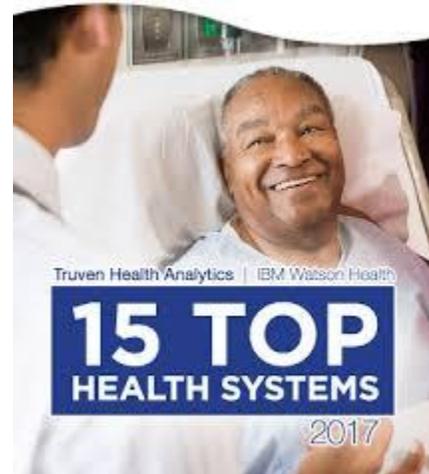


Cost Savings and Improved Efficiencies from Deploying the TrackStar™ integrated RFID System at Lakeland Health Hospital

Dr. Loren Hamel is the CEO of Lakeland Health in St. Joseph, Michigan. In 2014, while seeking new ways to improve performance in the rapidly evolving healthcare environment, Dr. Hamel met Harold Clampitt, founder of American RFID Solutions (ARS). After a limited and very successful trial of ARS' Trackstar™ RFID monitoring system, it has now been installed and integrated across all Lakeland Health departments resulting in millions of dollars of cost savings and efficiencies. In 2017, partly due to TrackStar™'s contribution, Lakeland Health was recognized as one of the Truven Top 15 Health Systems in the United States based on balanced, system-wide, clinical and administrative performance (<https://truvenhealth.com/media-room/pressreleases/detail/prid/207/truven-health-announces-15-top-healthsystems-2017>).



A key problem faced by hospitals is the need for a single integrated monitoring system that can provide reliable real-time data for asset tracking and utilization, infection control, inventory optimization, workflow analytics, clinical productivity, patient care, etc. This system needs to be low cost, compatible with hospital mainframe software, and require minimal manpower to monitor the results. For years, service providers have been selling hospitals silo solutions to individual problems; each of those solutions required an individual (typically proprietary) hardware infrastructure investment. Not only were the multiple infrastructure installments expensive, none of those individual solutions communicated with each other or shared data. The strength of TrackStar™ system at Lakeland was that it successfully addressed all of the above issues.

Background

In 2014 Dr. Hamel understood that the healthcare industry was beleaguered by ever increasing costs, and that many large hospitals had siloed departments that did a poor job communicating across different platforms – if at all. Hospital Acquired Infections (HAI) were increasing and jeopardizing the safety of patients and staff, and exogenous forces like newly proposed governmental regulation and oversight were creating the prospect of additional cost pressures. ARS TrackStar can help hospitals and surgery centers dramatically reduce costs and improve efficiencies by bringing to bear RFID-based solutions that were similar to what ARS had used in the manufacturing industry during their 18 years of experience with the RAIN RFID (ISO 18000-63) and Real Time Locations Service (RTLS).

In particular, ARS' Trackstar™ RFID system was already being used successfully in the manufacturing industry to solve similar types of problems faced by Lakeland Health. Deployed and reliably operating since 2008, Trackstar™ has processed over 231 billion data-capture events and measurements to identify, locate, authenticate and engage with items, assets, inventory or personnel tagged with RFID sensors. ARS has installed and operated systems with more than ten-thousand read points in a single facility. ARS's goal was to bring all of this capability to bear as a comprehensive system for monitoring, tracking and reporting within a hospital or surgery center environment in order to improve efficiency and cut costs.

The Trackstar™ Experiment at Lakeland Health

In 2014, Dr. Hamel asked ARS to do a trial of Trackstar™'s unique Hand Hygiene solution in a small area within Lakeland Health's main campus. Based on extremely positive results showing that Trackstar™ led to significant increases in proper hand sanitation by medical staff, Lakeland Health and ARS have worked together to further develop Trackstar™ solutions across a wide variety of use cases critical to hospital operations. In effect, Lakeland Health has been a real-world research, development, test, and evaluation center to optimize the Trackstar™ system for a large hospital environment.

The key to ARS' success at Lakeland was to ensure that Trackstar™ could solve multiple layers of efficiency and safety issues across all departments from a single technology infrastructure. In addition to the Trackstar™ system's ability to collect the requisite data, the goal was to ensure that the information was tracked, analyzed and reported, or turned into an actionable event automatically within Trackstar™. Getting all of the tracked information into Trackstar™ empowered the hospital staff and administrators by providing real-time information and analytics they had never had in the past.

Since the initial trial five years ago, Trackstar™ is now deployed corner to corner in Lakeland Health's patient facilities with an active presence in every department. Lakeland uses Trackstar™ to monitor, report and improve performance across the facility including; asset tracking & utilization, infection control, inventory optimization, workflow analytics & gains, clinical productivity, patient care, HAI forensics and more. Trackstar™ saves Lakeland Health millions of dollars each year, plus it improves patient and staff satisfaction.

The Byond Healthcare Subscription Model

In 2018, ARS entered into an agreement with Byond Healthcare to enable better care, better patient experiences, a safer environment for patient and staff, and still save millions of dollars each year. To minimize the burden on Hospital resources, Byond Healthcare is promoting the Trackstar™ subscription model. With Byond Healthcare, hospital staff do not need to worry about installing, operating or maintaining equipment or software. Instead, hospital staff would work directly with Byond and ARS to create new personalized use-case solutions. Staff and administrators recognize that the power of Byond Healthcare is maximally achieved by having continuous access to the people that customize and optimize Trackstar™ for their facility's unique opportunities.

Is Byond Healthcare Right for your Medical Facility?

Trackstar™ system can be used to solve many challenges large medical providers are facing today. This has been demonstrated by Lakeland Health's experience with this system. If you are interested in the Trackstar™ system, Byond Healthcare is able to provide white papers on inventory management and hand hygiene improvement, as well as some of Lakeland's empirical results that show them saving over \$3.7M in inventory optimization in year 1 and at least \$1.4M per year after that. Byond Healthcare can provide further information that shows the particular TrackStar™ wins across other use cases.

Devery Prince
Chief Operating Officer
byond.us, Inc.

907.230.9000
devery.prince@byond.us
www.byond.us

401 E Fireweed LN #200A
Anchorage, AK 99503