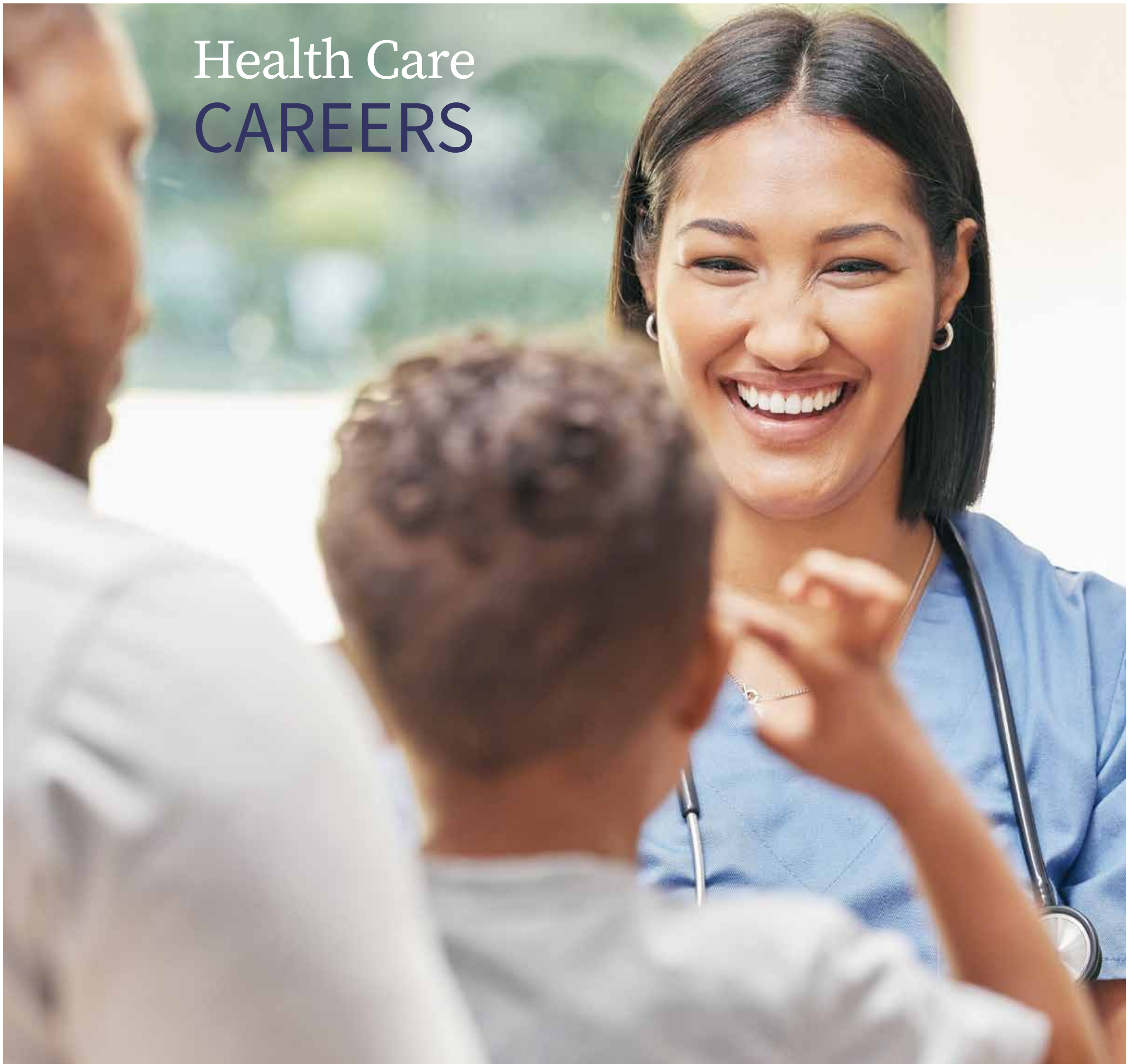


Health Care CAREERS



Helping People Communicate

Speech-language pathologists (SLPs) are dedicated to diagnosing, treating and preventing communication and swallowing disorders.

They work with people of all ages, from children with speech delays to adults recovering from strokes or brain injuries.

With their expertise, SLPs make a profound difference in improving quality of life by helping individuals regain their ability to communicate effectively and safely. Their patients may experience challenges such as stuttering, language delays, speech impediments or difficulty swallowing due to aging, illness or injury.

One common area SLPs focus on is helping children develop speech and language skills. This can include diagnosing speech disorders such as articulation problems, where a child may struggle to pronounce words correctly, or language disorders that affect their ability to understand or use words in a meaningful way. SLPs work closely with parents, teachers and other health care providers to create individualized treatment plans designed to help children communicate effectively.

For adults, SLPs support rehabilitation following brain injuries, strokes or neurological disorders such as Parkinson's disease. In these cases, patients



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may struggle with speech clarity, language comprehension or swallowing. SLPs help these patients recover their abilities by providing therapies that improve speech production, understanding and safe swallowing techniques.

SLPs work with individuals who have voice disorders, such as those who experience hoarseness, vocal strain or difficulty projecting their voice. These issues can arise from overuse, illness or conditions like vocal cord paralysis. Through therapy, SLPs help patients regain control over their voices and communicate

with confidence.

SKILLS AND TRAINING

To become a speech-language pathologist, individuals typically need a master's degree in speech-language pathology, along with a state license. The educational journey includes extensive coursework in anatomy, linguistics, communication disorders and clinical practice, where students gain hands-on experience treating patients under supervision. Some SLPs may pursue certifications or additional training to specialize in certain areas, such as pediatric speech disorders,

voice therapy or dysphagia (swallowing disorders).

INFLUENCE OF SPEECH-LANGUAGE PATHOLOGISTS

SLPs leave a lasting impression on their patients' lives. For children with speech delays, early intervention can help set the foundation for future academic and social success. For adults recovering from strokes or traumatic injuries, speech therapy can restore the ability to communicate and swallow safely, allowing them to regain independence and improve their quality of life.

SLPs also play an important role in preventing communication disorders. For example, they work in schools, health care settings and private practices to provide screenings, early assessments and educational support, helping to prevent problems before they become more severe.

By improving communication, SLPs help individuals connect with others, build relationships, succeed academically and participate fully in society. Their work is critical to helping people navigate life's challenges and enhancing their overall well-being.

Health Care and Technology

Biomedical engineering combines principles of engineering, biology and medicine to develop solutions that improve patient care.

Biomedical engineers design and create medical devices, equipment and systems that directly affect patient outcomes, from prosthetics and artificial organs to imaging machines and diagnostic tools. These professionals play a pivotal role in revolutionizing health care and helping individuals live longer, healthier lives.



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ROLE OF BIOMEDICAL ENGINEERS

Biomedical engineers work at the intersection of engineering and medicine, applying their knowledge of mechanical, electrical and chemical engineering to the design and improvement of medical devices and technologies. Their work develops the tools that help doctors diagnose, treat and manage medical conditions.

One of the most well-known areas of biomedical engineering is the development of prosthetics and orthotics. Biomedical engineers design artificial limbs, joint replacements and braces that restore mobility and improve quality of life for people who have lost limbs or suffered from injuries

or congenital conditions. By incorporating advancements in materials science, robotics and biomechanics, these professionals create more functional, comfortable and customizable prosthetic devices.

Another key area is medical imaging, which involves developing technologies such as MRI machines, CT scanners and ultrasound devices. Biomedical engineers work to enhance the clarity, accuracy and efficiency of these machines, enabling doctors to diagnose and monitor a wide range of medical conditions with greater precision. They contribute to the development of patient monitoring systems,

which track vital signs in real-time, and diagnostic equipment, which allows doctors to detect diseases early and improve patient outcomes.

SKILLS AND TRAINING

Becoming a biomedical engineer requires a strong foundation in engineering principles as well as a deep understanding of biology and human physiology. Typically, this career path starts with a bachelor's degree in biomedical engineering or a related field. Many professionals pursue advanced degrees, such as a master's or Ph.D., to specialize in a particular area, like biomaterials, bioinformatics or medical imaging.

In addition to technical knowledge, biomedical engineers must possess problem-solving skills, creativity and a strong attention to detail. They work closely with doctors, nurses and other medical professionals to understand the challenges patients face and find innovative solutions that meet their needs. Communication skills are crucial, as biomedical engineers must explain complex technical concepts to non-engineers and work as part of a multidisciplinary team.

EFFECT ON HEALTH CARE

Biomedical engineers make a significant effect on patient care by developing technolo-

gies that save lives and improve outcomes. From the development of life-saving devices like pacemakers and insulin pumps to the creation of more effective imaging tools that aid in early detection of diseases like cancer, biomedical engineers are constantly advancing the frontier of health care.

By combining technical expertise with a passion for improving lives, biomedical engineers contribute to groundbreaking innovations in medicine. These professionals treat existing health conditions and play a key role in preventing illness and enhancing the overall health and well-being of individuals across the globe.

Compassionate Care at Home

Home health aides help individuals live independently and comfortably in their own homes.

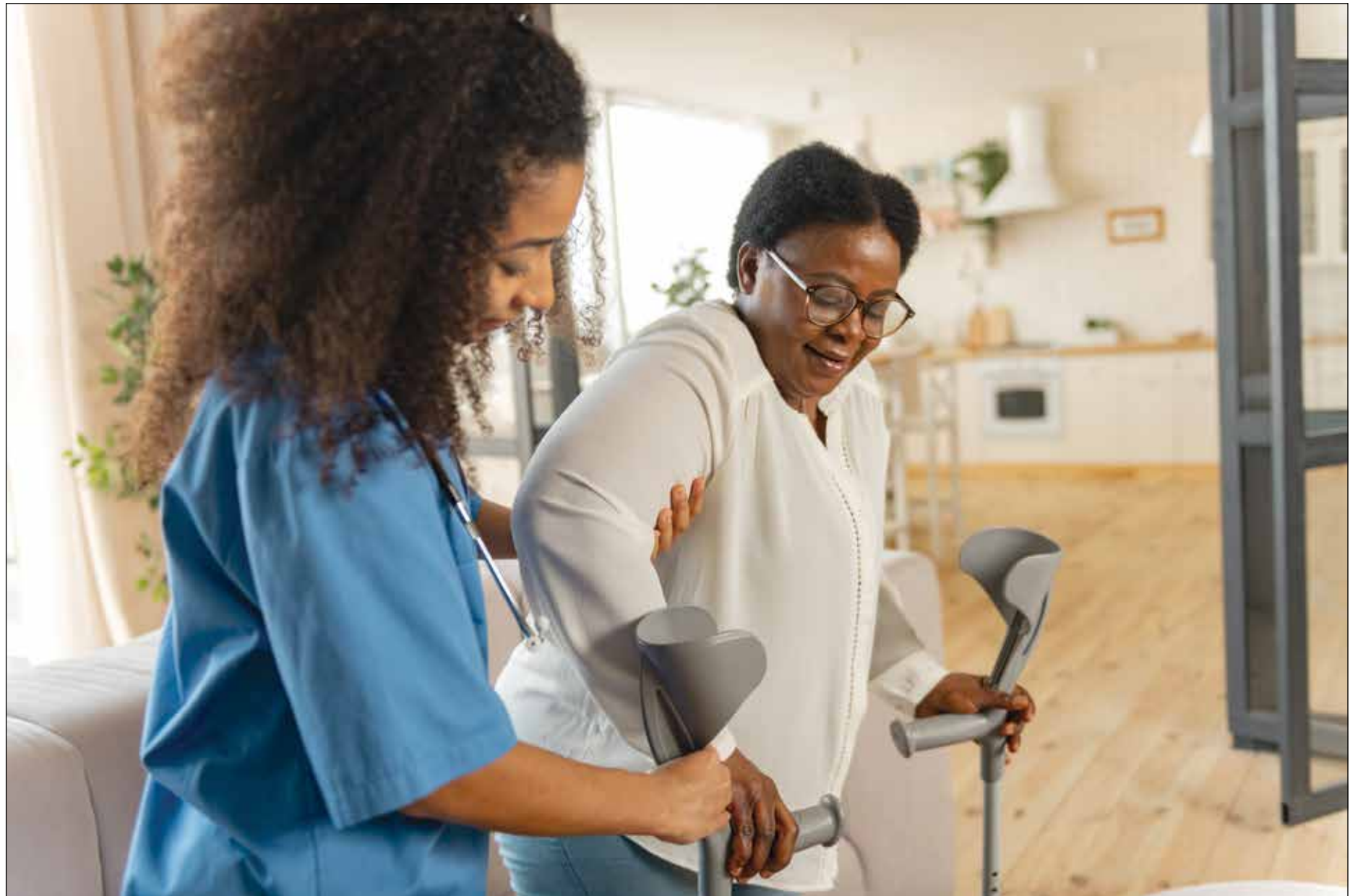
These compassionate professionals provide support to people who are elderly, have disabilities, or are recovering from illness or surgery.

Home health aides offer services designed to support daily living activities for those who need assistance but prefer to stay at home. Responsibilities can include helping patients with personal care tasks such as bathing, dressing and grooming, as well as assisting with mobility, meal preparation and light housekeeping. Additionally, home health aides may help with medication reminders and provide basic health monitoring, such as checking blood pressure, temperature and pulse.

Home health aides offer companionship and emotional support. Many clients who require home health care are isolated and may face challenges like chronic illness or mobility issues. The companionship home health aides provide alleviates feelings of loneliness and enhances mental well-being, offering patients more than just physical care.

GROWING NEED FOR HOME HEALTH AIDES

As the U.S. population ages, the need for home health aides is growing. According to the



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Bureau of Labor Statistics, the employment of home health aides is projected to grow by 25% from 2021 to 2031, much faster than the average for all occupations. This increase is largely driven by the aging Baby Boomer generation, many of whom prefer to age in place rather than move to assisted living or nursing homes.

Home health aides also serve a critical role for individuals recovering from surgery,

managing chronic conditions or those with disabilities. Their work allows people to receive care in a more familiar and comfortable environment, promoting better health outcomes and greater satisfaction.

BECOMING A HOME HEALTH AIDE

To become a home health aide, a high school diploma or equivalent is typically required, though some employers may offer on-the-job training.

Many home health aides choose to pursue certification programs to enhance their skills and qualifications. While certification is not always mandatory, it can increase job prospects and earning potential. Certified home health aides (CHHAs) complete a state-approved training program, which includes classroom instruction and supervised practical experience.

Home health aides offer

dignity and respect to clients in their most vulnerable moments. This career is not only fulfilling but offers flexibility, as many home health aides are able to choose from full-time, part-time or live-in positions.

For those who are compassionate, patient, and dedicated to improving the lives of others, being a home health aide is a meaningful and in-demand career that makes a real difference.



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Health Care Billing Pros

Medical coders and billers play an often overlooked role in ensuring health care providers are reimbursed for their services and that patients understand their medical bills.

These professionals work behind the scenes, translating medical procedures and diagnoses into standardized codes used for billing, insurance claims and patient records.

Medical coders translate medical records and diagnoses into a universal coding system. This system allows health care providers to bill insurance companies and government programs like Medicare and Medicaid accurately. The codes correspond to specific diagnoses, treatments and medical procedures documented in the patient's record.

For example, when a patient visits a doctor, the medical professional will document the diagnosis and any treatments or procedures performed. The medical coder assigns the appropriate code to each element of care. These codes are based on systems such as the International Classification of

Diseases (ICD), Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS).

ROLE OF A MEDICAL BILLER

Once the coder assigns the medical codes, medical billers take over to submit claims to insurance companies, government programs or patients directly. Billers ensure that claims are submitted accurately and on time, following up on unpaid claims and making adjustments as needed.

Medical billers help patients understand their bills, answering questions about insurance coverage, deductibles, co-pays and what their insurance plan will pay. They may also be involved in negotiating payments or setting up payment plans for patients who cannot pay their bills in full upfront.

SKILLS AND TRAINING

Becoming a medical coder or biller requires specialized training and education. While a high school diploma is the minimum requirement, most individuals in this field complete formal training programs, which can last from several months to two years. These programs cover medical terminology, coding systems, health care laws and regulations and insurance procedures. Many medical coders and billers pursue certification to enhance their credentials and career prospects.

The two main certifications in the field are the Certified Professional Coder (CPC) designation, offered by the American Academy of Professional Coders (AAPC), and the Certified Coding Specialist (CCS) credential, offered by the American Health Information Management Association (AHIMA). Certification can help individuals stand out in a competitive job market.

Medical coders and billers must also have strong attention to detail, excellent organizational skills and knowledge of health care laws and insurance

protocols. Since they often work with sensitive patient information, confidentiality and ethical practices are essential in their daily responsibilities.

GROWING FIELD WITH OPPORTUNITIES

As the health care industry continues to expand, the demand for skilled medical coders and billers is expected to rise. The U.S. Bureau of Labor Statistics predicts a 9% growth rate in employment for medical records and health information technicians, including coders and billers, through 2031. This growth is driven by the increasing complexity of healthcare services and the need for accurate documentation and billing.

Becoming a medical coder or biller offers a stable and rewarding career with opportunities for advancement. It's a job that requires precision, organization and an understanding of health care systems — but it's also a career that provides an essential service, ensuring that patients receive the care they need and health care providers are compensated fairly.

Holistic Care for Families

For centuries, midwives have provided support through pregnancy, childbirth and beyond.

Today, midwifery remains a vital health care career, blending medical expertise with a compassionate, patient-centered approach to childbirth.

Midwives are highly trained professionals specializing in pregnancy, labor, delivery and postpartum care. Depending on their certification and location, midwives work in hospitals, birthing centers, clinics or even in home birth settings. Certified nurse-midwives (CNMs), for instance, are registered nurses with advanced training in midwifery, enabling them to provide a full spectrum of care, from prenatal visits to gynecological exams.

A midwife's responsibilities extend beyond delivering babies. They provide comprehensive prenatal care, educate patients about nutrition and exercise, monitor the baby's development and prepare expectant parents for labor. During childbirth, midwives offer both medical expertise and emotional support, often focusing on minimizing medical interventions when appropriate and prioritizing the natural birthing process.

After delivery, midwives ensure both mother and baby are thriving, addressing



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postpartum recovery and breastfeeding. Their work fosters a holistic approach, emphasizing not only physical health but also emotional well-being and empowerment for their patients.

WHY CHOOSE MIDWIFERY?

Many are drawn to midwifery because of its unique blend of science and human

connection. For those passionate about maternal health, advocacy and patient education, midwifery offers a deeply rewarding path. Midwives often develop strong, trusting relationships with their patients, playing a pivotal role in one of life's most transformative moments.

Midwives also contribute to reducing health disparities. Studies show that

midwifery-led care can improve outcomes, particularly for underserved populations. By focusing on individualized care and informed decision-making, midwives help address maternal mortality and ensure better access to quality care.

BECOMING A MIDWIFE

The journey to midwifery requires dedication.

Prospective midwives typically need a bachelor's degree, followed by specialized midwifery education. Certification varies, but in the United States, CNMs complete a graduate program accredited by the Accreditation Commission for Midwifery Education (ACME) and pass a national certification exam.

Other midwifery roles, such as certified midwives (CMs) or certified professional midwives (CPMs), have different educational pathways and may focus on out-of-hospital births.

A GROWING CAREER

The demand for midwives is on the rise, with more families seeking personalized, patient-centered care. Midwives embody the best of health care — combining clinical skill, emotional support and a deep respect for life's beginnings.

According to the American College of Nurse-Midwives, just over 10% of all births were attended by a certified nurse-midwife or certified midwife in 2019. That grew by 2% by 2021. Close to half of those professionals say that ongoing reproductive health care and primary care are part of their duties, which include annual exams, nutrition counseling, writing prescriptions, parenting education and reproductive health visits.

For those looking to make a profound difference, midwifery offers both purpose and fulfillment.

Caring for the Next Generation

Pediatric health specialists ensure children grow up healthy and strong.

From infancy through adolescence, these professionals are trained to address the unique medical needs of young patients, focusing on treating illnesses and guiding their development and well-being.

Pediatric health specialists encompass a broad range of roles within the medical field, including pediatricians, pediatric nurses, pediatric surgeons and pediatric specialists in areas such as cardiology, endocrinology and neurology. These professionals are trained to work with children, understanding the nuances of childhood development and the distinct health concerns that arise at different ages.

Pediatricians are often the first point of contact for parents seeking medical care for their children. They monitor a child's growth, administer vaccinations and diagnose and treat common childhood illnesses. Pediatricians provide preventive care, offering guidance on nutrition, exercise and mental health to ensure a child's overall well-being.

Specialized pediatricians, such as pediatric cardiologists or pediatric endocrinologists, focus on specific areas of child health. Pediatric cardiologists address heart conditions, while pediatric endocrinologists treat hormone-related



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disorders. These specialists undergo additional years of training to develop the expertise needed to care for children with complex or chronic conditions.

Other pediatric health specialists, like pediatric nurses or child life specialists, support children during hospital

stays and medical treatments. Pediatric nurses provide direct care, administer medications and assist in diagnostic tests. Child life specialists help children cope with the emotional challenges of illness or injury, using play therapy, education and emotional support to ease their anxieties.

SKILLS AND TRAINING

Becoming a pediatric health specialist requires years of education and specialized training. Pediatricians typically start with a medical degree, followed by a residency in pediatrics, which lasts between three to four years. After completing their residency,

pediatricians can pursue fellowship programs if they want to specialize further in areas such as pediatric cardiology or pediatric oncology.

Specialized pediatric health professionals, such as pediatric surgeons or pediatric anesthesiologists, undergo additional training to gain expertise in their specific fields. Pediatric nurses typically complete nursing programs and earn a registered nurse (RN) license before specializing in pediatric care. Other roles, like child life specialists, may require a degree in child development, psychology or a related field.

A GROWING DEMAND

The demand for pediatric health specialists continues to rise as awareness about child health grows, and more families seek specialized care for their children. According to the U.S. Bureau of Labor Statistics, the health care industry, including pediatric roles, is expected to grow significantly in the coming years. This growth is driven by an increasing population of children and the complexity of health care needs across the pediatric spectrum.

For individuals interested in working with children and having a direct effect on their health and well-being, a career as a pediatric health specialist offers fulfillment and opportunity. Whether in a clinical setting, a hospital or a specialized practice, pediatric health specialists are making a lasting difference in the lives of young patients and their families.

Restoring Mobility, Quality of Life

Prosthetists and orthotists specialize in designing, fitting and maintaining devices that help individuals with physical disabilities lead more independent and fulfilling lives.

These specialists help restore mobility and improve the quality of life for patients who have lost limbs or require assistance with body alignment or movement. Their work combines a deep understanding of anatomy, engineering and biomechanics to craft devices tailored to each patient's unique needs.

THE ROLES

Prosthetists focus on creating artificial limbs, or prostheses, for individuals who have lost a limb due to injury, disease or congenital conditions. The process involves designing and fitting prosthetic devices that restore functionality, mobility and appearance. Prosthetists work closely with patients to assess their specific needs and lifestyle, ensuring that the prosthesis will be both comfortable and effective.

One of the key challenges in prosthetics is ensuring the device provides a natural range of motion and is well-aligned with the patient's body. Prosthetists consider



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factors such as the patient's remaining limb strength, overall health and daily activities when selecting materials and designing the device. Advances in technology, such as myoelectric prostheses that respond to muscle signals, have allowed for more sophisticated, functional devices

that improve both mobility and control.

Orthotists, on the other hand, focus on creating orthotic devices, which are used to support, align or correct physical deformities and improve the function of joints and limbs. These devices can include braces, splints and

supports for conditions such as scoliosis, cerebral palsy and joint instability. Orthotists may also work with athletes or individuals recovering from surgery to prevent injuries or aid in rehabilitation.

Orthotic devices are designed to fit each patient's body and provide the

necessary support without restricting movement. For example, an orthotist might design a knee brace for someone recovering from an injury or surgery, or a back brace for someone with scoliosis. These devices help prevent further injury, alleviate pain and promote healing by providing stability and comfort.

TRAINING AND EDUCATION

To become a prosthetist or orthotist, professionals must complete specialized education and training. Typically, this includes a master's degree in prosthetics and orthotics, which combines coursework in subjects like biomechanics, anatomy, materials science and patient care with hands-on clinical experience. After completing their education, prosthetists and orthotists must pass national certification exams.

In addition to technical expertise, these professionals must possess excellent communication skills, as they work closely with patients to understand their needs and offer guidance throughout the treatment process. They must stay current on advancements in medical technology to provide the best possible care and solutions.

For those looking for a rewarding health care career that blends engineering, patient care and the opportunity to make a real difference, becoming a prosthetist or orthotist offers both challenges and incredible rewards.