

# Continuing education

## Improving healthcare through lifelong learning

### Services with more grip

Today: Continuing education (CE). Delivering high-quality education training and education courses for healthcare professionals means accelerating excellence in healthcare performance.

### The importance of continuing education in healthcare

→ When education is an integral part of delivering care, clinical performance and patient focus work like clockwork.

### How can healthcare professionals stay ahead of the curve?

→ By constantly using clinical, technical, and IT-relevant information that help improve skills and thus both patient care and health systems as a whole.

### Executive overview

#### Continuing education (CE) will gain momentum as it keeps skills sharp

Escalating healthcare costs and the growing gap between healthcare evidence and practice have identified education of healthcare professionals as a substantially contributing factor for improving the healthcare delivery system. Although the benefits of continuing education in the healthcare industry are so obvious – like, for example, a highly skilled workforce, a magnificent reputation, an optimized financial performance, and, finally, better patient outcomes – there is even more upside potential. Firstly, it is still hard to get medical institutions to integrate CE into their quality landscape, and, secondly, to get healthcare providers to use CE standards as a hiring proposition. This is a conundrum that should change instantly. But before this happens, both importance and benefits of continuing education have to be confirmed in practice. Otherwise, any kind of sustainable change will be hard, if not impossible, to achieve.



**75%** of CEOs globally say that a skilled, educated, and adaptable workforce should be a government/business priority.

**Number 1 priority: never stop learning**

The deciding criterion in this context: offer ongoing quality training and education. This will enhance the knowledge and understanding of best practice guidelines and latest clinical evidence for healthcare professionals. It will help you improve the wellbeing of your patients, your institution, and your staff: your organization's most valuable components.

**Key challenges**

- provide employees with effective and practical support, supervision, and appraisal
- modernize workforce planning, education, and training strategies – the number of influencers is constantly growing thanks to the Internet, the usage of mobile devices, and social media
- carefully listen to your staff and emphasize direct support more than theoretical lectures and readings
- solve physician and primary care shortages by offering CE standards, for example

**Every medical institution thrives on its ability to change and innovate**

→ But staff members often are not competent and capable enough to meet future needs. The reasons for this are manifold and highly complex.

**Why is CE so indispensable?**

→ Because effective and high-quality continuing education ensures that staff is available in the right numbers with the right skills, values, and competencies. But this comes at a price, namely time and money – and plenty of staying power.

**Trends****Nothing is as constant as change – and the healthcare arena is currently changing more rapidly than any other industry**

Just because people have a job in healthcare doesn't mean their education is complete. If we are to believe Socrates, our education is merely the kindling of an eternal flame. So how to keep the fire burning and what are the benefits of doing so?

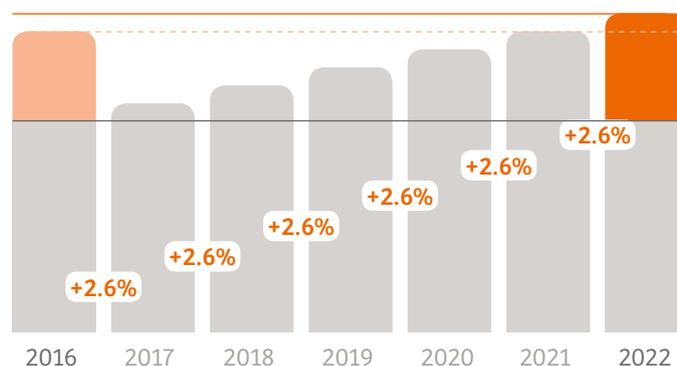
It is essential to bear in mind that the global medical education market is driven by the ever-expanding healthcare industry, a sector which is demonstrating high growth rates in both developing and developed regions of the world. However, in many regions a lack of experienced and well-trained staff can be observed. This shortage tends to compromise the growth of the sectors as well as the quality of the service rendered.

According to World Health Organization (WHO) estimates, an additional 4.3 million healthcare practitioners are required around the world to compensate for the current deficit<sup>1</sup> – whereas the Bureau of Labor Statistics (BLS) projects that the healthcare and social assistance sector will grow at an annual rate of 2.6% between 2012 and 2022, adding five million jobs. This accounts for nearly one-third of the total projected increase in jobs.<sup>2</sup>

<sup>1</sup> <http://www.transparencymarketresearch.com/article/medical-education-market.htm>  
last visited November 28, 2016

<sup>2</sup> [https://www.bls.gov/news.release/archives/ecopro\\_12192013.pdf](https://www.bls.gov/news.release/archives/ecopro_12192013.pdf)  
last visited March 07, 2017

4.3 million jobs missing today



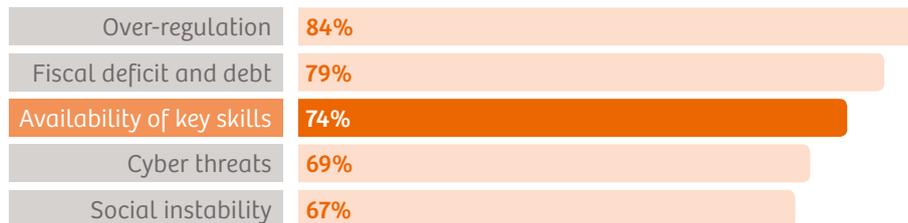
5 million additional jobs in the healthcare sector by 2022

But one question still remains: Will they be the highly skilled and motivated staff the healthcare sector is longing for so urgently?

Regarding these numbers and developments, it is hardly surprising that the healthcare profession itself is also rapidly changing. But continuing education for healthcare professionals is all too often stuck in the past. It's simply not enough for today's healthcare professionals (HCP) to just be on top of the latest clinical research: They have to learn how to adapt newest developments and findings to the needs of their practice and patient population. And all HCPs have to cooperate with coworkers in larger and larger communities of consolidated care providers.

Taking this into consideration, there is clearly a strong need to foster most effective and efficient ways to improve knowledge, skills, attitudes, practice, and teamwork. At the end of the day, a healthcare provider knows he or she made a big difference in someone's life. There aren't too many fields of work where employees can say that about themselves.

#### Top five key risks



Source:  
[www.pwc.com/gx/en/ceo-agenda/ceosurvey/2016/healthcare.html](http://www.pwc.com/gx/en/ceo-agenda/ceosurvey/2016/healthcare.html)  
 last visited September 06, 2016

## Readiness and opportunities

#### Today's focus: Lifelong learning for the 21st century healthcare workforce

Fatalities from coronary heart disease have been reduced by almost 40% since the year 2000. This improvement in patient outcome is due to new drugs, new technologies, new protocols, and an emphasis on prevention, such as lower cholesterol levels. One of the ways these advancements were communicated to healthcare professionals was through CE courses, including medical technologists and nurses<sup>3</sup>.

Consequently, the global medical education market will continue to grow steadily in the future. The increasing prevalence of lifestyle-related conditions will add to the demand for primary care and thus fuel the global medical education market. Furthermore, as already mentioned, the shortage of trained and skilled staff in the healthcare industry will also drive the global medical education market.

#### Today's actual situation is the following:

- CE, as currently practiced, does not focus adequately enough on improving clinical performance and patient health
- Too much emphasis on lectures and too little emphasis on helping health professionals enhance their competence and their performance in their daily practice
- Physicians, nurses, and other health professionals will lose the ability to maintain and improve their knowledge and skills throughout their careers in order to provide safe, effective, and high-quality healthcare for their patients
- Persistent cost-cutting programs force healthcare providers to cut funds for CE in general

<sup>3</sup> <http://www.concorde.edu/blog/continuing-education>  
 last visited November 28, 2016

**But what is expected and is a must-have for the near future, looks like this:**

- CE must be provided as an integral part of healthcare delivery to provide safe, effective, and high-quality care for patients
- With Internet technology, health professionals can find answers to clinical questions even as they care for patients – and CE must encourage its use or emphasize its importance
- Strengthen inter-professional collaboration, teamwork, and improved systems as keys to high-quality care
- Teamwork or aligned CE measurably improves the quality of health systems

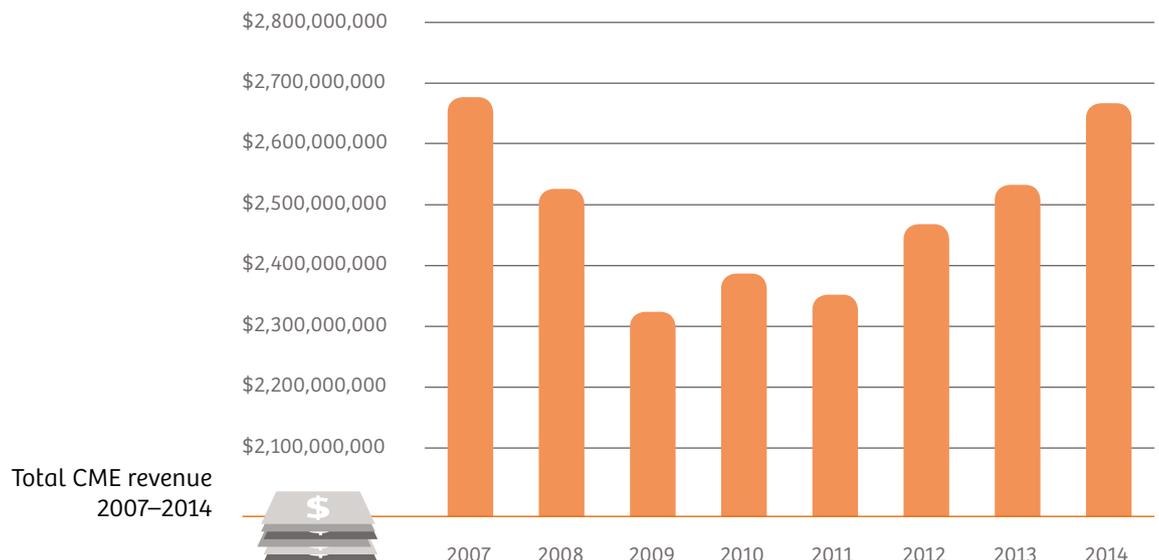
**Something is going on:****Size and scope of the continuing medical education (CME) enterprise nationwide**

The Accreditation Council for Continuing Medical Education (ACCME)<sup>4</sup> and its 2014 Annual Report Data from 2007–2014 come to some interesting conclusions in regards to those who already entered the market with professional offerings:

In 2014, the CME economy grew by 4.9%, by \$124,945,126, to \$2,668,123,727

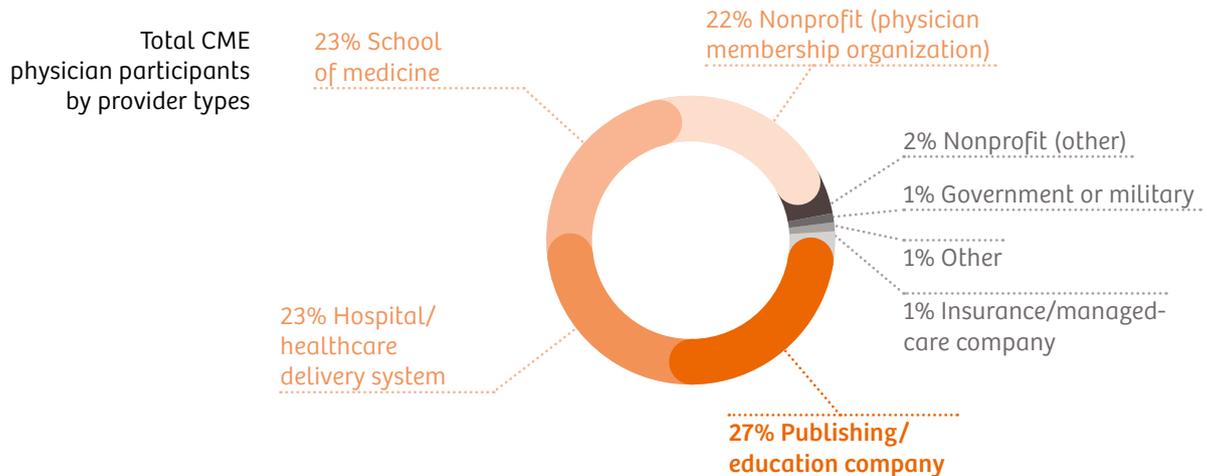
- Physician attendance decreased by 1.2% and 165,209 attendees, to 13,599,687
- Non-physician attendance, on the other hand, increased by 6% and 658,301 attendees, to 11,587,518
- As a result, CME providers' activities in 2014 educated more than 25 million participants

<sup>4</sup> <http://www.policymed.com/accme/page/3/>  
last visited November 28, 2016



There are more than 1,900 accredited CME providers across the US that offered more than 147,000 activities in 2014, a 6.4% increase from 2013.

- Overall, publishing/education companies had the most physician participants (3,717,507), followed by
- school of medicine (3,084,294) and hospital/healthcare delivery systems (3,125,707)



Now it's time to regain lost time for healthcare organizations.

### Siemens Healthineers Services testimonial

Whatever your institution requires to continuously supply appropriately skilled staff: Siemens Healthineers Services is aware of this and strives to provide support

“ With accelerating advances in health information and technology, physicians, nurses, and other health professionals must maintain and improve their knowledge and skills throughout their careers. That’s the only way to provide safe, effective, and high-quality healthcare for their patients.

But the delivery of high-quality services can only happen if the staff members employed to undertake this work are suitably trained and competent to undertake their roles.

We offer continuing education that fills the gap between current care and output-oriented care, and is mandated by licensing boards, professional societies, and certification boards for healthcare professionals. We have a long-standing history with continuing education, and it is a topic that is very dear to our hearts. Education is personal. For every player in the healthcare industry. ”

.....  
 Dr. med. Janina Beilner,  
 Vice President Application Services, responsible for global training and education at Siemens Healthineers Services

**Customer testimonial** “ The benefit I see is that we now ensure continuous training – we have a fixed budget every month that we can make use of. In the end, we are almost forced to make sure we keep education in focus: We have a set schedule that requires attention – we can’t just overlook planning for the radiographers’ training. [...] This way we will continuously work on our expertise, and this is where I expect the most success. ”

Prof. Dr. Niels Zorger,  
Head physician of Radiology, Neuroradiology, and Nuclear Medicine,  
Barmherzige Brüder Regensburg

## Key advantages

- meet legal, societal, employee, and consumer expectations
- create workforce enthusiasm for an employer who is interested, caring, and motivated
- deliver on strategic priorities that optimize overall outcomes
- capitalize on relevant trends and sustain growth prospects as an institution that is ahead of its time

## Educating and training staff is the supreme discipline

→ CE paves the way within the highly innovative and competitive field of healthcare delivery and patient care in the 21st century.

## How to integrate CE in your institution?

→ Compared to the costs of high staff turnover or medical malpractice lawsuits, the costs of a continuous education or accreditation program are not worth mentioning. Nevertheless, they are not part of the standard repertoire of healthcare institutions. Not yet.

## Necessities **One thing you can rely on: there is no rest in progress**

Without investing in your personnel, you risk losing experts to other employers. Furthermore, you risk losing out on valuable knowledge gains if expert staff members are not offered continuous in-depth knowledge, training, and educational support. This, amongst other aspects, can lead to inefficiencies in system usage and frustrated (system) users on all sides: healthcare providers, staff, physicians, the IT team, and administrative personnel. Missing training and education offerings can also lead to incorrect application and system usage and misinformation in general, and consequently to higher costs and wasting time in particular. Both crucial factors that disrupt workflows immensely, effecting both workflow efficiency and reputation, and, in a worst case scenario, even patients’ lives. This in turn can result in medical malpractice, and potentially in medical malpractice lawsuits, which will cause almost irrevocable damage to an institution’s reputation.

## Expertise **CE: enabling you to stay up to date – on any level**

In a sensitive environment such as the healthcare sector, it is important to offer all employees continuous support and knowledge expansion opportunities. Being responsible for hundreds of patients in complex healthcare organizations, nothing is more disappointing – and in circumstances life-threatening – than being unaware of trends and innovations. So why are governmental organizations, such as the National Health Service (NHS), creating continuous education programs on a governmental level? And what should you as a healthcare provider be doing to install CE in your facility?

**Focus Highly skilled and continuously educated staff – it always pays off**

Addressing internal workforce information needs and expectations is a clear advantage, because if this is done professionally and with passion, staff members realize opportunities for their own job development, which they would not receive from competitors. Retention rates can also increase significantly.

A distinct and differentiating investment by offering continuing education and training options shows employees that you – their employer – care about their future. The business impact is indisputable: staff turnover costs and business time, productivity, and money, and even results in undue stress for the remaining personnel, decrease. And that’s a good development for anyone.<sup>5</sup>

<sup>5</sup> <https://www.ceu360.com/4-employee-retention-strategies-healthcare/>  
last visited November 28, 2016

- Lack of inspiration
- Lack of tools
- Lack of opportunities
- Lack of training and education



**Training and retraining as a top priority in staff retention strategies**

The average cost of replacing an employee amounts to fully 20% of the person’s annual salary. In the healthcare industry, employee turnover is especially costly: as the rate of turnover increases, the quality of patient care significantly declines.<sup>6</sup>

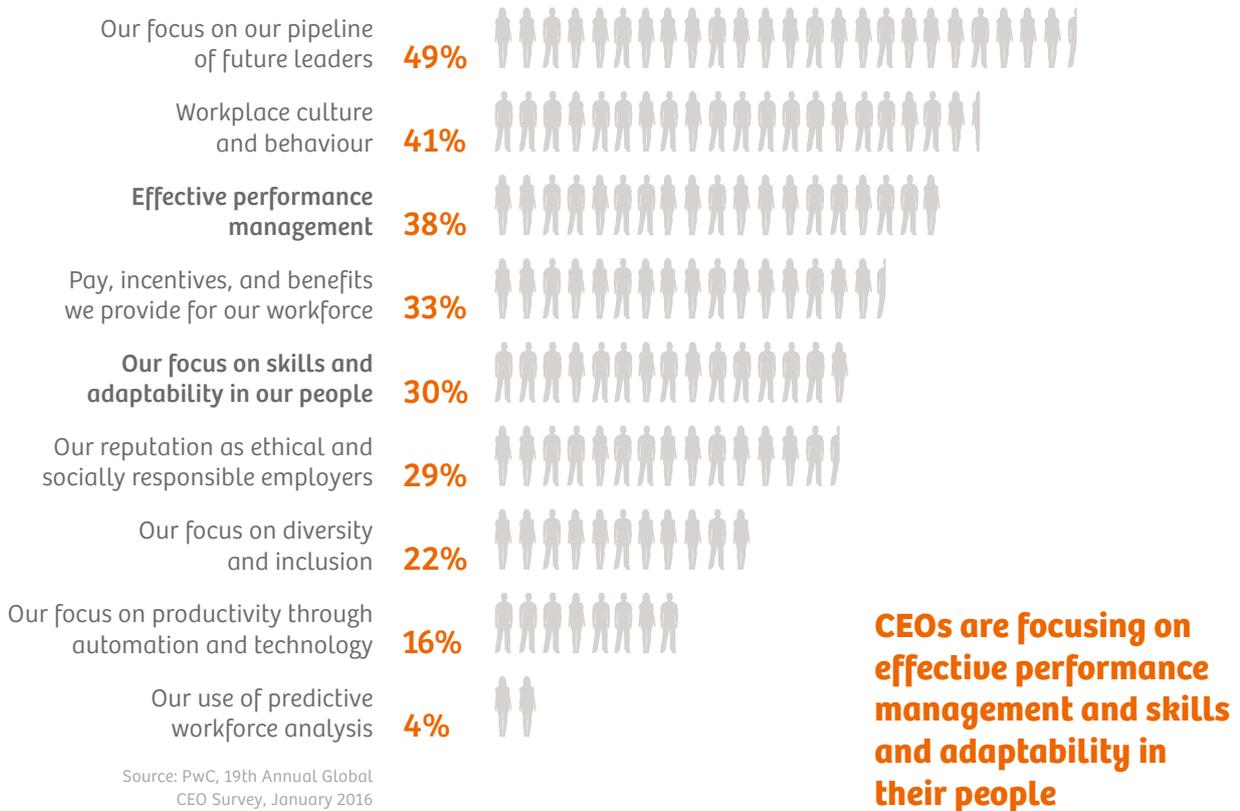
<sup>6</sup> Based on “Four Employee Retention Strategies in Healthcare,” Jami Cooley <https://www.ceu360.com/4-employee-retention-strategies-healthcare/>  
last visited November 28, 2016

**Staff efforts are stepped up immensely**

CE in the form of education and training courses will build the future workforce based on robust staff planning and clear quality indicators. Healthcare organizations need a new generation of open-minded staff with an entrepreneurial attitude that is also comfortable with data, analytics, and many new and different technologies – with the correct skills right at hand.

Where appropriate, CE should incorporate working in multiskilled teams reflecting pathways rather than exclusively professional groupings. Which is why CEOs continue to strengthen their talent-attraction strategy to interest, retain, and engage the people they need to stay competitive and relevant to patient-centered outcomes.

CEOs were asked: “What aspects of your talent strategy are you changing to make the greatest impact on attracting, retaining and engaging the people you need to remain relevant and competitive?”



**Impact on reputation, budget, and future prospects**

→ CE can make the greatest difference in providing high-quality services and care for employees, patients, and their families.

**A guarantor for future healthcare delivery?**

→ All sides benefit from dedicated training and education offerings that can be tailored to individual needs. This helps maintaining state-of-the-art treatments with overall secured and streamlined processes – keeping the workforce motivated and engaged.

The constantly growing healthcare market brings up a huge demand for clinical and, best case, highly skilled staff. If this happens, Siemens Healthineers is right at hand with the right tool so that medical devices and equipment are utilized to the full potential of their technology. Good for employers who now have to look for fresh ways to engage, retain, and attract staff.

### **Expand clinical capabilities to stand out with an unbeatable portfolio**

Siemens Healthineers have designed Education Plans, meaning stand-alone and separately designed contracts to serve the above cause. We offer these plans to healthcare providers worldwide alongside a possible system purchase or as a stand-alone offering – as Education Plans are developed to help healthcare professionals fully exploit the capabilities of Siemens medical equipment to achieve maximum efficiency in the clinical routine and in all episodes of care.

An Education Plan bundles different elements of the training portfolio in a comprehensive package which is flexible and adaptive to changing needs and state of healthcare providers' knowledge. It is always an agreement with a long-term perspective: either with a fixed duration of several years or with a duration of one year including automatic renewal. As opposed to selling single trainings ad hoc, Education Plans focus on a comprehensive training concept targeting entire departments. Whatever healthcare institutions' applications mix, workflow, or IT requirements are composed of: Siemens Education Plans or offerings like PEPconnect are at hand.

## **Clinical imperatives**

### **To create a sustainable revenue stream**

- Add to versatility in handling a broader case mix including increased diagnostic complexity by installing sustainable education and accreditation programs
- Improve patient outcomes as well as patient safety by maintaining a high level of knowledge among staff regarding medication radiation and the reduction thereof
- Fully exploit medical equipment's potential in terms of image quality to define more effective treatment paths by educating staff on effective and reproducible imaging protocols

## **Operational optimization**

### **Enabling best care, prevention, and treatment services**

- Avoid knowledge gaps derived from in-house knowledge cascading by offering a blended learning approach that reflects both individual competency and learning style
- Add to workflow optimization by offering specific training courses designed to your institution's specific settings and making clinical efficacy an integral part of the daily routine

## **Financial performance**

### **As the investment is a big part of TCO**

- Increase your institution's competitive edge by increasing patient satisfaction and concurring revenue flows with a highly educated staff both in terms of clinical processes and bedside manners
- Reduce revenue deductions due to staff replacement by fostering staff satisfaction with an investment into their specific capabilities
- Reduce the cost of rescans and readmissions with highly effective clinical processes delivered through a knowledgeable staff

## In a nutshell

Continuing education

- serves as a trailblazer and prerequisite for future healthcare delivery
- bridges the gap between technology, end users, and beneficiaries (staff and patients)
- enables the usage of innovative technologies and systems
- is highly effective in improving patient outcomes and saving lives
- creates new revenue sources in a competitive environment

## Key to success:

### educate and train staff constantly

→ Keeping expertise and equipment on a high level at predictable cost is of vital importance for any healthcare organization, especially in challenging times like these.

## Education:

### business priority with business impact

→ Education is no longer simply a “nice-to-have,” but a fundamental business imperative and first priority. Only dedicated training and education pave the way towards innovative procedures and highly motivated and acknowledged staff to ensure high quality and safe patient care.

## Flexible workforce, receptive to research and innovation

CE allows adaptation to the changing demands of public health, healthcare, and care services that must be delivered in the future – always ensuring that technology is increasingly used and that the staff is competent in using it. CE demonstrates the value for all money spent on education, training, and development of the workforce.

Ensuring that continuing professional development is readily available throughout the practice life of a healthcare professional requires a system that

- (a) expands collaborative partnerships for continuing professional development,
- (b) ensures health professionals effectively use technology to access current evidence-based health information for the improvement of patient safety and point-of-care learning, and
- (c) emphasizes effective program design and evaluation to link continuing professional development to practice behaviors and improved patient outcomes.

Because one thing is certain: Learning is more challenging than ever for healthcare professionals due to the plethora of published literature and electronic information that exists, combined with the fact that new knowledge is emerging at an accelerating pace. Upon entering practice, the healthcare professional experiences increased demands that reduce the time available for learning and assessment, and over time the professional’s knowledge of emerging evidence-based practice and professional competence may deteriorate. Until now, greater emphasis has been placed on pre-practice education, which generally ranges from 5 to 15 years, yet the practice life of a healthcare professional can range from 35 to 40 years. Because of this, it is apparent that a full transformation is needed to emphasize CE, professional development, and lifelong learning throughout the practice life of a healthcare professional.<sup>7</sup>

Evidence-based practice, much like patient care, depends on evidence-based education. If your workforce participates in your CE learning programs, satisfaction and competence will grow as much as your performance, which in the end may result in more patient throughput and better health.

<sup>7</sup> <http://www.hrsa.gov/advisorycommittees/bhpradvisory/acicbl/Reports/eleventhreport.pdf> | mboe, 2011  
last visited November 28, 2016

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## Thinking for the future.

With proven, highly innovative services. For demanding tasks.  
Profitable in the long-term. From a technological healthcare leader.  
This is Siemens Healthineers Services.

## Want more insights for healthcare leadership?

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The products/features and/or service offerings (here mentioned) are not commercially available in all countries and/or for all modalities. If the services are not marketed in countries due to regulatory or other reasons, the service offering cannot be guaranteed.

Please contact your local Siemens organization for further details.

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