

TRANSFORMING PSORIASIS TREATMENT WITH DIGITAL HEALTH PLATFORMS

Abstract

Chronic diseases such as psoriasis have a lifelong impact on individuals, society, and healthcare systems. Yet, despite its global prevalence, the diagnosis, treatment, and management of psoriasis remain ad-hoc due to systemic challenges. This white paper looks at what pharmaceutical companies do to address the barriers to treating psoriasis. It also examines why pharmaceutical companies should consider using digital health platforms to accelerate treatment, provide personalized care, and improve overall health outcomes for psoriasis patients.

Introduction

The World Health Organization categorizes psoriasis as a chronic and noncommunicable skin disease with no apparent cause or cure that has global incidence and impact. Studies on psoriasis reveal prevalence rates ranging from 0.09% to 11.43% across various countries, making it a problem that affects 100 million individuals worldwide (1).

Due to the unpredictable nature of its symptoms, complex disease triggers, and many comorbidities, the treatment of psoriasis presents significant challenges for healthcare providers. However, drug innovations and the adoption of digital solutions are paving the way forward for positive patient journeys and early treatment outcomes. The market size for psoriasis treatment is expected to reach US \$51 billion by 2030, indicating that this is an area of focus for healthcare (2).

Barriers to Effective Treatment of Psoriasis

Symptom control underpins the treatment of psoriasis. Typically, a combination of three therapies is used, i.e., topical therapy, phototherapy, and systemic therapy. The difficulty lies in a conclusive diagnosis from the right physician since patients often visit different medical specialists based on the location of symptoms, i.e., skin, nails, hair, etc. Managing future comorbidities is another concern that calls for a multi-speciality approach. Some of the most pressing challenges are:

Lack of diagnostic tools

Prompt diagnosis is essential for early treatment and symptom control of psoriasis. But the lack of patient awareness and low availability of guidelines and tools cause delays in diagnosis. This leads to symptoms spiralling out of control and extreme patient discomfort, severely impacting their quality of life.

Non-adherence to treatment

There could be a variety of triggers for psoriasis, causing recurrences among patients. Without personalized treatment plans that cater to their lifestyle, there is often a drop in adherence to therapy, leading to sub-optimal outcomes. In some cases, patients struggle with insufficient information about the drugs they are administered. A multi-disciplinary approach that includes pharmaceutical drugs, proper nutrition, family awareness, and psychological support, is critical for the long-term management of psoriasis.

A cautious drug market

The lifelong nature of psoriasis drugs adds to the challenges of low adherence and poor health outcomes. Moreover, as a chronic disease, psoriasis comes with a sizeable cost burden – whether borne by health plans, the members, or the government – owing to costly topical and systemic drugs apart from recurrent physician visits. In some cases, pharmaceutical companies and drug manufacturers collaborate with regulators to offer these medicines at affordable prices, in spite of which uptake remains low.



How the Pharma Industry Supports Treatment Goals

Pharmaceutical companies are investing heavily in novel and new-generation drugs. Depending on the condition – mild, moderate, or severe – there is a range of biologic, non-biologic, and next-generation biologic drugs entering the market. Some estimate that over the next five years, next-gen biologics may comprise of more than 50% of the US drug market for the treatment of moderate to severe psoriasis(3). Plaque therapeutics is another competitive treatment space dominated by players such as J&J, AbbVie, and Amgen with drugs such as Remicade, Stelara, and Tremfya (4).

Apart from drug manufacturing, pharma companies are also leveraging the power of digitalization to create innovative patient

journeys with the aim of improving overall health outcomes. For instance, Eli Lilly launched an open innovation challenge inviting inspiring digital health solutions to improve the health and well-being of atopic dermatitis patients (5). Pharma company Almirall partnered with Popit, a digital health startup, to create a medication adherence tool for psoriasis patients, consisting of a smart device that tracks when medication is consumed and issues reminders (6). Companies such as Johnson & Johnson and AbbVie invest in campaigns encouraging psoriasis patients to resume periodic check-ups with doctors.

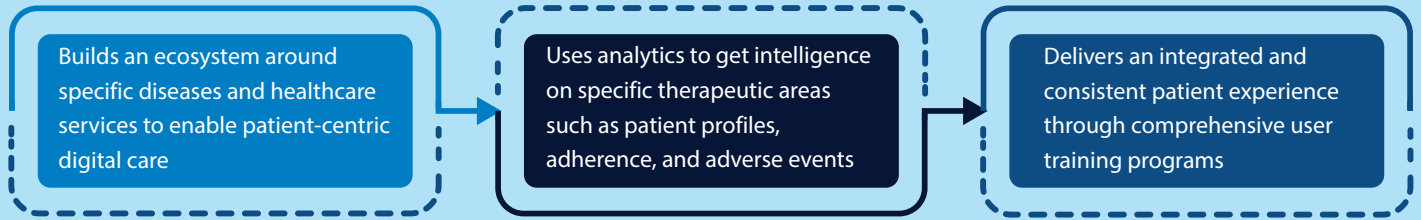
How Digital Health Platforms Help

Digital health platforms leverage the use of digital technologies, artificial intelligence, machine learning, and wearables to improve access to care and drive positive health outcomes for patients. Being highly flexible with solid integration, these platforms streamline the delivery of targeted healthcare services, from patient onboarding to financial assistance.

- **Patient onboarding and treatment** – Digital health platforms ensure easy onboarding of patients to find the right healthcare provider on their mobile devices. Patients can register themselves, create their profiles, and upload their clinical history. Using this data, healthcare providers can assign medical or care teams.
- **Treatment adherence and care plans** – DHPs enable personalized care plans through customized patient pathways packages, routine tests, etc., depending on the type of therapy and comorbidities. Such platforms can stratify patients according to disease type and severity, track medication adherence, provide nutrition guidance, and capture biomarker data for daily health monitoring.
- **Access to the right doctors** – Digital health platforms offer 360-degree care by ensuring access to multi-speciality doctors including dermatologists, nutritionists, psychologists, and general physicians. They also integrate easily with healthcare information systems to retrieve patient data, which enables additional capabilities to improve access. For instance, it can include travel logistics for multiple doctor visits for tests and diagnosis and location-based tracking to locate the right healthcare providers.
- **Continuous patient support** – Digital health platforms help build a community of disease experts as well as patients for augmented support. With DHPs, companies can scale their awareness campaigns across a wider network and push relevant educational content to patients.
- **Healthcare provider dashboard** – Digital health platforms provide a unified dashboard, allowing doctors to monitor their patients anytime, anywhere. Doctors have a single window view into all patient data including symptom history, therapy adherence, medication regimes, lifestyle behaviours (such as exercise, diet, and sleep), lab results, and other relevant biomarkers. It provides a holistic picture of patients for improved medical decisions by doctors.
- **Value-added services** – Digital health platforms facilitate patient access to health programs through digital channels. The platform can also support the complete patient journey across enrolment, appointment scheduling, case management, adherence tracking, telemedicine, mobile health monitoring, and advocacy. By onboarding other stakeholders in the healthcare ecosystem, it can also offer support for insurance claims, appeals, and alternate funding. Additionally, patients can easily access resources such as registered nurses and educational materials.
- **Extend reach of healthcare plans** – As digital channels become pervasive, digital health platforms will help establish a strong social presence and brand recall for pharmaceutical companies. By widening the patient pool, access and support as well as making care increasingly efficient, automated, and relevant, DHPs can support global reach.

Benefits

Digital health platforms can improve patient engagement across various touchpoints. Robust compliance protocols ensure that quality care is delivered and patient data remains secure. The right digital health platform:

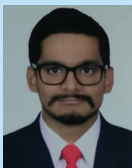


Finally, pharma companies that use DHPs can unlock new revenue streams through subscription-based payments, location-based services, and care plan packages, therein building customer loyalty and extending their reach.

Conclusion

Psoriasis is a global healthcare challenge that is yet to achieve all-round success in treatment outcomes. Patients often struggle with low disease awareness, ineffective access to the right physicians, and the lack of a multi-speciality treatment approach. As symptom control is the first step in the long-term management of psoriasis, consistent monitoring, adherence to therapy and drug regimens, and timely as well as appropriate advice are critical success factors. Digital health platforms can help those involved in diagnosing and treating psoriasis deliver quality and responsive care. By streamlining patient journeys, from mobile onboarding to financial advice, such platforms benefit all stakeholders – patients, their families, healthcare providers, and pharmaceutical companies – through better drug uptake, improved health outcomes, and patient satisfaction.

About the Author



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Prakhar has more than ten years of experience in the domain of Life Sciences. His area of expertise is data analytics and ML on data from medical devices, IoT sensors, patients and Apps. He has a certification in Digital Health from the Indian Institute of Science and a graduate degree in Biological Sciences.

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