

Attracting and Retaining Medical Staff

How to transform care delivery by enhancing job satisfaction
and developing the skills of healthcare professionals

Executive overview

No other industry worldwide will have a greater shortage of skilled employees in the future than the healthcare industry. Analysts have projected that it will be the fastest-growing segment of the economy over the next ten years.¹ Scientific studies predict that global demand for skilled healthcare workers will be 80 million in 2030. However, the supply of healthcare professionals is expected to reach just 65 million, leaving a shortage of 15 million worldwide.² In the U.S. alone, which is the largest healthcare market in the world, employment in healthcare occupations is projected to grow 18 percent from 2016 to 2026, adding about 2.4 million new jobs.³

15 million unfilled positions for healthcare workers by 2030

The impending shortage of personnel in the healthcare sector affects industrialized countries as well as emerging markets. In Western nations, the main cause is demographic change: An aging population with concomitant age-related diseases is creating an increasing demand for optimal, comprehensive, and cost-effective medical care.³ At the same time, more and more medical staff are reaching retirement age without sufficient numbers of next-generation staff to replace them. Meanwhile, developing countries face the challenge of providing care that is on par with that being delivered in industrialized countries. The shortage of specialists affects all medical professions – from highly specialized doctors through to nursing staff.

In the long run, most healthcare providers have two overarching goals: Providing the best possible medical care at the lowest possible cost, assuring their competitiveness and future viability. Finding, hiring, and retaining suitable personnel is of pivotal importance in this regard. Having dissatisfied, overworked, or underqualified personnel not only leads to a high turnover rate, but also, as a consequence, to above-average recruitment costs. Furthermore, it causes a vicious circle of inadequate quality of care and poor economic performance (see Fig. 1).

Fig. 1: The importance of retention



Besides adequate remuneration, job satisfaction and a company's reputation play important roles in recruiting and retaining good personnel. For employees to be satisfied, they must be empowered to do their job in the best possible way, i.e., in a way that also fulfills them personally. To make this a reality, they need good medical equipment, a manageable workload, and above all the opportunity to pursue their professional and personal development so that they have better career prospects. Training programs, courses, and further education – in the form of classroom lectures, team training, or modern e-learning programs – can make valuable contributions to increasing the employer's appeal and the employee's job satisfaction. The market for these schemes is booming worldwide. Companies are spending more on their employees' training and education by the year. The healthcare sector accounts for a large proportion of this expenditure across all industries.

Introduction

Every healthcare provider has the goal of providing the best possible medical care for patients at a reasonable cost. In this context, individual clinical capabilities and outstanding medical staff are of central importance.

In an increasingly global labor market, finding, hiring, and retaining qualified personnel over the years is among the most important and demanding tasks facing the healthcare industry today. This challenge will become even greater in the decades ahead due to the growing shortage of skilled workers worldwide.

Generally speaking, healthcare providers can approach the workforce problem from two different directions: With concepts to increase labor efficiency, or by improving their attractiveness as employers. The two approaches are not mutually exclusive. This white paper focuses primarily on the global challenge for healthcare providers to promote themselves as an attractive employer so that they can more easily find, motivate, and retain suitable employees – in particular by offering suitable training and education. Successful personnel management and development will determine the future of healthcare companies. If a company fails to manage and develop its employees well, it will risk its ability to compete in an increasingly competitive environment.

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1. Reasons to read: The importance of attracting and retaining staff

Quality of care has the biggest impact on a healthcare provider's reputation, and subsequently on its financial performance. Aside from having an enviable reputation and cutting-edge technology, employing qualified and motivated personnel also plays a decisive role in accurate diagnoses and successful forms of treatment. Medical practices and hospitals that can find and retain employees more easily have an advantage. Employer attractiveness is one of the most important ways that healthcare providers can remain competitive. However, in a survey conducted by Deloitte, 59 percent of respondents rate their healthcare organizations as not effective or only somewhat effective at empowering people to manage their own careers.⁴

“Leaders of companies that go from good to great start not with ‘where’ but with ‘who’. They start by getting the right people on the bus, the wrong people off the bus, and the right people in the right seats.”

Jim Collins, U.S. management coach⁵

In times of serious shortages of skilled workers, recruiting qualified employees becomes a major challenge. The majority (53 percent) of U.S. hiring managers have reported difficulties in finding and retaining millennial talent – more than three times the number who say it is “easy.”⁶

In particular for comparatively unattractive employers, the shortage is making it increasingly expensive to recruit personnel. For example, a few years ago recruiting a nurse cost an average of around \$1,500. The cost has since more than tripled to \$5,000.⁷ Recruiting a physician can easily cost as much as 35 percent of a year's salary.⁸ Replacing an executive can run to \$150,000.¹ In the healthcare industry, employee turnover is especially costly: As the rate of turnover increases, the quality of patient care significantly declines.⁹

Investments in personnel are likely to rise further due to the increasing shortage of skilled workers. In U.S., hospitals, the average annual revenue growth of 5.7 percent between 2012 and 2016 exceeded the 5.5 – percent growth in salaries and benefits expenses. However, that did not include recruitment spending, which is higher in growing economies because nurses are more willing to change jobs, and providers must up the ante with better rates, bonuses, and benefits to keep them on staff.⁷

This is also true for the willingness to change jobs among younger skilled workers in general: Nearly 60 percent of millennials expect to stay in their jobs for less than three years. This is a much shorter length of time than older generations, who stay an average of five to seven years.⁶ According to the Human Resource Management Association, 20.4 percent of healthcare employees quit their jobs in the U.S. each year. This figure is well above the 12 to 15 percent turnover rate seen in most other industries.¹

A high degree of employer attractiveness is therefore also essential for retaining the arduously recruited personnel long-term: High fluctuation impacts the workplace atmosphere, endangers well-coordinated and productive processes, and drives up recruiting costs. By contrast, the higher an individual's job satisfaction, the lower their willingness to switch jobs.

Replacing a new hire costs 13,000 USD on average.¹

2. Evidence: The worldwide shortfall in medical staff

Successful personnel management is already of tremendous strategic importance given the global shortage of skilled workers. According to a World Health Organization (WHO) report, the world needs 7.2 million more healthcare professionals to ensure adequate global healthcare.¹⁰ Demand and hence competition for skilled workers in the healthcare sector will continue to intensify. Worldwide, the importance of workforce issues has gained momentum: 77 percent of healthcare CEOs cite the availability of key skills as a top concern for their company (see Table 1).¹¹

Table 1: Top 5 threats to growth prospects according to healthcare CEOs worldwide

Threat	Mentions in %*
Over-regulation	84
Uncertain economic growth	82
Geopolitical uncertainty	80
Social instability	79
Availability of key skills	77

* Multiple answers possible

Source: PwC, 20th Annual Global CEO Survey, 2017.

The healthcare industry will be the fastest-growing segment of the economy over the next ten years and will account for at least three of every ten new jobs created.¹ Global demand for healthcare professionals is projected to reach 80 million in 2030 – 15 million more than are expected to be available at that time.²

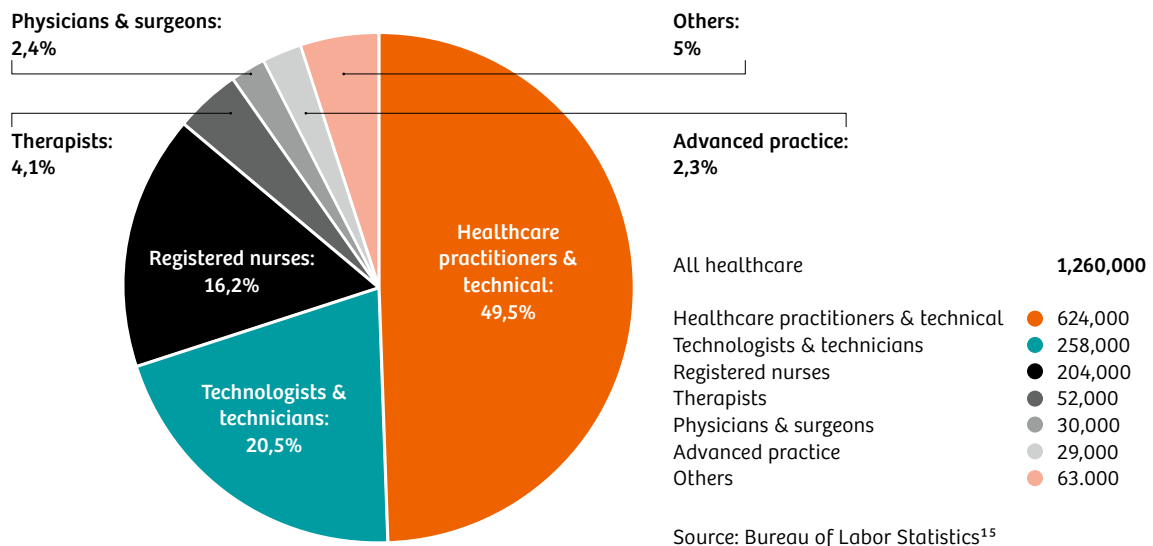
Take the U.S. as an example: In the world’s largest healthcare market, employment in healthcare occupations is projected to grow 18 percent between 2016 and 2026, much faster than the average for all occupations. About 2.4 million new jobs will be added.³ Experts estimate that there will be a shortfall of nearly 105,000 physicians by 2030, including a shortage of up to 43,100 for primary care physicians, and up to 61,800 for non-primary care specialists.²

The increasing scarcity of personnel is already becoming apparent among registered nurses (RN). According to a recent study, nearly all Chief Nursing Officers (CNO) in the U.S. acknowledged that their healthcare organizations are currently experiencing some level of nurse shortage, with 72 percent describing the shortages as moderate, significant, or severe. In addition, most felt that the shortages would get worse over the next five years. Specifically, 28 percent of CNOs predicted a worsening in one year, 43 percent in two years, and 61 percent in five years.¹²

On average, 7,575 new jobs were created per month in U.S. hospitals between April 2017 and March 2018.¹³

Already, many vacancies can no longer be filled. While job openings have traditionally outpaced job hires in healthcare, the Bureau of Labor Statistics says that the gap between openings and hires has been widening rapidly since 2014. Figure 2 shows the average annual demand of projected job openings for the period between 2016 and 2026 according to the Bureau of Labor Statistics.¹⁵ Job openings have been rising while job hires have remained relatively static. One reason for this was the introduction of the Affordable Care Act in 2014. However, various other factors are also widening the gap: An aging population, the retirement of baby-boomer healthcare practitioners, and the flourishing economy.¹⁴

Fig. 2: Average annual job openings in the U.S., 2016-2026

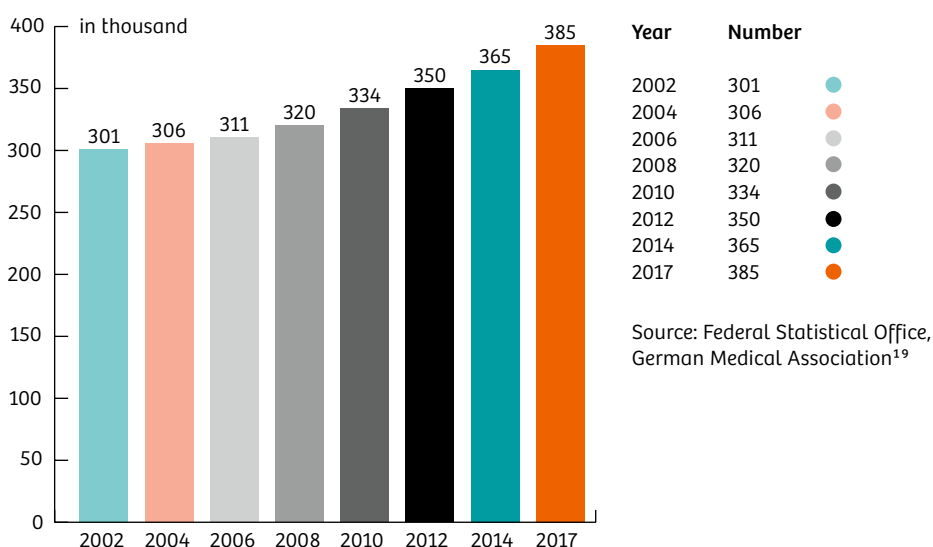


The situation is hardly any better in many European countries. Take Britain, for example: In 2015, experts were already predicting that demand for nurses and nursing staff would increase by around a quarter by 2020.¹⁶ The chronic staff crisis has been further exacerbated by Brexit: Between 2017 and 2018, almost 4,000 nurses and midwives from the European Economic Area left the U.K. During the same period, only 800 nurses from other countries joined the Nursing and Midwifery Council, which equates to barely 13 percent of the 6,382 nurses who came to the U.K. from abroad the year before.¹⁷

The situation is also difficult in Germany, where in 2017, healthcare and nursing staff ranked second among the most sought-after professionals. The health and nursing sector accounted for six in ten vacancies in service occupations.¹⁸

The statistics on the number of employed doctors in Germany are only seemingly better. Although their number increased by more than a quarter between 2002 and 2017,¹⁹ Professor Frank Ulrich Montgomery, President of the German Medical Association, warns that “to focus only on headcount is to oversimplify the matter. The reality is more complex. We need more physician hours. If we don’t finally start training more doctors, this shortage will worsen.”²⁰ Two thirds of all doctors at German hospitals work more than 49 hours per week. This significantly exceeds the average weekly working hours of German employees²⁰ – and often leads to severe job dissatisfaction among doctors.

Fig. 3: Working doctors in Germany (in thousands)



“To focus only on headcount is to oversimplify the matter. We need more physician hours.”

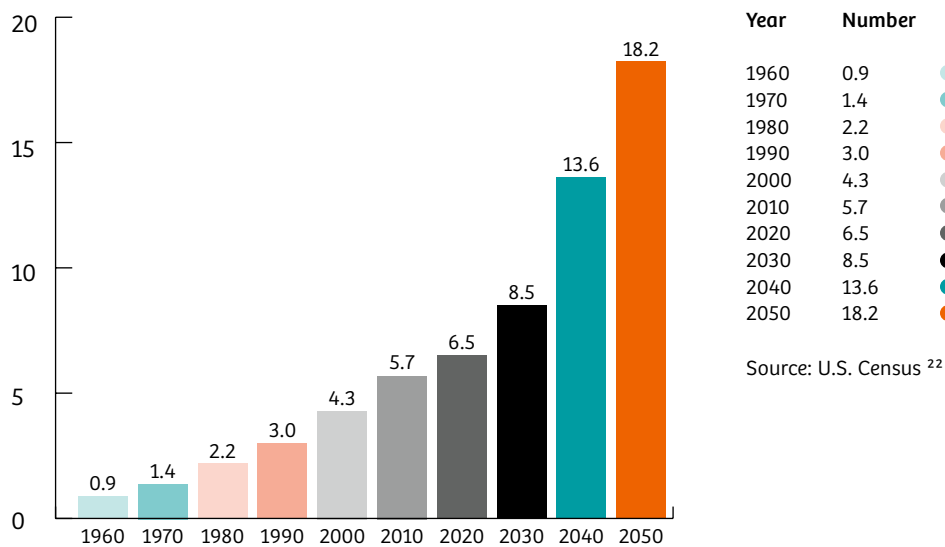
Professor Frank Ulrich Montgomery, President of the German Medical Association²⁰

One major reason for the shortage of doctors and nurses is demographic change, as the need for treatment increases with rising life expectancy. Germany’s Federal Statistical Office forecasts a 42-percent increase in the number of people over 67 in Germany by the year 2040.²⁰ According to a 2016 hospital restructuring survey by the management consultants at Roland Berger, hospitals see specialist departments with a high proportion of older patients as key priorities for growth and investment.²¹ At the same time, the number of health professionals who are reaching retirement age and need to be replaced is increasing.

The situation in the U.S. is similar: The number of people aged over 65 will grow from 43 million in 2012 to 84 million in 2050, rising from 14 percent of the population to 21 percent, while the nation’s overall population also grows. Older people need a higher number of more complex healthcare services; this translates to an increase in demand for healthcare workers.

People over the age of 65 experience three times as many hospital days compared to the general population, while people over 75 experience four times as many. More than two thirds of older Americans have multiple chronic conditions requiring complex care delivery. In addition, older people are more likely to use skilled nursing and assisted living services compared to the general population, which will further increase demand for healthcare workers.⁴ If we now go one step further and look at people over 85 years of age, the trend looks similar. By 2050, for example, over 18 million people in the U.S. are expected to be aged 85 or older.²²

Fig. 4: Growth of the U.S. population aged 85 and above



Emerging and developing countries often still have a lot of catching up to do when it comes to medical care: Although the basic threshold for healthcare workers is 23 skilled professionals per 10,000 people, 83 countries worldwide still fail to meet this standard.²

In low- and middle-income countries (LMICs), the scaling of essential health interventions to achieve health development targets is constrained by the lack of skilled healthcare professionals. Growth in the demand for healthcare workers will be highest among upper middle-income countries, driven by economic and population growth and aging. This results in the largest predicted shortages, which may fuel global competition for skilled healthcare workers. Middle-income countries will face workforce shortages because their demand will exceed supply. By contrast, low-income countries will face low growth in both demand and supply, which are estimated to be far below what will be needed to achieve adequate coverage of essential healthcare services.²³

3. Strategy: Attract and retain workers through training and continuous education

Healthcare is a people business. Productivity and service quality depend on an organization's ability to manage human resources. In addition to recruitment and retention, this concerns appraisal, training and education, compensation, and motivation.²⁴

Continuous education and training lead to lower employee churn and reduce the effort and expenditure required for successful recruiting. According to research, companies that promote learning are three times more profitable and have up to four times better retention than those that do not. This is one reason why 79 percent of healthcare providers worldwide have adjusted their strategy in recent years to reflect the skills and employment structures they need for the future.^{11,26}

The limited capacity of education programs is one of the key factors contributing to the shortage of healthcare workers – along with the aging population, high levels of retirement among an aging healthcare workforce, and increases in chronic diseases.² Of these four reasons, healthcare providers can only influence the capacity and quality of their education programs. To make up for the shortfall in workers, millions of new healthcare professionals need to be trained. A growing number of senior medical educators are advocating using new technologies to make this training more cost-effective without compromising on quality.¹⁰

In relation to the economy as a whole, the smart education and learning market is estimated to grow from 193 billion USD in 2016 to 586 billion USD by 2021. North America is expected to account for the largest share of this market.²⁵ In the U.S., training expenditure rose significantly in 2017, increasing by 32.5 percent or 90.6 billion USD.²⁷ Overall, companies spent an average of 1,075 USD per learner – compared with 814 USD in 2016.²⁷

This is not surprising, given that training in general and continuous education in particular have a good cost-benefit ratio. As well as improving job satisfaction, they also result in highly skilled staff, high staff retention, a better reputation, optimized financial performance, better patient outcomes, and fewer medical malpractice lawsuits. The disadvantages of not investing in personnel are equally obvious: Medical institutions risk losing their experts to other employers. Losing out on valuable knowledge can lead to inefficient system usage, frustrated users, and dissatisfied patients – and consequently to higher costs, wasted time, and a decline in reputation.

A company that offers engaging training and education programs also becomes increasingly attractive as an employer. The next generation in particular clearly realizes that careers in the 21st century are no longer narrowly defined by jobs and skills, but by experience and learning agility. As technology advances, skills are becoming obsolete quicker than ever. Many of today's fastest-growing job markets are in fields such as healthcare, sales, and professional services that are essentially human but can be aided and augmented by machines. Instead of a steady progression along a job-based pathway, leading organizations are moving toward a model that empowers individuals to acquire valuable experiences, explore new roles, and continually reinvent themselves.²⁶

In the U.S., 15 percent of all training expenditure comes from the healthcare sector (13.6 billion USD), followed by finance/banking (12 percent) and government/military, real estate/insurance, and technology/software (8 percent each).

Among doctors and other qualified medical personnel, there is a great desire and need for a system of further training measures. This is partly because these measures relate to clinical aspects, and are therefore essential for optimal patient care. Another reason, however, is that staff must also receive ongoing training for operating medical equipment. Besides preventing potentially costly errors, this type of training also enables personal development, a more needs-based use of equipment, and the greatest possible flexibility in staff deployment. According to Deloitte's Human Capital Trends survey from 2016, senior executives rank learning at #5 among their top 10 trends, with 84 percent of respondents indicating that learning is "very important" or "important" for them.²⁸

"When training is implemented correctly, the result is improved outcomes across the board, both for patients and employees."

Eduardo Salas, School of Social Sciences, Rice University ²⁹

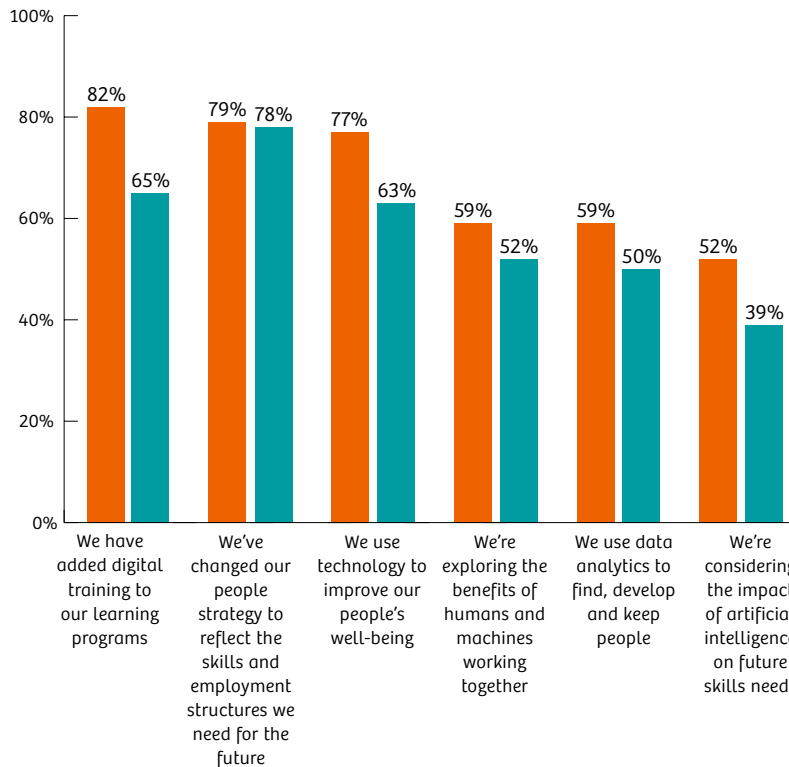
To make continuous education possible, institutions need suitable formats. Setting aside large blocks of time for training is often difficult in everyday clinical practice and could further increase the already high workload for employees onsite.

A possible solution to this problem is continuous education in the form of modern e-learning programs. The technologies used for e-learning are diverse. They include webcasts, application simulation tools, learning content management systems, performance support, mobile applications, podcasts, and more. In fact, learners and companies are increasingly turning to e-learning courses and online training to achieve their personal and professional goals.²⁷

Today's healthcare professionals are becoming more mobile and are spending more time online than ever before. Content must be highly valuable and up-to-date, and, (ideally) developed by healthcare and e-learning experts who know exactly what sort of knowledge and support are needed for effective medical care in the real world. Four in five healthcare companies worldwide already rely on e-learning which is, significantly more than in other industries.¹¹

One major reason for this is that excellent individual and flexible electronic programs for training and education are now available. The past two decades, have seen the development of learning management systems (LMS). LMS build on traditional e-learning and combine innovative software for managing complex databases, digital frameworks for managing curricula and education and training materials, and evaluation tools. LMS make it possible to administer, document, track, report, and deliver educational courses and training programs. Experts estimate that the market for LMS will be around \$8 billion in 2018.³⁰ About one third of companies in the U.S. outsourced LMS operations and hosting in 2017, while LMS administration and learner support were largely handled in-house.²⁸

Fig. 5: Healthcare providers rely on e-learning



Worldwide, 82 percent of healthcare companies rely on e-learning, which is about a third more than in other industries.

“Which of the following statements do you agree with?”

Healthcare companies (%)
All industries (%)

Source: PwC, 20th Annual Global CEO Survey, 2017³¹

Continuous education with e-learning can help keep learners’ interest and motivation high because the learning units can be enhanced with videos or interactive elements that learners can pause and continue later, or repeat until they have fully understood the content. The latest evidence also suggests that e-learning is usually more efficient because learners gain knowledge, skills, and attitudes faster than through traditional instructor-based methods.³²

New research by Deloitte recommends that companies face and embrace the fact that they have a tremendous opportunity (and obligation) to drive the change needed to create and support a culture of “always-on” learning.³³

This is also supported by a PwC analysis from 2017.³¹ Healthcare companies invest and rely significantly more on all kinds of e-learning methods and tools to retain and develop their staff than the average of all industries (see Fig. 5).⁶

4. Key takeaways

1. Finding, hiring, and retaining qualified personnel over the years is one of the most demanding tasks facing the modern healthcare industry. This challenge will become even greater in the decades ahead due to the shortage of skilled workers and the demographic change. The costs of recruiting personnel will rise.
2. High employer attractiveness is essential for retaining qualified employees long-term. Low staff turnover is important for avoiding brain drain, maintaining quality of care, and reducing the costs of recruiting new personnel.
3. High job satisfaction reduces staff turnover. Providing excellent education plays a crucial role in this because it helps employees to better fulfil their tasks and to advance their own personal development.
4. Among doctors and other qualified medical personnel, there is a great desire and need for a system of further training and education measures. These measures relate to clinical aspects and are essential for optimal patient care.
5. In many cases, e-learning is a good way of meeting the demand among health professionals for learning anytime, anywhere and at their own pace. It is cost-effective and delivers superior learning results than other models.



Transforming care delivery with more effective education and training

Transforming care delivery is one of the biggest success factors for modern healthcare systems. This is about creating an environment of accessible, highly efficient healthcare with reduced costs and no compromise on outcomes. The key factor here is efficiency due to increased workforce productivity and optimized clinical operations.

Siemens Healthineers helps healthcare providers improve workforce productivity with automated laboratory and diagnostic imaging processes that relieve physicians of routine tasks and allow them to work at the top of their license. Furthermore, Siemens standardizes and automates workflow steps to relieve the burden on staff. Education plans from Siemens Healthineers enable institutions to stand out as centers of excellence for to clinical and workflow-based expertise and quality of medical care. An Education Plan is a stand-alone and separately designed contract. Customers can choose it as an optional complement to the equipment purchase and the related service contract.



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