

Advance AI with enterprise-grade confidence

A private cloud for AI for healthcare



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Healthcare providers, pharmaceuticals and biotechnology, and medical research are at the forefront of advancing population health and well-being. With this vital responsibility, they are grappling with a multifaceted crisis that threatens the efficacy, equity, and sustainability of healthcare delivery.

This complex state can be distilled into the following key challenges:

- **Healthcare costs** are escalating due to administrative costs, advanced medical technologies, aging populations, and increased prevalence of chronic diseases
- **Access and equity** are influenced by geographic, socioeconomic, and demographic factors
- **Disparate systems** and vast amounts of data that must be managed securely and efficiently
- **Complex regulatory and compliance environment** is time-consuming and costly to navigate
- **Innovation and research bottlenecks** of high cost, lengthy trials, and limited funding
- **Healthcare workforce shortages and burnout**

Solving key challenges with AI

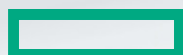
There is an opportunity to revolutionize how we create healthier communities. From cutting-edge research to breakthrough treatment options, to delivering personalized patient care, technologies such as AI can help address the critical challenges that the healthcare sector faces today.

- **Enhance patient experiences**

- Provide doctors with insights into conditions and treatment options to promote overall patient satisfaction, understanding, and positive health outcomes
- Differentiate services that can enhance the quality of care such as usability of patient portals and electronic health record (EHR) systems to access health information, schedule appointments, and communicate with healthcare team
- Enable hyper-personalized 24/7 access to patient education and support through LLM chatbots and virtual assistants
- Optimize personalized medicine for more precise treatment plans, early disease detection, reduced trial and error, improved drug efficacy, better communication, efficient resource use, and overall better health outcomes

- **Improve operational efficiencies**

- Optimize workforce allocation and scheduling to reduce burnout
- Integrate EHRs, improve data interoperability, and enhance data security through advanced encryption and anomaly detection methods
- Automate compliance monitoring, track regulatory changes, and ensure that healthcare practices are up to date with the latest legal requirements, reducing the burden on staff
- Streamline revenue cycle management (RCM)
- Assist in medical documentation and reporting, which helps burned-out staff have more accurate and reliable notes after a long shift and generate summaries from unstructured data



- Mitigate safety and security risks
- Implement virtual assistants for triage and preappointment validations, streamlining processes, reducing staff workload, and enhancing productivity
- **Enhance clinical outcomes**
 - Improve imaging interpretation and provide clinical decision-making support
 - Bridge the gap for underserved populations. AI-driven tools can identify at-risk groups and customize interventions to enhance equity in healthcare delivery, including telemedicine and remote patient monitoring
 - Enable real-time patient monitoring for vital signs, movement, and other parameters to prevent falls and more proactive patient care
 - Improve treatment plan adherence by enhancing patient engagement and communication
 - Increase operating room workflow automation by optimizing scheduling, resource allocation, patient preparation, intraoperative assistance, postoperative care, coordination, and data integration
 - Provide surgery analytics through preoperative, perioperative, and postoperative stages
- **Improve medical research**
 - Synthesize realistic patient data, predict disease progression, optimize drug design, and generate novel insights from medical literature
 - Reduce costs, enhance the precision of medical interventions, and foster interdisciplinary collaboration
- **Accelerate and optimize pharmaceuticals and biotechnology**
 - Accelerate and streamline drug discovery, drug development, and clinical trials
 - Optimize molecular design, personalized medicine approaches, drug safety, the rapid synthesis of novel compounds, and the prediction of potential therapeutic effects

A private cloud for AI for healthcare

HPE Private Cloud AI is the engine behind implementing these new efficiencies and outcomes in your healthcare organization.

HPE Private Cloud AI, part of NVIDIA® AI Computing by HPE, is a turnkey private cloud solution for inference, retrieval augmented generation (RAG), and fine-tuning use cases. Codeveloped with NVIDIA, it delivers a cloud-based experience to simplify AI complexity, improve productivity, and speed time to value—while keeping data private, secure, and under complete control of enterprise IT. The solution can be deployed on-premises in colocations, edge locations, or data centers. And unlike full-stack AI solutions based on reference architectures that can take months to plan, build, and deploy with professional services, HPE Private Cloud AI is ready to use out of the box—providing productivity to AI and IT teams in minutes. All managed through HPE GreenLake cloud, it enables customers to expand and add AI capabilities as demand within the enterprise grows.



Key benefits of HPE Private Cloud AI

- **Instant AI productivity:** Get self-serve access to essential AI tools
- **Unified access to all your data:** Remove data siloes with one global namespace for seamless access to different data types, anywhere
- **Enterprise-grade confidence and control:** Protect data and models, and maintain performance and reliability of AI infrastructure, with multilayered controls
- **Cloud experience that keeps your data and IP private:** Deployed on-premises, designed for hybrid; flexible and modular with cloud technologies, economics, and scalability

Up and running in
three clicks

2x
increase in AI development
productivity¹

4x
faster time to
inference²

Flexibility
to consume and manage
as demand grows

¹ 90% developer productivity increase is based on 2023 UA data: Reduction in total time to build, train, evaluate and operationalize ML model using bespoke tools in comparison with fully integrated workflows and self-service access to data and ML frameworks.

² The 4x faster time to inference is in comparison with the typical DIY manual steps to operationalize large language model (LLM) versus automation in AI essentials (for example, virtual assistant chatbot solution accelerator with RAG).



Accelerate AI success with Hewlett Packard Enterprise and NVIDIA

AI holds immense potential for driving transformation. However, the vast and fragmented ecosystem of AI software and hardware choices creates complexity and can jeopardize a company's most valuable asset—its proprietary data.

HPE Private Cloud AI helps to solve these challenges—simplifying complexity and improving productivity while managing enterprise risk from AI.

Wherever you are on your AI journey, HPE Private Cloud AI can help you accelerate success. Start fast, remain open, and consume flexibly to meet future AI opportunities.

Learn more at

[HPE.com/us/en/Private-Cloud-AI.html](https://hpe.com/us/en/Private-Cloud-AI.html)



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