HEALTHCARE & LIFE SCIENCES WORLD OF WORK OUTLOOK

Manpower

BY 2030, THE GLOBAL HEALTHCARE TALENT GAP WILL GROW TO

11 Million

74%

HEALTHCARE & LIFE SCIENCES EMPLOYERS ARE STRUGGLING TO FIND THE SKILLED TALENT THEY NEED

GLOBAL BIOPHARMA LEADERS ARE INVESTING HEAVILY IN AI TO INCREASE DRUG R&D SPEED BY AS MUCH AS

45%

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When I talk to our healthcare and life science clients around the world, they say they are entering one of the most consequential periods in their history. Breakthroughs in AI, precision medicine, biotechnology, advanced therapeutics, and digital healthcare are accelerating at unprecedented speed. These innovations hold the promise of improved patient outcomes, greater operational efficiency, faster drug discovery, and more personalized care. Yet the ability to realize this promise still depends on skilled talent.

Around the world, employers in this sector face a paradox. Demand for skilled professionals is rising rapidly at the same time talent pools are becoming increasingly constrained. Aging populations are driving greater healthcare utilization, while demographic shifts are shrinking labor force participation in many regions. At the same time, organizations are competing for professionals with highly specialized expertise in clinical care, data science, regulatory affairs, laboratory sciences, digital health, and emerging AI-enabled disciplines.

The challenge extends beyond recruiting. Healthcare systems continue to navigate workforce shortages, employee burnout, and persistent retention challenges following years of disruption and transformation. Life sciences organizations are confronting a similar reality as they race to develop new therapies and technologies while competing for scarce scientific and technical talent. In many markets, the competition for critical skills now extends far beyond traditional industry boundaries, with technology firms, startups, and research organizations pursuing the same professionals.

This report examines the workforce trends reshaping healthcare and life sciences worldwide. Drawing on global labor market data, employer insights, and industry expertise, it explores the forces behind talent shortages, the skills that will shape future success, and the strategies leading organizations are using to attract, develop, and retain critical talent. It also highlights how employers can strengthen workforce resilience through skills-based hiring, workforce transformation, strategic reskilling, and human-centered leadership.

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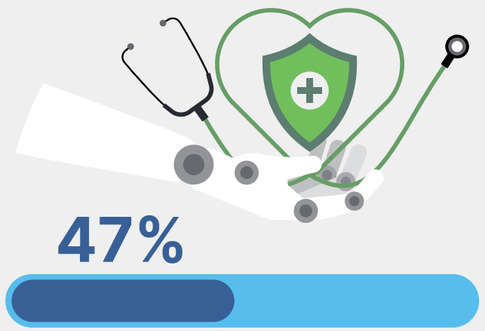
The AI Prognosis

AI is moving from experimentation to daily clinical, operational, and research workflows across healthcare and life sciences. But as organizations use AI to support diagnosis, accelerate R&D, improve talent forecasting, and redesign care delivery, the real differentiator will be trust. Employers that pair AI adoption with human oversight, transparent decision-making, and targeted workforce upskilling will be best positioned to turn technological promise into better patient, business, and workforce outcomes.

- **Where AI Excels:** Life science sector employers worldwide say AI is having the most positive impact on their Learning & Development (31%), Team Performance (14%) and Talent Forecasting (14%).[1]
- **Where AI Falls Short:** Despite heavy global investment in AI recruiting technology, most life science (71%) and healthcare (78%) say they have seen no improvement in time-to-hire versus the previous year.[2]
- **Net Optimism in the Long Run:** Most healthcare sector CIOs (67%) say they are actively implementing AI across their organization and nearly half (47%) are already seeing positive ROI.[3]

AS AI IMPLEMENTATION SCALES, NEARLY HALF OF HEALTH SECTOR CIOS (47%)



SAY THEY ARE SEEING REAL RETURNS FOR THEIR BUSINESS.[3]

Workforce Implications:

- **Employers should continue investing in AI-powered solutions for training and strategic workforce planning.**
- **As automation on both sides of the hiring process grows, it is important for employers to consider how the human touch can improve the hiring experience and time to hire.**
- **This industry has a unique opportunity to connect AI innovation to meaningful gains to improve long-term business outcomes.**

1. ManpowerGroup Global Talent Shortage 2026 2. ManpowerGroup Employment Outlook Survey, Q4 2026 3. Experis CIO Study 2026

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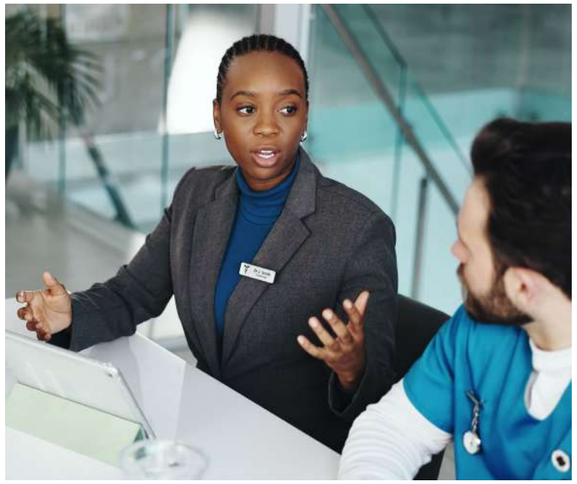

Strong Vitals

Despite economic uncertainty, healthcare and life sciences organizations are entering 2027 from a position of relative strength. Leaders remain confident in their own growth prospects, spending is expected to keep rising, and deal activity is likely to continue reshaping the competitive landscape. But strong vitals do not mean conditions will be stable. Employers will need to stay agile as tariffs, pricing pressure, portfolio shifts, and M&A activity change where talent is needed most.

- **Internal Optimism, External Concern:** More than 75% of responding biopharma and medtech executives are confident in their own organizations' financial outlooks for the coming year. However, only 41% feel optimistic about the health of the global economy.[1]
- **Steady Growth Amid Uncertainty:** Global healthcare spending will rise by 5.2% as pharma sales will continue to rise by a healthy 5.1% across the world's 60 biggest markets. However, after facing multiple tariff threats in 2025, pharmaceutical companies will remain under pressure to rework their business models or risk losing access to the US market, which will still account for more than 40% of sales.[2]
- **M&A Sentiment Remains Strong:** Most healthcare (61%) and life science (73%) leaders expect more mergers and acquisitions in 2026-2027.[3]

Workforce Implications:

- **Organizations will need flexible workforce plans that can scale quickly in growth areas while managing cost pressure in more constrained parts of the business.**
- **M&A activity will increase demand for change management, integration, compliance, and leadership talent that can help teams adapt through restructuring.**
- **Manpower helps our clients identify the critical roles most tied to revenue growth, market access, and transformation so scarce talent is focused where it can create the greatest impact.**

MOST BIOPHARMA LEADERS **75%**

ARE OPTIMISTIC ABOUT THE FUTURE GROWTH OF THEIR BUSINESS AS CONCERNS ABOUT THE ECONOMY'S IMPACT ON THE OVERALL INDUSTRY LINGER.[1]

1. Deloitte 2. Economist Intelligence Unit 3. KPMG

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Patent Cliffs Fuel Transformation Urgency

Patent expirations are intensifying the pressure on pharmaceutical and biotech companies to replace at-risk revenue, reduce costs, and accelerate the development of new products. As major therapies lose exclusivity, organizations are rethinking R&D models, pursuing AI partnerships, and restructuring portfolios to move faster with fewer resources. For employers, the patent cliff means more demand for scientific, digital, regulatory, and change management talent.

- **Still Navigating the Patent Cliff:** By 2030, patents protecting nearly $300 billion of pharmaceutical industry drug revenue will expire. This cycle began with more than $52 billion in patents expiring in 2025 and will peak at $104 billion in 2027 as the Keytruda patent expires.[1]

- **Cutting Costs:** Pharma and biotech layoffs in 2026 have stabilized compared to previous peaks, though major restructuring continues across large companies and smaller biotech due to patent expirations, post-merger integrations, and clinical trial failures. One in four employers (24%) in the healthcare sector said their 2026 headcount was lower than 2025.[2]

- **Doubling Down on AI to Spur Growth:** Big pharma facing patent expirations are increasingly pursuing AI deals to strengthen internal R&D and accelerate development of new medicines. Examples include AstraZeneca's acquisition of Modella AI, Eli Lilly's supercomputer partnership with Nvidia, and Merck's $1 billion partnership with Google Cloud.[3] Over the next five years, analysts estimate this could accelerate R&D by 45%.[3]

1. Evaluate 2. ManpowerGroup Employment Outlook Survey, Q4 2026 3. Pharmaceutical Technology 4. McKinsey

THE GLOBAL PHARMA PATENT CLIFF IS EXPECTED TO PEAK IN 2027 AT

$104 BILLION[1]

Workforce Implications:

- **Patent-cliff pressure will require workforce plans that balance cost control with continued investment in launch-critical, scientific, regulatory, and commercial talent.**

- **As companies use AI to accelerate R&D, employers will need more hybrid talent that can connect data science, clinical expertise, regulatory knowledge, and product development.**

- **Restructuring and portfolio shifts will increase the need for redeployment, reskilling, and change-management strategies that keep critical knowledge inside the organization. Programs such as Manpower MyPath can help scale these efforts.**

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Health Comes Home

Care is moving beyond traditional clinical settings as patients, providers, and payers look for more convenient, lower-cost, and personalized ways to manage health. The growth of home healthcare reflects both consumer preference and system pressure, especially as aging populations increase demand for ongoing care. For employers, this shift will require new staffing models, stronger community-based talent pipelines, and better support for nurses, caregivers, and digital health workers who can deliver quality care outside the hospital.

- **Global Growth:** The global home healthcare market is projected to reach $473.8 billion by 2030, up from $309.9 billion in 2025, growing at a CAGR of 8.9%.[1]
- **Driven by Patient Preference:** While 72% of all consumers received care at a doctor's office in the last 12 months, many (34%) say they would prefer appointments at home.[2] For the elderly, most (75%) say they would prefer to receive care at home.[3]
- **Confronting Talent Constraints:** The desire for increased care at home in advanced economies must overcome the challenges of a shrinking workforce and growing demand. In Europe, the industry will face a projected talent shortage of 1 million nurses by 2030.[4]

MOST PATIENTS **75%**

PREFER RECEIVING CARE AT HOME AND THE MARKET IS PROJECTED TO GROW, BUT PROVIDERS MUST OVERCOME PERSISTENT TALENT SCARCITY

Workforce Implications:

- **Employers will need more flexible staffing models that can support care delivery across homes, clinics, virtual channels, and community-based settings.**
- **Retention strategies for nurses, caregivers, and home health workers will become more important as demand rises and talent shortages intensify.**
- **Home-based care will increase demand for workers who combine clinical skills with digital literacy, patient engagement, and the ability to work independently in distributed care environments.**

1. Research & Markets 2. PwC 3. AARP 4. WHO

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Biomanufacturing Bottlenecks

Pharmaceutical supply chains are being reshaped by drug shortages, geopolitical risk, and the push to bring more critical manufacturing capacity closer to patients. As governments and companies invest in regional production, the limiting factor will increasingly be the availability of specialized talent to build, validate, operate, and scale advanced manufacturing facilities. For employers, supply resilience will depend not only on where production happens, but on whether they can develop the biomanufacturing, quality, engineering, automation, and regulatory skills needed to keep medicines moving.

- **Limited Supply Chain Visibility:** Like many advanced economies, the U.S. healthcare system imports more than $75 billion in medical devices annually and an estimated $212 billion in pharmaceuticals from foreign suppliers. This underscores the importance of supply chain transparency as a recent government oversight report found the U.S. lacks manufacturing visibility for 63% of its critical drugs.[1]

- **Trade Tensions:** Most biopharma executives (76%) predict that geopolitical volatility will significantly impact their sourcing strategies, while 56% agree that domestic manufacturing of biologics is set to increase dramatically during the next three years.[2]

- **Ramping Up Production:** In response to drug shortages and geopolitical supply-chain risks, pharmaceutical companies have announced plans for dozens of new manufacturing facilities across the United States and Europe. In the U.S. alone, major drugmakers have committed more than $200 billion to domestic manufacturing expansions, while the European Union's Critical Medicines Act is accelerating comparable investment in regional production capacity to reduce reliance on overseas suppliers.[3,4,5]

EXPECT DOMESTIC MANUFACTURING OF BIOLOGICS TO INCREASE DRAMATICALLY IN THE NEXT THREE YEARS TO INCREASE SUPPLY CHAIN RESILIENCE.[2]

Workforce Implications:

- **Regional manufacturing expansion will intensify demand for biomanufacturing, quality, validation, engineering, automation, and regulatory talent.**

- **Supply resilience will require better workforce visibility across suppliers, CDMOs, and production partners so organizations can anticipate talent gaps before they disrupt medicine availability.**

- **Employers will need stronger local talent pipelines, training partnerships, and reskilling programs to staff new facilities and reduce reliance on scarce experienced workers. Manpower partners with healthcare and life science clients across more than 70 countries to scale these efforts.**

1. U.S. Dept. of State 2. Cytiva Global Biopharma Index 3. Intuition Labs 4. European Medicines Agency 5. Pharma Tech

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Growing Cybersecurity Threats

Cybersecurity has become a core business and patient trust issue for healthcare and life sciences organizations as attacks grow more frequent, costly, and disruptive. The sector's sensitive data, connected devices, digital care models, and complex partner ecosystems create an expanding risk surface that traditional security teams cannot manage alone. For employers, resilience will depend on building cybersecurity capacity across the workforce, from specialized security talent to frontline leaders who understand how to protect data, systems, and continuity of care.

- **A Top Target:** Around the world, healthcare organizations are the top targets for cybercrime and industry leaders have noticed. A majority of CIOs in the Public, Health & Social Services sector (83%) say cybersecurity is the greatest threat to their business in 2026.[1]

- **Maximum Impact:** For the 13th consecutive year, the healthcare industry recorded the highest average data breach cost ($6.64 million) among all industries in 2026. Attackers continue to value and target the industry's patient personal information, which can be used for identity theft, insurance fraud and other financial crimes.[2]

- **Cyber Help Wanted:** Most CIOs in the health sector (62%) around the world tell us their cybersecurity teams need the greatest increase in available talent in the market over the next 12-24 months.[1]

MOST HEALTH SECTOR CIOS AROUND THE WORLD (83%) SAY **CYBERSECURITY IS THE #1 THREAT** TO THEIR BUSINESS.[1]

Workforce Implications:

- **Healthcare and life sciences employers will need to increase investment in cybersecurity talent, especially in threat detection, incident response, identity protection, cloud security, and medical device security.**

- **Cyber resilience can no longer sit only with IT, so employers should build basic cyber awareness and data protection practices into training for clinical, operational, research, and commercial teams.**

- **Manpower helps clients build workforce continuity plans so teams know how to maintain patient care, research operations, and manufacturing activity during a cyber disruption.**

1. Experis CIO Study 2026 2. IBM Institute for Business Value

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Chronic Talent Scarcity

Talent shortages are no longer just another workforce challenge for healthcare and life sciences employers. They have become the common thread running through nearly every major trend shaping the industry. Whether organizations are investing in AI, responding to cybersecurity threats, expanding manufacturing capacity, navigating patent expirations, or moving more care into the home, success ultimately depends on having the right people committed to improving patient care.

- **Future Talent Gaps**: The world will confront a shortage of 11 million health workers by 2030, mostly in low- and lower-middle income countries. However, countries at all levels of socioeconomic development face, to varying degrees, difficulties in the education, employment, deployment, retention, and performance of their healthcare workforce.[1]
- **Talent Scarcity Today:** Most healthcare & life science employers (74%) say they are struggling to find the skilled talent they need.[2]
- **Most Difficult to Find Skills:** Employers in the health sector around the world say Administrative/Office Support (17%), AI literacy (16%) and HR (15%) skills are the most difficult to find.[2]

Workforce Implications:

- **Employers will need stronger retention strategies that address workload, flexibility, career growth, and burnout so scarce healthcare and life sciences talent stays engaged.**
- **Skills-based hiring and targeted reskilling will become essential to expand talent pools beyond traditional credentials and fill hard-to-find roles faster.**
- **Manpower helps clients use workforce data to identify critical capabilities, redeploy talent more effectively, and make scarce skills go further across care, research, manufacturing, and digital transformation.**

MOST HEALTHCARE & LIFE SCIENCE EMPLOYERS (74%) SAY THEY ARE **STRUGGLING TO FIND THE SKILLED TALENT THEY NEED.**[2]

1. WHO 2. ManpowerGroup Global Talent Shortage 2026

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Future of Work Opportunities for Healthcare & Life Science

Make AI Human-Centered: AI can accelerate learning, care delivery, R&D, and workforce planning, but employers will need strong governance, human oversight, and targeted upskilling to turn innovation into trusted outcomes.

Plan for Constant Change: Growth, M&A activity, patent cliffs, pricing pressure, and portfolio shifts will require workforce strategies that can scale, redeploy, and reskill talent as business priorities move.

Build New Talent Pipelines: Home-based care, regional biomanufacturing, cybersecurity, and advanced therapeutics will increase demand for specialized skills that many markets cannot supply through traditional hiring alone.

Strengthen Workforce Resilience: Cyber threats, supply chain disruption, drug shortages, and care delivery pressures make continuity planning, cross-training, and workforce visibility essential to protecting patients and operations.

Make Scarce Talent Go Further: With healthcare and life sciences employers already struggling to find skilled workers, leaders must focus on retention, skills-based hiring, flexibility, reskilling, and smarter deployment of critical capabilities.

Global Workforce Solutions for Healthcare & Life Sciences

Upskilling & Reskilling at Scale

Contingent and Permanent Talent Resourcing

Strategic Workforce Planning

OnSite Management

Talent Resourcing

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