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TOP 4 PHARMA TRENDS FOR 2025

A WNS Perspective

COVID-19 re-shaped the life sciences industry. In the race to find a vaccine, widespread collaboration became the norm, with pharmaceutical companies, not-for-profits and academic institutions sharing data and research. Trust in big pharma increased, with 49 percent of people saying they view the pharmaceutical industry more positively than before the pandemic.[1]

Now that vaccines are being administered, almost 90 percent of immunologists, infectious disease researchers and virologists agree that the coronavirus will become endemic.[2] It will continue to exist in pockets of the population, but no longer cause global lock-downs or states of emergency. As the urgency reduces, the question is whether life sciences companies can continue to draw on learnings from the response to accelerate time-to-market and pricing of treatments for other diseases.

To do so, they must maintain focus on social purpose, and embrace a balanced fusion of human judgment and technologies such as Artificial Intelligence (AI), Machine Learning (ML), Natural Language Processing (NLP) and advanced analytics. From Competitive Intelligence (CI)[3] to speed up Research and Development (R&D) to overcoming compliance challenges to ensuring supply chain security, the dynamics for the pharma industry will change as personalization and complexity grow. Here we explore four trends that will transform the pharma sector in 2025.

1 R&D AI-volution

In the US, the average time-to-market for an experimental drug is 12 years.[4] However, the first COVID-19 vaccines were developed, tested and approved in under a year, providing insights into how the process can be accelerated.

AI has been central to the creation and distribution of the vaccines[5] and it will re-define the future of R&D in life sciences. The global AI in healthcare market is expected to reach USD 31.3 Billion by 2025.[6]

AI can process historical, competitor and third-party data, while learning and adapting in real-time. Through analyzing precedents, regulatory landscape, and competitors' development plans, life sciences companies can quickly identify viable drugs and shape their go-to-market strategies. In the coming years, growing numbers of pharmaceutical researchers will use AI and ML to speed up the development of novel treatments.

2 Next-gen Clinical Trials

AI and other advanced technologies will also transform the future of clinical trials at every stage — from matching trials to patients by analyzing their health records to improving medication adherence. The trials will become more global and remotely led. Using video conferencing, wearables and mobile applications, pharma employees will connect virtually with patients.

Since self-monitoring tools and Internet of Things (IoT) technologies are already being leveraged to share data and boost patients' well-being, making the transition to similar technologies for clinical trials will be relatively seamless. The number of health and fitness applications is predicted to stay above 84 million through 2022[7] and the global fitness application market is expected to grow to USD 13 Million by the end of 2025.[8]

In the future, new technologies such as digital pills will enhance the accuracy of monitoring and reporting. Trackable drugs, containing ingestible sensors and cameras that enable researchers and healthcare providers to monitor patient progress remotely, are already in development. These kinds of nano technologies will transform clinical research and healthcare through the tracking of short and long-term treatment outcomes in real-time.

3 Patient-centric Power

Drug innovation will become increasingly patient-centric and personalized through the 2020s. Gene and cell therapies, for example, are proving successful in the treatment of cancers and hereditary conditions. However, the individualized nature of these treatments makes them incredibly expensive, with some costing millions of dollars per patient.[9]

Ensuring these life-saving therapies become more widely accessible will mean re-inventing the drug reimbursement model to focus on value and patient outcomes. There will be a shift to paying life sciences companies as and when a patient's health improves. This will enable healthcare professionals to prescribe expensive treatments without knowing for certain whether or not they will work. Some treatments are already being administered on a performance-based contract; CAR-T cell therapies is one such example.[10] In Italy, payments are made in three instalments: the first on enrolment, the second during treatment, and the third in the fifth year of patient survival.[11]

As personalized patient-centric care becomes the norm, individuals will take growing control of their health data and well-being. One UK start-up has created a digital platform giving customers insights into their DNA, as well as ownership of their own health data, enabling them to make better-informed lifestyle, healthcare and treatment choices.

4 Track-and-Trace Treatments

The 2020s will see an overhaul of pharma supply chains, as personalized treatments go mainstream. Growing numbers of stakeholders, the need for innovative logistics, including temperature-controlled units and time-sensitive delivery, and increased risk of disruption will all add to the complexity, while digitalization will bring new threats to security.

Risks of diversion, cyberattacks, counterfeiting and drug tampering are accelerating, and blockchain will be central to the defense. A time-stamped, encrypted, digital ledger technology, it makes it easy to trace where and when ingredients and formulations were made. This is particularly important in the light of the US government's Drug Supply Chain Security Act which outlines requirements to develop and enhance drug supply chain security by 2023, including track-and-trace systems for all drugs. Other countries are following suit.[12]

Technology will provide greater visibility and make supply chains more customer-centric. Similar to customers placing an order with Amazon which they can track to delivery, healthcare consumers will be able to view their upcoming deliveries in order to optimize inventory.[13] Pharma will also look to new techniques such as 3D printing of drugs at hospitals or even in patients' homes in order to remove the last mile of distribution.

The pandemic showed how the pharma sector can be both competitive and collaborative. Looking ahead to 2025, the life sciences industry will face seismic shifts in priorities and digital transformation that will lead to significant innovation. Treatments will reach healthcare providers and patients quicker as a result of more resilient and secure supply

chains, as well as R&D that is driven by intelligence and insights, and tech-enabled clinical trials. Treatments will be personalized, and payment will be based on performance. Life sciences will be more purpose driven and patient-centric; more targeted, yet accessible.

(This article was created in collaboration with The Future Laboratory)

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