



## AHA TRANSFORMATION TALKS

### STRATEGIES FOR REIMAGINING HEALTH CARE

Leveraging actionable intelligence to make hospitals smarter and safer

*COVID-19 provided greater visibility into health care facilities' performance*

**Throughout the pandemic, many organizations faced challenges in managing surge capacity, flexing and prioritizing spaces for COVID-19-positive patients, anticipating changes to minimize the spread of this airborne illness and more.**

It's not that hospitals didn't have the data needed to inform decision-making, but often they could not see this information in a useful way across the operation in real time to convert it to actionable intelligence.

With this in mind, a growing number of hospitals and health systems are now investing in intelligent technology infrastructure. These cloud-based platforms using wireless sensors capture data and help leaders process it quickly to drive decision-making. Information and communication technologies are used to collect and analyze operational performance data to anticipate needed changes in operations and maintenance.

An enterprisewide approach to managing building data has broader implications for improving hospital operational performance.



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### 4 ways intelligent infrastructure can support decision-making:

- 1. Recalibrating occupancy and space utilization:** Room density sensors can provide insights to inform operational and capital planning.
- 2. Supporting demand-driven cleaning:** Wireless sensors identify areas of high and low cleaning demand based on occupancy and space utilization, allowing for intelligent reallocation of resources to deliver increased cleaning frequencies and in the most needed areas.
- 3. Measuring indoor air quality:** Air flow technology monitors environmental conditions, such as temperature and CO2 levels. Ventilation system performance data support maintaining a safer indoor environment.
- 4. Optimizing energy efficiency:** Environmental sensors allow energy heating and cooling systems to operate based on occupancy demand, rather than fixed schedules, thereby reducing energy cost and consumption.

Data acquired through the internet-of-things devices can deliver a suite of business intelligence tools to drive greater efficiencies, improve planning and enhance services to create a safer environment for patients, staff and visitors. Sensors send data to a gateway and then to the cloud with a cellular signal. The data are stored in a cloud-based intelligent database that allows for seamless integration into workflows, notification systems and reporting displays. Ultimately, these platforms can help hospitals and health systems optimize staff utilization.

Platforms like these are being used in many fields outside health care and are expected to grow as organizations look to optimize staff resources and spaces.

To learn more about how leaders are reimagining health care, visit the AHA Transformation Talks [resources page](#).

### Discussion Questions:

- 1. Where are hospitals today in their efforts to capture data that can optimize building, personnel and occupancy across an entire organization? What are some of the challenges and pain points?**
- 2. What challenges do hospitals face in integrating different cloud-based system applications to quickly deliver actionable intelligence?**
- 3. How can smart systems provide value beyond what today's building automation systems, computerized maintenance management systems, asset tracking and other technologies offer?**
- 4. What is the takeaway for health care leaders? What is the potential for reducing costs, while improving safety and operations?**
- 5. In crisis situations like those we've seen during the pandemic, how can smart systems improve organizational decision-making and safety?**