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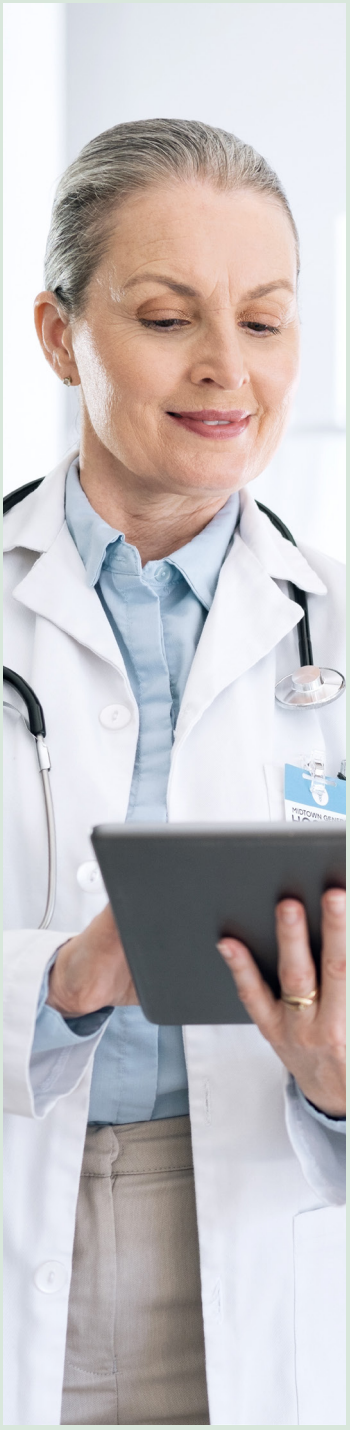

ORACLE HEALTH EHR: AI-NATIVE, CLOUD-READY, INTEROPERABLE

Abstract

Oracle Health evolved from Cerner, which Oracle acquired in June 2022. Since then, the platform has been upgraded to an AI-driven, cloud-native electronic health record (EHR) system built on Oracle Cloud Infrastructure (OCI). The portfolio includes innovations such as the Clinical AI Agent, an advanced EHR environment, and a modernized patient portal. Oracle Health is widely utilized in hospitals, ambulatory care settings, diagnostic laboratories, and a range of clinical specialties.

This transformation represents Oracle's effort to elevate the product's established capabilities while introducing next-generation features that focus on artificial intelligence (AI), automation, and improved digital experiences for clinicians and patients.

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EHR Market Overview and Growth Outlook

Electronic health records (EHRs) are an important source of patient information across hospitals, inpatient and outpatient practices, diagnostic services, imaging centers, perioperative areas, and specialty departments. The EHR system consolidates both structured and unstructured clinical data, including demographics, medications, allergies, orders, results, and provider notes. It also supports critical workflows such as order entry, decision support, clinical documentation, billing, and regulatory reporting. Because EHRs maintain standardized data formats and expose certified APIs, they serve as foundational infrastructure for patient engagement, coordinated care, interoperability initiatives, and population health analytics mandated by national healthcare programs.

Global investment in EHR platforms remains substantial and is projected to continue its upward trajectory, visualized in Figure 1. Independent market analysts estimate that total EHR spending will reach approximately US $29–39 billion by 2030. They expect a sustained 4–6% compound annual growth rate (CAGR) extending into the mid-2030s (Refer Figure 1). This projection reflects ongoing modernization cycles, cloud migration, regulatory compliance requirements, and the rising demand for clinical and operational capabilities led by artificial intelligence (AI).

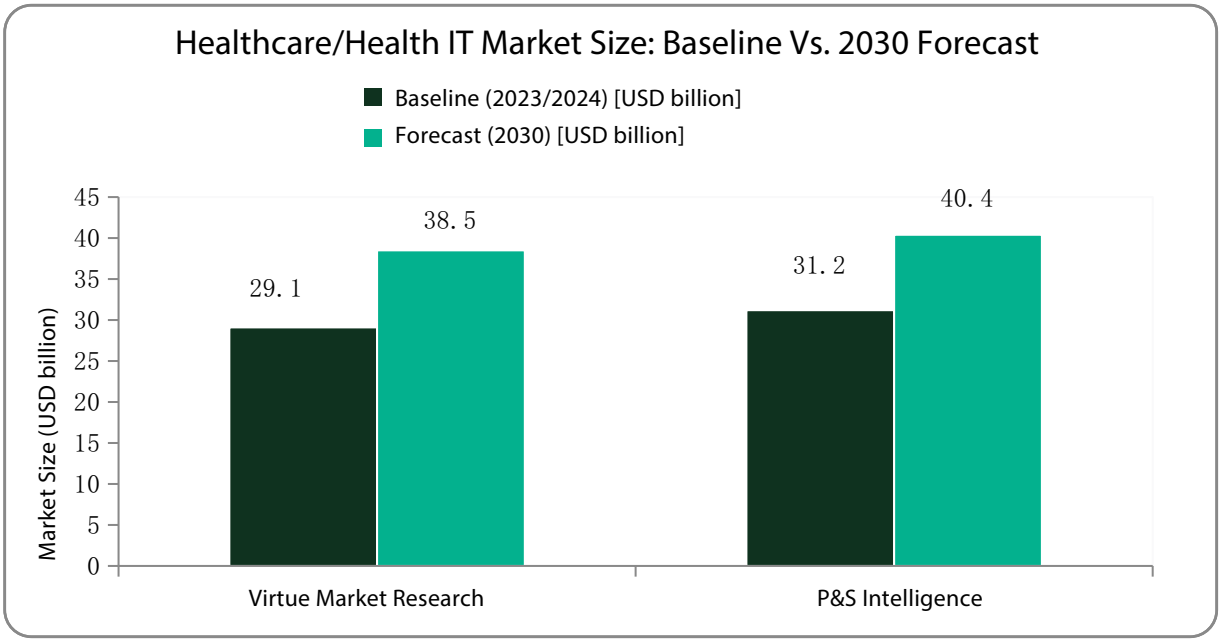

Figure 1: Global EHR market projection

Where Oracle Health Shines

Oracle is transforming the former Cerner Millennium platform into a next-generation, AI-first EHR system. They are rebuilding the platform on Oracle Cloud Infrastructure (OCI) using a semantic data layer, conversational interfaces, and agentic automation. Oracle is also developing a new EHR system independent of Cerner's legacy architecture. Their coexistence strategy ensures that existing customers can continue using Millennium functionalities while they are migrated to the new EHR infrastructure.

This AI-first transformation positions Oracle Health not just as an EHR vendor but as a data and AI-informed health platform provider. By leveraging Oracle's enterprise cloud, data, analytics, and AI capabilities, Oracle Health far exceeds traditional EHR competitors in scale.

Despite the competitive EHR market, Oracle Health's unique strengths as seen in Figure 2 distinguish it from peers like Epic Systems, MEDITECH, and Altera Digital Health.

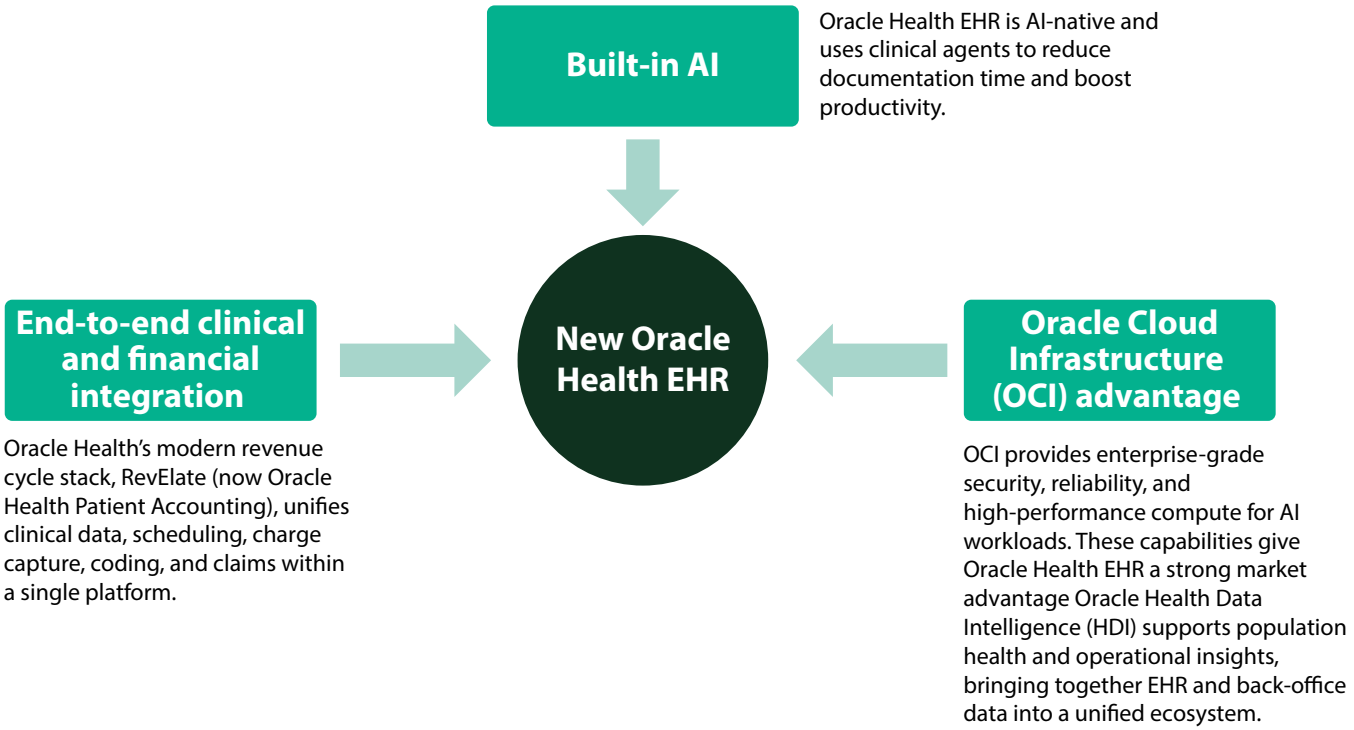

Figure 2: Oracle Health EHR differentiators

Solution Footprint

This section outlines three core pillars hospitals and health systems rely on for comprehensive digital operations. It also highlights Oracle Health EHR's improved offerings:

Patient portal: Nextgeneration patient experience

Oracle Health is transforming its patient portal, moving from a standard view–download–transmit interface to an AI-enabled, conversational, patient-centric engagement hub.

Clinical modules: Comprehensives care delivery across the continuum

Oracle Health EHR provides a broad set of clinical module portfolios. It supports hospitals, ambulatory care, diagnostics, specialties, research, and long-term care settings. This range best suits multi-hospital networks, government systems, and complex integrated delivery networks. Table 1 details the clinical domain coverage that Oracle Health offers.

Table 1: Clinical domains covered under Oracle Health EHR

Core acute and ambulatory care	Diagnostics, laboratory, and imaging	Specialty & Advanced Care
• Acute care	• General laboratory	• Oncology
• Ambulatory care	• Microbiology	• Perioperative Services
• Inpatient nursing	• Anatomic pathology	• Women's Health
• Physician practice	• Blood bank	• Rehab Therapies
	• Radiology	• Geriatrics
		• Behavioural Health

Revenue cycle modules: End-to-end financial transformation

Oracle Health is transitioning its revenue cycle suite from the legacy Cerner Patient Accounting to a new, cloud-enhanced architecture under Oracle Health Patient Accounting (previously RevElate). This new architecture unifies clinical and financial data, improves accuracy, and reduces administrative effort.

The core revenue cycle modules include:

Acute case management	Registration	Scheduling
Health information management (HIM)	Charge services	Oracle Health Patient Accounting

Compliance and Interoperability

Compliance and interoperability determine whether an EHR can safely scale across care settings, qualify for federal incentives, enable patient access, and exchange data at the national level.

Oracle Health is built on Cerner's legacy program certified by the Office of the National Coordinator for Health Information Technology (ONC) and runs on OCI. As seen in Table 2, it is engineered to meet these obligations while enabling AI-era workflows.

Table 2: Compliance and interoperability in Oracle Health EHR

CMS CEHRT	TEFCA and QHIN Participation	FHIR R4, HL7 v2, and CDA Standards	HIPAA Privacy Rule Compliance
CMS mandates hospitals to run CEHRT for their reporting period to avoid penalties and earn incentives. They must also report measures such as e-prescribing, patient access, and interoperability.	TEFCA creates a national "network of networks" for health information exchange. Oracle Health Information Network has been accepted as a QHIN.	Oracle Health exposes FHIR R4 resources, including encounters, conditions, laboratory reports, and medicines, through documented APIs such as the Cerner Ignite stack. It supports HL7 v2 and C-CDA through Oracle Integration for Healthcare—MLLP, CDA, and FHIR profile import.	The HIPAA Privacy Rule governs the use and disclosure of PHI and patients' rights to access and amendments. Oracle Health supports privacy-by-design with role-based access, audit logs, and configurable controls. These features help organizations implement these obligations and maintain robust privacy operations within the EHR.

Legend:

CMS: Centers for Medicare and Medicaid Services

CEHRT: Certified EHR Technology

TEFCA: Trusted Exchange Framework and Common Agreement

QHIN: Qualified Health Information Networks

FHIR R4: Fast Healthcare Interoperability Resources [Release 4]

HL7 v2: Health Level Seven International version 2

C-CDA: Consolidated Clinical Document Architecture

MLLP: Minimal Lower Layer Protocol

HIPAA: Health Insurance Portability and Accountability Act

PHI: Protected Health Information

AI strategy and use cases with Oracle Health

Oracle Health's AI strategy is a significant shift in the EHR landscape. It moves from traditional digitalization to a fully AI-native, cloud-powered health platform.

The Oracle Health Clinical AI Agent—formerly the Clinical Digital Assistant—is a key differentiator. It delivers:

- Ambient listening and automated note generation
- Real-time clinical insights and next-step recommendations
- Conversational access to laboratory reports, imaging, medications, and summaries
- Context-aware assistance during chart review and order entry

Scaling AI requires trustworthy, integrated data infrastructure. Table 3 summarizes how Oracle delivers this through Oracle Health Data Intelligence (HDI), OCI and AI Data Platform (AIDP).

Table 3: Integrated data infrastructure enabling AI at scale

Oracle Health Data Intelligence	Oracle Cloud Infrastructure	AI Data Platform
Oracle HDI is a unified, EHR-agnostic platform that integrates longitudinal patient data with financial, operational, and population health datasets. It provides real-time dashboards for operations, quality, and care management.	OCI is purpose-built for regulated workloads, offering high-performance compute for AI and machine learning (ML). The infrastructure boasts built-in encryption, identity controls, and network segmentation. It also supports hybrid, public, and dedicated cloud deployment options.	AIDP a scalable enterprise AI workbench that enables model training, tuning, and orchestration. It also supports large-scale data ingestion and Delta table management, and cost governance through unit metering.

There are high-impact use cases for health systems that leverage Oracle's semantic EHR, cloud-native components, and AI agent orchestration to deliver measurable return on investment (ROI). These include:

- Medical record summarization for pre-visit, referral, and emergency department (ED) triage
- Ambient documentation for providers across more than 30 specialties
- Claim denial prediction and prevention using historical patterns and contract rules
- Prior authorization automation embedded in the clinician workflows
- Financial accuracy analytics such as charge capture and documentation completeness
- Operational command center intelligence for throughput, capacity, and staffing

Conclusion

Despite strong market competition, Oracle Health significantly improves clinical workflows, patient experience, and financial performance through its AI-first EHR, Clinical AI Agent, AI-enabled patient portal, and Revenue Cycle Management (RCM) tools.

When combined with OCI, AIDP, and FHIR/TEFCA standards, Oracle Health can deliver measurable value at scale. Success would depend on organizations building the right skills and managing AI with a focus on safety and compliance.

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