Leveraging AI and GenAI in Healthcare to Enhance Workflow Efficiency and Hyperpersonalize Patient Care

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Healthcare organizations in Asia/Pacific are at a pivotal moment with AI and GenAI witnessing prioritized investments and adoption. Healthcare organizations in the region state that 86% are using AI, while 59% are utilizing GenAI technology.

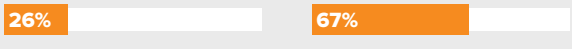
AI and GenAI are transforming healthcare across the Asia/Pacific by optimizing clinical, operational, and administrative workflows, enhancing patient engagement, and augmenting clinician experience. *IDC's Asia/Pacific Public Sector Survey, 2024*, shows that AI and Automation in healthcare operations stand as the top operational priority for healthcare organizations, for the next two years. The same survey also revealed that clinical workflow optimization is seen as having the greatest potential for automation to improve patient throughput and reduce bottlenecks in the care delivery process for half of the healthcare organizations in the region.

AI optimizes clinical workflows by automating routine tasks, streamlining clinical decision-making, and improving resource allocation. AI-powered predictive analytics helps hospitals manage patient flow, detect diseases early, reduce surgical complications with real-time recommendations, and prevent clinician burnout by optimizing staffing and workload management. Virtual health assistants and chatbots enable the hyper-personalization of patient services by facilitating self-service appointment scheduling, health monitoring, and 24/7 query support through integrated clinical data platforms. The transformative value of AI and GenAI in healthcare lies in their ability to enhance patient experiences and drive better clinical outcomes. By providing real-time, actionable insights into comprehensive clinical data at the point of care, these technologies empower care providers to make informed decisions quickly and accurately.

Top 5 Industry AI/GenAI Use Cases in Healthcare

- Clinical Workflow and Resources Optimization
- AI-enabled Customer Service and Self Service
- Augmented Compliance and Risk
- AI-powered Quality and Compliance
- Augmented Claims Processing

Extent to which Asia/Pacific healthcare organizations believe GenAI will disrupt their competitive position or business operating model in the next 18 months



Disrupting Now

Will Disrupt in next 18 Months

Source: IDC's Worldwide AI and Generative AI Spending Guide 2024 | August (Version 2, 2024) Forecast

Source: IDC FERS Wave 1 – 2024 Asia/Pacific n = 300, Asia/Pacific Healthcare n = 28

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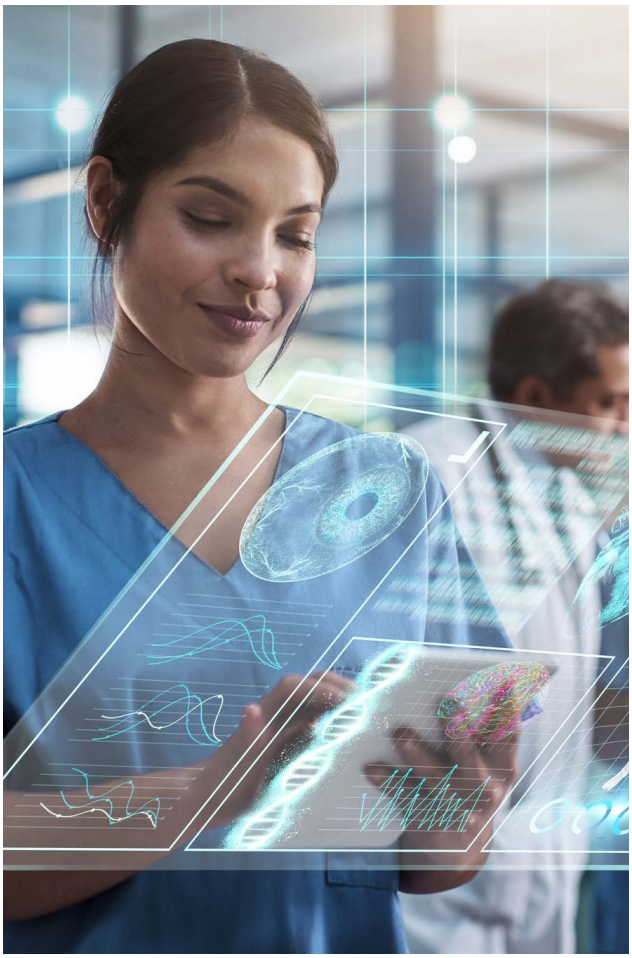
GenAI in Healthcare

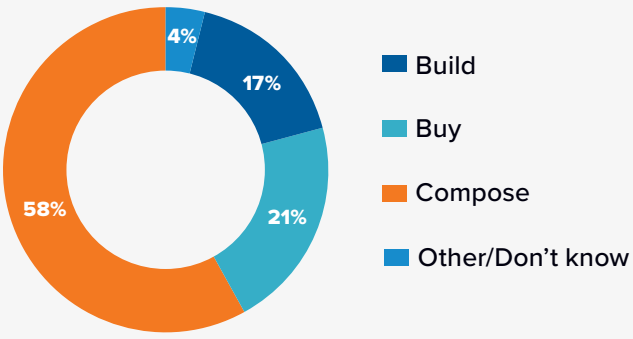
GenAI is set to transform the healthcare sector by driving innovation, improving efficiency, and enhancing patient care. In the Asia/Pacific, healthcare organizations are investing in GenAI, focusing on early adoption to leverage new technologies. Many organizations start with proof-of-concept (POC) projects to make sure GenAI solutions fit their needs.

A key trend is a growing commitment to GenAI adoption, with many CIOs planning to increase IT budgets to support GenAI efforts. As per *IDC's FERS Survey 2024,* 40% of the Asia/Pacific's healthcare providers are planning to increase IT budgets, to accommodate early GenAI use cases. These investments aim to improve clinician efficiency, boost patient engagement, and streamline workflows. As per IDC's *Digital Executives Sentiment Survey, 2024*, about 77% of healthcare organizations in Asia/Pacific are in the early stages of investment. GenAI solutions' scalability and cost-effectiveness make it possible to expand access to quality care, especially in underserved areas, driving the democratization of AI.

As organizations progress to full-scale GenAI deployments, trust, transparency, and responsible AI practices are essential for realizing the full potential of these technologies. Custom-built solutions allow healthcare organizations greater control over clinical datasets, ensuring privacy, security, seamless integration, customization, and adaptability while improving patient care. In contrast, the "Buy" approach provides a quicker path to implementation with ready-to-use solutions that meet common healthcare challenges like workflow automation and patient engagement. When cost and privacy/security concerns related to clinical data are effectively managed by solution providers, the "Buy" approach is likely to see increased adoption in the region.



GenAI Adoption Approach in Healthcare



Compose: fine-tuning an existing GenAI model (usually open source) on top of an enterprise AI platform.

Build: developing a foundational model using institutional data.

Buy: leveraging enterprise applications with GenAI capabilities or native GenAI applications.

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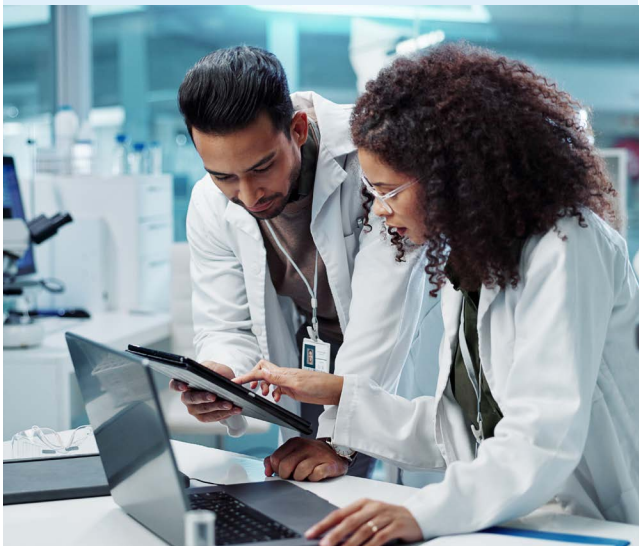
Top GenAI Use Case Areas by Function in Healthcare

01	**HR: End User Experience**
02	**Procurement: Contract Management**
03	**Customer Service: Self-service —** Customer self-scheduling and self-service knowledge base
04	**ITOps: Service Performance —** Anomaly detection and service observability
05	**Facilities: Intelligent Capital Planning and Execution**



Conclusion

As GenAI continues to redefine healthcare in Asia/Pacific, organizations are increasingly recognizing its transformative potential in addressing longstanding industry challenges by focusing on specific industry-level use cases. By leveraging GenAI's ability to process vast amounts of data and generate actionable insights using large language models (LLMs), healthcare organizations can achieve new levels of workflow efficiency and deliver hyper-personalized care.

Moving forward, the success of GenAI will depend not only on the technology itself but also on a strong commitment to ethical AI practices, data privacy, and building trust within the healthcare ecosystem. By defining strategies to effectively handle structured and unstructured data, and selecting partners based on intuitive solution offerings (user-friendly, transparent GenAI tools that align with clinician expectations and enhance hospital workflows), GenAI adoption is set to empower healthcare systems to meet the demands of a rapidly evolving patient landscape, ultimately ensuring care outcomes.

Source: IDC WW AI Use Case Survey, July 2024 (Asia/Pacific n = 919, Asia/Pacific, Healthcare. n = 41.)

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