

# Instant visibility into hospital assets, patients and workflows to fuel smarter decision making

A smarter hospital – in weeks



A big part of running any hospital effectively is keeping track of people and things. That's because every hospital is an extraordinary collection of equipment and supplies, the patients whose lives and well-being depend on them, and the caregivers who are trained to put them to work.

Hospitals that can orchestrate all this effectively are able to improve patient outcomes. They must ensure that the right caregivers have access to the right supplies and equipment to care for the right patients at the right time. While this sounds simple, doing so is anything but.

In most hospitals, practically every moment there is a scramble to find the mobile assets needed to provide care. This sets off a chain reaction in which staff members waste precious time searching for the equipment and resources they need. As a result, by some estimates, only 40% of mobile assets in hospitals are being used. In the end, the quality of patient care suffers.

It doesn't have to be this way. Hospitals can deploy straightforward asset and workflow tracking capabilities connected to the Internet of Things (IoT) in the amount of time it takes to plug Wi-Fi-enabled trackers into power outlets.

We can amplify the value of these simple tools by combining them with analytics. This gives hospital leaders the ability to identify patterns in usage, deployment, maintenance and effectiveness. And all this at a level of detail that was previously unimaginable in even the most advanced hospital systems.

Powered by [SAS' Event Stream Processing](#), this is exactly what Intelligent Locations and SAS are delivering to hospital systems around the world today.





## Make it simple

Previous attempts to use technology to track assets, patients and workflows in hospitals relied too heavily on user input. For example, a staff member was required to register the delivery of a ventilator to a room in a tracking system. As a result, these systems fell short of expectations.

That's where the SAS and Intelligent Locations combination of automation, cloud and IoT capabilities makes all the difference for hospitals. The system automatically tracks assets, patients and staff members as they make their way through the hospital, with no need for human input or intervention.

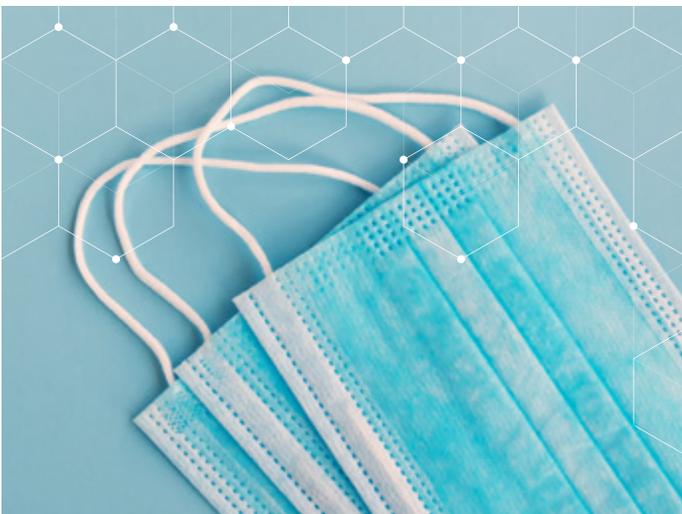
Analytics tools reveal workflow patterns in key areas from the ER to imaging. These tools show how people are making their way through facilities, which equipment they are using and when they are using it. It works because it's simple.



## Not just assets

Intelligent Locations capabilities help hospital leaders keep track of virtually anything in the hospital – including staff members and patients. This can allow patients' family members to track their loved ones as they make their way in and out of procedures, or from room to room. This means they don't have to ask hospital workers for information or spend anxious hours waiting for updates.

Similarly, hospital caregivers and other staffers can be located immediately when their services are needed. This can make all the difference for patient outcomes as needs for care can change in a moment. Advanced tracking and analytics capabilities can help better align and anticipate staffing and equipment needs to meet actual patient demand.



## The power of hidden patterns

How often – and where – are hospitals using valuable pieces of equipment? Which workflows could operate more efficiently? How many "extra" assets are sitting unused day after day? Which parts of the hospital have the greatest need for resources? What impact does asset utilization have on patient outcomes?

These are the types of next-level analytical insights that come into focus once hospitals start gathering a wider range of data on their assets, people and other resources. These previously hidden patterns can point the way to more efficient processes, more targeted purchasing practices and more effective use of people and assets. With Intelligent Locations and SAS Event Stream Processing capabilities, asset tracking is only the beginning of a more valuable data journey.

## How it works

Gateways are plugged into AC outlets and connected through Wi-Fi to beacons affixed to mobile assets and people. Using Bluetooth Low Energy technology and advanced sensors, these IoT-enabled devices track movement, utilization and environmental conditions in real time with unprecedented accuracy. All tracking maps, analytics and key performance indicators are accessed from a HIPAA-compliant, intuitive mobile app and web-based interface. With [SAS Event Stream Processing](#), the Intelligent Locations platform supplies “streaming KPIs” – real-time insights drawn from current data for making timely decisions.

## Sample applications

- Asset and patient tracking.
- Digital wayfinding and navigation for patients.
- Environmental monitoring to meet Joint Commission standards.
- Staff tracking, including staff duress monitoring.
- Automated patient updates for family and friends.
- Handwash hygiene analytics.

## Benefits

- Instant tracking using templated and custom dashboards.
- Built-in advanced analytics capabilities.
- No upfront installation costs.
- No new staff required.
- Instantly identify the location and status of equipment and other assets.
- Manage inventory more effectively, with greater accuracy.
- Dramatically improve workflows in critical areas such as imaging, surgery, ICU, NICU, Echo and the ER.
- Significantly reduce “find time” for equipment, patients and personnel.
- Improve patient experience and communications with friends and family.
- Improve patient outcomes through more efficient asset use and management.





## Let's talk

The capabilities and efficiencies introduced by Intelligent Locations and SAS would have been unimaginable only a few years ago. But with major advances in IoT, automation and analytics capabilities, these capabilities can be put to work in any hospital, at any scale, within weeks or even days.

Among the hospital leaders who have already put them in place, the benefits of this deceptively simple approach are far-reaching. The SAS and Intelligent Locations solution allows them to run a more effective operation, reduce costs and improve patient outcomes at a time when hospitals are facing significant pressures.

If you'd like a simple demonstration of how this solution could work for your hospital, please contact **Steve Copeland** at [steve.copeland@sas.com](mailto:steve.copeland@sas.com) to get the conversation started.



### About Intelligent Locations

Intelligent Locations is an Internet of Things company that provides healthcare organizations with data insights gained through advanced monitoring of assets, people and processes to solve persistent problems of inefficiency, affordability and accessibility. For more information, visit [intelligentlocations.io](http://intelligentlocations.io).

### About SAS

SAS is the leader in analytics. Through innovative software and services, SAS empowers and inspires customers around the world to transform data into intelligence. SAS gives you THE POWER TO KNOW®. For more information, visit [sas.com](http://sas.com).

