Two for One:

How AMD and DocBox Revolutionized ICU Care

A surge in patients requiring critical care, suffocating staffing shortages, limited bed availability, and the sudden need to change procedures converged across healthcare systems around the globe thanks to the pandemic. While this might have ushered in the next evolution of modern healthcare and set in motion the transition to hospitals without walls, the new care delivery model has increased the demands of all medical practices.

Medanta, a hospital located in India, can certainly attest to that.

> "I have been using DocBox for the last many years. Advantages are that I can see all parameters, labs and imaging on one screen with medications, and trends and interventions, which can also be retrospectively reviewed to look at any event in detail. It also has a tremendous USP for remote monitoring, not only for eICU, but also from other devices, including laptops, mobile phones, etc."
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> — Dr. Yatin Mehta, MNAMS, FRCA, FAMS, FIACTA, FICCM, FTEE
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> *Chairman, Medanta Institute of Critical Care and Anesthesiology*
> *Adjunct Professor, NBE*
> *Past President, ISCCM*

Like most organizations in the healthcare sector, Medanta was already using technologies to not only improve patient outcomes, but also extend care. However, the coronavirus forced the provider to shift care delivery even further in this direction, relying more heavily on virtual visits, remote patient monitoring, and a host of other digital technologies.

A large part of the change in Medanta's delivery model was out of sheer necessity. With the high risk of infection, virtual care technology would allow physicians to safely and reliably determine whether patients required in-person care. Remote patient monitoring, on the other hand, would allow a single physician to monitor 22 beds in an ICU while also helping to reduce the risk of COVID-19 exposure for the care delivery team, which was a top concern throughout the medical industry.

Medanta is a tier-one medical facility that's been in the midst of an expansion over the last few years, growing beyond its first health center (a 1,250-bed super-specialty hospital spread over 43 acres) to include facilities across the region. If another medical facility doesn't have the same level of infrastructure or medical professionals, it can turn to Medanta for support.

That support is made possible with the right technology and partner.

The Challenge:

Struggling With Telehealth Integration

Medanta wasn't alone in its quest to find the right telehealth solution among all the noise and confusion of new technology companies entering the space. Healthcare provider organizations of all shapes and sizes have long found this digital transition and new technology integration to be necessary but challenging.

Telehealth, in its various iterations, has been evolving for years now, moving closer and closer to real-time monitoring — which happens to be the specialty of DocBox, a critical-care IoT platform that provides real-time data integration for medical systems.

Almost all healthcare organizations were looking for enhanced telehealth technology during the pandemic, and the more integrated a solution was, the better. Customers like Medanta turned to DocBox for a solution that can address critical care patients in the ICU. Pre-coronavirus, it was pretty common to expect an engineering project between two technology companies to take three years to complete. That wasn't possible once the pandemic hit. DocBox had to be more strategic with its partnerships, aligning itself with another software provider that had complementary skills and knowledge in telehealth.

"We do the real-time monitoring piece, but we needed a partner that not only has a global presence, but also has been in the industry for multiple decades," says DocBox CEO Bobby Shah.

The Approach:

Customized Technology to Develop an Integrated Solution for ICU Needs

DocBox came to partner with AMD Global Telemedicine. In addition to our skills, knowledge, expertise, and experience, AMD has a technology that doesn't exist anywhere else in the industry. You can customize our technology to develop integrations for specific use cases in various systems, all while offering the ability to scale.

Both parties began working on an innovative solution. From start to finish, the two teams were able to develop and launch a product within 90 days — a remarkable achievement that highlights each party's dedication and ingenuity. That product is called teleICU, a solution that can remotely monitor a patient's vitals in real time. Though it can be extremely useful, telemedicine in the ICU only has a market penetration of

about 2.6%. There are about 95,000 ICU beds in India alone. Therefore, there was a massive opportunity for DocBox and AMD to create an accessible solution for these healthcare facilities.

And the partnership hasn't stopped there. We are now working on a hub-and-spoke model for our technology solution, with teleICU serving as the hub and expanding out to support every part of the patient's journey. Whether starting in the ICU, a general practitioner's office, or an ambulance, every patient event should be connected to maintain the quality of care throughout that individual's journey.

The Outcome:

A Combined Solution That Improves Quality of Care for Years to Come

Our partnership with DocBox is a glowing testimony of how two companies working on different aspects of care can work together to help healthcare organizations address a need in a short space of time — not to develop a temporary solution, but one that actually improves the quality of care for years to come and redefines what's possible.

With the introduction of teleICU, medical facilities are:

Reducing the number of ICU stays from five to three days

Monitoring patients safely and securely from home

Lowering medical costs for patients

Maintaining quality of care within the home

Limiting internal expenses for their organizations

The True Value in an Unlikely Alliance

DocBox and AMD operate within the same space, but there's not a lot of overlap in what either party offers customers. DocBox has industry-changing disruptive technology for the ICU, and the partnership with AMD helps evolve that solution into providing remote access to the teleICU.

"The ICU has the sickest of the sick," says AMD CEO Eric Bacon. **"With DocBox, a doctor can call in from down the hall, across the state, or even across the world, and they will still be able to use the livestream to monitor the patient's condition. It's nothing short of revolutionary."**

It's no wonder why teleICU has become an integral part of DocBox's solutions for its clients. Now, healthcare organizations basically have a portable ICU clinic at their disposal. Physicians, nurses, and the entire care delivery team can understand the patient journey holistically through the data collection and accessibility that teleICU provides. The solution allows for smarter decisions around all the various points of a patient's care.

"My No. 1 concern is the cohesiveness of a team," says DocBox's Shah. "If you put together a successful team, your output is a successful product. A successful product is a happy customer. This is why I'm so excited about our partnership with AMD. At the end of the day, the customer is happy."