

Environmental monitoring in Healthcare

A comprehensive strategy for patient safety and compliance requirements.

Overview

Health systems must ensure the life saving products and procedural areas they use are safe for the patients in their care.

From an executive perspective, the opportunity to automate environmental monitoring systems that are accurate, scalable and offer exception-based monitoring would:

- improve efficiencies
- support system level compliance
- protect investments



Challenges

Some key challenges administrators consider are:

Patient safety and quality of care



56% of consumers agree that a hospital's reputation is the same as its quality of health care. Consumers also associate hospital reputation with the belief that they will be less like to suffer a complication.¹

Asset integrity



Many medications have recommended storage temperatures of 20° to 25°C with allowable temporary "excursion" periods (15°C to 30°C). Temperatures outside this range adversely affect the efficacy of medications.²

Compliance



The Joint Commission conducted surveys at 750 U.S. hospitals and found that: Most deficiencies fall into the areas of Environment of Care (EC), Infection Prevention and Control (IC), and Life Safety (LS).³

Staff utilization



Clinical staff are often labored with manual processes that detract from focusing on patient care.

¹ https://journals.lww.com/jhqonline/Citation/2019/07000/Consumers_Association_of_Hospital_Reputation_With.8.aspx

² https://www.specialtypharmacytimes.com/publications/specialty-pharmacy-times/2013/nov_dec-2013/p-2

³ https://www.jointcommission.org/deline_tjc/accreditation_is_about_continuous_quality_-_not_passing_a_survey/

Solutions

By leveraging Copeland and their partners' expertise, health systems combine innovative engineering and technology to develop robust solutions that protect valuable assets, support compliance and allow staff to focus more on patient care.

A scalable, automated monitoring solution improves consistency in compliance across the health system.

Additional benefits may include:

- create accurate documentation and data to support compliance and continuous improvement.
- maintaining a strong image of quality of care and patient safety in the marketplace to mitigate patient concerns.
- communicating a strong message of quality of care and patient safety across departments.

Results

Developing, implementing and maintaining a healthcare cold chain with an embedded range of service can result in:



Improved quality of care which promotes patient safety and brand integrity.



Streamlined regulatory compliance via the creation of historical records for auditing.



Improved asset efficacy - protects patient samples which minimizes inventory loss.



Actionable data allowed Mayo Clinic a 50% reduction in time between initial symptoms and treatment. It cut manual screening hours by 72 percent, allowing nurses to focus on other care duties.⁶



Reduced labor costs via automation of data collection. Conserves resources and improves data accuracy and reduces demand on staff.



Better workflows and automated systems for analysis are potentially superior to manual data collection methods.⁷

A comprehensive strategy and vision for embracing connected services can lead to improved safety and brand integrity.



"97% of consumers choose hospitals based on safety, regardless of cost".⁴

- Wendy Lynch, Altarum Institute, Center for Consumer Choice in Health Care



Overall quality was most important when considering which hospital to go to for inpatient care, 71% of consumers ranked this as the most important factor.⁵



⁴ <https://www.beckershospitalreview.com/quality/97-of-consumers-choose-hospitals-based-on-safety-regardless-of-cost.html>

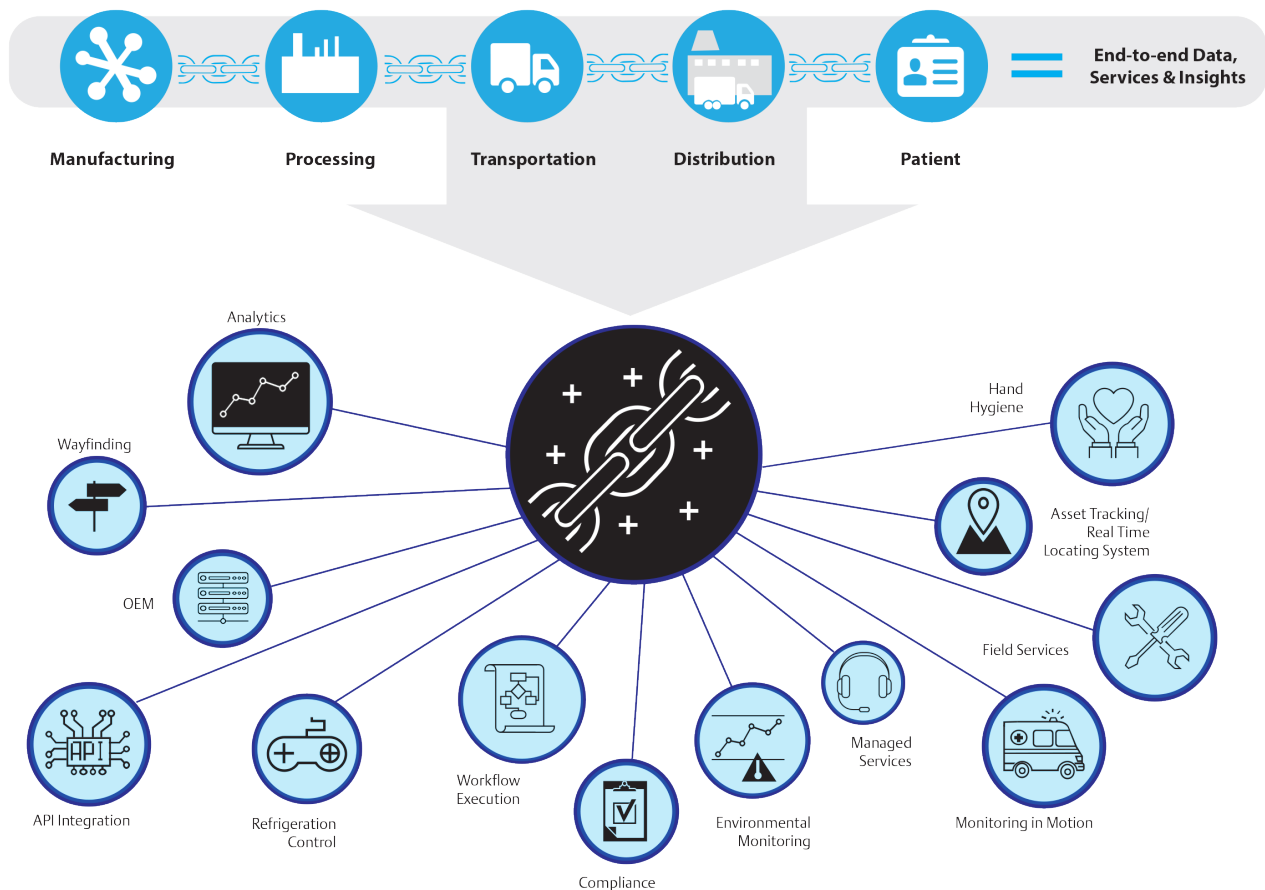
⁵ <https://www.beckershospitalreview.com/hospital-management-administration/3-key-findings-on-hospital-reputation.html>

⁶ <https://healthitanalytics.com/features/turning-healthcare-big-data-into-actionable-clinical-intelligence>

⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3644815>

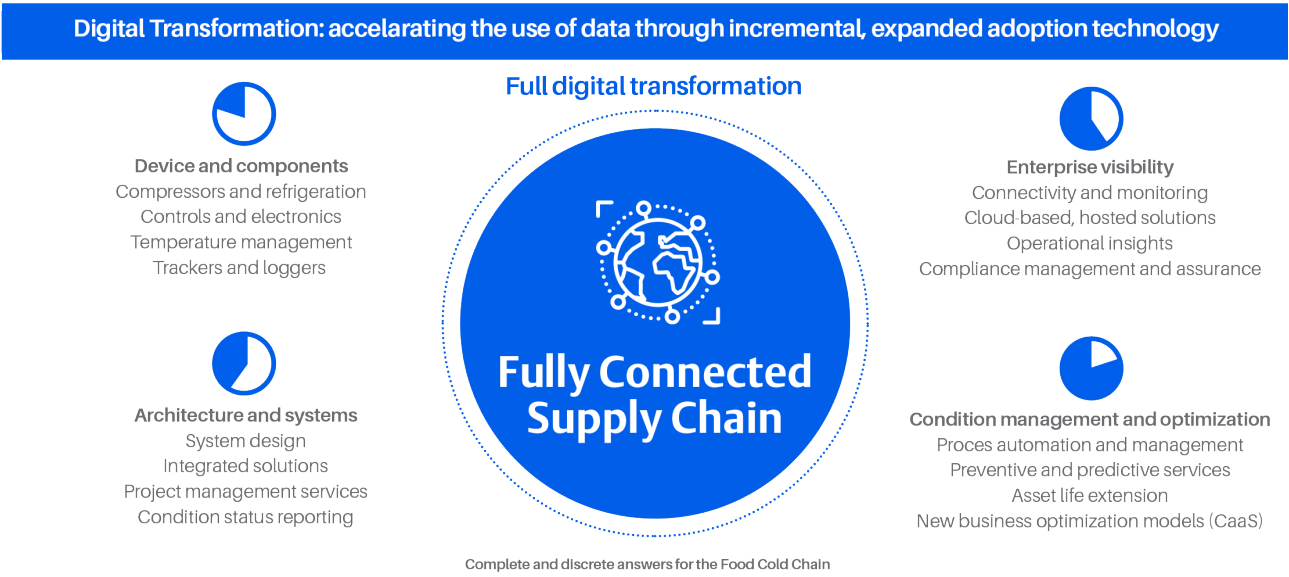
How is Copeland delivering practical, flexible approaches?

It starts with the devices and components for which Copeland is well-known and includes controls, electronics, compressors, software and newer areas of temperature management, trackers and loggers. We've become industry leaders at designing system architectures and integrating systems and solutions within businesses. Through Copeland and other tracking capabilities, our connectivity enabled support and services allow us to help provide operators enterprise-wide visibility to temperature, systems and infrastructure that can potentially impact product, its condition and its quality throughout the cold chain. We're providing operators with the data and insights that deliver deep information about how they're managing temperature conditions. This helps optimize their assets, assuring them that the systems and components essential to maintaining quality are operating properly, saving energy, improving sustainability and delivering the highest possible product quality.



Copeland is a leader in this space today, and we have a vision of where it's going. We're committed to working with customers and partners to make that a reality. If you are one of those organizations interested in pursuing a fully connected, efficient and sustainable cold chain, Copeland should be one of your first points of contact.

We're delivering practical, flexible approaches



Complete, connected condition management across the cold chain

