

# HEALTH TRENDS IN JAPAN



The development and application of artificial intelligence (AI) is changing medicine and healthcare globally including in Japan.

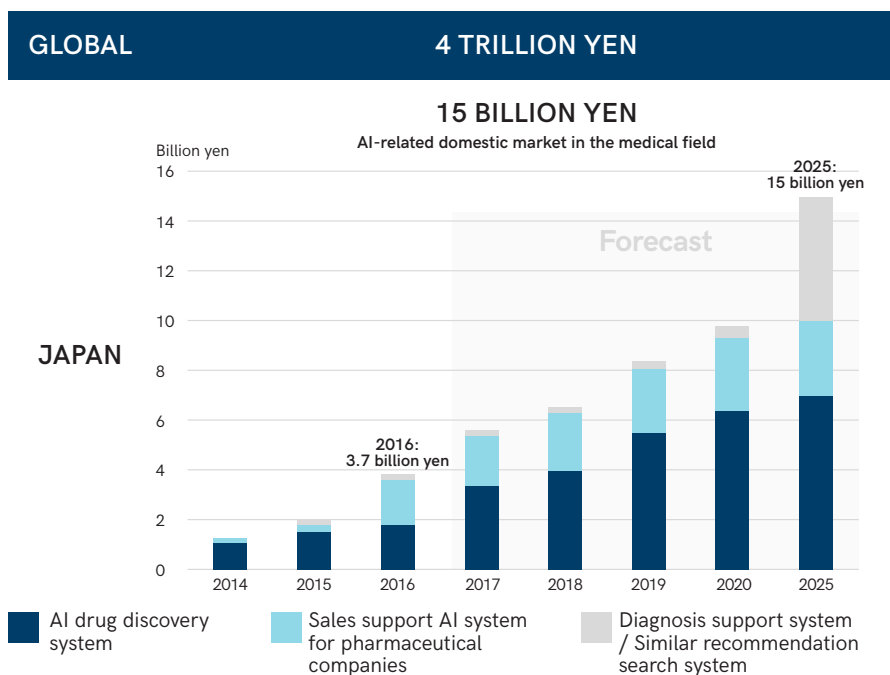
## Opportunities for AI in the medical sector

The use of AI is being tested and introduced in a wide range of fields in Japan, including in diagnosis, medical care, nursing care and preventative medicine. Areas of emerging growth include; imaging diagnosis, treatment and surgery support, drug development genomic medicine and dementia care. In terms of market size, Japan medical sector is projected to be worth 15 billion yen in 2025.

Key players in image diagnostics in Japan include Olympus Corporation, Fujifilm Corporation, Astellas Pharma, Toray Engineering, Envoy Ai, Cyberdyne and Lpixel.

Success by foreign companies in this area include Sensely, a California based start up, which attracted investment from Sojitz. However this is a rapidly expanding sector attracting new players both domestically and from overseas.

## AI Development Market Size in the Healthcare Industry in 2025



Source: Materials on AI Development Acceleration Consortium for Healthcare, Report Linker, Fuji Keizai Co., Ltd.

## AI in drug discovery in Japan

The AI market in drug discovery is expected to grow rapidly both in Japan and globally. The global market size is projected to grow from \$259 million in 2019 to \$1.444 billion by 2024.

AI is currently being utilized mainly for basic research in drug discovery that requires a long-term investment of over 100 billion yen.

Of note in Japan is the trend towards compound searches using in silico technology (computer based screening) targeting priority disease areas by pharmaceutical companies. Examples of this include, drug design, chemical compound research, identification and optimization of compounds.

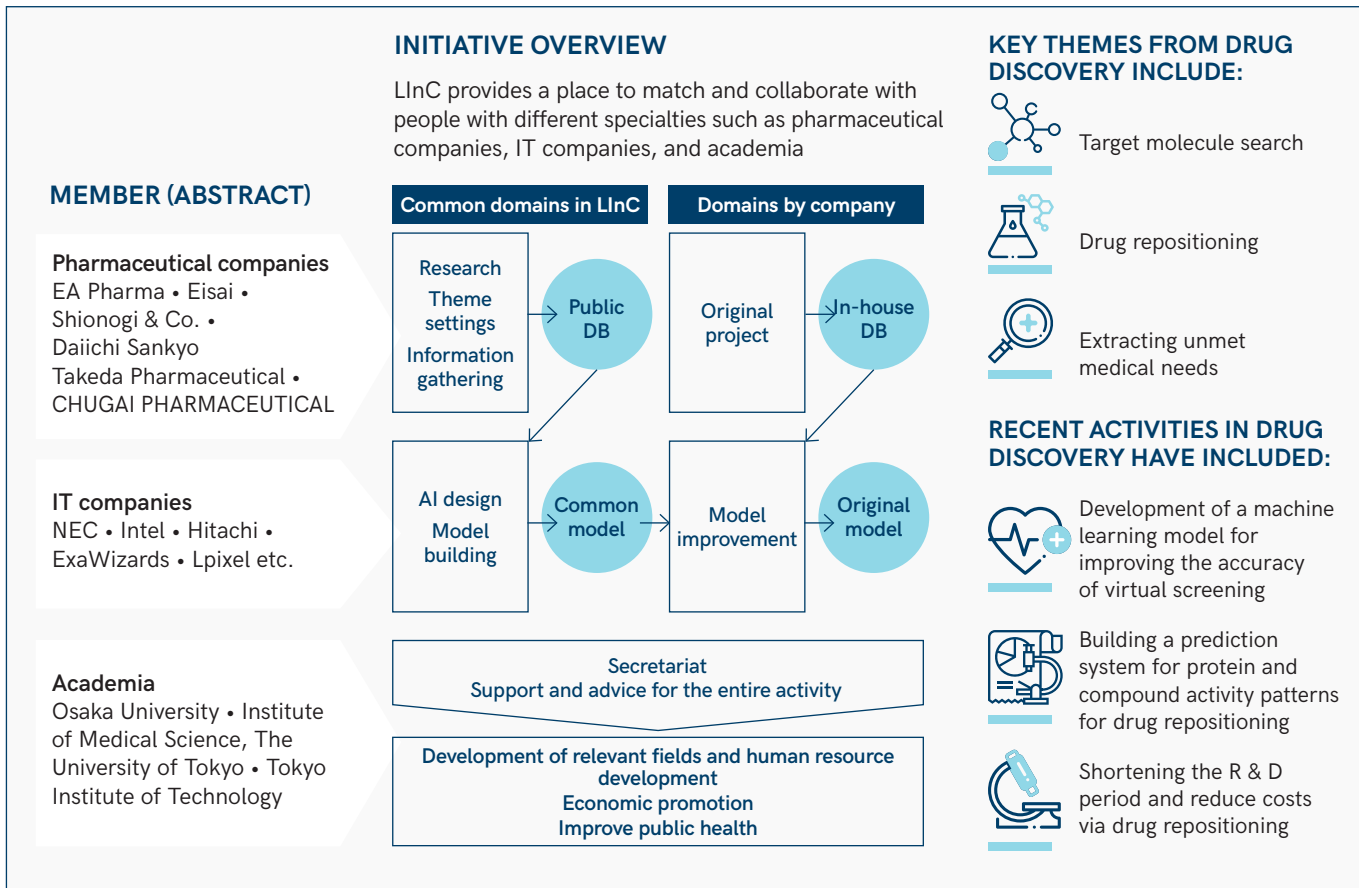
In the future, it is expected that next-generation in silico predictive technology, including drug repositioning, will increase.

Some challenges Japan is facing in this area include:

- Japanese pharmaceutical companies which have not undergone major restructuring compared to the global market are lagging behind globally in terms of sales ranking and size
- The delay in the construction of datasets is a challenge in terms of using AI technology
- Currently, the majority of processes for utilizing AI are mainly the basic research processes - the technology is not being optimized.

In order to support drug discovery in Japan more effectively a consortium for the life sciences/medical field has been launched by leading pharmaceutical, IT companies and academia. The consortium known as Life Intelligence Consortium (LIInC) aims to leverage synergies to promote the health care field and related industries based on the AI strategy.

### Life Intelligence Consortium (LIInC)

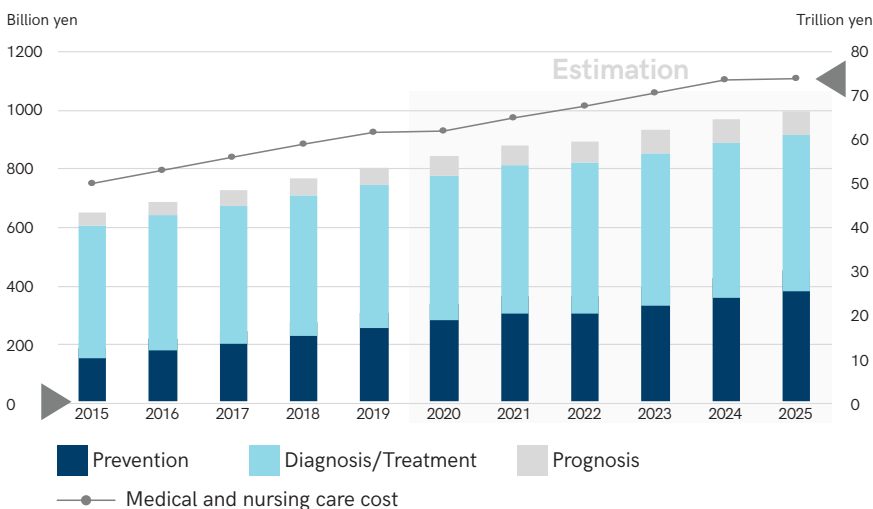


### Health Tech opportunities in Japan

As Japan becomes a “super-aged society” in 2025 (one in three people will be 65 years old or older), increasing social security costs, shortage of medical staff and decline in the workforce will be issues. Therefore, Japan will become increasingly dependent on using Health Tech (health x technology), to provide health support to individuals.

The Health Tech market size in Japan is expected to grow significantly from 651.5 billion yen (as of 2015) to 996.5 billion yen (as of 2025). In particular, prevention/medical care/treatment segments are expected to be a significant market.

#### Health Tech market size and trend/forecast of medical and nursing care costs in Japan



Source: Cabinet Secretariat, Cabinet Office, Ministry of Finance, Ministry of Health, Labor and Welfare, “Future Outlook for Social Security in 2040”. Fuji Keizai “Health Tech / Health Solution-related Domestic Market” “Medical Information System Domestic Market” “Nursing / Welfare-related Products / Service Market”

### Health data analysis

Medical treatment using data analysis has been developing throughout the world, but Japan is currently one step behind in the phase of accumulating medical data. Reinventing medical care delivery and improving treatment quality is a key priority.

In the future, it is expected that research and development will progress toward a comprehensive medical platform personalized from prevention to prognosis.

Specific areas of health care in Japan where there are opportunities for market growth include; health data analysis; electronic medical records; genomic analysis; telemedicine and nursing care systems.

Japan has a strong presence in the field of assistive robots to service their rapidly aging population, but there is still considerable potential for foreign companies in fields where Japan lags behind the world.



## Genome analysis

The Japan Genomic Medicine Program, initiated by the Japan Medical and Research Development Agency (AMED) in 2015, includes several programs: an Integrated Database of Clinical and Genomic Information, the Promotion of Genome Medicine, a BioBank Japan Project for Genomic and Clinical Research, and a Tohoku Medical Megabank Project. The intent is to share the allele frequencies and disease variations of the Japanese population.

In recent years, this sector has attracted significant capital and the interest of corporation with diverse interests including Yahoo! and DeNA who expanded their business to this market. In addition, services based on genetic information have started to emerge.

## Telemedicine

Telemedicine has been covered by Japanese insurance since 2018, but the incentive to promote telemedicine is weaker than that of other countries due to free access to medical institutions. There is a strong cultural bias towards face to face consultation, but the servicing rural and remote areas by doctors is increasingly difficult so there is an urgent need to increase the uptake of telemedicine.

## Nursing care systems

Japan has been struggling with an acute shortage of trained nursing staff for some time. Resolving human resource shortages has become an urgent issue, and it is expected that the introduction of nursing care systems and robotics will increase as home nursing care progresses in the future.

## Wearable devices

Analysis of real-time life logs using wearable devices is becoming mainstream among tech companies, mainly GAFA, however preventive medicine is not widely understood or prevalent in Japan as yet.

## Electronic medical records

Though cloud computing has been allowed in the medical field since 2010 and medical data management has started, the introduction rate of electronic medical records has been low and data storage has made slow progress.

In some countries, the introduction rate exceeds 100%, but in Japan, hospitals with less than 200 beds have a 37% introduction rate. Concerns have been raised over the inconsistency of standards and costs.



Health trends in Japan are changing rapidly. This is a summary of information sourced through JETRO reports. If you are interested in investing or commencing business in Japan in this sector seek the latest updates on the trends and regulations through JETRO and original sources.

JETRO Tokyo publishes online statistics and reports on the JETRO website.

You will find a range of information on the JETRO website to assist you with setting up an office in Japan. Or if you meet the Invest Japan program criteria, you may be eligible for consultations with industry experts.

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