

INTERVIEW

Innovation is central to how India's healthcare system is scaling sustainably and efficiently

Shakeel Iqbal, Head – Service Sales and Education Solutions, GE HealthCare, in an interaction with **Express Healthcare**, shares insights on how innovation in services is driving sustainable, efficient, and patient-centric growth in the healthcare sector

As India moves towards a more self-sufficient healthcare ecosystem, what trends and innovations do you foresee shaping the future of service models in the MedTech industry?

India's healthcare landscape is evolving rapidly and as the country moves towards greater self-sufficiency, we will see transformative shifts in how MedTech service models are designed and delivered.

One key trend is the localisation of service infrastructure, with growing investment in regional service hubs, training of local biomedical talent, and the development of certified third-party maintenance networks particularly for tier 2, tier 3 cities, and rural health centres. This aligns with India's Atmanirbhar Bharat vision and supports the creation of a more agile, responsive service backbone.

Another major trend is the rise of data-driven, value-based service models. OEMs like GE HealthCare are already leveraging AI, IoT, and digital twin technology to enable predictive maintenance and performance benchmarking.

These technologies are evolving into full life-cycle asset management platforms, helping providers make smarter decisions around procurement, utilisation, and maintenance.

We will also see service models shift from ownership to outcome-based engagement—think subscription models, pay-per-use, or shared-risk



frameworks where service quality and uptime are linked directly to patient outcomes and provider satisfaction.

Finally, interoperability and platform integration will become critical. As hospitals adopt more digital tools—like EHRs, imaging systems, and diagnostics—there will be rising demand for service models that support integrated ecosystems rather than isolated devices. This means service teams will need cross-disciplinary expertise

across software, hardware, and compliance. The future of MedTech services in India is going to be smarter, more decentralised, and deeply aligned with clinical impact. And that's not just a technological shift—it's a mindset shift towards viewing service as a strategic enabler of healthcare delivery.

Unplanned equipment downtime can disrupt clinical workflows and delay critical care. How is GE

HealthCare minimising these risks through predictive, preventive, and real-time service models?

Unplanned downtime is a serious risk—not just to clinical efficiency, but to patients' lives. At GE HealthCare, minimising that risk is a core part of our service philosophy. We are using a three-pronged approach: predictive, preventive, and real-time service models.

First, predictive service

tools like TubeWatch and OnWatch use machine learning algorithms to analyse equipment usage patterns and performance data. This helps us forecast potential failures before they happen—essentially allowing us to fix problems before they impact care. Second, our preventive maintenance strategy—GE Professional Maintenance follows rigorous OEM-recommended schedules for inspections, calibrations, and software updates. This ensures the equipment is always performing at peak efficiency, reducing wear and tear over time.

Third, our real-time service model, iCenter, relies on IoT-enabled devices that continuously stream data to central monitoring hubs. If a machine starts showing irregular behavior, alerts are triggered instantly, allowing us to initiate remote diagnostics or dispatch a field engineer right away. This kind of fast intervention minimises workflow disruptions and ensures continuity of care.

Overall, these models help us shift from a reactive to a proactive service mindset, ensuring that healthcare providers can focus on what matters most—delivering timely and safe care to patients.

With India's diverse geography, clinical needs, and infrastructure gaps, what are the most critical service challenges healthcare providers face and how do these shape GE HealthCare's approach to

solutioning and engagement?

One of the biggest challenges in India is the inconsistency in maintenance standards, especially in public hospitals and remote regions, where up to 60 per cent of medical equipment can be non-functional. That's a huge risk to patient outcomes.¹

A noticeable shortage of skilled biomedical engineers further complicates the effective management of sophisticated medical devices. GE HealthCare is addressing this by doubling down on OEM-driven service contracts like Comprehensive Maintenance Contracts (full blown service contract covering parts and labour) and Annual Maintenance Contract (labour contract only), ensuring devices are maintained to global standards. We are also leveraging remote diagnostics so we can provide proactive support—even in areas that lack on-site access. The aim is not restricted to selling a device, but to be a long-term partner in delivering reliable, accessible healthcare across every corner of the country.

From a services perspective, what role is innovation playing in ensuring growth, that is sustainable, efficient, and patient-centric?

Innovation is central to how India's healthcare system is scaling sustainably and efficiently. A strong example is predictive maintenance powered by AI and IoT, which is helping hospitals reduce equipment downtime. This ensures critical devices remain operational when patients need them most, significantly enhancing both safety and efficiency. We are also seeing smart partnerships between OEMs and healthcare providers, where real-time monitoring and data analytics are being used to proactively manage devices. This shift is not just about fixing equipment when it breaks—it's about anticipating issues before they impact patient care. That's what makes the

AI and IoT are game changers for MedTech, and GE HealthCare is at the forefront of that transformation. We are using these technologies to move beyond reactive maintenance to a more intelligent, predictive model

approach truly patient-centric. Plus, with the rise of digital tools and mobile platforms, even facilities in tier 2 and tier 3 cities are now able to access quality maintenance services, which goes a long way in addressing India's geographical and infrastructural diversity.

AI and IoT are transforming MedTech service delivery. How is GE HealthCare leveraging these to drive predictive maintenance, reduce downtime, and deliver proactive insights to healthcare providers?

AI and IoT are game changers for MedTech, and GE HealthCare is at the forefront of that transformation. We are using these technologies to move beyond reactive maintenance to a more intelligent, predictive model.

Through IoT-enabled devices, we collect real-time data on equipment performance—ranging from usage patterns to temperature fluctuations and software logs. That data is then analysed using AI algorithms that can detect anomalies, predict failures, and recommend timely interventions. This means we are no longer waiting for equipment to fail. Instead, we can alert service teams or even perform remote troubleshooting before issues escalate, reducing unplanned downtime, extending the life of the equipment, and ensuring that providers have uninterrupted access to diagnostic and therapeutic tools.

We are also using AI to generate proactive insights for hospitals—like which machines might need upgrades, how to optimise asset utilisation across departments, or when to plan

preventive maintenance during low-traffic hours to avoid workflow disruption. It's all about giving healthcare providers the tools to be more efficient, more resilient, and ultimately more patient focused.

Beyond uptime, service innovation now shapes the entire customer journey. How is GE HealthCare using digital tools—like remote monitoring and self-service platforms—to elevate service responsiveness and provider satisfaction?

Today, service is not just about fixing issues, it's about creating a seamless and empowered experience across the entire customer journey. GE HealthCare is doing that by embedding digital tools into every touchpoint of the service lifecycle.

We use remote monitoring platforms like iCenter that track equipment health 24/7, enabling real-time diagnostics and early detection of anomalies. This lets us respond faster, often solving problems before providers even know there's a risk. In many cases, remote troubleshooting can resolve issues instantly—no wait time, no technician needed on-site.

We are investing in self-service platforms that give providers direct access to service history, maintenance schedules, real-time alerts, and even on-demand training or parts ordering. That kind of transparency and control increases provider confidence and satisfaction.

For instance, our AI-driven solution, such as AIR™ Recon DL enables medical professionals to achieve pin-sharp images more quickly. AIR™ Recon DL challenges

the inherent trade-off between SNR, scan time and image resolution. Using an AI based reconstruction algorithm, AIR™ Recon DL improves SNR by making use of the raw data to remove image noise and ringing. The equipment can produce high-quality images with shorter scan times, enabling greater patient throughput and increased return on investment.

We have also introduced digital tools like the My GE HealthCare app which is an easy way to manage your GE Healthcare service and support in one place – anytime, anywhere. It's simple and fast to create and track service requests from initial contact to completion, monitor planned service needs, initiate unplanned service calls, and proactively manage service for your entire diagnostic imaging fleet, whenever and wherever you want. We also have a first-of-its-kind ecommerce portal called Service Shop where our customers can procure parts, accessories and even contracts online making it convenient for them. These initiatives ensure that our solutions remain at the forefront of healthcare innovation, aligned with the evolving needs of the industry.

Cost remains a barrier to technology adoption, especially for mid-sized and Tier 2/3 healthcare providers. What role do flexible service contracts, value-based partnerships, or pay-per-use models play in expanding access?

That's a critical issue in the Indian healthcare landscape. Many providers in tier 2 and tier 3 cities operate with limited budgets, but they still

need high-quality, reliable equipment. That's where flexible service models really come into play.

At GE HealthCare, we offer customised Annual Maintenance Contracts (AMC) and Comprehensive Maintenance Contracts (CMC) that bundle services across devices or allow for staggered payments—making it easier for smaller hospitals to afford OEM-level maintenance. We're also exploring digital pay-per-use models, where providers only pay per scan, which aligns costs directly with revenue cycles.

Beyond contracts, we're forming value-based partnerships focused on long-term outcomes rather than one-time transactions. These partnerships may include shared risk models, co-branded training programs, or tech-enabled capacity building.

TruPay—our pay-per-use service contract for Revolution CT equipment offers specialised services designed to streamline operations and improve equipment uptime.

It provides complete care for three years with 95 per cent uptime, including planned maintenance visits and service support within a few hours, 365 days a year. Optional QA tests and calibration services are also available. Its pay-per-use model ensures that providers pay only for actual equipment usage, making it financially viable for smaller hospitals.

The goal is to remove barriers to access—financial, logistical, and technical—so that every healthcare provider, regardless of size or location, can deliver safe, timely, and effective care. Because access to technology shouldn't be a privilege—it should be a standard.

Reference:

1. https://www.nhm.gov.in/New_Updates_2018/NHM_Components/Health_System_Strengthening/BEMMP/Biomedical_Equipment_Revised_Guidelines.pdf