

Japanese Market Potential in Digital Health

A market in needs for cutting-edge digital health solutions

Japan has one of the world's highest proportions of elderly citizens, with about 28% of the population aged 65 in 2021, and this figure is expected to rise to nearly 40% by 2060. Japan's life expectancy reaches 87.7 years for women and 81.6 years for men which makes it the leading country in terms of life expectancy. The increasing elderly population presents a complex healthcare challenge, as older individuals typically require more medical attention and care.

The rising demand for healthcare services, coupled with a shrinking workforce to support the aging population, is straining Japan's healthcare system. The National Health Insurance system, while comprehensive, faces the daunting task of sustaining quality care amidst these demographic shifts.

This is where digital health solutions such as digital therapeutics and advanced software-as-medical-device can play a transformative role.

Digital health offers scalable and efficient solutions to support Japan's healthcare needs. Remote monitoring, telemedicine, and personalized digital therapeutics can provide continuous care and support for the elderly, reducing the burden on traditional healthcare resources. By leveraging technology, we can improve access to care, enhance the efficiency of healthcare delivery, and ultimately contribute to better health outcomes for Japan's aging population.

Aptar Digital Health experience and solutions for the Japanese market

In 2023, Aptar Digital Health developed two digital health solutions for the Japanese market with life science partners. These solutions have been tested and evaluated



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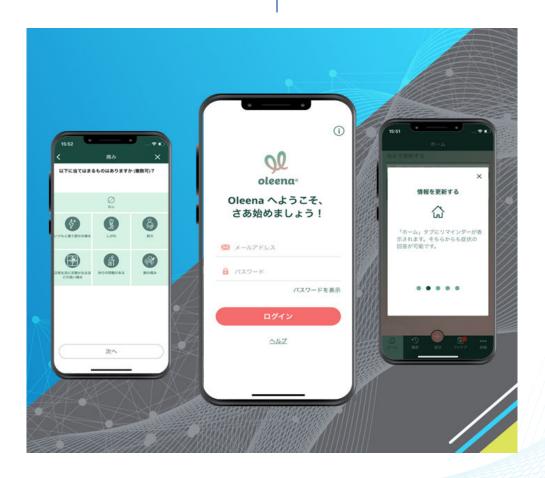
by a Japanese user panel composed of 14 patients and healthcare professionals. The outcomes helped us to draw up a list of requirements to meet the Japanese population's needs such as:

- Ensure that the product content has been alidated by native Japanese persons who are linguistic professionals.
- Use a different tone of voice than for occidental countries to make it more pleasant to use and less directive.
- Develop additional instructions to better guide users step-by-step.
- Rework the content to make it compatible with the Japanese lifestyle.
 For example, we have adapted our medical temperature measurement algorithm because, in Japan, temperature is generally taken under the armpit.

Aptar Digital Health is ready to launch

digital health solutions in Japan:

- Our software platform on which we develop our digital health solutions has been fully translated into Japanese.
- We collaborate with a human factor agency based in Japan to organize formative and summative studies, with whom we conducted the formative study in 2023.
- We know the Japanese regulatory and market access spaces and can support our partners in filing the Pharmaceuticals and Medical Devices Agency (PMDA) submission file for regulatory approval.
- We extended our contract with Azure, our hosting environment and data storage supplier, in order to cover Japan.
- We recently opened new offices in Tokyo.
- We offer market access consulting services to support and guide our



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- partners in identifying the best strategies to commercialize their solutions in Japan.
- We have a good understanding of the Japanese healthcare system and closely monitor the digital health landscape in Japan.

Four medical cases of interest

Aptar Digital Health partners with life science, biotech, and medtech companies to develop and implement meaningful digital health solutions, tailored to address the specific challenges and needs of patients worldwide. Aptar Digital Health designs its solutions according to several factors including:

- The therapeutic areas and the medical challenges associated;
- The patient's journey and needs;
- The healthcare providers' challenges and needs;
- The social and cultural background of the users' population;
- The formulation of the associated therapy.

With these factors in mind, we are particularly active across four medical cases

in different therapeutic areas of interest:

- In oncology, we focus on patients' wellbeing, sharing real-time information with healthcare providers and supporting patients in the management of their symptoms.
- In respiratory, we aim to create one comprehensive platform for patients to manage their asthma or COPD by using one tool to measure, track and monitor the disease.
- In neurology, we support healthcare providers in calculating the right dose of medication according to the patient's medical profile.
- For subcutaneous drugs, we developed an autoinjector add-on that precisely detects injection events and provides real-time visual and audio feedback about whether the injection is performed correctly.

Recently, Aptar Digital Health developed a digital health solution for healthcare professionals in Japan to support them in calculating doses for a specific drug used in chronic conditions. This solution has been co-developed with a leading life science company and is now available in Japan.



About Aptar Digital Health

Aptar Digital Health creates end-to-end solutions to enhance patient experiences every day, leveraging a holistic ecosystem of digital interventions. Amplified by an industry-leading portfolio of products and solutions, Aptar Digital Health's offerings combine mobile and web apps, connected drug delivery systems, onboarding, training and advanced data analytics services to actively empower patients and create a positive treatment journey.

