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PROVIDING SAFETY AND REASSURANCE

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antenatal mothers reclassified as low-risk for antenatal alloimmunization, thereby preventing unnecessary interventions.

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Among 2026 UNIVANTS winners, leaders drive innovation and effective care

BY KIMBERLY SCOTT

From identifying cancer patients at risk for cardiac complications to improving perinatal outcomes through risk-stratification to implementing data-driven laboratory workflows, the 2026 winners of the UNIVANTS of Healthcare Excellence demonstrate how empowered leadership can drive innovation, change management, multidisciplinary care, and patient-centric cultures.

The prestigious UNIVANTS of Healthcare Excellence awards were created by Abbott in partnership with the Association for Diagnostics & Laboratory Medicine and other leading healthcare organizations, including the Healthcare Information and Management Systems Society and Modern Healthcare. The awards recognize healthcare teams that unite across disciplines, challenging the status quo with avant-garde problem-solving and novel use of laboratory insights to improve outcomes for patients, clinicians, payers, and health systems. In each case, clinical laboratories were pivotal in developing and implementing the initiatives. The three winners are highlighted below.

Proactive troponin screening and monitoring in lung cancer patients

0.38%: Reduction in immune-associated myocarditis (grade II or higher)

50%: Reduction in cardiovascular mortality among lung cancer patients

37.5%: Reduction in ICU admissions among lung cancer patients with grade III or higher immune-associated myocarditis

PROACTIVE TROPONIN SCREENING AND MONITORING IN LUNG CANCER PATIENTS

Cardiovascular toxicity (CVT) is a significant concern in cancer care because many oncologic therapies can damage the heart. While advancements in diagnosis and treatment have improved survival rates, CVT remains a significant cause of morbidity and mortality for cancer patients. Awareness of CVT has increased among providers and the public, however, early detection and treatment is often challenging due in part to the insidious onset of CVT.

In China, the 5-year survival rate for cancer patients has increased from 30.9% in 2003 to 43.7% in 2022. At the same time, however, cancer-treatment–related CVT has become the second leading cause of death among cancer patients, according to Zhijun Guo, professor in the intensive care unit (ICU) at Shandong Cancer Hospital and Institute (SCHI) in Jinan, Shandong, China. A condition called immune checkpoint inhibitor-associated myocarditis (ICIAM) is a particularly problematic form of CVT. Although its incidence is relatively low (0.06% to 3.8%), ICIAM progresses rapidly and carries a high mortality rate (36% to 66%).

Prior to 2024, SCHI mainly performed cardiac examinations, such as electrocardiograms and cardiac biomarker testing, when cancer patients developed cardiovascular symptoms during treatment. This approach often meant missing opportunities for early intervention, potentially leading to more severe cardiovascular complications and poorer outcomes, explained Guo.

Under the leadership of Academician Jinming Yu, president of Shandong Cancer Hospital, the ICU launched an initiative, called Proactive Troponin Screening and Monitoring in Lung Cancer Patients, in 2024. This initiative, which involves a multidisciplinary team (MDT), received top elite honors associated with the 2026 UNIVANTS of Healthcare Excellence awards. According to Yu, the MDT model — driven by administrative leadership, guaranteed by systems, and covering all patients free of charge — has become a benchmark in China for improving the quality of cancer care.

"MDT runs through the entire cycle: diagnosis, treatment, rehabilitation, and follow-up," explained Yu in an interview with Patricia Ravalico, Abbott's director of scientific leadership, CORE diagnostics. "The results have been remarkable, with improvements in both quality of care and treatment outcomes. For over 6 years, patient outcomes under MDT have been better than those under traditional models."

Once the troponin screening initiative launched, the MDT conducted educational programs in five key departments: the ICU, the pulmonary surgery ward II, the thoracic radiation oncology ward VI, the internal medicine department of respiration ward II, and the laboratory department. The goal was to ensure that, for patients receiving potentially cardiotoxic cancer therapies, high-sensitivity cardiac troponin (hs-cTn) testing would be included in baseline risk assessment (i.e., prior to cancer treatment) and monitored regularly during treatment to enable cardioprotective intervention(s), as needed.

"Our approach shifted from reactive, symptom-based management to proactive, biomarker-based early identification using high-sensitivity troponin as a core marker," said Guo.

As a result of the early troponin-guided testing and treatment pathway, diagnosis of ICIAM (grade II) among lung cancer patients decreased by 0.38%, ICU admissions due to ICIAM went down by 37.5% (from eight to five patients), and the mortality rate was reduced by half.

In 2024, 8.07% of patients who received immune checkpoint inhibitor therapy were identified as having moderate or high cardiovascular risk because of the hs-cTn–guided risk assessment — an increase of 0.97% when compared with 2023 data. These patients subsequently received preventive interventions before undergoing cancer surgery or treatment.

Since all cases of ICIAM grade III or higher require an ICU stay with a daily cost of renminbi (RMB) 5,700 ($839) and an average length of stay of 12 days, the mitigated costs associated with reduced ICU stays amount to RMB 68,400 ($10,070) per patient, totaling RMB 205,200 ($30,211) for three patients.

An early difficulty in implementing the initiative was overcoming clinicians' ingrained habits of waiting for symptoms to appear rather than screening pre-emptively, said Guo. Once providers overcame their initial reluctance, they embraced the initiative. Among 43 surveyed physicians, all of them felt that the hs-cTn–guided clinical pathway improved their overall satisfaction with clinical practice for themselves and their patients.

"The major transformation brought by this initiative was that it moved beyond the conventional mindset of focusing only on deterioration," Guo explained. "This is consistent with our disciplinary philosophy in oncology critical care of shifting the intervention timing forward. It reflects the shared wisdom between Chinese and Western medical cultures and resonates well with the well-known Western proverb, 'An ounce of prevention is worth a pound of cure.'"

Although the concept of using cardiac biomarkers to manage CVT in cancer therapy has been discussed in recent years, its adoption in routine oncology practice remains limited, noted Guo. However, the hs-cTn–guided screening initiative at SCHI has shown that such testing can have a positive effect on patient outcomes.

"As a specialized oncology hospital, we have launched an initiative that integrates a multidisciplinary team to establish an optimized, full-process management model — from diagnosis to intervention," he said. "By standardizing workflows and simplifying technical requirements, the project enhances reproducibility across institutions and delivers an efficient, scalable pathway for cardiovascular toxicity prevention and control in lung cancer patients."

According to Guo, the initiative can be easily scaled to other hospitals. The protocol requires minimal equipment and testing reagents, which most hospitals can easily provide. Clinical education can be delivered through routine departmental meetings and case consultations, ensuring straightforward implementation. This design enables rapid adoption across diverse healthcare institutions, offering an efficient and practical solution for cardiovascular toxicity screening and management. In fact, the initiative is already being adopted by other hospitals.

"This innovative approach was showcased at multiple major cardio-oncology academic events, earning wide recognition and influencing practices in many general and grassroots hospitals," Guo shared.

The new pathway also demonstrates the promising potential for expanded clinical applications, said Guo. In the future, troponin testing may also provide valuable insights into cardiovascular risk in patients with other diseases.

This initiative was mainly supported by the Noncommunicable Chronic Diseases-National Science and Technology Major Project (Sub-project 4, Grant No. 2024ZD0526104). Key collaborative support was provided by the Chinese Tumor Immune-related Organ Injury Network, the Intelligent Data Platform for Tumor Immune-related Medical Information Mart of China, and the Committee of Cancer Intensive Care of the Chinese Anti-Cancer Association.

IMPROVING PERINATAL OUTCOMES THROUGH RISK-STRATIFICATION OF ANTENATAL ALLOIMMUNIZATION

A team from KIMSHEALTH Hospital in Trivandrum, Kerala, Southern India, also received elite top honors associated with the 2026 UNIVANTS of Healthcare Excellence awards for their initiative to improve perinatal outcomes through risk-stratification of antenatal alloimmunization. UNIVANTS has also recognized KIMSHEALTH this year with honors of distinction, marking the first time in the awards program's history

that an institute has won multiple honors in the same year.

Maternal red cell alloimmunization — the development of antibodies to fetal red blood cell antigens — is a significant cause of hemolytic disease of the fetus and newborn, which can lead to fetal anemia, hydrops fetalis, and perinatal death. Prevalence ranges from 0.4% to 8.74% worldwide and 2% in the Indian subcontinent. The most common antibody remains anti-D, followed by other Rh antibodies (anti-C & anti E), anti-M, and anti-K.

Typically, all antenatal mothers are screened for allo-antibodies during the first trimester of pregnancy and again at 28 weeks' gestation. Then, all antenatal mothers who are identified as high-risk based on clinically significant antibodies undergo follow-up screening and monitoring, including a fetal Doppler scan to help predict moderate to severe anemia that requires critical interventions, such as intrauterine transfusion (IUT) or exchange transfusions (ET). A primary dilemma for many healthcare providers, however, is that a positive initial screen for allo-antibodies, without a definitive antibody identification, does not always equate to clinical risk, often triggering costly intensive screening and unnecessary patient anxiety.

KIMSHEALTH Hospital screens all antenatal women for alloimmunization in the first visit. Previously, because antibody identification panels were unavailable, all patients who had positive screens received intensive surveillance. According to Sanooja Pinki S., a consultant and group coordinator for immunohematology and blood transfusion at KIMSHEALTH, this burdened the low-risk majority with unnecessary interventions, anxiety, and costs, while failing to adequately identify high-risk individuals so they could receive appropriate intervention.

To address this, the hospital implemented a laboratory-driven risk-stratification protocol that used "definitive antibody identification" for all mothers who screened positive. Between 2019 and 2024, 9,615 antenatal mothers were screened using definitive antibody screening.

At their first visit, mothers underwent an antenatal antibody screening using a three-cell reagent panel. All positive antibody screens (109) were analyzed, and these positive screens underwent definitive antibody identification using an 11-cell reagent panel. Passive immunization (RhIg) was ruled out by history of recent RhIg administration and anti-D titer of less than 4.

Mothers with active anti-D were monitored with serial antibody titrations, where a titer of 16 defined critical threshold and high-risk. Patients with other clinically significant antibodies (e.g., anti-C, anti-E, etc.) underwent MCA-PSV Doppler monitoring, with or without titration, depending on the availability of corresponding red cells.

Of the 109 positive screens, 31 cases (28.4%) were deemed passive immunizations — which meant no further workup was needed. The remaining 78 cases (71.6%) constituted a true alloimmunization, of which 62.8% were classified as high-risk, requiring intensive management, with 6.1% needing IUT and 20.4% requiring ET.

The initiative's clinical significance is most profoundly demonstrated by its direct impact on patient outcomes, said Sanooja. It provided safety and reassurance for the 29 low-risk mothers by preventing unnecessary investigations and iatrogenic premature deliveries.

This 100% accurate stratification model represents a substantial change in antenatal management, noted Sanooja, enabling clinicians to move beyond generalized protocols and implement precise, risk-stratified care pathways.

Clinician response to the initiative has been extremely positive. Vidyalekshmy R., senior consultant and clinical director of high-risk obstetric and fetal medicine at KIMSHEALTH, said that the definitive antibody identification allows providers to stratify risk with far greater precision, directly enhancing patient safety.

"Knowing exactly which pregnancies are true high-risk allows us to channel intensive fetal surveillance to the right patients while safely de-escalating care for others without compromising outcomes," she said. "This targeted clarity has markedly strengthened our clinical confidence, reduced unnecessary interventions, and ensured timely action for fetuses genuinely at risk."

Sajith Mohan R., a consultant

Improving perinatal outcomes through risk-stratification of antenatal alloimmunization

71.6%: Percentage of positive screens confirmed as true alloimmunization

62.8%: Patients classified as high-risk, requiring timely and intensive management

38,620 Indian rupees: Cost savings per low-risk patient as a result of fewer Doppler ultrasounds and specialist consultations

in obstetrics and gynecology at KIMSHEALTH, agreed. "From my perspective, the intervention's greatest value was in enabling a timely diagnosis of fetal anemia," he said. "It gives me proven confidence to tell my low-risk patients 'it's safe to wait,' preventing needless interventions. It's also why I'm so vigilant with my high-risk patients, for whom intensive monitoring may be needed to find that one baby and intervene before a crisis occurs."

Since the low-risk cohorts no longer require any monitoring or interventions, resources are redirected to high-risk cases. This saved 38,620 Indian rupees per low-risk patient as a result of fewer Doppler ultrasounds and specialist consultations, said Sanooja.

"The transition from detection (positive screen) to direction (clinically significant identification) is paramount," said Sanooja. "Definitive antibody identification provides actionable data, improving clinical decision-making. This boosts clinical confidence to act decisively for high-risk patients and de-escalate for low-risk patients."

The initiative's uniqueness lies in its systematic, protocol-driven approach to solving a common dilemma, according to Sanooja. It proves that applying a structured lab protocol can definitively challenge the undifferentiated management of positive screens — the prior, less efficient standard of care.

While foundational to advanced immunohematology, 11-cell antibody identification panels and specialized titrations are not routinely available in many standard hospital immunohematology labs, largely due to the short shelf-life of reagent red cells and the trained expertise required for interpretation. However, because this protocol builds upon standard blood-banking methodologies rather than requiring expensive new equipment or niche techniques, it remains highly adoptable. The primary operational prerequisite is clinical and technical expertise; definitive antibody identification is a meticulous process that requires trained laboratory professionals to systematically apply certain interpretation rules and exclusion criteria to the test results.

The initiative indicates a paradigm shift: Rather than being perceived as passive data provider, the lab is now being viewed as the proactive engine of the entire clinical protocol, explained Sanooja. "This intelligence is demonstrated not just in 'what' is tested, but in 'how' the data is translated into action," she said. "The lab eliminates system noise in that it filters out 28.4% of positive screens as clinically irrelevant, instantly removing unwanted cases from the system. It also stratifies true risk, moving beyond a simple positive result to identify the specific antibody and separating benign cases from clinically significant ones. In addition, it delivers clinical direction by synthesizing this data into unambiguous, actionable directives."

IMPROVING DIAGNOSTICS THROUGH DIGITAL LAB TRANSFORMATION

Worldwide, clinical laboratories are facing increasing pressure to deliver accurate results, ensure regulatory compliance, and reduce turnaround times. Traditional laboratory operations, such as relying on paper logs, spreadsheets, and manual tracking, often lead to errors, delays, and inefficiencies.

Prior to July 2024, laboratory workflows at Jubail Health Network in Jubail, Saudi Arabia, were largely manual processes, with inconsistent courier cycles and a lack of real-time digital integration between primary healthcare centers (PHCs) and the central laboratory, according to Hussein AlSadiq, laboratory specialist with Jubail Health Network. He was part of a team that received top honors from UNIVANTS for its digital lab transformation initiative.

Results for routine chemistry testing required 48 to 72 hours, while results for hormone testing took up to 3 weeks, delaying diagnosis, medication adjustments, and chronic disease management. This directly affected key care pathways, particularly preventive and planned care and chronic disease management, where timely laboratory data is essential for proactive follow-up.

In 2024, a cross-functional team developed the Aynati Initiative, which was specifically designed to align with the goals of Saudi Vision 2030: accessible, efficient, and technology-enabled healthcare. The team included professionals from laboratory services, primary healthcare centers, family medicine, nursing, quality and patient safety, information technology support, logistics and specimen transportation, and the transformation management unit. AlSadiq helped to coordinate the initiative.

Using DMAIC (Define, Measure, Analyze, Improve, Control — a structured, data-driven methodology central to Lean Six Sigma), the team mapped the specimen journey to identify and resolve bottlenecks. Root-cause analysis highlighted the courier delays, manual documentation, and communication gaps as key areas for improvement.

The team introduced multiple

processes, including digital barcoding and specimen tracking for full traceability, standardized courier cycles, full digital integration between the lab and the hospital information system, a real-time samples journey monitoring dashboard, automated alerts, same-day clinical decision support, and unified digital workflows between PHCs and the central lab, as well as real-time notifications for clinicians and patients via national platforms.

Within 3 months of full implementation (from July to September 2024), chemistry results were available within 8 hours, a greater than 80% improvement. Results of hormone testing were available within 24 hours, a 95% improvement. Due to improved turnaround time and subsequent test result communications, surveyed clinicians reported a 90% satisfaction rate with the laboratory across all PHCs.

"Since the Aynati system was implemented, I no longer need to delay treatment decisions while waiting for lab results," said Roaa Al-Mousa, family medicine consultant and chairperson of primary health care. "Having accurate results within hours gives me full confidence in my clinical decisions and improves follow-up with my patients."

By reducing delays and strengthening coordination between PHCs and hospital services, the Aynati Initiative enabled faster follow-up, smoother patient flow, and more reliable decision-making, directly contributing to increased screening rates and virtual care utilization across the network. Specifically:

- Diabetes screening increased from 1,817 patients in 2024 to 5,454 patients by the third quarter of 2025.
- Colorectal cancer screenings increased from 302 patients in the second quarter of 2024 to 593 patients by the third quarter of 2025.
- Virtual PHC visits rose from 1,712 in 2022 to 23,627 in 2025.
- Virtual hospital visits increased from 12,684 in 2022 to 34,314 in 2025.

Overall, there was a 4.3% improvement in positive patient experiences, from 81.9% in the first quarter of 2024 to 86% in the first quarter of 2025, based on the Press Garney Patient Experience Survey.

The Aynati Initiative was also resource efficient, enabling mitigation associated with the initiative, specifically in terms of unnecessary transportation costs, noted AlSadiq. Overall, specimen transportation costs decreased from 385,300 to 1,808 Saudi riyals. This was attributed to implementation of standardized courier cycles, improved specimen readiness, and digital tracking across PHCs and the central laboratory.

The Aynati Initiative is unique within Saudi Arabia's primary healthcare setting. "Its strength lies in merging operational redesign with national digital health platforms to achieve same-day diagnostic results — an unprecedented transformation in the public sector," said AlSadiq. "This innovative integration of technology, data analytics, and interdisciplinary collaboration has created a replicable framework for value-based, patient-centered laboratory care across the Kingdom."

Implementation was moderately difficult, according to AlSadiq. While no new infrastructure or equipment was required, initial challenges included aligning workflows across multiple PHCs, training staff on new digital processes, and coordinating courier schedules with laboratory operations. Once the process was standardized, adoption progressed rapidly.

"Strong leadership engagement, clear governance, and integration with existing national digital systems ensured a smooth transition and full activation within a few months," explained AlSadiq. "The experience gained during early deployment has streamlined replication across other PHCs, making future implementation faster and more efficient."

Data-driven laboratory analytics were instrumental in the initiative's success. Through real-time dashboards, automated alerts, and continuous data monitoring, laboratory information was transformed into meaningful insights that guided daily operational and clinical decisions. The system continuously analyzed turnaround times, courier performance, and compliance trends to identify early deviation and enable rapid corrective action.

Improving diagnostics through digital lab transformation

4.3%: Improvement in patient experience based on improvements in trust, satisfaction, and engagement

70%: Decrease in follow-up calls from clinicians to laboratory

383,492 Saudi riyals: Cost savings from mitigating unnecessary transportation

"These continuous insights empowered both laboratory and clinical teams to enhance coordination, accelerate decision-making, and ensure accurate, timely patient care," said AlSadiq. "Beyond routine monitoring, aggregated performance data informed leadership dashboards and quarterly governance reviews, reinforcing accountability and long-term improvement. Data intelligence has become an integral component of sustainable quality management and performance excellence across the network."

The Aynati Initiative is highly scalable due to its foundation on existing health platforms and its modular, adaptable design. "These elements make the model easily transferrable to other settings, regardless of size or location," said AlSadiq. "Sustained through automated monitoring, continuous training, and data-drive governance, Aynati ensures long-term scalability and resilience, serving as a national blueprint for digital transformation services under Saudi Vision 2030."

STRONG LEADERS DRIVE CULTURES OF ACTION

Each of the initiatives highlighted above show how strong leaders can collectively drive meaningful change. With empowered collaborators, interdisciplinary teams can find new ways to maximize insights from clinical laboratories, using screening tests to identify patients at risk for unusual complications and revamping laboratory workflows to improve patient care.

The UNIVANTS program illuminates the exceptional teams that are transforming the landscape of diagnostics. In addition to a physical award and the exclusive title, "UNIVANTS of Healthcare Excellence Award Winner," each of these winning teams will be given opportunities to speak about their initiatives, including an invitation to share their best practices at an exclusive leadership forum.

To learn more about the UNIVANTS of Healthcare Excellence award program, visit UNIVANTSHCE.com.

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UNIVANTS 2026 teams spotlighted in this issue

Reducing cardiovascular morbidity and mortality for patients with lung cancer through proactive screening and intervention

Shandong Cancer Hospital and Institute, Shandong First Medical University, and Shandong Academy of Medical Sciences
Jinan, China

Zhijun Guo
Hongbo Guo
Hui Zhu
Xiaoyong Tang
Miaoqing Zhao

Improving perinatal outcomes and protecting safety through laboratory medicine guided risk-stratification of antenatal alloimmunization

KIMSHEALTH Trivandrum
Trivandrum, India

Sanooja Pinki S.
Prethika P. A.
Vidyalekshmy R.
Naveen Jain
Sajith Mohan R.
Anju Krishna R. P.

The Aynati Initiative: Accelerating diagnostics and enhancing resource utilization through digital lab transformation

Jubail Health Network
Jubail, Saudi Arabia

Ahood Al-Ghamdi
Hussein AlSadiq
Roaa Al-Mousa
Suad Aman
Fatimah Al-Humaili

Improving Perinatal Outcomes and Protecting Safety through Laboratory Medicine Guided Risk-Stratification of Antenatal Alloimmunization

KIMSHEALTH Trivandrum, India

The Aynati Initiative: Accelerating Diagnostics and Enhancing Resource Utilization through Digital Lab Transformation

Jubail Health Network (JHN)

Reducing Cardiovascular Morbidity and Mortality for Patients with Lung Cancer through Proactive Screening and Intervention

Shandong Cancer Hospital and Institute, Shandong First Medical University and Shandong Academy of Medical Sciences

CONGRATULATIONS TO THE 2026 WINNERS

TOP TEAMS AROUND THE WORLD ARE ACHIEVING HEALTHCARE EXCELLENCE

Learn about these success stories **at UnivantsHCE.com**

UNIVANTS™
OF HEALTHCARE EXCELLENCE

RECOGNITION OF DISTINCTION

The Third Affiliated Hospital of Guangzhou Medical University
KIMSHEALTH Trivandrum, India
Izumiotsu Medical Center
Bergen New Bridge Medical Center

RECOGNITION OF ACHIEVEMENT

King Fahad Specialist Hospital
Premier Integrated Labs Sdn Bhd
Health New Zealand - Canterbury
Emilio Ribas Medicina Diagnóstica

Abbott

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