do not require a four-year college degree. Today, CTE health science programs exist across the U.S. in urban, rural and suburban settings, providing both high school students and adult learners with access to specialized technical training.

Participating in CTE health science programs opens up opportunities for all types of students. It helps them discover a wide variety of healthcare career options, from providing clinical support as part of a patient care team to managing administrative tasks critical for a successful healthcare business. This experience allows them to determine whether healthcare is a career path they might enjoy.

CTE health science programs can also help college-bound students create a pathway to success. Earning an accredited national industry credential through a CTE program creates a competitive edge for students, strengthening their college applications. With increasing tuition rates for post-secondary education, many students need financial assistance to make their education goals a reality. In many districts, especially in rural areas, CTE programs provide dual credit for some classes, helping students earn college credits before graduating high school. Plus, after receiving a national certification, students can access employment opportunities while they are furthering their education. Not only do students earn money while they are learning, but some may benefit from employer-based tuition assistance.

“Many of the students in our program use these courses as a stepping-stone to higher education in the same or related fields. They have used their certifications as a means to get part-time jobs while in school for a higher degree,” says Michelle Lynne, MSN, family nurse practitioner, Biomedical and Medical Sciences Academies, nursing program director and department chair at Lake Worth Community High School in Lake Worth, Florida.

For individuals who have barriers to post-secondary educational opportunities, CTE programs can be the lifeline that helps them create a plan for work after high school. Participation exposes students to career paths and employers looking to develop talent pipelines for important healthcare roles many students never knew were available to them. This is especially true for schools in densely populated metropolitan areas that are challenged to stretch resources to serve large student bodies. According to our Career and Technical Education Pathways Survey, those schools offering CTE programs see a 5.7% increase on average in high school completion. Plus, 55% of students in urban schools who participate in CTE health science programs head directly into the workforce.

The State of CTE Health Science Programs

NHA surveyed more than 130 CTE educators to learn about the impact of health science programs in urban, suburban, and rural communities. Turn the page to learn more, and go to nhanow.com/CTE success to download the poster.

What is HOSA?

HOSA is an international student organization that provides future health professionals the opportunity to develop technical skills in health careers as well as leadership skills intended to help these students become leaders in the health community.¹

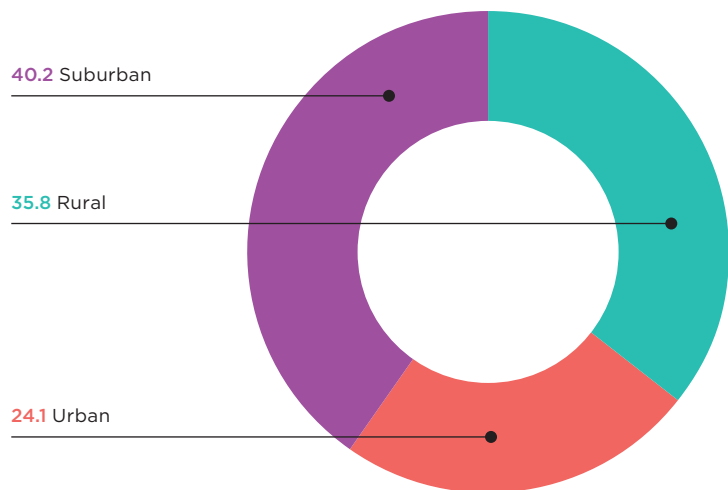
Students who participate in HOSA have the opportunity to put their skills to the test through competitive events at both their state conferences and the HOSA Annual International Leadership Conference. During the annual conference, more than 8,100 students compete in 60 different events² covering health sciences, health professions, emergency preparedness, leadership, and teamwork.³

Students experience rigorous learning through CTE health science programs, which also provide unique experiential learning opportunities. From externships to simulation learning to competing in events at HOSA – Future Health Professionals, students gain practical and professional skills that will serve them no matter the path they take.

“Our students are employable in positions such as

pharmacy technicians or medical assistants as soon as they complete their program and graduate from high school. They know that their employers will support them via tuition reimbursement, as they pursue further education for mid- and high-level career growth,” says Kyle Backer, a communications specialist for West-MEC, which has an extensive CTE program with campuses

School Districts



across many different communities in Arizona.

NHA's recent Career and Technical Education Pathways Survey gathered insights from more than 130 CTE educators across the U.S. to better understand the impact of CTE programs in different types of communities. This survey sought to uncover the needs of urban, suburban, and rural communities and how CTE programs are

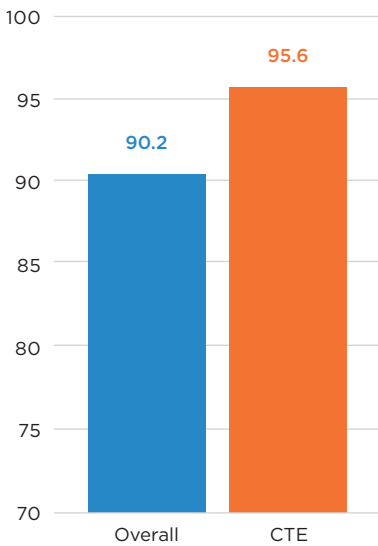
addressing those needs while preparing students for their future endeavors. The results shown on the following pages demonstrate the real value CTE health science programs provide to students regardless of their community setting or career path.

RESEARCH METHODOLOGY

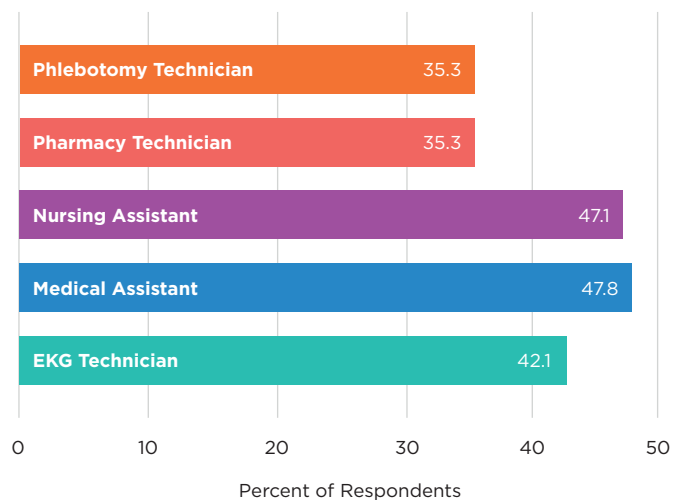
The Career and Technical Education Pathways Survey was structured to assess the opinions of CTE health

science program directors and educators regarding the impact of CTE programs on their districts. This survey was distributed to NHA customers working in CTE programs. The survey was in market December 9, 2019 through December 18, 2019 and evaluated the opinions of 136 respondents. NHA analyzed the data by looking at averages of responses based on district setting: urban, suburban, and rural.

Graduation Rates



Top industry credential exams offered in health science programs



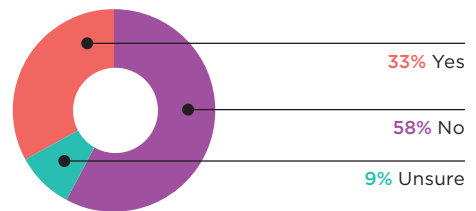


Many students use the information, experiences, and industry certifications earned during their health science programs as a foundation for their post-secondary college and career life. Some create effective resumes with academic and co-curricular achievements and acquire entry-level jobs in the medical and health professions. Students earn articulated credit into technical or local colleges and universities. The paths taken are as individual as the students themselves. The goal of our health science programs, especially those that offer industry certifications, give students choices so they can optimize the effectiveness of their secondary health science education and launch a fulfilling lifetime career.

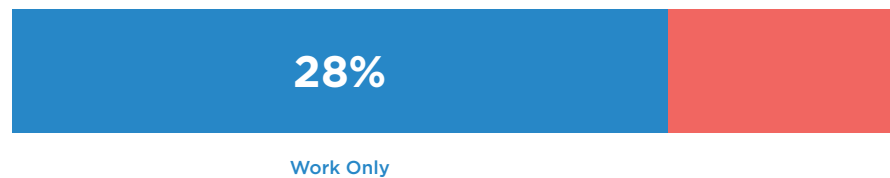
Lucielle Flynn, curriculum supervisor for Broward County Public Schools CTE health science program in Ft. Lauderdale, Florida.

URBAN CTE HEALTH SCIENCE PROGRAMS

Dual Credit
Do urban CTE programs offer classes that count for dual credit?

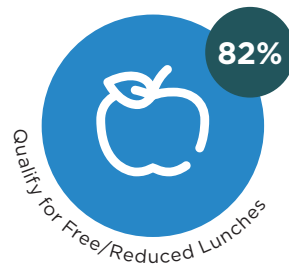
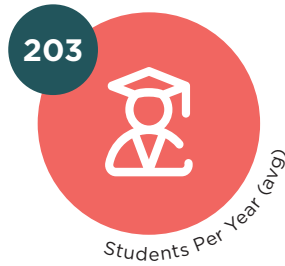
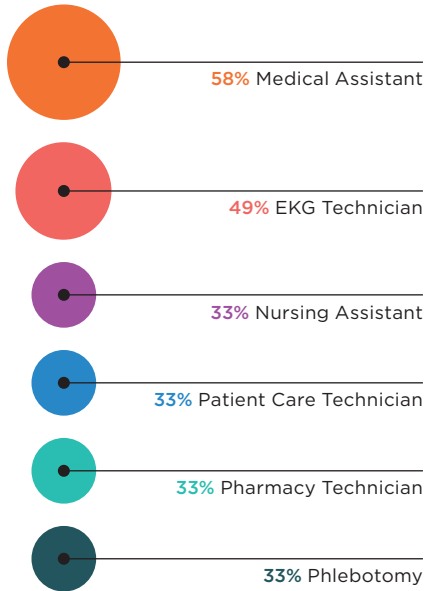


Post-Graduation Paths

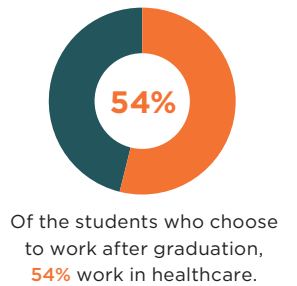
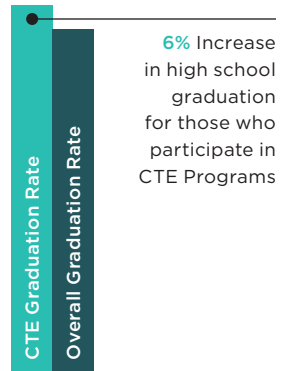


Exams

What are the most popular industry-recognized professional credential exams offered in urban programs?



Students in urban districts qualify for free/reduced lunch at higher rates than students in rural or suburban districts.

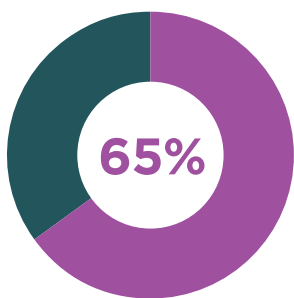


Compared to their suburban counterparts, students from urban and rural school districts go straight into the workforce at higher rates.



SUBURBAN CTE HEALTH SCIENCE PROGRAMS

Students from suburban districts who choose to work after graduation go on to work in healthcare more often than students from urban or rural districts.

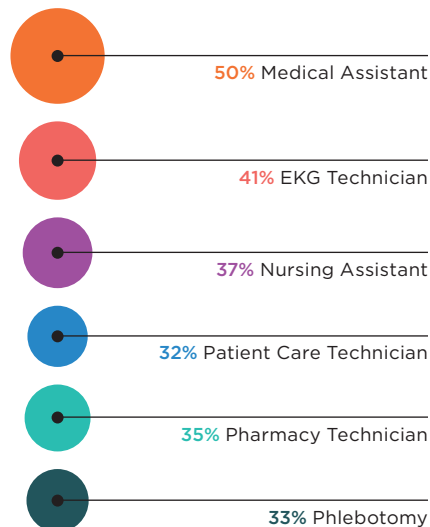


Of the students who choose to work after graduation, 65% work in healthcare.



Exams

What are the most popular industry-recognized professional credential exams offered in urban programs?



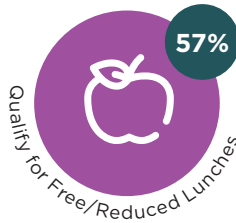
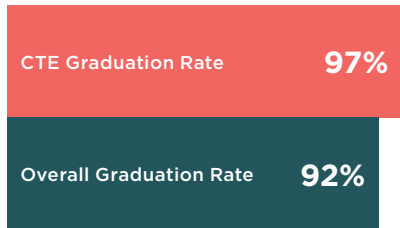
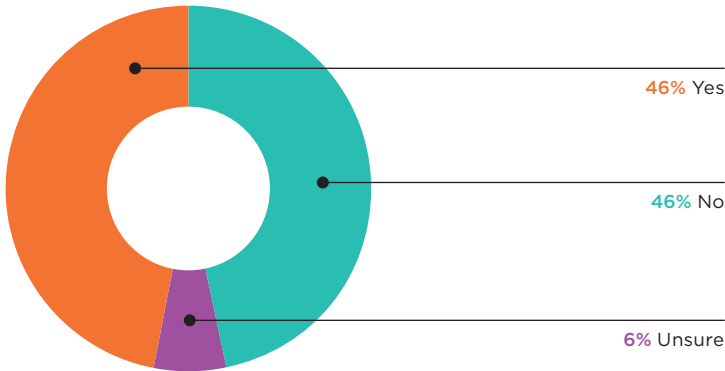
Suburban programs provided more opportunities for students to earn a medical assistant certification than rural programs.

Post-Graduation Paths

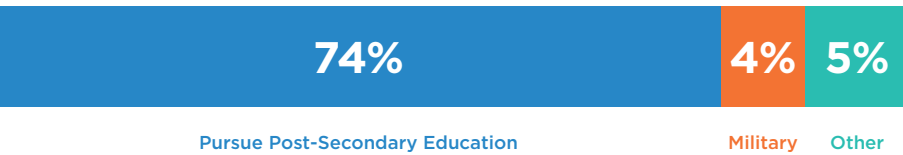


Dual Credit

Do suburban CTE programs offer classes that count for dual credit?



More suburban students focus 100% on post-secondary education than students from rural school districts.



My CTE Health Science program is the largest in our high school, and I have a waiting list for students to get into my program. Students see health science as a doorway into a medical career, whether they are interested in nursing, medicine, respiratory, radiology, pharmacy or many of the other allied healthcares.

Gina Jordan, instructor at Millington Central High School in Millington, Tennessee.



Many colleges and universities that our students apply to are aware of our students' success at CCST. They come to talk and scout our students and always remind them of the importance that their NHA CCMA certification holds and how they come in ahead of other students who have not attended a CTE program.

Angie Teoli, RN, instructor at Cecil County School of Technology in Elkton, Maryland.





Many of our CTE students enjoy learning all there is to know about health sciences. They are very eager to transition into the workforce, while other students use our health sciences degree as a stepping-stone for pursuing further educational degree programs at our surrounding colleges. Students often have the goal to gain employment at an institution that would assist with tuition expenses so that they can further their education.

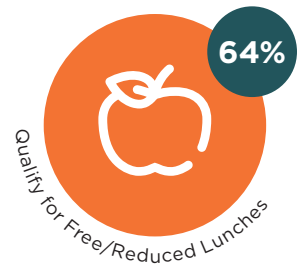
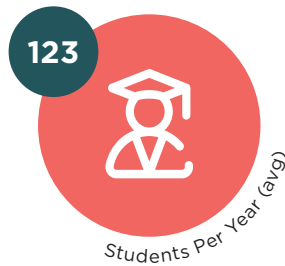
Jessica Loudermilk, adult education secretary at Pioneer Career and Technology Center in Shelby, Ohio.



For our students, when they apply for a job, they can put a national certification or license number on their application. When a human resource director is reviewing applications, those students with certifications automatically get thrown into the pile to review more closely and will most likely get an interview because they know that the certification indicates they are ready to do the job.

Kelly Harrison, Health Science instructor at Enterprise High School

RURAL CTE HEALTH SCIENCE PROGRAMS

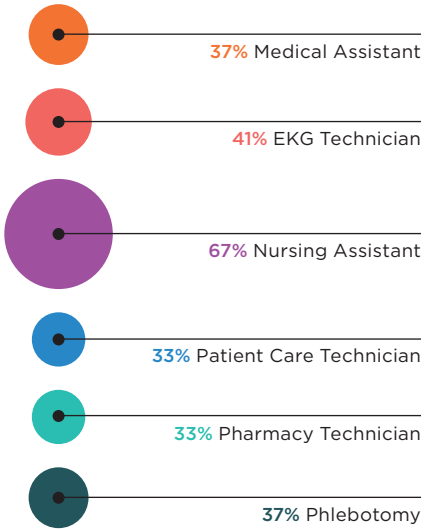


Post-Graduation Paths



Exams

What are the most popular industry-recognized professional credential exams offered in urban programs?



Rural programs provide more opportunities for students to earn a nursing assistant certification than suburban and rural programs.

Compared to their suburban counterparts, students from urban and rural school districts go straight into the workforce at higher rates.

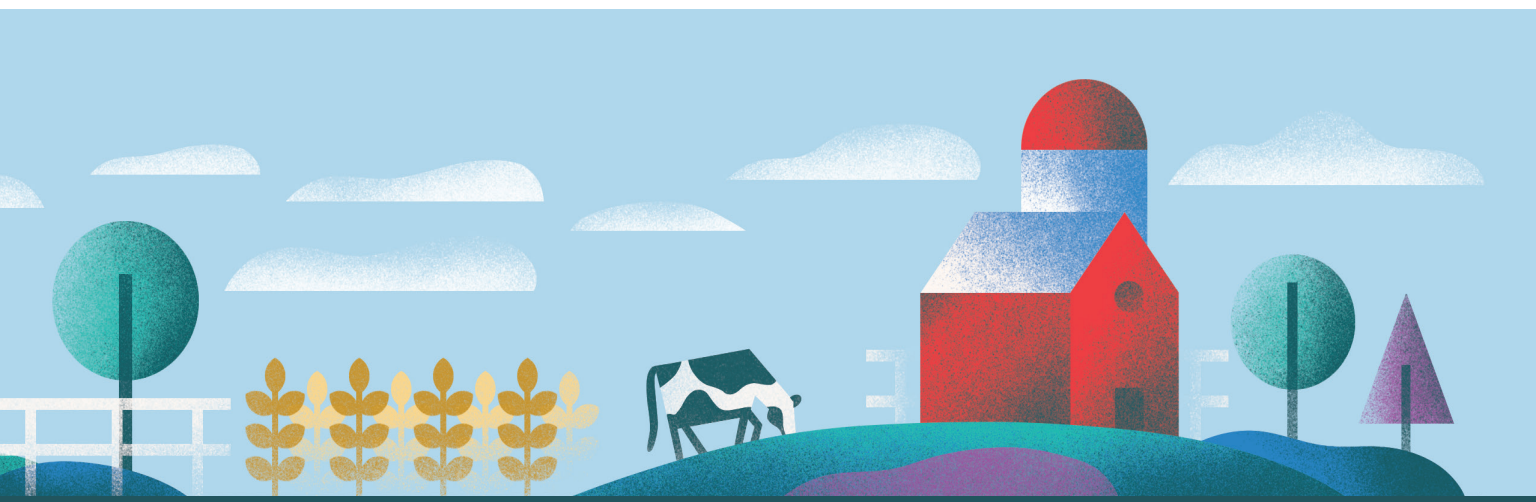
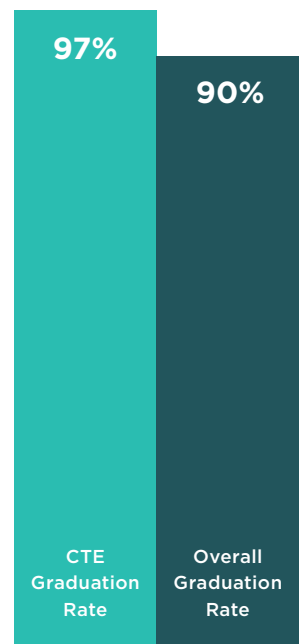
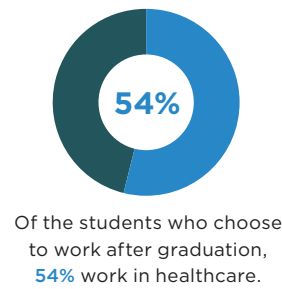


Dual Credit

Do suburban CTE programs offer classes that count for dual credit?



More CTE programs in rural districts offer classes that count for dual credit than suburban and urban districts.





Expanding The Role of Pharmacy Technicians

How Advanced Skills are Moving the Industry Forward

*By Kenneth Hohmeier, Pharm.D., Associate Professor,
Director of Community Affairs Dept of Clinical
Pharmacy and Translational Science, The University
of Tennessee Health Science Center*

It's no surprise that the dynamics of healthcare have shifted in recent years. Patient demand for convenient, cost-effective healthcare continues to increase. Large health systems and pharmacy organizations are increasingly looking for new ways to meet these needs, which has led to a rise in convenient care clinics and the popularity of telemedicine. Among this growing body of innovative healthcare delivery methods is the increased use of pharmacists in clinical, direct patient care roles in both inpatient and community pharmacy settings. This shift in the role of pharmacists has support from both governmental organizations and patients.¹⁻⁶

As the most accessible healthcare provider, it's not hard to imagine how pharmacists can serve as clinicians in both hospital and community pharmacy settings. Yet, this shift in focus from pharmaceutical product to patient care has been fraught with challenges. To continue moving forward, the profession has looked back at its history—as well as to its

colleagues overseas for solutions. One resounding answer continues to echo: advancing the role of the pharmacy technician allows for the profession's advancement in providing patient care.

The pharmacy technician's role has seen almost constant evolution over the past century, both in the U.S. and abroad.^{7,8} In the early part of the century, delegated tasks included simple roles such as running cash registers, answering phones, and providing customer service to patients. With the integration of computers into pharmacy workflow in the 1960s and 1970s, pharmacists began delegating more responsibilities as well as new medication dispensing tasks to technicians, which allowed pharmacists to focus on managing and evaluating “prescription profiles”—something often taken for granted in today's high-tech pharmacy. Throughout the 1970s-1990s, significant changes occurred in the pharmacist's role, which embedded them directly in the provision of patient care and away from their more traditional medication

Today, future opportunities for pharmacy technicians seem almost limitless.

dispensing roles. Again, pharmacy technicians rose to the challenge and embraced their new roles, which included early versions of tech-check-tech (a.k.a. technician product verification) and medication reconciliation, among other responsibilities.

Today, future opportunities for pharmacy technicians seem almost limitless. The rapid expansion of clinical pharmacist services across outpatient and inpatient settings has ushered in a new era for pharmacy technician role advancement. Although these opportunities vary across organizations and states, one thing is consistent—advanced technician skills mean better patient care.

TECHNICIAN PRODUCT VERIFICATION (TPV)



WHAT IS THE SKILL?

A certified pharmacy technician with advanced training in product verification delivers the final verification of medication product selection after the medication data entry has been verified by a licensed pharmacist (typically excluding compounds and controlled substances).^{9,10}



WHY ARE PHARMACIES NOW LOOKING AT TECHNICIANS TO TAKE ON THIS SPECIFIC SKILL?

Community pharmacists are increasingly responsible for providing direct patient care services, including medication therapy management (MTM), acute diagnosing of influenza and strep throat via point-of-care testing (POCT), treatment of minor ailments (e.g., allergic rhinitis treatment, anaphylaxis, headaches [including prescribing triptans], human/canine and feline bite prophylaxis). Because of this added responsibility on the pharmacist, technicians are now taking on product verification.



WHAT DOES THE RESEARCH SAY ABOUT IT?

There is consensus that TPV is safe and effective based on several large prospective studies.^{10,11} Questions that remain include which pharmacies are best suited for TPV and what is the ideal training and credentialing for technicians providing TPV. Also, since TPV has been largely experimental at this point, a corresponding TPV-technician pay rate increase has not occurred, though this is anticipated as TPV spreads across the country.



ARE THERE ANY BARRIERS STANDING IN THE WAY OF TECHNICIANS PERFORMING THE SKILL?

State regulatory oversight has created the largest barrier to TPV. Boards of pharmacy regulate pharmacy practice from the state level, and so the technician scope of practice can vary widely from one state to another—even if the states border one another.



WHAT ARE THE POSITIVE OUTCOMES THE INDUSTRY IS EXPERIENCING FROM TECHNICIANS TAKING ON THESE DUTIES?

The data is clear: Increasing delivery of patient-care services results in improved quality of work-life (QOWL) for both technicians and pharmacists and improved medication delivery workflow.¹⁰⁻¹⁴ In other words, TPV makes for happier pharmacy technicians and pharmacists, providing higher level clinical services, and quicker medication filling.

59%

Pharmacy technicians complete 59% of product verification tasks.²²

MEDICATION THERAPY MANAGEMENT (MTM)



WHAT IS THE SKILL?

Medication therapy management (MTM) involves a range of services to optimize patients' medication regimen while detecting and preventing potentially costly medication errors.¹⁵ MTM is now commonplace in most U.S. community pharmacies—although the number of MTM services delivered varies widely.¹⁶



WHY ARE PHARMACIES NOW LOOKING AT TECHNICIANS TO TAKE ON THIS SPECIFIC SKILL?

A recent report from the Centers for Medicare and Medicaid Services (CMS) noted lower than expected MTM completion rates across the country.¹⁵ As CMS is the largest payer of MTM services, this report was alarming to pharmacies and the industry as a whole. MTM represents a major departure from traditional workflows, and new approaches that involve technicians must be considered to boost the lagging adoption.



WHAT DOES THE RESEARCH SAY ABOUT IT?

Research supports technicians taking on advanced roles as a way to increase MTM delivery rates and as a means to improve technician job satisfaction.^{17,18} This represents a win-win for the industry. As one technician framed it in a recent study published in the Journal of the American Pharmacists Association, "... just being a part of [MTM] and seeing how beneficial it can be, I mean, [the patient] was nonfunctional because of all the medications she was on ... it's such a blessing to see what a small service can do to absolutely change somebody's life."¹⁷



ARE THERE ANY BARRIERS STANDING IN THE WAY OF TECHNICIANS PERFORMING THE SKILL?

Implementation of MTM into pharmacy workflow and patient awareness of MTM are the two largest factors impacting the adoption of MTM. Busy patients who have never received MTM sessions do not understand the value of the unfamiliar offer and see it as time-intensive and unnecessary. Consequently, many patients decline MTM without realizing how much it can positively impact their care.



WHAT ARE THE POSITIVE OUTCOMES THE INDUSTRY IS EXPERIENCING FROM TECHNICIANS TAKING ON THESE DUTIES?

As MTM is a new service for pharmacy, its implementation has been sporadic and inconsistent. Integrating MTM into traditional pharmacy workflow has been a challenge. Technician involvement may improve some of the workflow constraints, which have hindered widespread availability of these services. Moreover, as technicians are the face of community pharmacies, the strong relationships they have with patients may increase patients' willingness to agree to MTM session(s).

43%

Pharmacy technicians complete 43% of tasks related to medication therapy.²²

VACCINATIONS



WHAT IS THE SKILL?

Pharmacy technicians administer vaccinations after pharmacists provide patient screening, counseling, and vaccine verification.¹⁹



WHY ARE PHARMACIES NOW LOOKING AT TECHNICIANS TO TAKE ON THIS SPECIFIC SKILL?

The increasing demand for clinical services, especially vaccinations from community pharmacists, has created unforeseen workflow problems. The physical act of administering a vaccine does not require clinical judgment, and with appropriate training and credentialing, a pharmacy technician who is skilled and knowledgeable on the vaccines available at their pharmacy can safely administer them, thereby helping to improve public health.



WHAT DOES THE RESEARCH SAY ABOUT IT?

Nearly 1,000 vaccinations were administered in the first six months after a pilot training program in Idaho involving 25 technicians. Since the completion of the pilot, more than 500 pharmacy technicians have received training to administer vaccinations.²⁰

37%

Pharmacy technicians prepare 37% of vaccines for pharmacist administration.²²



ARE THERE ANY BARRIERS STANDING IN THE WAY OF TECHNICIANS PERFORMING THE SKILL?

Currently, Boards of Pharmacy and other regulatory bodies determine the scope of work for technicians. As of March 2020, only Idaho, Rhode Island, and the federal pharmacy system (i.e., Indian Health Services) permit technicians to administer vaccines. Pharmacy technicians should stay tuned to this rapidly developing story. With support from both large employers and professional organizations as well as continued pressure for pharmacies to provide more clinical services, permission to administer vaccines may be right around the corner.



WHAT ARE THE POSITIVE OUTCOMES THE INDUSTRY IS EXPERIENCING FROM TECHNICIANS TAKING ON THESE DUTIES?

Pharmacy's entry into vaccination services not only provided more convenient access for patients, but also importantly increased vaccinations for patients who do not have a physician and who otherwise would not become vaccinated. As technician-administered vaccinations increase, we expect the pharmacy to have an even greater impact in reducing preventable diseases for those who do not routinely see a medical provider (e.g., the uninsured, young adults, those with high-deductible insurance plans).

MEDICATION HISTORY COLLECTION



WHAT IS THE SKILL?

Medical history collection involves gathering and compiling all current medications a patient is taking, including prescription, over-the-counter, herbal supplements, and vaccinations, with corresponding dose, strength, directions, quantity, length of treatment, and reason for treatment, among other pertinent medication details.



WHY ARE PHARMACIES NOW LOOKING AT TECHNICIANS TO TAKE ON THIS SPECIFIC SKILL?

Medication history collection is an important first step prior to MTM or medication reconciliation—two evidence-based practices proven to improve patient outcomes. When pharmacy technicians collect medication history, they can give time back to pharmacists, allowing them to provide these services to more patients.



WHAT DOES THE RESEARCH SAY ABOUT IT?

Of all the advanced skills technicians are taking on, this skill has the most evidence to support it. The American Society of Health-system Pharmacists (ASHP) specifically advocates for technician involvement in medication history collection and has even produced a toolkit compiling research, case studies, and best practices.²¹



ARE THERE ANY BARRIERS STANDING IN THE WAY OF TECHNICIANS PERFORMING THE SKILL?

State regulatory bodies largely defer to individual pharmacy organizations regarding what “technical” skills to delegate (those who do not involve the exercise of professional judgment). At this point employers, primarily, make the determination as to whether to allow technicians to perform medication history collection.



WHAT ARE THE POSITIVE OUTCOMES THE INDUSTRY IS EXPERIENCING FROM TECHNICIANS TAKING ON THESE DUTIES?

Medical history collection is fundamental to providing clinical, direct patient care services. As this responsibility is increasingly delegated to pharmacy technicians, pharmacies will play a growing role in ensuring the highest level of patient outcomes—and thereby will improve access to high-quality healthcare services for patients. <

56%

Pharmacy technicians complete 56% of tasks related to medication history collection and reconciliation.²²

A Pharm Tech Journey: Finding Success in Many Settings and Roles

Aimee Capps' journey as a pharmacy technician has given her career opportunities she didn't realize were possible. When Capps was first approached about a part-time opening as a pharmacy technician with her employer, a retail pharmacy, she was a full-time bookkeeper and spent her days in a back office. With a little encouragement, she applied and started working in the pharmacy a couple of days each week, still bookkeeping on weekends. It didn't take long before Capps says she was "hooked." She loved helping people and seeing how much of a difference medication could make.

"I loved witnessing when patients would come in with a new prescription for whatever it may be, diabetes medication or blood pressure or whatever. Then the next month they'd come in for their refill, and you could see how much that medication had helped them," says Capps.

Since becoming a certified pharmacy technician in 2003, Capps has worked in several roles with different types of responsibility. The secret to her success? Empathy.

"One major skill you have to have as a technician is



empathy,” Capps says. “I think if you look at the patients as people instead of prescriptions, it helps. Just remember that every prescription belongs to someone who is going through something.”

A LOOK INTO CAPPS’ JOURNEY IN PHARMACY

Tech Specialist

Capps was invited to participate in a career advancement program through her employer, which provided pharmacy technicians the opportunity to gain additional training to be able to take on more responsibility as a lead technician. She eventually worked as a tech specialist in one of Idaho’s busiest retail pharmacies.

“As a tech specialist, my role involved scheduling and staying on top of inventory—making sure that you had enough of one thing and not too much of another and making sure you didn’t run out of vials or lids. I also was responsible for training any new technicians that we hired,” Capps explains. “I also helped train any pharmacy interns that joined us. I taught them how the pharmacy works, from running the register to using the computer systems.”

Specialty Pharmacy

Eventually, Capps moved into a specialty pharmacy role

where instead of face-to-face interaction with patients, she spent much of her time obtaining prior authorizations. She says she honed her problem-solving skills there, because oftentimes, many oncology and mental health patients had challenges in getting insurance providers to cover prescriptions.

A PRESCRIPTION IS NOT JUST A PIECE OF PAPER ... IF YOU REMEMBER THAT, YOU’LL HAVE THE CHANCE TO MAKE A DIFFERENCE.

“I actually formed a lot of relationships with pharmaceutical sales reps at that time. When I couldn’t figure out another way to get drugs covered, I would work with the reps to obtain 30-day trial vouchers for patients,” recalls Capps.

During her time in specialty pharmacy, Capps received letters and handmade gifts from patients who wanted to say ‘thank you’ for helping them with often life-saving prescriptions.

Capps eventually received a promotion to assistant manager, where she managed 16 employees working in the specialty pharmacy.

Mail-order Pharmacy

In the state of Idaho, where Capps lives and works, pharmacy technicians are empowered to take on greater responsibilities. Today, Capps works remotely from her home, spending her time calling doctors’ offices to clarify prescriptions, helping to ensure patients receive

the right medications and the correct dosage. She has the power to change and take new prescriptions over the phone—a task that just five years ago had to be completed by a pharmacist.

As the pharmacy industry continues to change, certified technicians like Capps have the opportunity to step into new roles, taking on more responsibility in helping their pharmacy teams as well as the patients they serve.

“Every day is something new. Every patient is someone new,” Capps says. “A prescription is not just a piece of paper ... if you remember that, you’ll have the chance to make a difference.” <

2020 Industry Outlook

Understanding the journey to career success

Pathways to professional success are not always straightforward. Circumstances—including access to education, socioeconomic status, ethnicity, and geography among other factors—can create twists and turns that shape each path. It can be long and winding, but with training, education, and commitment to themselves and from others, individuals can navigate to success.

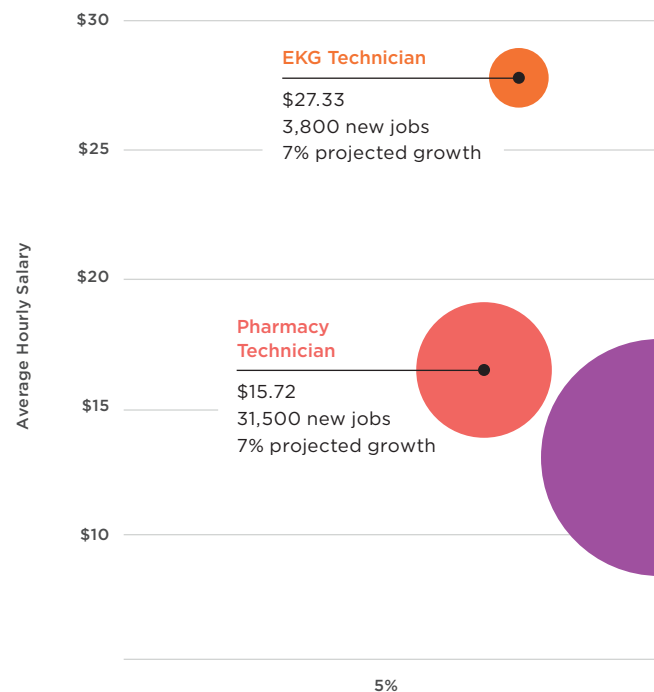
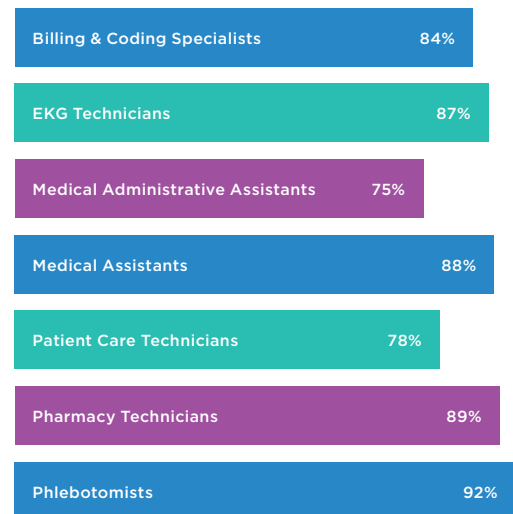
National certification is a starting point, like the red star on a map that shows “you are here.” It designates readiness for the career journey ahead because it demonstrates a standardized measure of knowledge and skills. Once you’ve earned it, you’re ready to traverse a journey to career success. Again, the pathway is unique to the individual.

Educators see certification as a milestone for students. Passing a nationally accredited exam means a student is more likely to be work-ready. Employers value the standardization national certification provides and use it to screen job applicants. By using certification as a start, healthcare professionals can carve their paths by honing soft skills, seeking additional clinical training, taking on more responsibilities, and developing advanced skills to continue moving upward.

Because no pathway to professional success looks the same, NHA sought to uncover what factors impact the journey. The 2020 Industry Outlook collected insights and data from employers of allied health professionals, digging deeper to understand what they seek in candidates, what these professionals’ daily work looks like, and what traits and skills make them most successful in their roles.

As an advocate for allied health professionals, we hope you can use this data to help your students and employees navigate their own path to achieve their career dreams.

Percent of institutions that require or encourage certification for the following professions



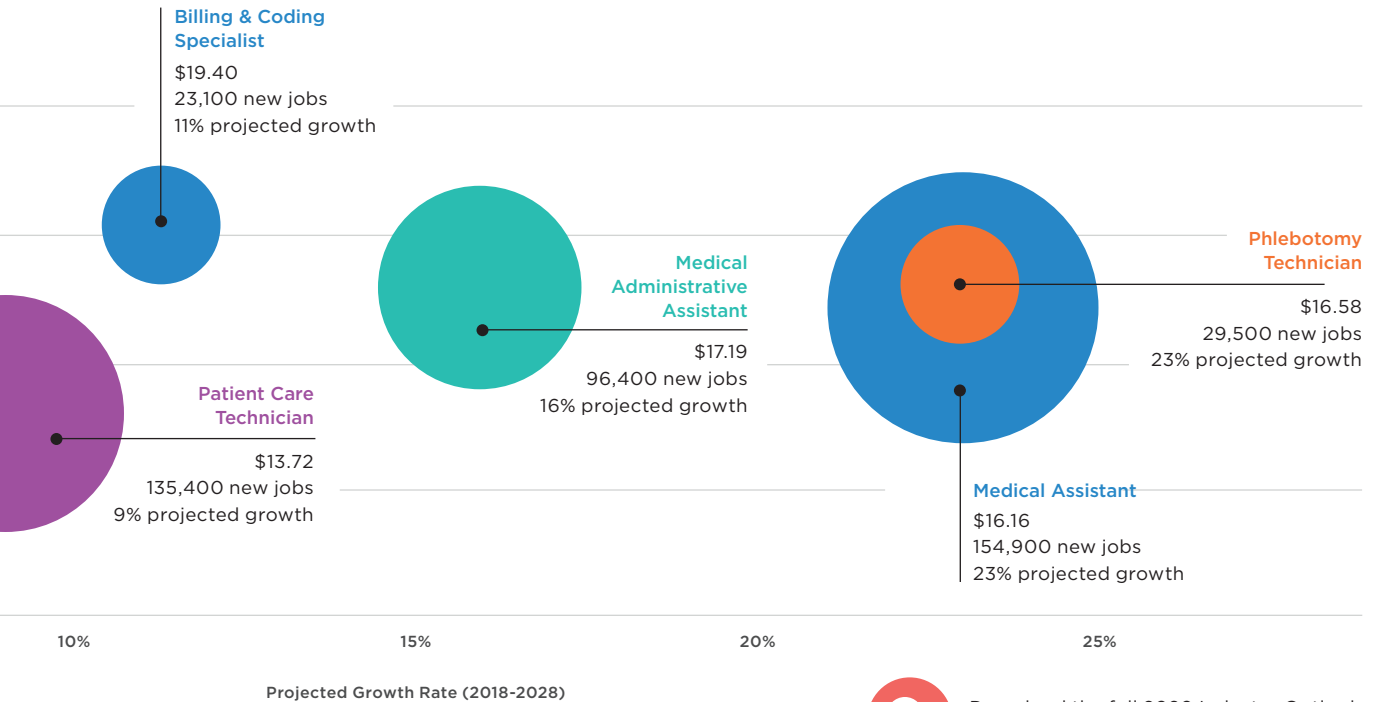
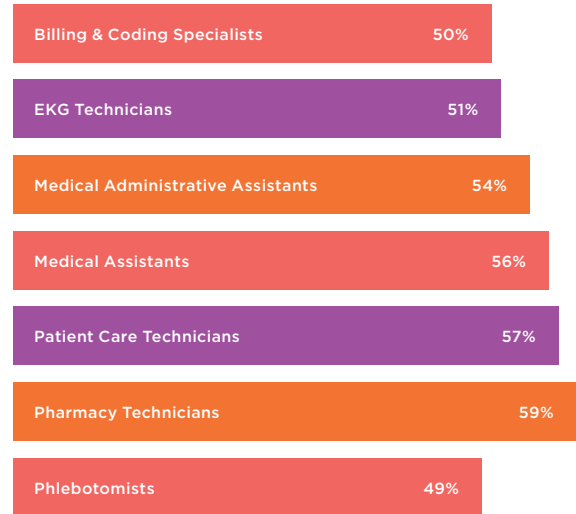
Source: Bureau of Labor Statistics. (2019). Occupational Outlook Handbook. Retrieved on February 12, 2020 from <https://www.bls.gov/ooh/>.



48%

**OF INSTITUTIONS
HAVE A VETERAN
HIRING INITIATIVE.**

Percent of institutions that have career growth or laddering programs for the following professions



Download the full 2020 Industry Outlook at nhanow.com/2020-industry-outlook

A

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Electronic
Health Record**

By Virginia Ferrari, MHA, CMAA, CEHRS

Continuing Education Objectives

- Describe how electronic health records (EHRs) grew in prominence.
- Identify the positive effect EHRs have had on healthcare.
- Define some of the common errors and challenges when using an EHR.
- List strategies and solutions to combat errors, avoid burnout, improve information sharing, and protect patient privacy.
- Describe what will shape the future of EHR.



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Electronic health records (EHRs) were touted as a pathway toward better, safer, and more inexpensive healthcare, but a look back shows improvements have been slow, often due to technology issues. While the complex array of EHR options still poses challenges, one route toward better utilization is improving how humans interact with EHRs.

EVOLUTION OF EHRs

In 2004, the U.S. government set a 10-year goal for all healthcare organizations to be using EHRs to help avoid medical errors, reduce costs, and improve patient care. Efforts to develop the EHR represented a long journey from early visions to today's reality, where EHRs have been adopted across the majority of hospitals and physicians practices throughout the U.S.

The EHR is not a simple computer application; rather, it represents a carefully constructed set of systems that are highly integrated and require a significant investment of time, money, process change, and human factor reengineering.

EFFECT OF EHRs ON HEALTHCARE

Depending on who you talk to, EHRs have had a positive effect, very little effect, or a negative effect on healthcare. Some patients and providers prefer communicating electronically. Some patients hate that their provider spends most of the visit looking at the computer, entering data, and spending too little time on personal interaction.

While noting that it is too soon to determine whether the significant time spent

by interns with electronic records is a misuse of time, Krisda Chiayachati, M.D., an assistant professor of Medicine in the Perelman School of Medicine of the University of Pennsylvania, believes that "indirect patient care has tradeoffs." She adds, "If it takes time away to the point that the patient feels like we aren't listening to their needs or we lose out on human interactions that provide physicians with a sense of purpose, that is a bad thing. But if it helps us diagnose diseases more efficiently, then maybe that's not that bad in the end."¹

The obvious goals of the EHR are to improve patient safety, improve quality care, and reduce healthcare costs. So, where is the industry at today when it comes to the EHR?

Positive effects

While EHRs are continually evolving and improving, most users agree that transitioning from paper to electronic health records has saved countless lives. Access to complete and accurate patient information has had a number of positive effects:

- Improved patient care
- Increased patient participation
- Improved care coordination
- Improved diagnostics and patient outcomes
- Practice efficiencies and cost savings²

Consider the effect of poor communication and illegible handwriting in paper records.

As connectivity and interoperability of EHRs improve, so will healthcare overall.

From a provider's perspective, Blake Busey, D.O., a family practice physician who works at Texas Tech University Health Sciences Center in El Paso, Texas, describes

some of the positive effects he has experienced using the EHR:

- Legible notes and clear documentation allow for decreased ambiguity and miscommunication.
- Electronic ePrescribing decreases the time spent writing prescriptions.
- Quick text, dictation software, and macros allow for better capture of information.
- De-identified data mining allows access to data for research and quality efforts.³

Challenges

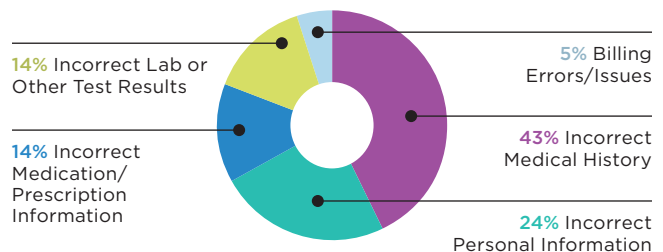
In 2019, the ECRI Institute, a non-profit organization focused on cost-effective patient care, reported that "diagnostic errors and improper management of test results" topped the list of EHR-related patient safety concerns. Part of the reason for concern is that "when diagnoses and test results are not properly communicated or followed up on, the potential exists to cause serious harm or death."⁴

Broken Records

One in five people surveyed this year by the Kaiser Family Foundation has found a mistake in their EHR. Of those, nearly half have incorrect medical histories.

21%
OF PATIENTS FOUND AN ERROR IN THEIR EHR.

Type of Error Noticed in the Medical Record



Source: Nicolas Rapp/Fortune

Providers are busy and they want EHRs that make their lives easier, not more complicated.⁵ Expanding on this point, Dr. Busey cites additional challenges providers experience.

QUALITY OF COMMUNICATION

Dictation can cause errors such as nonsensical information that is phonetically correct.

SOFTWARE FAILURES

Technology glitches can lead to downtime, which leads to paper charting.

INTEROPERABILITY ISSUES

Information cannot always be shared electronically across various providers, and health systems may not have the same EHR program. While there has been great progress in interoperability in the last decade, EHRs are not always interconnected, leading to faxed records and more paper.

POOR-QUALITY SYSTEMS

EHRs are expensive, so employers may choose more inexpensive or lower-quality products to save cost. Poor-quality EHRs are one of the leading reasons for physician burnout.

BILLING ISSUES, UPCODING, AND FRAUD

Use of quick texts will often lead to upcoding and potentially overbilling. Insurance providers require more documentation (and thus time) to justify payment and prior authorizations.³

COPY/PASTE

Copy/paste, also known as cloning, has been identified as a challenge by the Office of Inspector General (OIG). Providers will copy documentation from a previous encounter and paste the documentation into a current note without updating the record.¹⁸

Other concerns include privacy and HIPAA compliance. Personal, face-to-face communication between provider and patient can also be inhibited by how the provider uses the EHR.

Common errors using the EHR

When using the EHR, both human and technology factors affect the ability to accomplish the goals of increasing safety, improving quality of care, and reducing cost.

THE HUMAN FACTOR

Humans make mistakes. Data entry issues, such as selecting a wrong CPT or ICD-10 code, entering the wrong dosage and instructions on a medication, failure to communicate with patients in the patient portal, or neglecting to schedule a required patient follow-up, can be life-altering mishaps.

Lack of follow-up on orders/results

While EHRs have created systems that allow quick transfer of information, workflow issues can still create problems in terms of properly handling critical information. For example, when test results are received in the EHR, proper workflow is required to ensure that the results are addressed: the physician reviews the results, the patient receives notification, and any follow-up tests or visits are scheduled.

Failure to communicate with patients

Most EHRs have a patient portal feature allowing the patient to communicate with the provider, see results, and request refills. When patients make requests, prompt attention is required from staff members to process the information and facilitate any next steps. Many internal messaging applications require staff to enter a significant amount of detailed and accurate information, which then needs to be communicated to both the provider(s) and the patient. The EHR cannot solve for the human factor of communication to patients, but it can be designed to include prompts and safeguards.

THE TECHNOLOGY FACTOR

Despite the best of intentions, not all EHRs are easy for providers to use and for IT departments to maintain. The frequency of updates and how providers can navigate between screens can affect proper usage. Because of these and many other factors, there are a number of common mistakes hospitals and other healthcare workers make with EHRs.

Autocorrect and autofill functionality can cause errors. This technology is useful in other applications, but when it happens in an EHR, it can result in the wrong medication name or dosage, an incorrect diagnosis, or the addition of other medical information without anyone noticing an error. To combat these errors, start by turning off or modifying these features and reviewing workflow processes that may currently require unnecessary steps, forced clicks, or other inefficiencies.⁶ You can improve efficiency, reduce wasted time, and decrease burnout by continually optimizing the EHR based on regular reviews of workflows.

USER EXPERIENCE

For people who have worked in healthcare for more than 20 years, the EHR has transformed the daily experience—from how they interact with patients and each other, to how they obtain critical information to ensure patients receive the care they need at the right time. Perspectives on the benefits and challenges of working in the EHR vary based on roles and responsibilities.

Provider experience

Although intended as a timesaving tool that improves patient care and reduces errors and costs, the EHR requires about the same investment in time as paper records, and it's expensive. Constant updates and upgrades to the EHR require more training and contribute to provider burnout. The ECRI Institute notes that “keeping up with

the changes can be a challenge” and “time pressures are intense. Providers are caring for an increasing number of patients with complex medical conditions, drawing on limited resources.”⁷ Many providers have left the profession rather than take on the cost and task of learning new electronic programs.

Support staff experience

EHRs have transformed workflows for support staff. For example, organizations with EHR systems that interface with partnering labs can have results automatically loaded into the EHR. Many prescriptions no longer need to be called into the pharmacy; providers can send them to the pharmacy electronically while the patient is in the office. This has saved time for support staff like medical assistants.

A KLAS Research survey of 28,000 nurses found them to be more satisfied than providers with EHRs (62% report they are pleased), but there is still room for improvement, especially when it comes to integration with outside organizations.⁸

Patient experience

In 2019, the Kaiser Family Foundation reported that about 45% of patient respondents think the EHR has improved the quality of care and interactions with physicians. Roughly half of patients are concerned about unauthorized access to their records or errors that could affect their care; 21% report that they or a family member have discovered an error in their EHR.⁹

During interviews with patients, many expressed appreciation of features of the EHR, such as viewing results of tests, making in-person appointments, and arranging phone or video appointments. However, patients report dissatisfaction with EHR glitches, such as receiving electronic notifications for being late on blood work, being asked repetitive questions, and allergies or medication interactions not being updated. All patients interviewed

expressed frustration with the amount of time the provider spent on the computer instead of face-to-face interaction during the visit.¹⁰

STRATEGIES AND SOLUTIONS

A key to improving satisfaction with EHRs is to avoid getting trapped behind technology, as this is one of the patients' biggest complaints. From the provider perspective, Dr. Busey suggests the following:

- Purchase a high-quality EHR that works for the practice; it costs more to recruit, hire, and onboard new physicians than to buy appropriate software.
- Ensure that implementation and service are part of the contract agreement with the vendor.
- Implement a regular peer review to bring coders and support staff together for the purpose of quality review.³

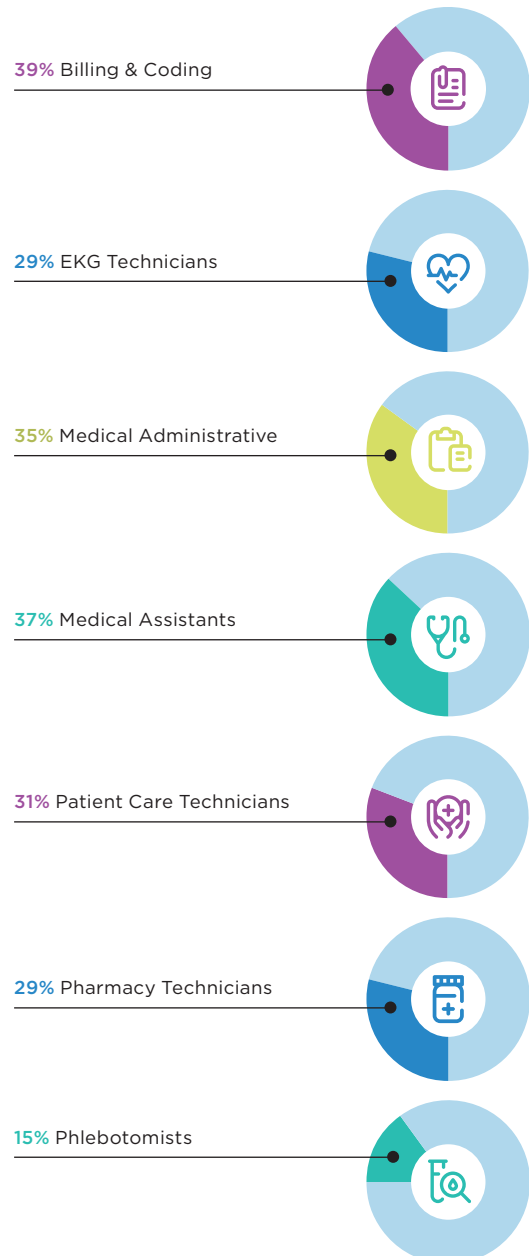
Improving the providers' user experience can increase satisfaction, quality, and accuracy. To prevent frustration with the EHR, ensure that your selected EHR integrates with external organizations. Make sure to purchase a certified EHR program to ensure that bonus incentives can be obtained by insurance carriers, such as Medicare. Also, conduct training and encourage certification for all members of the team who will interact with the EHR. As you develop your EHR training, consider how to build strong mechanics while ensuring that EHR users understand the underlying importance of the EHR, what critical healthcare processes it drives, and how their actions can impact patients, operations, and revenue reimbursement.

Combating human errors

To improve employee engagement, Kenneth Longbrake, MSN, RN, CPEN, suggests conducting quarterly employee engagement surveys to evaluate the EHR product and usage so the team can create action plans.¹¹

Job Preparedness

In the 2020 Industry Outlook Survey, NHA asked employers about job preparedness for newly certified allied health professionals. Below is the percent of employers that cited EHR skills were lacking in entry-level workers in the following professions.



Source: National Healthcareer Association (2020). 2020 Industry Outlook.

While many EHRs are similar, there are distinct differences. Organizations must provide initial and ongoing training for providers, support staff, and others. Some organizations develop training materials in-house and offer live training sessions. Management can identify superusers in these training sessions and give the superusers the opportunity to mentor and train others to properly use the EHR.

The EHR provides an audit trail, or a digital footprint, of every user and every keystroke, which means there's ample opportunity to identify errors that can be used for learning and training. Leadership and users should work together to identify errors, determine the root cause, and recommend corrective action. By treating errors as opportunities for

improvement, leadership creates a culture that prioritizes patient safety, one of the ECRI Institute key recommendations.⁷

Avoiding EHR burnout

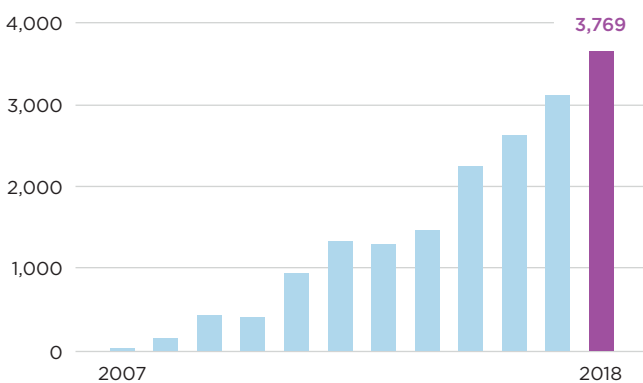
Burnout is common in healthcare. Ellen Deutsch, M.D., M.S., medical director of the ECRI Institute, describes burnout as "morally exhausting," resulting in decreased productivity. Dr. Deutsch suggests that health system administrations should gather feedback from providers and implement systemic changes.⁷ A contributing factor to burnout is the EHR and frustrations with documentation. According to a 2018 Merritt Hawkins survey, 78% of doctors suffered symptoms of burnout, and "other[s] [have] deemed it a 'public health crisis.'"¹²

Burnout attributed to EHR fatigue can be avoided by ensuring all EHR users learn the program, expectations, rules, and guidelines. Providers benefit from being trained early in the hiring process, using voice recognition software or a scribe, and having a manageable login and password process. Short, frequently scheduled training sessions should address updates that impact users. Lastly, an internal superuser can serve as a champion and resource for the whole team.

Danger Signs

Safety events owing to EHR and other health IT issues have been steadily rising. Even so, experts say cases are widely underreported.

Safety-Related Incidents Linked to EHR or Other IT



Source: Quantros

FUTURE OF EHRs

In 2007, the Institute for Healthcare Improvement (IHI) introduced the "Triple Aim":

- Improve individual patient experience
- Enhance population health
- Reduce healthcare costs

Because of the extent of burnout in the industry, the Triple Aim shifted to the Quadruple Aim, with the introduction of a fourth goal: improve staff satisfaction.¹⁵

Across healthcare, these goals continue to shape how organizations use EHRs. While

there is broad commitment in the healthcare industry to achieve these goals, some challenges faced now will continue into the future.

The future of the EHR will be to integrate healthcare reimbursement and quality improvement. For example, there are a variety of payment mechanisms (healthcare payment models), but the effectiveness varies widely. Fee-for-service, for example, appears to be moving “toward ‘value-based care,’ because it ties reimbursement to metric-driven outcomes, proven best practices, and patient satisfaction, thus aligning payment with value and quality.”¹⁴

Experts agree that emerging health information technology (HIT), integrated with the EHR, shows promise to improve efficiency. According to John Britton, “optimal reimbursement for healthcare must account for not only the quantity of care provided but also the complexity and quality of that care.”¹⁵

Britton elaborates: “Any mechanisms to do so will require the accumulation, synthesis, and interpretation of information to guide renumeration while simultaneously enhancing the efficiency and quality of care. The ability of a well-designed and utilized EHR is ideally suited to play a central role in accomplishing this goal.”

Regulatory effects and challenges

According to Cerner Corporation, one of the largest EHR vendors, “the sheer size and rapid-fire release of regulations are nearly impossible to keep up with.”¹⁶ Many vendors offer contracts, including regulatory consulting services, to lead users through the future of regulatory compliance (e.g., HIPAA compliance).

Improving information sharing

Interoperability is a challenge and an opportunity. The Office of the National

Coordinator for Health Information Technology (ONC) first published a 10-year vision for achieving infrastructure that was interoperable, followed by a roadmap. ONC then developed a framework for assessing progress on goals through 2024.¹⁷

ONC asserts that “nationwide interoperability has the potential to support a number of processes to help improve individuals’ experiences with the healthcare delivery system, reduce costs, increase efficiency of care, and improve health outcomes.”¹⁷

To achieve this success, there needs to be an increase in the number of EHR users across the healthcare industry that:

- Send, receive, find, and use electronic health information.
- Have electronic health information available from outside sources and make electronic health information available to outside sources.
- Use electronic health information to inform decision-making.

EHRs were once the latest innovation to the industry. Since then, they have evolved considerably, having a significant effect on institutions, providers, and patients. While the EHR has improved patient safety since the days of disjointed paper charts, faxed reports, and telephone messages, that improvement has brought with it a new set of challenges.

Looking to the future, it's clear that though the industry is armed with powerful technology, it requires a human solution to help solve these challenges while relentlessly pursuing an enhanced patient experience, better health outcomes, reduced costs, and improved staff satisfaction. <

A Portable Employment Solution *for* the Modern Military Family

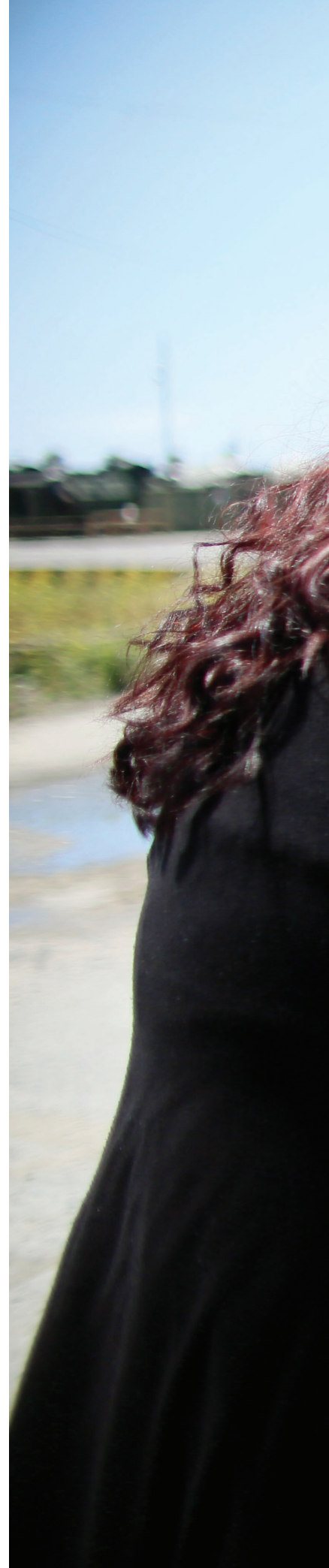
By Beth Conlin, senior program manager for Military Spouse Programs at Amazon

Meet the modern military family: a family that often has two working parents (one serving, one in a civilian job) with two incomes, living off-base among their civilian neighbors.

Military families are a diverse subset of our American culture, mainly living off base, within communities across the country. However, not many people know how their lives may be different. These families face a unique set of challenges as their loved ones serve our country.

You might imagine that moving every few years makes maintaining a career challenging, and you would be right. Of over 10,000 military families surveyed, 45% said that military spouse employment was a top issue for them, with “time away from family” being the only higher concern reported.¹ Their concern is cemented by the fact that nearly a quarter of military spouses are unemployed,² six times the national average of 3.5%.³

Military families make significant personal sacrifices for our country. They frequently move, often with children who must go through the stress of switching schools. They can be financially strained, and spouses often struggle to maintain and grow a successful career of their own.





Military spouses will go to great lengths to maintain a career, provide for their families, and continue their professional development. But with their career comes specific education criteria, and sometimes state license requirements. Transferring a professional license, as required for many healthcare professions, across state lines every three to five years is costly, time-consuming, and downright confusing. Although there are laws in place to make this easier, challenges remain in adoption by all states for every profession. Plus, the process of transferring a license is not the same from state to state.

For military spouses who are drawn to the healthcare field, achieving a national credential can help make obtaining employment during multiple moves a viable option.

MILITARY SPOUSES SERVING IN HEALTHCARE CAREERS

Military spouses, by their nature, are drawn to service professions. A significant portion

of military spouses are educators, healthcare providers, social workers and mental health providers.

Blue Star Families, the nation's largest grassroots nonprofit supporting military families, has a unique perspective on why credentialed healthcare careers (versus licensed) potentially provide military spouses with easier access to employment regardless of location.

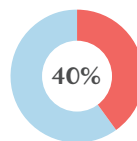
"Ten years or so ago, industry leaders collaborated to make veteran hiring a priority. We need that same focus today for military spouse unemployment so that we can reduce the greater than 20% unemployment rate," said Denise Hollywood, chief community and programs officer for Blue Star Families.

One of Blue Star Families' programs, Spouseforce, creates connections between military spouses and those invested in helping improve employment opportunities for them. These connections include training

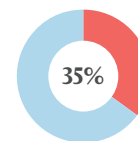
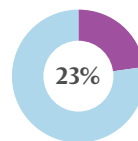
Top 5 Issues Facing Military Spouses

- 1 Military spouse employment
- 2 Amount of time away from family
- 3 Dependent children's education
- 4 Military family stability
- 5 Lack of military career control

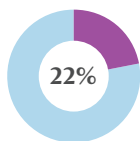
Military-Focused Hiring Initiatives May Not Speak to Military Spouses as They Do to Veterans



40% of military spouses and 23% of veterans felt employers in their local area were **not** eager to hire military-affiliated individuals.



35% of military spouses and 22% of veterans believed that employers in their local community would **not** accommodate the needs of military-affiliated employees.



Source: 2019 Military Family Lifestyle Survey: Comprehensive Results. (2020). Blue Star Families.

and education partners, employers, and more. Some of the members of Spouseforce provided perspective on how working in credentialed healthcare careers has enabled them to support their families.

PERSPECTIVES FROM SPOUSES

Myni, an Army spouse, has moved several times both across state lines and overseas. She is credentialed as a health information professional, a career that is recognized in every state. Myni’s credentials include RHIA, RHIT, CCS, CCS-P, CCA, among others. Because of the adoption of electronic health records, ICD-10 codes, and the demand for an information-based health system, she is excited that her profession is now in the spotlight and will continue to grow.

Another spouse working as a pharmacy technician reported that her profession allows her to work in the pharmacy field and around patients enough to feel connected to them, while also allowing her to grow professionally. Because pharmacy technicians are in demand across the U.S.,⁴ national certification makes it easy to find a new job when spouses must move.

EMPLOYMENT FOR MILITARY LIFE

According to participant survey responses from the Spouseforce program, over 30% of military spouses are willing to be retrained into career fields that are more compatible with military life.⁵ Not only would this allow military spouses to continue to use their professional skills, but retraining into a healthcare field can also help put a dent in the high rate of unemployment this group faces. Plus, this could provide much-needed relief to the current workforce shortages in the healthcare industry.

There are some programs and resources designed to help military spouses access career training in healthcare and many other industries. One of the most popular programs, My Career Advancement Account (MyCAA), provides up to \$4,000 of tuition assistance to eligible military spouses seeking education,

Spouse Employment

76% are employed in the labor force, 24% are unemployed and 38% are not in the labor force.



Underemployment Circumstances



77% of employed military spouses are underemployed.

- 42% Lower pay than education level**
- 42% Lower pay than work experience**
- 40% Overqualified for current position**
- 31% Lower pay than previous position**
- 25% Worked fewer hours than wanted**

Source: 2019 Military Family Lifestyle Survey: Comprehensive Results. (2020). Blue Star Families.

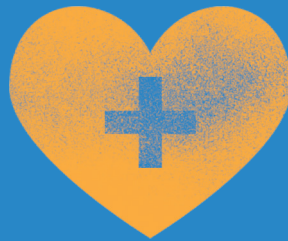
professional certifications or licenses so that they can work in a specific career field. The newly created Hiring Our Heroes Military Spouse Fellowship Program (MSFP) from the U.S. Chamber of Commerce connects its fellows to participating companies that provide professional training, networking, and hands-on experience in the civilian workforce.

Using programs like these, military spouses can gain the knowledge and skills needed for employment in the civilian workforce as well as earn nationally-recognized healthcare credentials for high-demand professions, including medical assisting, phlebotomy, pharmacy tech and more.

This combination of skill, knowledge, and a portable national credential paves a career pathway for military families, no matter where their journey takes them. <

How Apprenticeships Are Filling the Need for High-Skilled Healthcare Workers

Contributors: Mark Beaufait, Toya Moore, Betsy Conrad



The problem: There are not enough certified medical assistants in the labor market.

Every 11 seconds, an older adult is admitted to the emergency room for a fall. Approximately 80% of older adults have at least one chronic disease, and 77% have at least two. Additionally, one in four experiences some form of a mental health

condition, including depression and anxiety disorders, and dementia—a number expected to double by 2030.¹ As the United States' aging population grows, increasing healthcare needs are creating more pressure on healthcare providers and their teams.

Support staff, and in particular medical assistants (MAs), are often the first people patients interact with during a medical appointment. Currently, there is far more demand for these critical team members than what exists in the workforce.



3 Core Components of Healthcare Registered Apprenticeships

1

Compensated, on-the-job training with direct mentor supervision

2

Classroom instruction

3

Nationally accredited industry-recognized credentials

The Bureau of Labor Statistics estimates a 23% growth in demand for medical assistants through 2028.²

Unfortunately, throughout the country, there aren't enough skilled candidates to fill these roles. As demand increases, a persistent shortage of qualified healthcare workers will mean thousands of positions will remain unfilled if new solutions are not found.

IS THE APPRENTICESHIP MODEL A VIABLE SOLUTION TO THE HEALTHCARE HIRING DILEMMA?

The healthcare labor issue isn't due to a lack of interest in the profession. According to Mark Beaufait, director of apprenticeship at Healthcare Apprenticeship Consortium in Washington, there are barriers preventing interested individuals in obtaining the training and certification they need to start a medical assisting career.

"There are plenty of qualified individuals that are untrained. They are interested in living wage jobs but just don't have the training ... and they aren't necessarily able to get the training if they have to take a year or two off of work to go to school," Beaufait says.

As adult learners, many of these candidates have financial obligations—such as living expenses and dependents/children to support—that

prevent them from getting the education they need for the career they desire."³

Registered apprenticeships help eliminate these barriers by providing an opportunity for students to "earn while they learn." This model, historically used in manual labor fields like construction, combines paid on-the-job learning with classroom instruction and an industry-recognized credential (upon program completion) to help fill labor gaps with highly-qualified workers.

Healthcare organizations started utilizing registered apprenticeships in recent years to help address the demand challenges for skilled workers. In fact, the U.S. Department of Labor just began reporting on healthcare apprenticeships within the last five years. Since 2016, the number of healthcare apprentices has more than doubled, growing from 1,852 apprentices in the "healthcare and social assistance" industry to 4,507 in 2018.⁴

This growth can be attributed to the success of healthcare apprenticeship programs across the country and their effectiveness in solving the workforce gap. According to the U.S. Department of Labor, some benefits healthcare organizations

85% of healthcare employers surveyed said their apprentices were still working for them, and an impressive 92% of employers in all sectors said that apprenticeships lead to a more motivated and satisfied workforce.

adopting the registered apprenticeship model have experienced include:

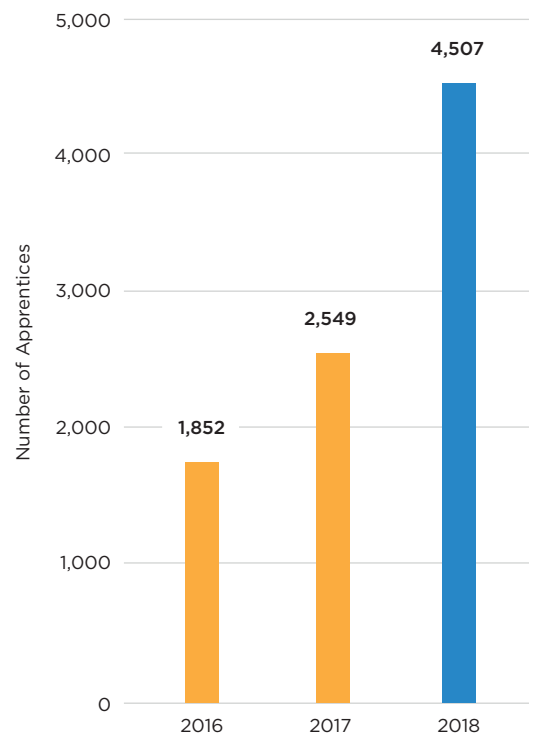
- Improved productivity, cost-effectiveness and patient care.
- Flexible, customized training options.
- Standardized training so all workers receive the same national, industry-endorsed training at all facilities.
- Diversified workforce.
- Reduced turnover and liability costs.
- Tax credits and employee tuition benefits in participating states.⁶

Because many healthcare organizations struggle with retention, reduced turnover is one of the most attractive benefits of apprenticeship programs. Numerous studies conclude that retention is higher among apprentices because they develop a sense of loyalty to their employer. It's especially true for healthcare, according to a

report for the Skills Funding Agency conducted in the UK.⁶ Their report found that staff retention levels were highest in the Public Services & Healthcare sector when compared to apprenticeship programs in other industries.⁶ In fact, 85% of healthcare employers surveyed said their apprentices were still working for them, and an impressive 92% of employers in all sectors said that apprenticeships lead to a more motivated and satisfied workforce.⁷

Using the registered apprenticeship model, healthcare organizations that were once struggling to find candidates are now gaining a highly-skilled, diverse workforce that is driven and loyal. Although it takes some investment upfront in both time (training) and money (depending on the sponsorship/grant/funding obtained), the improved productivity and tax credits gained from registered apprenticeships can result in a positive ROI for employers.

Registered Apprenticeship Growth in Healthcare and Social Assistance⁵



Case Study: How registered apprenticeships in the state of Washington are benefitting healthcare employers, educators, and aspiring medical assistants

Sponsor: Healthcare Apprenticeship Consortium of Washington

Training Agent: Kaiser Permanente

RSI (Related Supplemental Instruction) Provider: Seattle Central College

2,000 hours on-the-job training, plus direct and indirect supervision by medical assistant mentors

288 classroom hours

NHA CCMA certification upon completion

A consortium in the state of Washington developed a registered apprenticeship to help fill the need for qualified MAs in the region. The consortium consists of multiple unions, healthcare employers, and retained education provider, Seattle Central College. Employers were struggling to fill the demand for qualified MAs, and Seattle Central College was experiencing a high volume of dropouts from its medical assisting program. This combination prompted action, and the registered apprenticeship was born.

For the first implementation of the program, employers carefully selected 20 MA apprentices to participate (out of 181 applicants).⁹ After the first quarter, 19 were still participating—an excellent initial indicator that most will successfully finish.³ “Usually there is a drop of at least 40% from the first quarter to the

second quarter [in traditional MA programs] because a lot of times students come into the MA program not understanding how challenging the material actually is. To have 19 out of 20 moving on is great. We’re definitely going against the statistics moving forward,” says Toya Moore, medical assisting program director at Seattle Central College.⁷

Apprentices must perform 2,000 hours of on-the-job training, 288 classroom hours, and pass their national certification exam (CCMA) in order to complete the program.³ This will take approximately 14 months for most apprentices—12 months of classroom curriculum and approximately two additional months to finish the on-the-job training requirement.⁸

Compensation covers time spent with the employer and also the apprentices’ time spent in the classroom and lab (but not homework). To materially reduce barriers to

After one 3-month term

- 19 out of 20 apprentices are still participating.
- The evidence-based expectation is that retention of the apprentices’ mentors will be 2X greater than that of the average non-mentors.
- Average ROI is approximately \$1.52 per \$1.00 invested, including wages paid by the employer.
- Two additional cohorts are being planned for 2020.



completion, apprentices have access to resources from the consortium, a consortium hired support entity Connect for Success, Seattle Central College and employers like Kaiser Permanente. Support includes a navigator, gas cards, coaching/counseling, benefits and aid advisors.³

The program is funded by a variety of sources, including state-issued grants, local regional workforce development councils, philanthropic groups through the Healthcareer Advancement Program (HCAP) and the U.S. Department of Labor. This funding covers the cost of the apprentices' tuition, as well as equipment (computers, textbooks, etc.).³

Each apprentice is matched one-to-one with an employer mentor. Mentors are existing MAs who have shown interest in a leadership opportunity

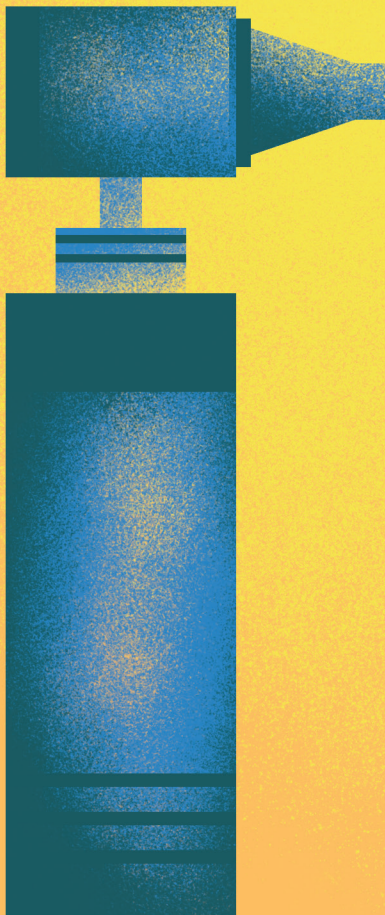
and receive extra compensation for their mentoring hours. "The mentors are able to see themselves as teachers and leaders and are recommitting to the standard work of the organization as they take on this new mentor role," says Betsy Conrad, the apprenticeship program manager at Kaiser Permanente. "It's been going really well."⁸

Three months in, the apprentices are running at roughly 40% productivity for the main competencies that an MA needs to have to practice, according to Healthcareer Fund's Mark Beaufait.³ Although a traditional MA hire who has already achieved certification may be operating at 90-100% productivity within several weeks, the loyalty of not only the apprentice but the apprentice's mentor helps contribute to a positive ROI, if a traditional MA hire is available.³



Some of our apprentices have never attended a school outside of high school. Some of them did not even graduate from high school, [but a GED is required]. So not only are they learning how to become an MA, they're learning how to be a student. They're learning how to be active in the workforce. So, there's a lot of challenges that we have with the apprenticeship... beyond simply the MA curriculum. There's a lot of growth in mentoring that goes along with it that I believe is a key part of the success.

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CASE STUDY CONTINUED »

Retention for mentors who are actively engaged in the process is double that of non-mentors in the same occupation.³ “So, they [employers] gain in retaining mentors and they gain new medical assistants in roughly equal numbers,” notes Beaufait.³

Having director supervision and a one-on-one mentor is not a requirement by the U.S. Department of Labor for a registered apprenticeship, but it is a healthcare quality-centered fundamental, and fits Washington’s registered apprenticeship requirements. The Washington Consortium believes this element of the program is one of the keys to their success.³

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curriculum. There's a lot of growth in mentoring that goes along with it that I believe is a key part of the success," says Moore.⁸

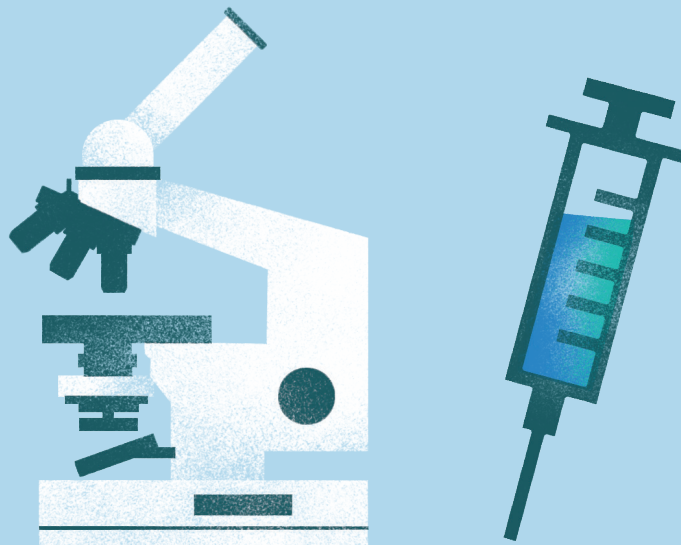
Due to the promising results, the Consortium is already working on two additional cohorts for next year. "The employers are enthusiastic," exclaims Beaufait. "We have sufficient interest now to spin up two more cohorts next year. There may be more beyond that."³

The healthcare space has always valued hands-on learning. The earn-as-you-learn model of registered apprenticeships is a growing trend that is helping healthcare employers develop highly-skilled healthcare workers, such as MAs. Registered apprenticeship brings the full academic

rigor of traditional programs to "earn while you learn." By combining on-the-job training with classroom curriculum and national certification, registered apprenticeships in healthcare are addressing the

critical shortage, improving retention, creating greater efficiencies, diversifying the workforce and ultimately improving healthcare organizations' bottom line. Scaling will take time, but the early results indicate investing in this model will have a long-term positive impact.

Beyond the statistics and ROI, these programs are making a life-changing difference for apprentices, who may not have access to an opportunity for a rewarding healthcare career otherwise. Moore says, "It empowers people to have a job that they're proud to go to and to feel part of their community."⁸ <



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