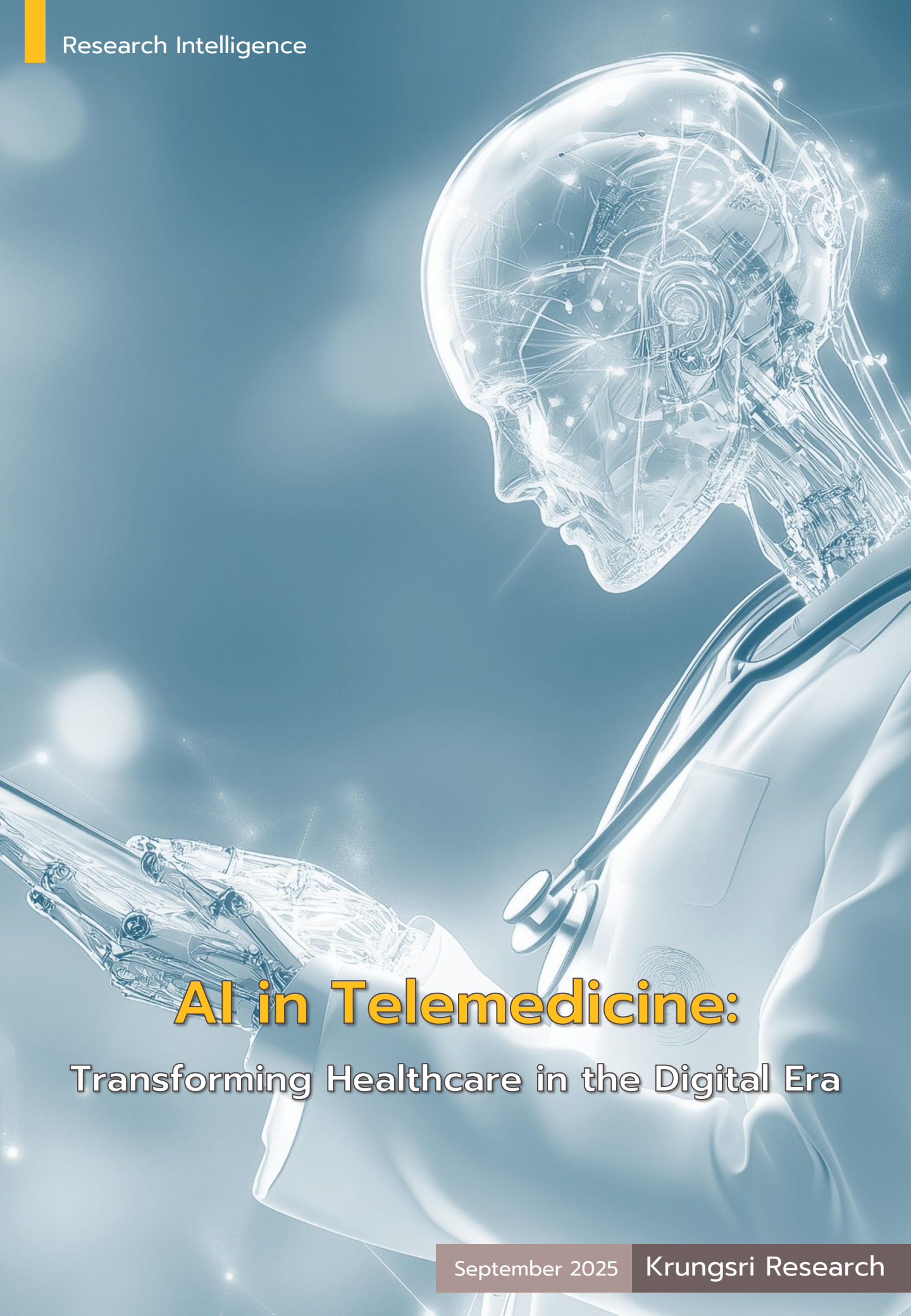
Research Intelligence



AI in Telemedicine:

Transforming Healthcare in the Digital Era

September 2025 Krungsri Research

krungsri Research

A member of MUFG

Contents

Introduction	3
AI in Telemedicine: A Continuously Expanding Market	4
Getting to Know AI in Telemedicine	5
Benefits and Challenges of AI in Telemedicine	7
Examples of AI Applications in Telemedicine: Global and Thai Perspectives	10
How Banks and Telemedicine AI Providers Can Support Each Other	14
Krungsri Research View	15
References	16



Subscribe Us

For research subscription, contact

krungsri.research@krungsri.com

Disclaimer

Unless explicitly stated otherwise, this publication and all material therein is under the copyright of Krungsri Research. As such, the reuse, reproduction, or alteration of this text or any part thereof is absolutely prohibited without prior written consent. This report draws on a wide range of well-established and trustworthy sources, but Krungsri Research can make no guarantee of the absolute veracity of the material cited. Moreover, Krungsri Research will not be held responsible for any losses that may occur either directly or indirectly from any use to which this report or the data contained therein may be put. The information, opinions, and judgements expressed in this report are those of Krungsri Research, but this publication does not necessarily reflect the opinions of Bank of Ayudhya Public Company Limited or of any other companies within the same commercial group. This report is an accurate reflection of the thinking and opinions of Krungsri Research as of the day of publication, but we reserve the right to change those opinions without prior notice.

Introduction

Although medical treatment and public health systems have long been essential to human survival, the COVID-19 pandemic[1/] highlighted the limitations of traditional healthcare systems, which struggled to accommodate large numbers of patients and left many without access to care. This challenge has accelerated the adoption of Artificial Intelligence (AI) in telemedicine, enabling continuity of healthcare services, reducing the need for in-person visits, and alleviating overcrowding in medical facilities.

Even as the COVID-19 pandemic has largely subsided, the use of AI in telemedicine continues to expand, driven by the rising prevalence of noncommunicable diseases (NCDs), which remain the leading cause of death globally. AI not only improves the accuracy of health data analysis but also supports medical personnel by reducing errors, easing workloads, and enhancing patients' access to timely care.

Moreover, the growing emphasis on "Longevity" has further underscored the role of AI in telemedicine for improving quality of life and mitigating healthcare disparities, particularly in rural and underserved areas. This development marks a meaningful step forward for the future of medicine, addressing both immediate healthcare challenges and the long-term well-being of the population.



Narichaya Satafang

Researcher

narichaya.satafang@krungsri.com

+662 296 2994

Dr. Pimnara Hirankasi

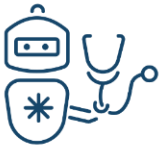
Head of Research Division and Chief Economist

pimnara.hirankasi@krungsri.com

+662 296 6457



1/ AI in telemedicine: Use cases, technologies, implementation and development



AI in Telemedicine: A Continuously Expanding Market

AI in telemedicine offers a significant advantage by assisting medical personnel in analyzing users' initial symptoms and providing real-time guidance on treatment options based on disease severity. If the AI system determines that a user should consult a doctor in person, it can immediately recommend a specialist suited to the user's condition, thereby building users' confidence in accessing safe and timely medical care. In contrast, general health applications typically employ AI only to track basic behaviors, such as exercise, dietary habits, or mental health, presenting the data for user awareness without conducting in-depth analysis or offering personalized recommendations.

Today, the use of AI to support telemedicine has become increasingly widespread, as it helps maintain continuity of healthcare by reducing the need for in-person visits and alleviating the challenge of limited hospital capacity. According to Markets and Markets, the AI in telemedicine market is projected to grow from USD 4.22 billion in 2024 to USD 27.14 billion in 2030, representing a compound annual growth rate (CAGR) of 36.4%.[2/] One of the key drivers of this growth is the rising prevalence of noncommunicable diseases (NCDs), such as heart disease, cancer, respiratory diseases, and diabetes, which remain the leading causes of death globally and in Thailand. In 2021, approximately 43 million people worldwide died from these diseases, accounting for 75% of total deaths.[3/] In Thailand, deaths from the five major NCDs—diabetes, hypertension, ischemic heart disease, stroke, and chronic obstructive pulmonary disease—have steadily increased, rising from 74,500 deaths in 2018, equivalent to a mortality rate of 113.93 per 100,000 population, to around 87,600 deaths, or 134.4 per 100,000 population, in 2022.[4/]

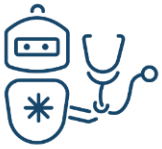
Moreover, the number of deaths from NCDs is expected to continue rising. The World Health Organization (WHO) projects that by 2050, the share of deaths caused by NCDs will reach approximately 86% of total deaths, amounting to over 90 million deaths globally each year.[5/] However, premature deaths can be prevented through timely preventive care. AI applications in telemedicine can strengthen preventive healthcare by enabling early screening and detection of NCD risks before they develop into serious conditions.

2/ AI in Telehealth & Telemedicine Market Growth, Drivers, and Opportunities

3/ Noncommunicable diseases | World Health Organization: WHO

4/ Department of Disease Control

5/ Chronic diseases taking 'immense and increasing toll on lives', warns WHO | UN News



Getting to Know AI in Telemedicine

AI in telemedicine refers to the integration of artificial intelligence (AI) technology with telemedicine systems.[6/] AI functions as a "virtual assistant" by analyzing medical data to support diagnosis and personalized treatment planning, providing preliminary guidance to patients, and monitoring symptoms in real time through wearable health trackers. It can also assist in remote surgery through robotic surgical systems and high-speed communication networks (telesurgery). AI in telemedicine enables healthcare professionals to communicate with patients in different locations in real time via digital technology, overcoming the limitations of distance and time. The technology can be applied in the following ways:

- **AI-assisted symptom screening (Virtual triage)**

This approach uses AI to screen patients and assess the urgency of their condition before entering the treatment process. Patients provide relevant information, such as symptoms, duration and severity, medication usage, and medical history, through applications or chatbots capable of understanding natural language via Natural Language Processing (NLP), enabling accurate interpretation of the information provided. A key feature of this symptom screening system is its ability to analyze individual patient health data using Machine Learning (ML), based on models trained on large anonymized datasets from millions of patients. The data are stored and processed in accordance with current medical diagnostic and treatment guidelines. The system categorizes patient urgency into four levels: 1) self-care at home, 2) telehealth consultation, 3) in-person visits, and 4) emergency care[7/] requiring immediate attention in a hospital.

- **Remote patient monitoring**

Remote patient monitoring uses smart wearable devices to track vital signs, health status, and symptoms around the clock, reducing the need for frequent hospital visits. Patients' health data—including physical information and measurements from biometric sensors—are analyzed using ML models developed from extensive health databases to assess and predict disease risks. In addition, Deep Learning (DL) techniques, utilizing multi-layered Artificial Neural Networks (ANNs), are applied to analyze more complex health data, such as heart rate patterns or body movements, enabling the detection of subtle abnormalities and supporting early disease diagnosis.[8/]

6/ AI in Telemedicine Market Size Expected to Surge from USD

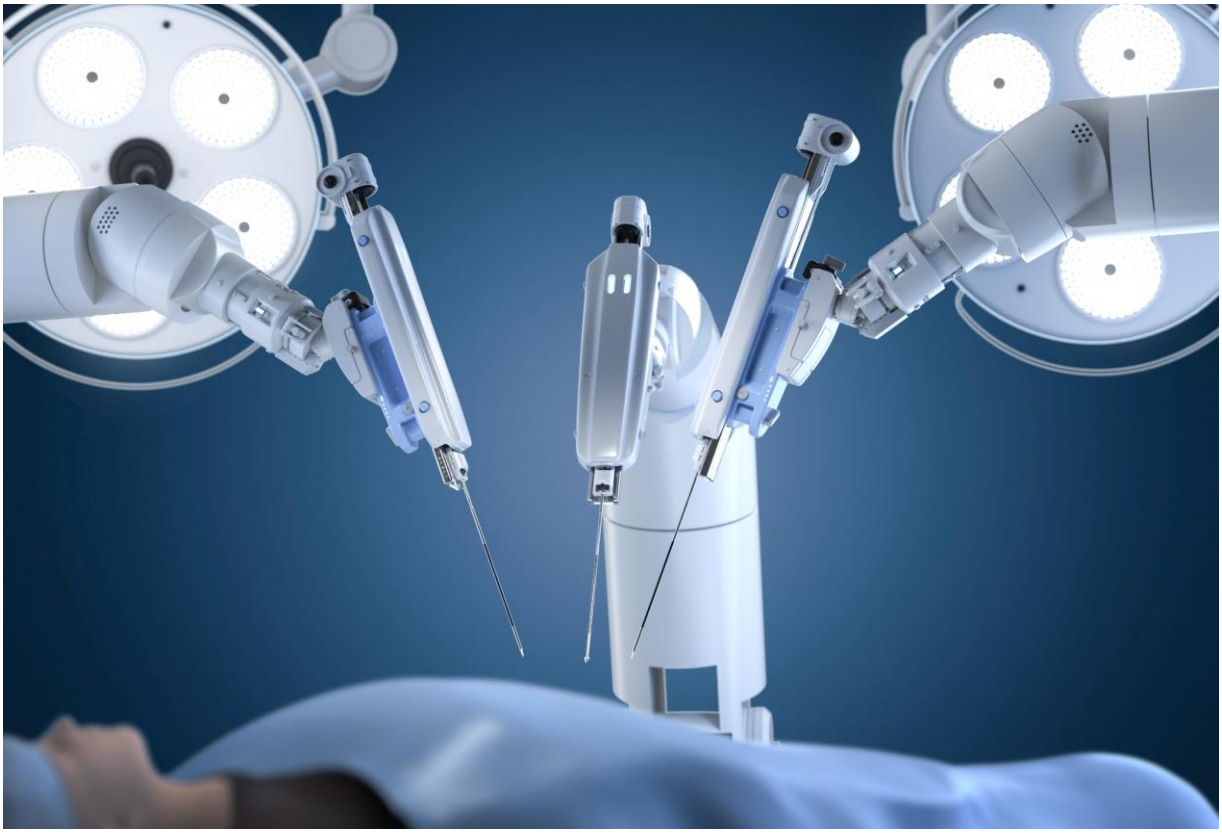
7/ AI Triage in Telemedicine: How Smart Algorithms Are Guiding First-Line Care | Secure Medical

8/ The Emergence of AI-Based Wearable Sensors for Digital Health Technology: A Review – PMC

Examples of applying ML and DL in smart wearable devices include AI-based detection of abnormalities such as atrial fibrillation (AFib) and assessment of heart disease risk.[9/] Another example is fall detection, which uses AI to analyze sensor data. The AI evaluates impact forces and movement patterns to determine whether the wearer has fallen. The fall detection system then sends an alert to the user's smartphone, allowing them to confirm or request assistance. If there is no response within a specified time, the device automatically contacts emergency services and notifies designated emergency contacts, ensuring rapid and effective support.

- **Telesurgery**

Telemedicine is rapidly advancing, extending from basic consultations to sophisticated technologies such as remote surgery. In this approach, surgeons control robotic surgical systems via high-speed communication networks, combined with computer vision[10/]—a branch of AI that analyzes and interprets images in real time. Here, images captured from surgical cameras support the decision-making of surgeons who are not physically present. This technology helps reduce errors and improve the precision of robot-assisted surgery, particularly in delicate procedures, such as cutting specific tissues or avoiding critical blood vessels with high accuracy.



9/ Photoplethysmography-Based Machine Learning Approaches for Atrial Fibrillation Prediction: A Report From the Huawei Heart Study | JACC: Asia

10/ Computer vision in surgery: from potential to clinical value | npj Digital Medicine

Benefits and Challenges of AI in Telemedicine

Benefits of AI in Telemedicine

1. Easier access to healthcare and lower costs

AI in telemedicine enables patients in remote areas or regions with limited medical personnel[11/] to receive diagnoses and medical advice more easily through common devices, such as smartphones or computers connected to the internet, which are generally more accessible than other medical equipment. Patients with mobility limitations, including the elderly or bedridden individuals, can consult doctors online from home without needing to travel to a hospital, thereby reducing healthcare costs. A 2023 survey by Deloitte, which collected data from 2,000 Americans,[12/] found that 53% of respondents believed AI improved access to healthcare services. Meanwhile, Brainforge reported that AI in telemedicine can reduce medical expenses by up to 40% compared to in-person visits.[13/]

2. Reducing the burden on healthcare professionals and the public health system

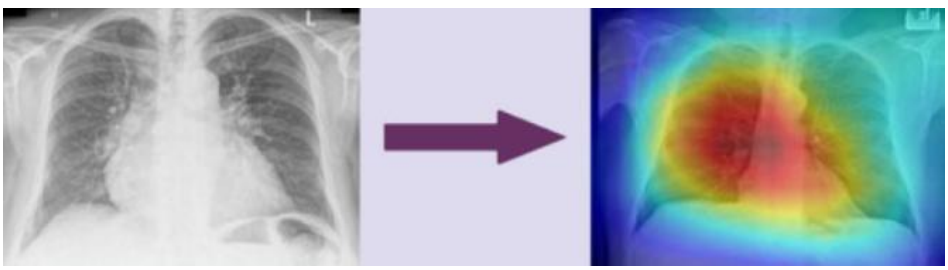
AI technology that screens patients' initial symptoms can partially supplement healthcare personnel, helping to reduce their workload and allowing doctors to focus on patients with severe or complex conditions. It also decreases unnecessary appointments and non-urgent hospital visits, addressing the shortage of medical staff and enabling more efficient use of healthcare resources.

3. Enhancing accuracy in medical decision-making

AI can assist in analyzing medical test results, such as X-ray images or computed tomography (CT) scans, detecting potential lesions that may be overlooked by healthcare professionals and thereby improving treatment effectiveness. In addition, AI's ability to monitor and track patient symptoms in real time, with alerts sent to physicians, when necessary, enables more precise detection of changes in patient health. AI can also predict disease trends and support preventive planning, allowing doctors to diagnose conditions more carefully and manage patient health more safely.

Figure 1

AI-Processed X-Ray Images



Source: Appinventiv

11/ Telehealth in Remote Areas: A New Artificial Intelligence-Based Model | ResearchGate
12/ Can GenAI Help Make Health Care Affordable? Consumers Think So | Deloitte US
13/ How Does AI Reduce Costs in Healthcare | Brainforge

Challenges of AI in Telemedicine

1. Privacy and data security issues

The application of AI in telemedicine involves the use and management of patient data through digital platforms, which is highly sensitive. Therefore, it is essential to protect this information from unauthorized access and prevent data leaks. Cybersecurity standards are necessary to enhance the safety of data management, including the use of encryption technology to protect data during transmission and storage, secure authentication methods to control system access, and regular software updates.[14/]

In addition, telemedicine platforms or applications must obtain consent from data owners in accordance with regulatory standards to protect patients' rights and privacy. For example, in the United States, the Health Insurance Portability and Accountability Act (HIPAA) safeguards patient health information. In Thailand, patient data protection is governed by the National Health Act B.E. 2550 and the Personal Data Protection Act B.E. 2562 (PDPA).

2. Impacts of biased data

Although users may expect AI to improve efficiency in screening and diagnosing diseases through telemedicine systems, the outcomes delivered by AI may vary across different user groups. This phenomenon is known as "Algorithmic bias," which occurs when AI produces skewed results because the training data does not sufficiently represent diverse patient populations. For example, if an AI system for dermatological diagnosis is primarily trained on images of patients with lighter skin tones, it may generate inaccurate results when diagnosing patients with darker skin.[15/] Similarly, in cases of angina or heart attacks—conditions historically observed more frequently in men—doctors tend to have more diagnostic experience with male patients. When AI algorithms are trained on past diagnostic data reflecting this imbalance, the models may learn patterns biased toward male patients, potentially overlooking symptoms more common in female patients. As a result, AI systems may under-diagnose women, leading to delays or inequities in treatment.[16/]

14/ Integrating Telemedicine and AI to Improve Healthcare Access in Rural Settings

15/ This study developed a dermatology image dataset to evaluate the use of AI in data analysis and found that model performance declined significantly—by 27–36%—for darker skin tones and rare diseases. However, fine-tuning the model with data representing a diverse range of skin tones can help reduce this performance gap. [2203.08807] Disparities in Dermatology AI Performance on a Diverse, Curated Clinical Image Set

16/ Biased AI can be bad for your health – here's how to promote algorithmic fairness | theconversation.com

3. Technological barriers and challenges in remote areas

In some rural or remote areas, internet infrastructure remains insufficient in terms of speed and stability, which hinders the smooth transmission of medical data, diagnoses, or communication between doctors and patients via online systems. This limitation may reduce the effectiveness of remote treatment and consultation, particularly when AI is integrated into telemedicine, as internet access is essential for data processing. To address these technological barriers, collaboration between the public and private sectors is necessary to invest in infrastructure development. Earlier in 2025, the Ministry of Public Health, together with the National Broadcasting and Telecommunications Commission (NBTC), launched a project to enhance the healthcare system and improve people's quality of life by expanding access to digital technology. The project aims to provide high-speed internet access points at 2,917 Subdistrict Health Promoting Hospitals (SHPHs) across 12 health regions, with a total budget of approximately THB 4 billion.[17/]

4. Balancing technology and human responsibility

Although AI has the capability to analyze large datasets and provide rapid medical recommendations, decisions related to patient health should not be left solely to AI. This is because certain risk factors must be considered, such as the nuanced nature of individual medical conditions, which may lead to inaccurate outputs or the generation of false information, commonly referred to as "AI hallucination".[18/] Moreover, excessive reliance on AI can result in cognitive and perceptual disturbances through interactions with AI chatbots, a phenomenon known as "AI psychosis", which in some cases may trigger risky behaviors such as suicidal thoughts or self-harm.[19/] Therefore, the use of AI in medical decision-making must remain under human oversight[20/] to ensure that healthcare professionals retain ultimate responsibility for final diagnoses and treatment decisions.

17/ 'สธ.-กสทช.' จัดจุดบริการเน็ตเร็วสูง ใน 'รพ.สต.' 2,917 แห่ง หนุนใช้ดูแลผู้ป่วยพื้นที่ห่างไกล | TheCoverage.info

18/ AI hallucination refers to a phenomenon in which a large language model (LLM) generates incorrect information or responses by fabricating non-existent data and presenting it in a way that appears factual. This may lead users to receive misleading or inaccurate information. What Are AI Hallucinations? | IBM

19/ Man ends his life after an AI chatbot 'encouraged' him to sacrifice himself to stop climate change | euronews.com

20/ The Importance of Human Oversight in AI-Driven Decision Making in Healthcare: Balancing Technology with Patient Care | Simbo AI - Blogs

Examples of AI Applications in Telemedicine: Global and Thai Perspectives

Global AI Applications in Telemedicine

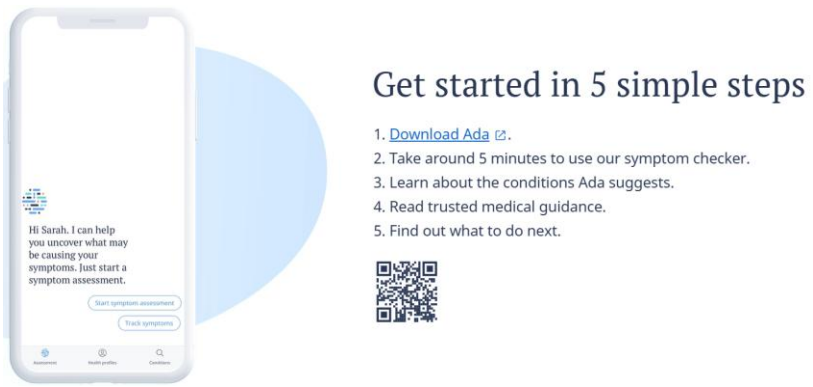
In many countries, telemedicine services have gained widespread popularity, particularly in the United States, where numerous applications have been developed to address challenges such as limited access to healthcare services, high medical costs, and long waiting times. **These applications often leverage AI technology to allow users to conduct preliminary self-assessments before consulting a doctor.** This approach differs from the common practice in Thailand, where applications are primarily used for direct online consultations with physicians. Examples of such applications include:

- **Ada Health**

Medical and technology experts jointly founded Ada Health in 2011. Today, the application has expanded its services to more than 190 countries, with approximately 30 million users worldwide.[21/] The platform focuses on providing AI-powered health guidance, allowing users to input their symptoms at any time and receive real-time assessments. The AI system analyzes possible conditions and offers appropriate self-care recommendations. Serving as a virtual health assistant, Ada Health helps users evaluate whether they need to see a doctor and better prepare relevant information for medical consultations.

Figure 2

Ada Health Application



Source: Ada Health

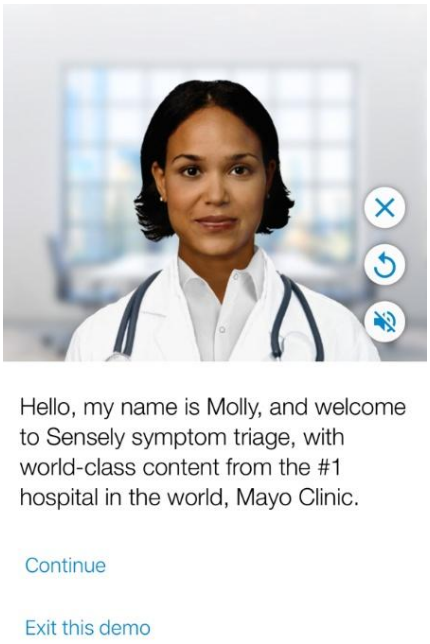
21/ 1.1 Company overview - Ada

- **Sensely**

Sensely, Inc., a leading technology company in the United States, launched the Sensely application in 2013. The app is available in 9 countries and supports over 30 languages.[22/] It combines AI with a virtual nurse named Molly to assist users in conducting preliminary symptom assessments. Users can provide health information through voice or text interactions with Molly, after which the system analyzes the responses and recommends appropriate care, such as self-care at home, visiting a physician, or connecting with health insurance services. A key strength of Sensely lies in its user-friendly design, making it particularly suitable for older adults and those less familiar with technology.

Figure 3

Sensely Application



Source: Sensely

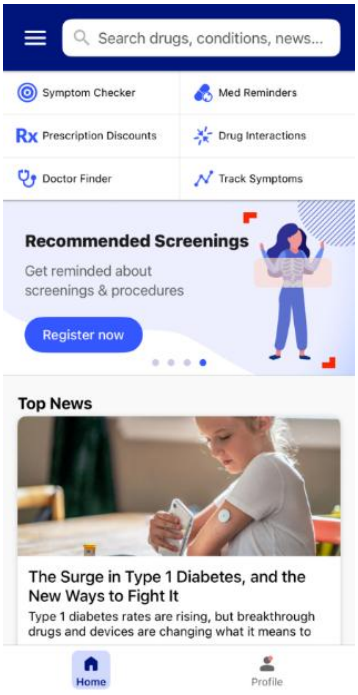
22/ Symptom Checker - Sensely

- **WebMD**

WebMD Health Corporation, a U.S.-based health information company, has been providing health-related content on its website since 1998 and launched the WebMD mobile application in 2008.[23/] The service primarily targets users in the United States and supports both English and Spanish. In 2018, WebMD enhanced its app with AI-powered features, including a Symptom Checker that allows users to perform preliminary assessments before consulting a doctor, Med Reminders to prevent missed or incorrect medication use, and Track Symptoms, which helps users prepare questions and relevant information for online medical consultations. Additionally, the Doctor Finder feature enables users to locate nearby physicians and specialists based on their current location.

Figure 4

WebMD Application



Source: WebMD

23/ WebMD Health - Reviews, Revenue and Downloads - Apple App Store

Thai AI Applications in Telemedicine

Telemedicine applications in Thailand have attracted increasing attention following the COVID-19 pandemic. Most applications focus on providing medical consultations through various digital channels, including video calls, voice calls, and messaging. A key feature of telemedicine apps in Thailand is their ability to offer comprehensive health consultations across multiple specialized departments, including mental health services, as seen in applications such as Mor Dee and Mor Koo Kids.

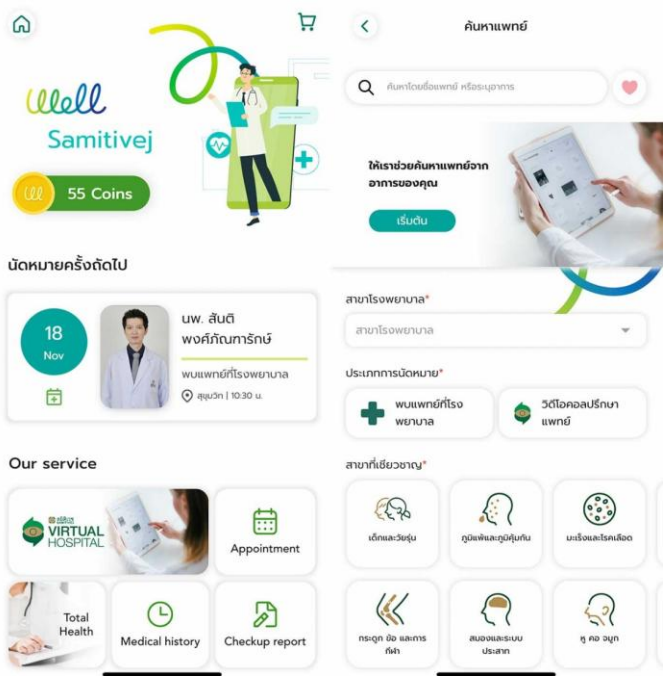
However, most telemedicine applications in Thailand have not yet integrated AI at the same level as those abroad, as access to the Thai healthcare system is generally adequate, reducing the urgency to develop AI-driven solutions. Nevertheless, some applications have recently begun incorporating AI into their systems. An example includes:

- **Well by Samitivej**

Samitivej Hospital developed this application in 2022,[24/] enabling users to schedule online consultations directly with the hospital's specialist doctors. A key feature of the app is the intelligent chatbot "AI Doctor," which can analyze users' health information and provide preliminary guidance, helping users better understand their health status and reduce anxiety before deciding to see a doctor. In addition, the app includes the "Wearable Clinic" feature, which connects to users' smartwatches to collect and analyze overall health data across five areas: sleep, heart rate, nutrition, physical activity, and mental health, providing valuable information for subsequent medical consultations.

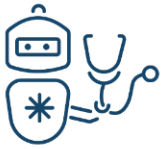
Figure 5

Well by Samitivej Application



Source: Well

24/ เปิดตัว แอปสุดล้ำ ปั้น Wellness Tech ช่วยคนไทยไม่ป่วย กับ แอปพลิเคชันเพื่อสุขภาพดี Well by Samitivej ตอกย้ำแนวคิด "เราไม่อยากให้ใครป่วย"



How Banks and Telemedicine AI Providers Can Support Each Other

Today, banks do more than provide deposit and lending services; they also play a role in facilitating various aspects of customers' lives, including lifestyle and investment needs. Similarly, AI in telemedicine has evolved into a comprehensive health ecosystem, encompassing everything from initial patient symptom screening to continuous health monitoring for rehabilitation. In this context, banks can support the development of AI in telemedicine in the following ways:

1. **Form strategic partnerships with AI telemedicine providers.** Such partnerships could include developing applications for bank employees that integrate financial and healthcare services. For example, an app could allow employees to perform initial symptom screening, book medical appointments, review treatment history, and pay for medical services directly from their healthcare benefits. If additional expenses arise, the app could link payments directly to employees' payroll accounts. Moreover, banks could negotiate with AI telemedicine providers to secure special service rates for employees, as well as complimentary value-added services, thereby promoting preventive healthcare. These services could include nutritional counseling, personalized exercise plans, and mental health consultations.

2. **Invest in startups providing AI telemedicine services.** For instance, Kasikorn Vision Co., Ltd.,[25/] a subsidiary of Kasikornbank PCL, has invested in the Indonesian company Alodokter to develop a comprehensive healthcare platform that leverages conversational AI technology.[26/] This platform helps physicians perform initial patient symptom assessments before online medical consultations.

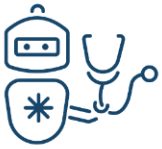
3. **Create benefits for bank customers, both retail and business, through a reward points program linked to the use of AI telemedicine services.** The system can be designed to automatically track customer activity and calculate points—for example, each time a customer completes a health assessment using AI or consults a doctor online, they earn points that can be redeemed for rewards, supplementary health services, or other health-related discounts offered by the bank.

4. **Apply AI technology to analyze large-scale, anonymized data obtained from AI telemedicine services to design employee wellness programs.** This approach helps employees maintain good health continuously and reduces absenteeism due to frequent illness. Banks can also integrate anonymized digital health data with internal organizational data to analyze and identify health trends within the organization, allowing them to mitigate common issues. For example, they can examine the relationship between the types of food and beverages offered in employee cafeterias and the incidence of diabetes or hypertension, or analyze the correlation between working hours and meetings with the occurrence of office-related syndromes.

In today's era, where AI and data play a critical role in both daily life and work, banks—with their large customer bases and access to vast amounts of data—can support AI-enabled telemedicine systems, thereby enhancing health benefits for both customers and employees. At the same time, banks must exercise caution regarding data privacy and usage, strictly adhering to relevant regulations as previously discussed. By doing so, collaboration between banks and health technology companies can become a key "piece of the puzzle" in building an accessible healthcare system for all.

25/ KVision advocate Beacon investment in Alodokter – a leading telemedicine startup of Indonesia - The Story Thailand

26/ Indonesia's Alodokter launches AI-powered virtual assistant



Krungsri Research View

Today, telemedicine is no longer a novel concept; it has become a major trend shaped by broader societal shifts. In the realm of health and wellness, telemedicine enhances access to medical services and emphasizes improving overall quality of life. With ongoing urbanization—where more people are moving from rural areas to cities—telemedicine enables urban dwellers with busy lifestyles to access healthcare conveniently and quickly, while also reducing the burden of traveling to hospitals.

From a technology perspective, the rise of artificial intelligence (AI) is taking telemedicine to the next level by reducing the workload on healthcare professionals and improving treatment efficiency. **AI can perform preliminary symptom screening before a patient decides to see a doctor, making its use in telemedicine a tangible support for public healthcare systems. This approach is far more suitable than relying on general AI chatbots**, such as ChatGPT, which may provide inaccurate responses that could negatively affect health. Moreover, individuals can create "digital twins"—virtual representations built using their real health data collected through AI-powered telemedicine. These digital twins allow physicians to assess conditions and plan personalized treatments without requiring frequent in-person visits.

Looking ahead, AI in telemedicine will enable a shift in healthcare from reactive treatment—addressing illnesses after they occur—to preventive care. It can also evolve into a hybrid care model that combines the benefits of AI-driven analysis and monitoring with expert consultations from healthcare professionals.

Furthermore, AI in telemedicine not only transforms access to healthcare services but also helps bridge the gap between urban and rural medical care, while reducing long-term healthcare costs—especially as Thailand transitions into a fully aged society. The future success of AI in telemedicine will depend on the development of technological infrastructure and the cultivation of user trust, ensuring that this technology becomes an integral part of a healthcare system that effectively meets the needs of Thai people in the digital era.

References

Thai

Samitivej (2022). “เปิดตัว แอปสุดล้ำ ปั้น Wellness Tech ช่วยคนไทยไม่ป่วย กับ แอปพลิเคชันเพื่อสุขภาพดี Well by Samitivej ตอกย้ำแนวคิด “เราไม่อยากให้ใครป่วย”” Retrieved August 11, 2025, from https://www.samitivejhospitals.com/th/about-us/news/detail/Well-by-Samitivej?utm

The Coverage (2025). “สธ.-กสทช. จัดจุดบริการเน็ตเร็วสูง ใน ‘รพ.สต.’ 2,917 แห่ง หนุนใช้ดูแลผู้ป่วยพื้นที่ห่างไกล” Retrieved August 11, 2025, from https://www.thecoverage.info/news/content/8277

กรมควบคุมโรค (2024). “จำนวนและอัตราตายด้วย 5 โรคไม่ติดต่อ ปี 2561 – 2565” Retrieved August 10, 2025, from https://www.ddc.moph.go.th/dncd/news.php?news=39911

English

Ada (2025). “Company overview” *Retrieved August 22, 2025, from* https://ada.com/help/company-overview/

Brainforge (2025). “How Does AI Reduce Costs in Healthcare” *Retrieved August 19, 2025, from* https://www.brainforge.ai/blog/how-does-ai-reduce-costs-in-healthcare

Cornell University (2022). “Disparities in Dermatology AI Performance on a Diverse, Curated Clinical Image Set” *Retrieved August 21, 2025, from* https://arxiv.org/abs/2203.08807?utm

Deloitte (2023). “Can GenAI help make health care affordable? Consumers think so” *Retrieved August 18, 2025, from* https://www.deloitte.com/us/en/Industries/life-sciences-health-care/blogs/health-care/can-gen-ai-help-make-health-care-affordable-consumers-think-so.html

Dimension Market Research (2024). “AI in Telemedicine Market Size Expected to Surge from USD 19.4 Billion in 2024 to USD 156.7 Billion by 2033” *Retrieved August 13, 2025, from* https://www.globenewswire.com/news-release/2024/11/13/2980419/0/en/AI-in-Telemedicine-Market-Size-Expected-to-Surge-from-USD-19-4-Billion-in-2024-to-USD-156-7-Billion-by-2033-Dimension-Market-Research.html

References

IBM (2023). “What are AI hallucinations?” *Retrieved August 21, 2025, from* https://www.ibm.com/think/topics/ai-hallucinations

Imane El Atillah (2023). “Man ends his life after an AI chatbot 'encouraged' him to sacrifice himself to stop climate change” *Retrieved August 21, 2025, from* https://www.euronews.com/next/2023/03/31/man-ends-his-life-after-an-ai-chatbot-encouraged-him-to-sacrifice-himself-to-stop-climate-

JACC Journals (2021). “Photoplethysmography-Based Machine Learning Approaches for Atrial Fibrillation Prediction: A Report From the Huawei Heart Study” *Retrieved August 14, 2025, from* https://www.jacc.org/doi/10.1016/j.jacasi.2021.09.004

LeewayHertz (2025). “AI in telemedicine: Use cases, technologies, implementation and development” *Retrieved August 10, 2025, from* https://www.leewayhertz.com/ai-in-telemedicine/

MarketsandMarkets (2025). “AI in Telehealth & Telemedicine Market: Growth, Size, Share, and Trends” *Retrieved August 10, 2025, from* https://www.marketsandmarkets.com/Market-Reports/ai-in-telehealth-telemedicine-market-108525984.html?utm

Miguel Cordon (2023). “Alodokter launches AI-powered virtual assistant for doctors” *Retrieved September 8, 2025, from* https://www.techinasia.com/alodokter-launches-ai-powered-virtual-assistant-for-doctors?utm

NPJ Digital Medicine (2022). “Computer vision in surgery: from potential to clinical value” *Retrieved August 15, 2025, from* https://www.nature.com/articles/s41746-022-00707-5?utm

PubMed Central (2023). “The Emergence of AI-Based Wearable Sensors for Digital Health Technology: A Review” *Retrieved August 14, 2025, from* https://pmc.ncbi.nlm.nih.gov/articles/PMC10708748/

ResearchGate (2023). “Telehealth in Remote Areas: A New Artificial Intelligence-Based Model” *Retrieved August 18, 2025, from* https://www.researchgate.net/publication/375317100_Telehealth_in_Remote_Areas_A_New_Artificial_Intelligence-Based_Model

Scientific Research Archives (2024). “Integrating Telemedicine and AI to Improve Healthcare Access in Rural Settings” *Retrieved August 20, 2025, from* https://sciresjournals.com/ijlsra/sites/default/files/IJLSRA-2024-0061.pdf

References

Secure Medical (2025). “AI Triage in Telemedicine: How Smart Algorithms Are Guiding First-Line Care” *Retrieved August 14, 2025, from* https://securemedical.com/telemedicine/ai-triage-in-telemedicine-how-smart-algorithms-are-guiding-first-line-care/

Sensely (2025). “Connect to World Class Care – 24/7” *Retrieved August 22, 2025, from* https://sensely.com/solutions/symptom-checker/?utm

The Conversation (2021). “Biased AI can be bad for your health – here’s how to promote algorithmic fairness” *Retrieved August 21, 2025, from* https://theconversation.com/biased-ai-can-be-bad-for-your-health-heres-how-to-promote-algorithmic-fairness-153088?utm

The Story Thailand (2022). “KVision advocate Beacon investment in Alodokter – a leading telemedicine startup of Indonesia” *Retrieved September 8, 2025, from* https://www.thestorythailand.com/en/22/09/2022/77180/?utm

United Nations (2023). “Chronic diseases taking ‘immense and increasing toll on lives’, warns WHO” *Retrieved August 13, 2025, from* https://news.un.org/en/story/2023/05/1136832?utm

WebMD Health (2025). “Developer Info” *Retrieved August 22, 2025, from* https://apptail.io/developer/webmd-health-N

World Health Organization (2024). “Noncommunicable diseases” *Retrieved August 11, 2025, from* https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases?utm

KRUNGSRI RESEARCH

Pimnara Hirankasi, Ph.D.
Head of Research Division and Chief Economist

Macroeconomic Team

Sujit Chaivichayachat
Head of Macroeconomic Research

Wanicha Direkudomsak
Senior Economist

Churailuk Pholsri
Senior Economist (Forecasting)

Piyavadee Chirasirisuwan
Senior Economist

Thansin Klinthanom
Senior Economist

Krittabhorn Sirichaichingkun
Economist

Supasyn Itthiphatwong
Economist

Analytics & Intelligence Team

Pimnara Hirankasi, Ph.D.
Acting Head of Analytics and Intelligence Research Department

Nathanon Ratanathamwat
Senior Researcher

Narichaya Satafang
Researcher

Parinya Mingsakul
Researcher

Chanatta Thararos
Researcher

Industry Team

Taned Mahattanalai
Head of Industry Research

Poonsuk Ninkitsaranont
Senior Analyst (Healthcare, Mobile Operators)

Piyanuch Sathapongpakdee
Senior Analyst (Transport & Logistics)

Thian Thiumsak
Senior Analyst (Energy, Petrochemicals)

Chaiwat Sowcharoensuk
Senior Analyst (Agriculture)

Narin Tunpaiboon
Senior Analyst (Power Generation, Modern Trade, Chemicals, Medical Devices)

Puttachard Lunkam
Senior Analyst (Construction Contractors, Construction Materials, Hotels, Industrial Estate)

Patchara Klinchuanchun
Senior Analyst (Real Estate)

Prapan Leenoi
Analyst (ESG)

Supawat Choksawatpaisan
Analyst (Automobile, Electronics & Electrical Appliances)

Rapeepoom Lapmak
Analyst (Agriculture, Food & Beverages)

MIS and Reporting Team

Thamon Sernsuksakul
Information Analyst

Chirdsak Srichaiton
Information Analyst

Wongsagon Keawuttung
Information Analyst