



Operationalizing Healthcare Data Through Visualization and Collaboration

Healthcare organizations face disruption on a daily basis. With advances in technology, shifting financial models, consolidation and new regulations constantly redrawing the competitive landscape, healthcare systems need new tools and workflows that promote optimum flexibility and collaboration to stay ahead.

“The problems most hospitals and health systems face today isn’t a lack of data,” said Mike Sklar, Vice President of Healthcare, Americas, for Barco. “In fact, there’s been an exponential increase in data from both clinical and operational sources. The true challenge comes in making that data meaningful and available to the people – wherever they work – who can use it to generate better outcomes.”

Sklar said Barco’s growing healthcare client portfolio is providing valuable insights into ways hospitals and other organizations are adapting to the new normal. These leaders focus on solutions that (a) create shared contexts in real-time for decision-making teams, (b) visualize vast amounts of data to produce actionable insights and (c) enable location-agnostic workflows that extend collaboration beyond the walls of a hospital or other provider organization.

Shared data, shared context

One obstacle in healthcare’s digital transformation is the persistence of data silos. When clinicians and decision-makers are required to consult multiple systems, data sources and screens, they often lose what Sklar called operational awareness – a comprehensive view of a patient, department or facility at any point in time. So, forward-thinking organizations are investing in technology that can bring the data together in one, meaning-rich place.

This need, Sklar said, explains the growing popularity of clinical command centers. From a central location, health system leaders and decision-makers can monitor patient flows, manage capacity, allocate resources and reduce waiting times for patients. Similarly, multi-monitor displays and video walls are being deployed in key clinical areas to overcome silos and provide greater context and continuity for patient care.

“The overarching goal is to extend operational awareness to all members of the care team,” Sklar said. “Petabytes of patient data won’t create greater knowledge for providers unless the data can be visually integrated, enabling clinicians to make better decisions in real time.”



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That same insight can also improve collaboration in formal clinical settings such as the Tumor Board, which increasingly include both onsite and remote participants. Given the disparate backgrounds of members, it is critical that meeting management technology can format any content – images, video, audio or interactive data visualizations – for optimal viewing across all connected devices. Similarly, meeting participants must be able to present their data and findings to colleagues with the click of a button, whether they are viewing it from a remote laptop or a central meeting room screen.

“This enables both remote and onsite participants to view exactly the same content,” Sklar explained. “And it often eliminates the need to transfer images and data between systems or sites.”

Extending collaboration

Remote reading technologies provides another example of how health systems can eliminate physical barriers to optimize patient care, improve operations and respond to new developments with maximum flexibility. By virtualizing the radiology department – enabling radiologists to provide the same quality care from anywhere – hospitals are reducing onsite expense and repurposing valuable space.

But this requires the right tools. Regardless of where they work, radiologists and physicians still need superior image quality with reliable, worry-free calibration and quality assurance to make confident decisions. Sklar said hospitals need to invest both in the clinical tools that enable remote work – such as DICOM-compliant, diagnostic monitors – and in the operational capabilities needed to ensure that patient data is secure and that remote devices can be remotely managed and maintained.

“Beyond the clinical advantages remote reading offers, health systems appreciate the operational benefits,” Sklar said. “On-call, weekend and late-evening duties, for example, can be performed at home instead of at the hospital. With the millennial generation and digital natives entering the workforce, home reading is becoming a standard benefit in radiology hiring.”

It’s also an approach that has proven itself especially effective during the COVID-19 pandemic, when health systems suddenly needed to stand up a remote workforce while continuing to deliver critical care to both infected patients and non-COVID populations.

Achieving the quadruple aim

No single technology or tool can, by itself, improve collaboration among caregivers and decision-makers. But an approach that emphasizes the importance of shared contexts and visualized data can help providers prioritize their IT investments and resources.

“Our clients tell us that their new operational awareness, enriched by visual context, produces better clinical workflows, greater collaboration and, by extension, better outcomes,” Sklar said. “It helps providers achieve healthcare’s quadruple aim – to improve the patient’s experience of care, improve the health of populations, reduce the per capita cost of healthcare and improve the provider’s experience.”

To learn more about how Barco helps improve clinical workflows with superior image quality, visit barco.com/healthcare.



About Barco

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