The Skills Partnership for the European Health Industry



The Skills Partnership for the European Health Industry

The Skills Partnership for the European Health Industry

1. The Introduction

The experiences of the COVID 19 pandemic has demonstrated the overwhelming need for a resilient and responsive healthcare system. Recognizing this, the European Union's industrial strategy, updated in May 2021, has ranked Healthcare as one of the key industrial ecosystems. This vital sector encompasses the manufacturing of pharmaceuticals, medical devices, and personal protective equipment, along with the provision of healthcare services. It is one of the biggest and fastest growing industries globally and plays a fundamental role for both our society and economy.

According to Eurostat National Accounts and Business Statistics, the healthcare ecosystem accounts for 9.5% of the total value added in the EU 27, with a gross value added of approximately €1.2 billion. It provides around 24.8 mil. direct jobs through a diverse range of businesses, from global enterprises to innovative start-ups. This ecosystem thrives on a complex network of global supply chains and continuous innovation.

As the healthcare ecosystem undergoes rapid transformation fuelled by technological advancements, economic changes, and societal shifts, the demand for skilled professionals is on the rise throughout the EU. To address the challenges ahead, it is crucial for the entire ecosystem to invest in attracting new talent, reskilling and upskilling the existing workforce.

According to data from the WorkInHealth Foundation, the health industry is growing significantly, and more than half of companies in this sector plan to hire new employees in 2023. However, the research also shows that the industry is facing challenges in preparing for the future. With a widespread skills mismatch and nearly 8 mil. jobs affected by the skills shift, the challenges of making the health industry attractive to young talent, especially those with data skills, are enormous. In surveys of engineering and IT schools' graduates, no healthcare companies were mentioned as potential employers. This talent and skills gap is particularly concerning, given that the health industry already plays a crucial role in the lives of 450 mil. EU citizens. As the number of chronic patients is expected to increase by 67% by 2050, the industry's importance will only grow, making it even more crucial to address the skills shortage.

The Skills Partnership for the European Health Industry thus focuses specifically on the industrial aspects of the healthcare ecosystem. It recognises that both healthcare professionals and the industrial supply side are interdependent. A shortage of industrial skills can compromise the delivery of healthcare services, medical equipment and medicines. By establishing this partnership, industry representatives aim to address the unique skills requirements of the health industry and promote collaboration among different stakeholders.

The skills partnership for the European Health Industry proposes the development and implementation of an EU-level roadmap to address both current and future skills needs in the industry. Through joint actions and synergies among various territorial levels (local, regional, and European) we can effectively tackle the challenges and seize the opportunities in the health industry sector.

Together, we can shape the future of the industry workforce, ensuring that it remains resilient, competitive and capable of meeting the evolving needs of our society. By investing in skills development, fostering collaboration, and embracing the opportunities brought by digitalisation and the green transition, we can create a thriving and sustainable health industry for the benefit of all Europeans.

2. The Challenge

The European producers of pharmaceuticals, medical devices, and PPE, collectively referred to as the Health Industry, are facing a series of skills challenges in the rapidly evolving health industry ecosystem. These challenges include:

Technological Advancements: The health industry is witnessing rapid technological advancement, such as the use of artificial intelligence, big data, and robotics. Producers need skilled professionals who can understand and leverage these technologies effectively. To address this challenge, companies can invest in continuous training and upskilling programs for their workforce, collaborate with universities and research institutions to foster partnerships and gain access to cutting-edge research and expertise, and encourage interdisciplinary collaboration to foster innovation and knowledge sharing

Digital Transition. The digital transition presents both unique opportunities and challenges for the industry. Producers need to effectively manage and secure large volumes of data, integrate various digital systems, and ensure compliance with data protection regulations. To address this challenge, companies can invest in upskilling their existing employees and support the training of new professionals who understand data governance, system integration, cyber security, and privacy regulations. They should also pay attention to skills such as communication and adaptability to the culture of innovation and constant changes that come with implementing digital solutions.

Green Transition. The green transition poses specific skills challenges, requiring companies to adapt sustainable practices in manufacturing, design, and supply chains. Producers need expertise in areas such as green chemistry, sustainable engineering, life cycle assessment, sustainable sourcing, ethical procurement, energy management, regulatory affairs, and R&D management to drive innovation and deployment of green technologies.

Regulatory Compliance. The health industry is highly regulated, and compliance with various standards and regulations is crucial. Producers need professionals who are well-versed in regulatory frameworks. Companies can address this challenge by developing comprehensive training programs on regulatory compliance, establishing dedicated regulatory affairs teams, and engaging with industry associations and regulatory authorities.

Quality Assurance and Quality Control. Maintaining high-quality standards is essential. Producers need skilled personnel who can ensure product quality, conduct rigorous testing, and monitor manufacturing processes. Companies can address this challenge by implementing robust quality management systems and standard operating procedures, investing in training programs for quality assurance and quality control, and adopting advanced technologies to improve efficiency and accuracy in quality assurance processes.

Supply chain, Stockpiling and Distribution Management. Effective supply chain and logistics management are essential for timely and efficient delivery of products. Producers need professionals who can optimize supply chains, manage stockpiles and logistics, and navigate complex global regulations. To address this challenge, companies can develop a comprehensive understanding of supply chain and distribution systems dynamics, invest in training programs, foster partnerships and collaborations with suppliers and logistics providers, and leverage digital technologies to enhance traceability, transparency, and efficiency.

Diversity, Equity and Inclusion in the future workforce. Creating a more diverse, equitable, and inclusive workforce requires continuous effort and commitment. Companies should provide equal opportunities for professional development to all employees, support work-life balance and flexibility, and create an inclusive workplace culture where employees feel valued and respected. This can be achieved through

mentorship programs, training sessions, leadership development programs, promoting diversity awareness and education, and implementing policies that address and prevent discrimination and harassment.

Addressing these key skills challenges requires a collective, as well as multi-dimensional approach that includes investments in training and upskilling programs, collaborations with external partners and fostering a culture of sustainability and innovation throughout the entire health industry ecosystem. By investing in training programmes, fostering collaborations and embracing emerging technologies, companies can equip their workforce to tackle the evolving skills demands of the industry and thus maintain the industry's competitive edge.

3. The Ambition of the Skills Partnership

The ambition of the Partnership is to build a robust, skilled and adaptable workforce that supports industry growth, fosters innovation, and ensures the continuous supply of high quality healthcare products. By working together, European partners can address common challenges, leverage collective expertise, and create a sustainable talent pipeline for the industry.

4. The Objectives

The partnership has set forth a series of long-term objectives to realise its vision. These objectives encompass various aspects of the health industry ecosystem and aim to address the challenges and opportunities that lie ahead.

Understanding the current skills needs in the Health Industry Ecosystem:

By mapping and identifying the present and future needs in various work areas, the partnership will prepare the European Health Industry ecosystem for upcoming challenges. This includes preparing for the digital and green transitions and analysing existing upskilling initiatives.

Bridging the skills gap:

The partnership aims to align existing educational programs, training initiatives, and industry needs at regional and/or EU level. This involves utilizing successful educational programs as blueprints to be adapted and scaled up, as well as identifying and addressing skills gaps that still need to be fulfilled. Equipping individuals with relevant skills, such as advanced manufacturing techniques, quality control, regulatory compliance, and emerging technologies, will support innovation, quality, and productivity.

Enhancing Health Industry and University Collaboration:

Strong collaboration between industry stakeholders, educational institutions, and research organisations is crucial. The partnership seeks to promote knowledge transfer, joint research projects, and the exchange of expertise to bridge the gap between academia and industry. This collaboration includes SMEs and startups, fostering a dynamic and innovative ecosystem.

Facilitating cross-border mobility and recognition of qualifications:

Supporting the mobility of skilled professionals across European countries is a key objective. The partnership will utilise tools such as Europass and ESCO to ensure the recognition of qualifications and skills acquired in different jurisdictions. This enables professionals to contribute their expertise and fill skills gaps in various European regions.

Promoting lifelong learning and continuous professional development:

Encouraging a culture of lifelong learning is essential in the health industry. The partnership will support ongoing professional development opportunities, including training programs, workshops, conferences, and certifications. By fostering continuous learning, professionals can adapt to changing demands and stay at the forefront of their field.

Strengthening public-private partnerships:

Enhancing collaboration between public authorities, private companies, industry associations, and regulatory bodies is a priority. By working collectively, the partnership aims to address skills shortages and leverage the strengths and resources of each partner. This collaboration ensures comprehensive strategies and initiatives are developed to meet the industry's needs.

Pooling available funding opportunities:

Maximising available funding opportunities, both public and private, is crucial for the partnership's success. This includes tapping into EU funds such as Erasmus+, ESF, and RRF, as well as national and regional public funding. By working together on pan-European skills development initiatives, the partnership can access the necessary resources to implement its objectives.

Enhancing the attractiveness of the sector:

Promoting the healthcare industry as an attractive career choice is a priority. The partnership aims to highlight the industry's contributions to healthcare, its potential for career growth, and its role in driving economic development and innovation. By showcasing the sector's value, the partnership seeks to attract talented individuals to join and contribute to its success.

These objectives collectively form a comprehensive framework to address the skills challenges in the health industry. By pursuing these objectives, the partnership will enhance the skills landscape, foster collaboration, support professional development, and ultimately strengthen the industry's competitiveness and impact.

5. The Actions

In our strategic plan's initial phases, we are committed to addressing the most pressing skills shortages within the European health industry. Our approach is built upon a systematic framework that encompasses collaboration, assessment, research, education promotion, and the cultivation of partnerships.

First and foremost, we emphasize collaboration with a wide spectrum of industry stakeholders. We recognize the vital role that industry representatives, educational institutions, regulatory bodies, and other stakeholders play in addressing this challenge. Our intent is to expand our network by engaging with relevant members who can actively contribute to our mission. Together, we will identify common challenges and develop a shared understanding of the priority actions required to bridge the skills gaps.

A comprehensive skills assessment is at the core of our strategy. To effectively tackle the skills gaps, we will conduct an extensive analysis of the skills requirements and shortages within the European health industry. This analysis will build upon existing data and insights derived from already existing projects. Collaboration with industry experts, education providers, and relevant stakeholders is pivotal to collecting valuable data and insights. We will compile a comprehensive list of existing skills programs that can be

adapted or expanded, all while developing intelligence regarding future skills needs to ensure the industry remains adaptable and future-ready.

Furthermore, we are committed to researching existing European training centres and Centres of Excellence that possess the capacity to provide practical skills training in a real or real-time simulated industrial environment. Our collaboration with training providers, universities, and research institutes will be instrumental in this endeavour.

Based upon data gathered we will prepare and present skills development strategy that will become the core outcome of the first phase of our actions and will help us to specify activities and targets for the further steps/phases.

Apart from the projects that will be proposed in the strategy our activities in the second phase will focus on:

Promoting technical/STEM skills education as a key pillar of our strategy. We will partner with vocational training providers, technical schools, and universities to advocate for industry-focused programs and curricula. These programs will be adapted to align seamlessly with the evolving needs of the industry, offering hands-on training in critical areas such as manufacturing processes, quality control, regulatory compliance, and emerging technologies.

Creating awareness and fostering interest in careers within the healthcare production sectors is another vital aspect of our plan. We will launch the Partnership's website and targeted campaigns to illuminate the myriad of career opportunities available. These campaigns will underscore the industry's appeal, its significant contribution to healthcare, and the potential for both career growth and innovation.

Last but not least, we are committed to cultivating public-private partnerships. By forging alliances between government entities, industry associations, private companies and training institutions we can collectively invest in skills development initiatives. Identifying the specific financial requirements and sources of funding is an integral part of this effort.

In implementing these core actions, our partnership is poised to proactively address skills shortages in healthcare product production. We aim to strengthen the workforce and ensure the industry's competitiveness in the global market. Central to our success is the collaboration between industry, educational institutions, and policymakers, which will help shape a resilient and adaptable future for the European health industry. Together, we wish to embark on a transformative journey towards a skilled and sustainable workforce.

6. The Key Performance Indicators and Monitoring

In the first phase of our actions the Key Performance Indicators (KPIs) will be:

- Skills assessment conducted.
- Skills development strategy created.
- Research on already existing European training centres/ Centres of Excellence with capacities for training practical skills in a real or real-time simulated industrial environment conducted.
- Diversity of membership representatives reached (industry associations, individual companies, clusters, training providers, research institutions, public authorities).

The KPIs for the future phases will be based upon the outcomes of the skills strategy designed and agreed during the first phase. They will include:

- Number of employees trained.
- Number of industry internship programs for students and graduates to gain practical on-the-job training and mentorship aligned with industry needs.
- Promotion of careers in the health industry conducted via the Partnership's website and targeted campaign.
- Financial requirements and source of funding specified via public-private partnership.

The KPIs as well as the action plan will be reviewed annually.

7. The Closing Statement

All organisations endorsing the Health Industries Partnership for Skills Development acknowledge the pivotal role of skilled professionals within the European pharmaceuticals, medical devices, and personal protective equipment manufacturing sectors. Consequently, they have collectively embarked on the establishment of a far-reaching partnership aimed at catalysing and streamlining workforce re-skilling and up-skilling endeavours, while simultaneously championing the advancement of career prospects for a growing talent reservoir. This collaborative initiative is carefully crafted to reinforce the shared objectives outlined in this partnership agreement, fostering knowledge exchange, resources pooling, and active participation in the pragmatic initiatives it endorses.

Enclosure: Founding members

Pact Signatories

1 December 2023

Pact Coordinator:

EIT Health

Pact Members:

- Asebio Spanish Association of Biotechnology Companies (Asebio)
- Biocat
- Campus Biotech Digital (CBD)
- Capgemini Engineering
- Council of European BioRegions (CEBR)
- DIGITALEUROPE
- EIT Manufacturing
- European Federation of Pharmaceutical Industries (EFPIA)
- European Fine Chemicals Group (EFCG)
- European Safety Federation (ESF)
- Escuela de Organización Industrial (EOI)
- FarmaIndustria
- IESE Business School (IESE)
- Medicines for Europe (MFE)
- ProMIS Programma Mattone Internazionale Salute
- Rise Research Institutes of Sweden (RISE)
- Trinity College Dublin
- Universitat de Barcelona (UB)
- University of Galway
- Universität für Weiterbildung Krems (UWK)
- Vaccines Europe

Pact Signatories

Pact Coordinator





Pact Members











































