



PHILIPS

Services and Solutions Delivery

Operational
Intelligence

Creating your
hospital's new
organizational
learning ecosystem

Executive briefing



Defining the healthcare education experiences of tomorrow

Ecosystem. It's a term that has entered common parlance from technology but, as our Operational Intelligence approach to servicing connected healthcare operations indicates, running the effective hospitals of the future will necessitate an integrated combination of people, processes and technology. This is especially true when it comes to defining the healthcare educational experiences of tomorrow.

Leading organizations are already taking steps to deliver more personal, motivating and future-forward learning in partnership with medical device manufacturers, such as Philips. The impetus for the construction of an educational ecosystem is often stimulated by concerns about how new technologies such as robotics and AI could affect job roles and how to prepare people to use them. And yet, to fundamentally transition to the future of changing healthcare work, we must focus on equipping our human talent with the right workforce-skill mix and developing specific processes and technologies to support that work.

As Melissa Kenig from Philips Education Services comments: "As we accelerate towards digital transformation, the people behind the machines can sometimes get forgotten or left behind. And yet, the best technological solutions won't make the impact that's hoped for it, if the people operating and using them haven't been taught how to use them to achieve their outcomes. Research has shown that stakeholders who invest in the right mix of skills can help accelerate digital transformation while achieving a happy, motivated workforce. And, of course, learning isn't a nice to have. It's a mandatory for effective care."

Tomorrow's people: The challenges healthcare education needs to address

Burn out, frustration, overload and a new generation with new expectations. The key challenges healthcare education needs to address include:



Job dissatisfaction and burnout

Healthcare is a people service and yet it's people are increasingly unhappy. Reports indicate that up to 70% of physicians and 50% of nurses are considering leaving the profession¹. Digitalization and the perception of “drowning in data” is considered to be one of the strongest drivers of burnout, predominantly linked to the introduction of electronic medical records and the resulting administrative burden and the daily challenge presented by information overload and lack of sufficient knowledge and skills.



The changing demographics of healthcare talent

With an ageing existing workforce, combined with an increasingly competitive global market for staff with the right combination of skills, healthcare providers need to become more focused on enticing and retaining the best talent.



Adding millennials into the mix

As millennials enter the global healthcare workforce, the demands on healthcare providers to present themselves as more modern employers will take hold. Research by Deloitte and McKinsey & Co, highlights the differing expectations millennials bring, including work-life balance, flexible careers, flatter employee-employer relationships, and unconventional rewards and incentives; not to mention the ways in which the technology start up models have displaced healthcare as primary career choice for many graduates.



On demand, interactive healthcare education is expected but lacking

Healthcare professionals are consumers too and are participating in their own lives in the shift from physical to digital. The digital landscape breaks down geographical and time zone barriers, allowing for peer to peer collaboration worldwide, 24/7. Just as telemedicine is embraced as a solution for out of hospital monitoring and care, healthcare professionals are anxious for their own professional development to catch up. From self-paced tutorials (e-learning, webinars, podcasts, gamification) and just-in-time education through to advanced delivery methods (simulators, AR/VR), tomorrow's talent expects personalized learning tools.



Learning is the earning curve

Employees at all levels now recognize that “the learning curve is the earning curve,” and are demanding access to dynamic learning opportunities that fit their individual needs and schedules.

¹ The Future Health Index is commissioned by Philips. The 2020 study comprises original research via a survey of 2,867 healthcare professionals under the age of 40 years old across 15 countries: Australia, Brazil, China, France, Germany, India, Japan, the Netherlands, Poland, Romania, Russia, Saudi Arabia, Singapore, South Africa and the United States of America.

Reinvest to transform

At Philips Education Services, we believe that the effective transformation of healthcare involves a significant reinvestment in the healthcare workforce by providing them with the reimagined knowledge, processes and technological support they need to develop the emerging enduring capabilities they will need to achieve in industry new paradigm, Healthcare 4.0.

In fact, if they stand a chance of meeting these imminent talent challenges, senior leadership throughout each organization must work to create an end-to-end culture of continuous learning. This means ensuring that its entire workforce feels supported and able to invest in the ongoing education they need with the provision of innovative learning models.

At Philips Education Services we're working together with our healthcare partners to define the learning experiences of tomorrow. As a leading provider of clinical and technical

educational services, we're blending learning technologies and techniques to help transform continuous medical learning into continuous professional development. Not only can we help you teach staff how to best use products and facilitate education in clinical applications, we also provide non-clinical professional development using modern learning technologies to prepare for a digital future and invest in the right workforce mixes of skills.

Healthcare professionals, especially the younger workforce greatly recognise they need to learn these new and emerging skills and have a significant appetite for tailored, visionary education solutions. Commissioned annually by Philips, The Future Health Index 2020² highlights that younger healthcare professionals are aware of the future gaps in their careers, citing four key areas as needing input. These areas – identified by 2,867 healthcare professionals under the age of 40 from 15 countries – spanned skills, knowledge data and expectations.

Younger healthcare professionals see four key gaps in their career relating to: **skills, knowledge, data and expectations.**

Skills

Many feel their medical education did not prepare them for certain aspects of their career



44%

Say their medical education has **not prepared** them at all for business administration tasks

Knowledge

How much younger healthcare professionals **knew** about **value-based care**

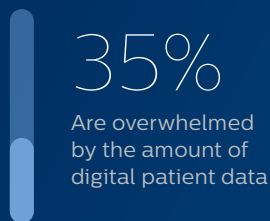
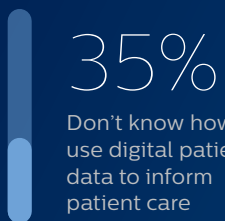


78%

Only knew it by **name/ a little or nothing at all**

Some younger healthcare professionals say they are **overwhelmed by digital patient data**. Many say the reality of their career does not live up to their hopes and expectations.

Data



Expectations



41%

Disagree or neither agree nor disagree that the reality of their career lives up to their hopes and expectations

² The Future Health Index is commissioned by Philips. The 2020 study comprises original research via a survey of 2,867 healthcare professionals under the age of 40 years old across 15 countries: Australia, Brazil, China, France, Germany, India, Japan, the Netherlands, Poland, Romania, Russia, Saudi Arabia, Singapore, South Africa and the United States of America.

The future of learning

At Philips Education Services, we believe that the future of learning will demand a blended learning approach to ensure existing and future competencies and capabilities are developed.

Blended, systematic education programs.

While e-learning is an essential component of the mix, we still believe that systematic programs of blended learning with meta-analysis are key to effective learning. The Philips Education Services blended approach encompasses online pre-learning, on site hands on, online assessments, and ongoing credits as well as snackable e-learning to ensure knowledge penetration and retention and continuing education.

Multi-modality learning excellence

Learning will span beyond the clinical and technical into all modalities, domains and capabilities. It will increasingly be:



Product, systems and solutions-based

With the proliferation of hospital technology and demands for interoperability, dedicated product, systems and solutions education training will continue to be a priority. Manufacturers are required to provide comprehensive education offers for all of their machines but as solutions continue to develop, rich feature sets need to be properly utilised. Clinical application courses cover monitoring and imaging systems and software applications and are designed to support clinical excellence. These types of courses include basic concepts like system functionality and clinical solutions as well as specialized curricula. It is supported by hundreds of clinical education specialists and instructors around the world.



Supportive of clinical excellence and decision-making

The path to exceptional patient care depends on continuing clinical excellence. In his article, *Challenges and opportunities facing medical education*³, the author Peter Densen MD estimated that the doubling time of medical knowledge in 1950 was 50 years, in 1980, 7 years, in 2010, 3.5 years and today, in 2020, just 0.2 years. That's just 73 days. We believe in the provision of internationally excellent peer reviewed basic, clinical and translational research relating to a diverse range of medical conditions and treatments. Philips Education Services offers peer-to-peer training programs and activities that support clinical excellence, instill confidence in the quality of exams, and enhance workflow and productivity.



Professional development, including future skilling

Supported by their managers, all healthcare professionals need to be able to regularly keep up with new techniques and technologies and expand their knowledge and skills, both within their domain but within the changing global and societal environment. For example, technical and clinical skills are essential but so too will be the development of softer skills, such as empathy and resilience. Even for those working in non-patient care or clinical roles, technology, regulations and best practices in business and leadership change rapidly as well and require continual review and retooling. And of course, research indicates that all of the workforce of the future will need new combinations of cognitive, emotional and analytical skills.

A stepped journey or 'learning path'

Continuing learning is a life-long endeavor and commitment to continuous feedback and improvement. To aid this journey, we utilise learning paths to guide the education journey. Philips Education Services will work to carefully select courses and arrange them in a sequence that enhances learning and efficiently manages time. Each Learning Path is designed to fulfill the demands placed upon you as a member of a highly effective clinical team.

Many Learning Paths are created to make it possible to customize learning by selecting courses and topics based on the healthcare professional's preferred style of learning, such as e-learning or virtual or in-person instructor-led courses, and you can bypass topics already familiar. Upon completion of a Learning Path, you will have more confidence that you have mastered the knowledge and skills of the technology or clinical specialty covered.

³ Densen, Peter, MD, Challenges and Opportunities Facing Medical Education, Transactions of the American Clinical and Climatological Association, 2011; 122: 48–58, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3116346/>

Change is essential, force fit is no longer fit for purpose

Disrupting with a focus on new skills and emerging capabilities

Much of the frustration linked with the scale and pace of change within healthcare is not linked to effort, talent or resources. Instead, it stems from attempts to make the current healthcare model fit the demands now expected of it.

- **Multidisciplinary teams**

The Centre for Workforce Intelligence⁴ has cited the value of teams ‘working across a range of different professional groups, deliver[ing] higher quality patient care and implement[ing] more innovations in patient care’⁵

- **Design thinking capabilities**

The transformation of healthcare demands new models and new competencies more akin to the broad based competencies and capacities offered through design thinking. In addition with product, solutions and clinical excellence, healthcare professionals need to be educated about systematic innovation processes that prioritize customer-centricity. New skills development will focus on the development of radical collaboration and rapid prototyping.

- **Systems thinking capabilities**

Understanding the interconnectedness of how health systems operate, their complexity and how they interact, will necessitate systems thinking skills across many strata of the global healthcare workforce, far beyond those working in IT. Management consultancy firm cites IT process change as potentially providing a model for continuing education. “As the pace of technological change has increased, IT teams have evolved from sequential, “waterfall” design-develop-test-operate models to new agile methods, sometimes known as “DevOps” that integrate system design, development, security, testing and operations into a team-based, connected process. In similar fashion, we anticipate new approaches to learning and work to arise, perhaps combining development and work into “devwork”, building on the realisation that learning and work are two constantly connected sides of every job.”⁶

- **Regulatory awareness and revalidation skills**

As the Centre for Workforce Intelligence has cited and in line with Philips own group regulatory center for excellence, differing EU and global regulatory and recertification changes will increase the need for regulatory understanding and skilling.

⁴ Future skills and competencies of the health workforce in Europe, WP6, Centre for Workforce Intelligence UK, 2016. Funded by the EU.

⁵ Team and working effectiveness in healthcare: Findings from the healthcare team effectiveness project, Borrill et al, 2013

⁶ Leading the social enterprise: Reinvent with a human focus, Deloitte, 2019



Lead the change, today

Seize the opportunity and reinvest in the talent that will drive healthcare transformation and exceptional patient care forward. Our key continuing education recommendations for senior leaders are:

Empower staff to build learning into their daily routine

A motivated, valued workforce invests in their own development to complement the investment their employer makes. Find ways of encouraging staff to find moments for learning, such as on the daily commute. Empower them with access to online journals, periodicals, webinars and other subscriber content.

Think personalized ‘edutainment’

Make learning personal, targeted to the individual and able to be accessed anytime. As learning becomes more available in snackable or bite sized modules, combining video, text and gamification, edutainment is possible even for the medical profession.

Embrace self-directed learning options

Millennials and other young employees have grown up in this self-directed learning environment. They expect it as part of their working lives and careers, and they will move elsewhere if employers fail to provide it. Already, 30 percent of executives in Deloitte’s survey see learning as the primary driver of employee development¹

Appoint “power users”

Stimulate uptake by appointing “power users”. In much the same way as we have first aiders and other ambassadors, ensure every department has ambassadors – or a resident expert – a person who other staff members can go to when they have questions or need help.

Flow real-time learning into the workflow

With cloud connected mobile and wearable devices increasingly accessible and emerging simulator and AR/VR options, virtual learning can be incorporated into the working day.

Book a learning assessment with Philips

Philips Education Services is committed to helping you embed outcomes-based learning for enhanced patient care. Our future-forward Philips Learning Center is the virtual place to experience healthcare education delivered in an intuitive, convenient, and flexible environment designed specifically to meet the continuous education needs of today’s healthcare organizations. Whether education is provided at a Philips location, at a customer location, online via eLearning, or through a blended approach that combines multiple learning methodologies and delivery methods, Philips Education Services provides educational resources that help continuously improve learner’s clinical knowledge and performance.



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