IDC MarketScape

IDC MarketScape: Asia/Pacific Electronic Health Record 2024 Vendor Assessment

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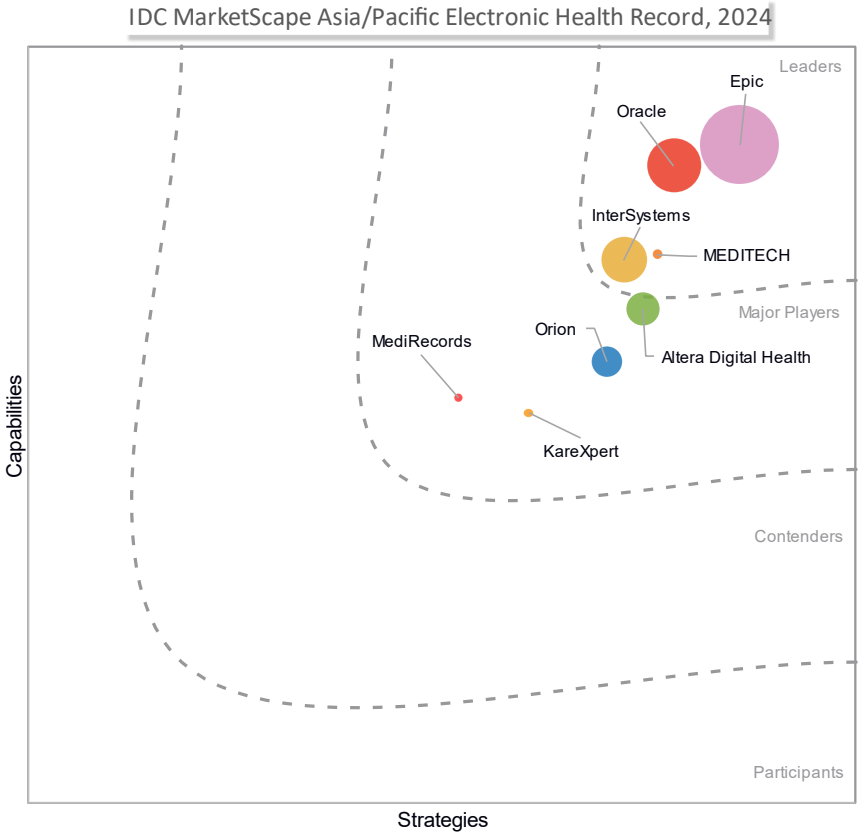
THIS IDC EXCERPT FEATURES INTERSYSTEMS AS A LEADER

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape: Asia/Pacific Electronic Health Record 2024 Vendor Assessment



Source: IDC, 2024

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

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ABOUT THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Asia/Pacific Electronic Health Record 2024 Vendor Assessment (Doc # AP52047324)

IDC'S OPINION

Electronic health records (EHRs) are evolving, widening the scope of capabilities and functionalities. The adoption of EHRs by hospitals in Asia/Pacific has grown significantly in recent years, with strong acceleration in the post-pandemic era. This evolution is tied to the growing emphasis on patient-centric care through the increasing integration of emerging technologies into the care continuum. At the same time, AI and, more recently, generative AI (GenAI) are enabling clinicians to extensively enhance workflow productivity across clinical, operational, and administrative areas. IDC's *2023 Asia/Pacific Digital Executive Sentiment Survey* shows that for almost half (46.8%) of the healthcare organizations in Asia/Pacific, building AI capabilities, including GenAI, is the topmost data and analytics priority over the next year. As a result, care providers are actively seeking efficient, user-friendly, and intuitive EHR platforms to align digital strategies with healthcare demands.

While EHR solution providers have increased their focus on offering full-stack solutions to care providers, they are also prioritizing the improvisation of existing features and plan to add new capabilities to their kit. This is to ensure that their solutions support care providers with their intensifying demands and expectations. As a result, EHR technologies are moving well beyond clinical data capture and interoperability to include acute care management, complex specialization, long-term care, rehabilitation, behavioral health, clinical decision support systems (CDSSs), and the integration of remote care management.

With this in mind, healthcare providers should assess the three pillars of success while engaging with EHR solution providers:

- **Increased workflow optimization:** To optimize workflows in hospitals, creating an EHR road map that meets the current and future needs of care delivery is critical. Making the right choices when selecting an EHR platform in hospitals across the region is crucial for optimizing operational and clinical workflows, leading to enhanced efficiency and improved patient outcomes and hospital management. IDC's *Digital Executive Sentiment Survey 2023* shows that nearly two-thirds of healthcare organizations in Asia/Pacific consider optimizing business processes and workflows to improve critical business outcomes as the critical operational priorities for the next 12 months. The creation of a centralized digital repository of patient information reduces the time and effort required to manually retrieve paper records or information scattered across multiple disparate systems. As Asia/Pacific governments are now prioritizing nationwide clinical data integration, the focus on internal

clinical data sources is vital for those countries' respective healthcare organizations. It enables quicker and more accurate patient registration, billing, and appointment scheduling. In the future, success will be defined through innovative tools and services to identify workflow bottlenecks and process improvements.

- **Enhanced workforce efficiency:** EHR systems enhance the flow of patient data across departments, such as radiology, labs, and pharmacies. Physicians can quickly access test results, update treatment plans, and review patient history without delays, which is crucial for time-sensitive decision-making in acute care settings. The utmost care needs to be taken to ensure that the EHR tools/platforms being adopted are not placing an additional burden on the workforce, especially the clinicians; instead, these tools should alleviate those pressures so clinicians can focus on better healthcare delivery. This could be ensured by assessing the number of clicks, checking on automation to eliminate repetitive tasks, and creating a well-structured entry dashboard to ensure an intuitive experience. Further, the EHR vendors could confirm the feedback loop is in place to listen to the clinicians and key stakeholders from the hospitals.
- **Enhanced patient engagement:** In the full-stack solution offerings by EHR solution providers, one of the core features is the ability to digitally engage with patients and connect them seamlessly with the system, including the referral processes. Such connections provide patients with a greater amount of flexibility with respect to data portability and well-informed decisions. Advanced features of EHR solutions may include ambient interfaces, contextual feedback, and GenAI to capture clinician–patient conversations to generate a quick summary, greatly supporting patients in getting quality time and increased attention from the consulting clinician. In Asia/Pacific, the success of EHR adoption greatly depends on how efficiently the regional nuances, such as digital literacy and digital health equity, are addressed, especially in large emerging countries such as Indonesia, Malaysia, and India. Effective EHRs also streamline the prescription process, reducing prescription errors and ensuring that medications are tracked across departments. This results in better medication management and fewer instances of adverse drug reactions.

As the technology adoption pace increases and hospitals strive for efficiency enhancements, EHR providers keep regular updates or release cycles, at least once a year, to align with the evolving demands.

The key findings from this study are:

- **Leveraging AI/ML capabilities is essential for EHR vendors to support clinicians by augmenting and sharpening their diagnostic efficiency through CDSS.** EHR vendors are being equipped with advanced technologies to monitor patient data throughout the care continuum and trigger any

abnormalities. This enables faster intervention and outcome-based treatment. Flagging irregularities is critically important in emergency cases, and it enables clinicians to intervene early. EHR providers are fine-tuning CDS frameworks to ensure the right information goes to the right people, in the right form of intervention, and at the right workflow stages. The aim is to ensure that clinicians are the final decision-makers while ensuring that alerts or warning signs are not missed. EHR vendors are also conscious of the potential challenges related to "alert fatigue," as overly frequent and non-critical alerts could diminish clinician trust in the system. Prominent EHR vendors are already focusing on addressing this issue in their feature offerings in Asia/Pacific.

- **Next-generation EHR providers keep innovating on how effectively they can ensure inclusivity by keeping patients involved in the care process.** EHR providers in Asia/Pacific are actively incorporating patient-facing technologies, such as portals, mobile apps, and personalized health insights, to include and empower patients in their personal care experience. These solutions foster better communication between patients and providers and improve access to health information, allowing patients to securely access their health records, lab results, medications, and immunizations and to take an active role in managing their own health journey. For example, advanced EHR providers now integrate wearable devices and remote monitoring tools to track vital signs, glucose levels, or physical activity. This data is directly fed into the EHR, providing physicians with up-to-date information.
- **Aligning with country-specific regulations and data integration is essential for next-generation EHR providers in diverse geographies, such as Asia/Pacific.** In the Asia/Pacific region, EHR providers are ensuring that their interoperability and data integration functionalities go beyond hospital settings, aligning with each country's specific national data pool and data-sharing requirements. Given the different regulations governing patient data in Asia/Pacific, EHR solutions must adapt to local clinical practices and regulatory standards and ensure seamless data sharing with national health systems, such as the Personal Data Protection Act (PDPA) of Singapore, Privacy Act of Australia, and Digital Personal Data Protection Act of India. This alignment is particularly critical when extending EHR systems to support the growing area of home care and remote care management, where adherence to national health data standards and compliance protocols is essential.
- **Assessment of bottlenecks and pain points and remedial measures embedded in the EHR engagement to ensure continued success and engagement.** Throughout the EHR vendor assessment process, a recurring observation was the frequency of new EHR platform versions by the vendors. Given the complexity and variability in adopting the EHR platform across diverse care settings, vendors must move beyond developing or revising platform features solely from their innovative and R&D standpoint. Instead, it is essential to actively involve end users — primarily clinicians across various

specialties — in the process of exploring and addressing their pain points. By prioritizing user feedback in future platform updates, vendors can ensure that revisions more effectively align with the practical needs of healthcare professionals, ultimately improving the usability and adoption of the EHR platform.

- **Leveraging GenAI to add further value to the EHR system.** Leveraging GenAI to enhance workplace automation is already gaining momentum in Asia/Pacific. More than 40% of healthcare providers prioritize workplace automation by embracing GenAI integration and intelligent workflows. Efforts are already underway in the EHR segment, with initial pilots focusing on conversational summarization and clinical documentation. On the current state of intelligent automation adoption, 31% of these organizations are proof of concepts (POCs) in the region, and "resistance to change and organizational culture" stands as the topmost challenge in deploying enterprisewide automation solutions. These AI-driven interventions are proving to be critical success factors, enabling clinicians to complete routine tasks more quickly and dedicate more time to direct patient care. While current adoption is mostly in the PoC phase, moving GenAI from pilot to production will require easy-to-adopt solutions/tools, along with regulatory frameworks, the alignment of digital infrastructure with care providers, and the merging of the required skill sets.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

IDC has defined a set of inclusion criteria to ensure this IDC MarketScape is fair to all vendors that actively play in this market.

- **Geography:** The vendor supports the sales, delivery, and/or implementation of health IT solution/s for clients in Asia/Pacific.
- **Market:** The vendor sells EHR solution/s in at least one Asia/Pacific submarket.
- **Vertical:** The vendor delivers EHR solution/s to healthcare providers.
- **Revenue:** A minimum revenue threshold is not mandatory. However, the vendor should have above US$5 million of estimated revenue in the Asia/Pacific healthcare market for the calendar years 2022–2023. Revenue must come from EHR solutions and related IT services.
- **Offering:** Regarding EHR solutions and services, IDC defines EHR as "applications and platforms that enable digital versions of patient charts and allow clinicians to securely access real-time information to perform documentation, record keeping, and decision-making functions at the point of care; and for staff members to use for day-to-day administrative, legal, financial, and operational functions."

ADVICE FOR TECHNOLOGY BUYERS

Asia/Pacific healthcare organizations, irrespective of their size, are prioritizing digital clinical data capture to ensure that their data foundation is more robust and digital health ready.

The exponential growth of clinical data, combined with the consumerization of care management, forces healthcare organizations to prioritize investments on better data management, including clinical data capture, data storage, data sharing, and data leveraging, to meet the evolving care and workflow efficiency needs. Hence, regional healthcare organizations require a clear focus on clinical data as a foundation to ensure that they do not get left behind with the market demands.

As care providers plan to prioritize investments in EHR solutions, IDC recommends the following guidelines to ensure a perfect alignment between the EHR investments and intended care outcomes:

- **Ensure a comprehensive solution model.** A full-stack EHR solution model is imperative to integrate various healthcare functions, covering the entire care continuum across multiple departments and specialists. A centralized data architecture promises seamless workflows, augments clinician efficiency, and improves patient outcomes. In Asia/Pacific, a full-stack EHR solution helps hospitals navigate regulatory compliance specific to each country, including compliance relating to clinical data sharing and leveraging.
- **Prioritize the user interface/user experience (UI/UX) mainly from the adoption point.** When adopting EHR tools and platforms, providers need to take the utmost care to ensure that the healthcare workforce, especially clinicians, are not at risk of burnout owing to inherent challenges concerning the UI/UX. Specific attributes include a well-structured and intuitive EHR entry dashboard with minimal latency when traversing pages. A panel of decision-makers comprising CIOs, GPs, and specialist clinicians should be involved in the platform evaluation, which includes parameters such as ease of adoption, scalability, interoperability, and platform security.
- **Focus on enhanced patient engagement to ensure inclusiveness.** As EHR platform offerings expand, a top attribute should be how effectively EHR adoption would enhance patient experience and health outcomes. This needs to be assessed based on four key pillars, namely: 1) enhanced patient experience; 2) health outcomes; 3) cost-effectiveness; and 4) the ability to offer tailor-made solutions. Agile mobile apps and patient portals would boost the patient experience, while remote connectivity, monitoring, and patient education materials would ensure health outcomes. Data analytics and leveraging AI would minimize or eliminate medical errors and result in cost efficiency. This is increasingly relevant in the case of chronic care management needs in Asia/Pacific. Handling different languages in Asia/Pacific and addressing equitable access to care in vast countries such as Indonesia, India, and Australia would be a more valuable addition for the patients.

- **Aim for a well-defined CDSS to augment clinicians' efficiency and to ensure patient outcome.** As hospitals focus on increasing clinical workflow efficiency, improving diagnostic accuracy, augmenting clinicians' efficiency, and ultimately committing to care outcomes, it is essential that care providers prioritize CDSS, focus on clinical data repositories, and leverage the data sets to support clinicians based on evidence-based decision mechanisms. CDSS engagement should go beyond just an alert mechanism and address tailored treatment plans based on respective medical history and early disease detection.
- **Ensure compliance across all regulatory aspects.** As the country governments in Asia/Pacific tighten respective data protection guidelines and healthcare data regulations, care providers must ensure that the adopted EHR platform fully complies with various clinical processes and data management. This applies to clinical data storage, access to data, anonymity, and sharing throughout the care processes. It is always ideal to embed respective country regulations and be fully compliant.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and opportunities.

InterSystems

InterSystems is positioned in the Leaders category of the 2024 IDC MarketScape for Asia/Pacific Electronic Health Record Vendor Assessment.

Founded in 1978 and based in Cambridge, Massachusetts, InterSystems specializes in advanced data management solutions across a wide range of industries. In the healthcare sector, InterSystems emphasizes the provision of "healthy data" — data that is clean, unified, and actionable — paired with cutting-edge technologies designed to manage, analyze, and utilize data effectively. This focus on data integrity and innovation allows InterSystems to enhance healthcare delivery, optimize hospital operations, and foster innovation across the industry.

InterSystems' healthcare product suite consists of technologies for developing healthcare solutions. InterSystems' IRIS for Health platform serves as a comprehensive data management system specifically designed for healthcare, upon which InterSystems and its partners build various products. InterSystems uses this platform to create solutions such as TrakCare EHR and TrakCare Lab Enterprise, taking advantage of the platform's interoperability and analytics features. Additionally, the company offers HealthShare, an interoperability solution that can

integrate with TrakCare, which cloud-based Fast Healthcare Interoperability Resources (FHIR) services support to foster innovation.

TrakCare

InterSystems' EHR platform is known as TrakCare. InterSystems acquired TrakHealth, the original developer of TrakCare, in 2007 and has since made significant investments in advancing the platform. TrakCare is an open, interoperable EHR system that frequently integrates third-party solutions, such as content management, medical device integration, and additional healthcare solutions, to enhance its functionality. TrakCare is deployed across 29 countries and collaborates with a wide range of global and regional partners, including Nuance, Imprivata, First Data Bank, MIMS, IMO, Ascom, Zebra, Elsevier, Wolters Kluwer, Apple, Microsoft, and The Commons Project. These partnerships add significant value by ensuring the system is highly adaptable, capable of meeting diverse healthcare needs and aligning with regional distinctions.

Approximately 50–70% of InterSystems' TrakCare clients are deployed on the cloud, utilizing either public cloud services or InterSystems' own private cloud. The deployment models vary by region, ranging from infrastructure as a service to fully managed service offerings. Clients seeking enhanced flexibility can deploy TrakCare using elastic and scalable Kubernetes architecture. Most customers InterSystems interacts with would like to buy a hosted service, whether public cloud or private cloud, which InterSystems' hosting team operates.

For InterSystems, TrakCare is one of the most open and interoperable EHR systems available, leveraging its IRIS for Health platform's capabilities to create a highly reliable and accessible data repository. All data stored within TrakCare is accessible via REST APIs, ensuring smooth and seamless integration with other systems in a healthcare environment. Moreover, InterSystems actively collaborates with innovative start-ups, encouraging them to integrate their solutions with TrakCare. This not only provides customers with greater flexibility and choice but also fosters a broader ecosystem of solutions tailored to specific healthcare needs. Through these partnerships, InterSystems aims to help start-ups leverage its technology to develop new applications that address the unique requirements of TrakCare users, enhancing the platform's functionality and keeping it at the forefront of EHR interoperability and innovation.

TrakCare's integration with Microsoft Teams, Google Meet, and Attend Anywhere enhances convenience for patients and providers by streamlining virtual consultations, making it easier to implement an effective "digital front door" strategy for patient engagement. Designed with a patient-centric focus, TrakCare spans various care settings and departments, including inpatient, outpatient, emergency, community health, maternity, oncology, laboratories, pharmacy, medical imaging, and revenue cycle management.

Strengths

- **Interoperability and data integration:** InterSystems' TrakCare solutions are known for their robust interoperability, a key feature that is imperative in the fragmented healthcare ecosystems of the Asia/Pacific region. The InterSystems HealthShare platform seamlessly integrates data from various healthcare providers, systems, and smart devices, allowing for real-time data sharing across hospitals, clinics, and healthcare organizations. InterSystems IRIS for Health platform provides advanced interoperability, unprecedented speed, analytics, and massive scalability for applications used in healthcare delivery. This real-time accessibility enhances care coordination and supports better clinical decision-making, ensuring that patient records are always up to date and available.
- **Deep-rooted regional presence:** InterSystems has established a robust and widespread local presence in Asia/Pacific, ensuring the integration of local clinical practices. InterSystems has built a robust partner ecosystem in the region, facilitating the deployment and integration of TrakCare within healthcare organizations. The company also offers comprehensive training and technical support to ensure the successful implementation and use of its solutions and adequately assists hospitals in meeting data protocols necessary for national clinical data pools, further solidifying its place in regional healthcare transformation.
- **Extended support for remote patient-centric care management:** InterSystems empowers hospitals in the Asia/Pacific region to adopt new, digitally supported models of care that integrate remote patient management. In Indonesia, connecting to the TrakCare EHR system enables chronic care management to be effectively carried out at home. This approach allows patients with chronic medical conditions to receive treatment in their homes using remote monitoring devices. One challenge with remote monitoring is that patient data may not be from hospital-grade devices. Hence, the system would not take that data and trigger automatic action. InterSystems opts for third-party collaboration to ensure that such data sets are HL7 fed. Such remote integration is better controlled in hospital-at-home care settings, as the devices that generate patient vitals are hospital grade.

Challenges

- **Defining full-stack solution offerings:** InterSystems strives to provide customers with an end-to-end solution to ease the integration across various departments. Some customers express gaps in the integration that are incompatible with the dental section, pharmacy system, and digital pathology segment in Asia/Pacific. This challenge could be linked with the country-specific regulations where InterSystems would have taken a conscious decision not to link certain departments with the EHR integration.

Consider InterSystems When ...

Consider InterSystems if you are a large hospital group or a large standalone hospital, as TrakCare is designed to meet the complex needs of large healthcare systems, ensuring interoperability across diverse departments and locations while adhering to local healthcare regulations.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is with customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis or strategies axis indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

This IDC MarketScape assesses Asia/Pacific EHR solution vendors in terms of strategies and capabilities. In the capability segment, other than core and advanced capabilities, evaluation parameters also include the user interface, interoperability,

workflow, CDSS, pricing model, geographical coverage, and delivery model. Similarly, the strategy segment includes parameters such as data and workflow optimization, advanced diagnostics, digital patient engagement, security measures, innovation, and customer growth.

Market Definition

In this IDC MarketScape, IDC Health Insights evaluates vendors supplying healthcare organizations with EHR solutions. IDC Health Insights defines EHRs as "applications and platforms designed for healthcare providers to facilitate managing and maintaining digital patient charts. These tools grant clinicians secure, real-time access to essential information for documentation, record-keeping, and decision-making at the point of care. Concurrently, these applications support staff in administrative, legal, financial, and operational tasks, such as appointment scheduling, billing, and inventory management."

LEARN MORE

Related Research

- *IDC FutureScape: Worldwide Healthcare Industry 2025 Predictions* (IDC #US52217524, October 2024)
- *GenAI in Healthcare and Life Sciences: Current Trends and Future Potential in Asia/Pacific* (IDC #AP51587824, June 2024)
- *Hospital@Home: Future of Low-Acute Care Management in Asia/Pacific* (IDC #AP51587724, March 2024)
- *IDC FutureScape: Worldwide Healthcare Industry 2024 Predictions — Asia/Pacific (Excluding Japan) Implications* (IDC #AP50548923, January 2024)

Synopsis

This IDC MarketScape evaluates the electronic health record (EHR) solution providers in Asia/Pacific through a set of comprehensive attributes across their current capabilities and strategies for the next three years. These platform providers keep expanding their offerings, moving beyond clinical documentation and interoperability to include acute care management, long-term care, rehabilitation, behavioral health, CDSS, and the integration of remote care management. Healthcare providers in Asia/Pacific will find this report valuable as they traverse through increased priority to deploy EHR by short-listing global, regional, and national vendors; assess various functionalities to align with organizational needs; ensure compliance with country-specific data regulations; ensure clinicians' buy-in; and enhance patient engagement with the care system. Detailed write-ups on the pillars of success, key learning points, and guidelines will enable healthcare organizations to make informed decisions on their EHR engagement and path ahead.

"In today's rapidly evolving technological landscape, adopting electronic health records is no longer optional but an essential step for healthcare organizations across Asia/Pacific aiming to build a robust clinical data platform," says Manoj Vallikkat, senior research manager, IDC Health Insights. "Modern EHR systems have evolved significantly, going beyond simple data recording to incorporate cutting-edge functionalities, such as acute care management, long-term care engagement, population health oversight, hospital-at-home services, and even support for surgical procedures. As countries in Asia/Pacific, such as Australia, Indonesia, Malaysia, and India, intend to prioritize national clinical data pool, aligning with the concept of 'One Medical Record', there is set to be an increased focus and investments for the adoption of EHR platforms by the care providers. It is crucial for healthcare providers to select an EHR system that aligns with their specific care settings and long-term care strategies, ensuring that the platform can support their organizational goals and patient care road maps effectively," adds Vallikkat.

ABOUT IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

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