

# Increase efficiency while improving patient care



Many hospitals accept searching for missing equipment and over-purchasing assets as frustrating yet necessary practices. Yet the broader impact—on annual budgets, nurse inefficiency and staff dissatisfaction—can add up to a staggering \$7M per year for the average 300-bed hospital.<sup>1</sup>

Even more concerning, patient care and satisfaction can suffer as a result of reduced nursing time at the bedside. That's why Midmark is using our decades of experience with RTLS to make it easier to support your staff with the latest technology.

Because having the right asset, at the right time, leads to a better patient-caregiver experience.

# Understand the true costs of missing equipment

To ensure patient care does not get disrupted, nurses may hide important equipment. Clinical leaders estimate that 30%<sup>2</sup> of their equipment is hidden at any time, leading to perceived scarcity. At the same time, asset fleets are shrinking by 10%<sup>2</sup> every year, as equipment is not able to be found, transferred with patients to other hospitals, or simply stolen. This reality has wide-ranging impact on hospital finances, adding up to \$7M annually for an average 300-bed hospital.<sup>1</sup>

#### \$7M Annually

\$5.250.000

In non-value-added nursing wages, covering the 10% of nursing shifts spent away from the bedside looking for equipment to provide patient care.

\$1.500.000

In write-offs for the 10% of equipment that goes missing every year.

\$125 000

In capital expenses for over-purchasing assets to ensure availability, adding up to \$1.5M in unnecessary spending over the lifetime of the fleet.

\$100.000

In hidden operational expenses as individual nursing units replace lost assets on their department budgets.

\$42.750

In biomedical technician wages for the 208 hours per year they spend simply searching for equipment.

\$3,000

In equipment rental costs to supplement for missing assets.

# What is missing medical equipment costing your patients?

While over-purchasing and lost assets have direct impact on costs, the biggest impact can be on your staff and patients. When nurses spend time away from the bedside and needed equipment isn't available, the timeliness of patient care can suffer. Missing equipment can delay discharges and even divert care to other hospitals.

#### 156,000 hours

#### TIME LOST WITH PATIENTS

Nurses spend a reported 10% of their time looking for equipment. For a 300-bed hospital, that adds up to 156,000 hours a year spent away from the bedside—more than \$5M in wages for non-value-added time. In addition, biomedical technicians spend an estimated 208 hours annually hunting down equipment that's due for preventive maintenance (PM)—a frustrating exercise.<sup>1</sup>

### Stress ↑ Satisfaction ↓

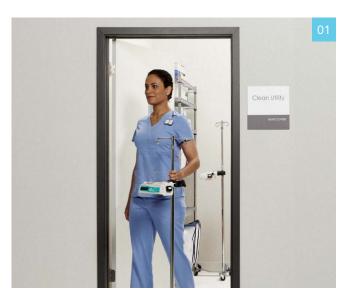
#### **PATIENT + STAFF DISSATISFACTION**

According to Gallup, not having the materials and equipment to do one's job is the strongest indicator of job stress.<sup>3</sup> Patient satisfaction scores, too, can suffer if nurses are looking for equipment rather than spending time with patients.

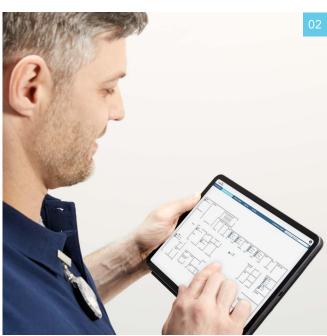


#### Enable your staff to improve patient care with better asset visibility

Thanks to accuracy you can trust, your staff can find the right equipment without delaying or diverting patient care, using software designed to be intuitive for nurses and biomedical teams alike.







#### **IMPROVED NURSING** SATISFACTION

Nurses can easily locate critical equipment like IV pumps. Time that was spent walking the halls in search of equipment is now redirected to value-added patient care activities.

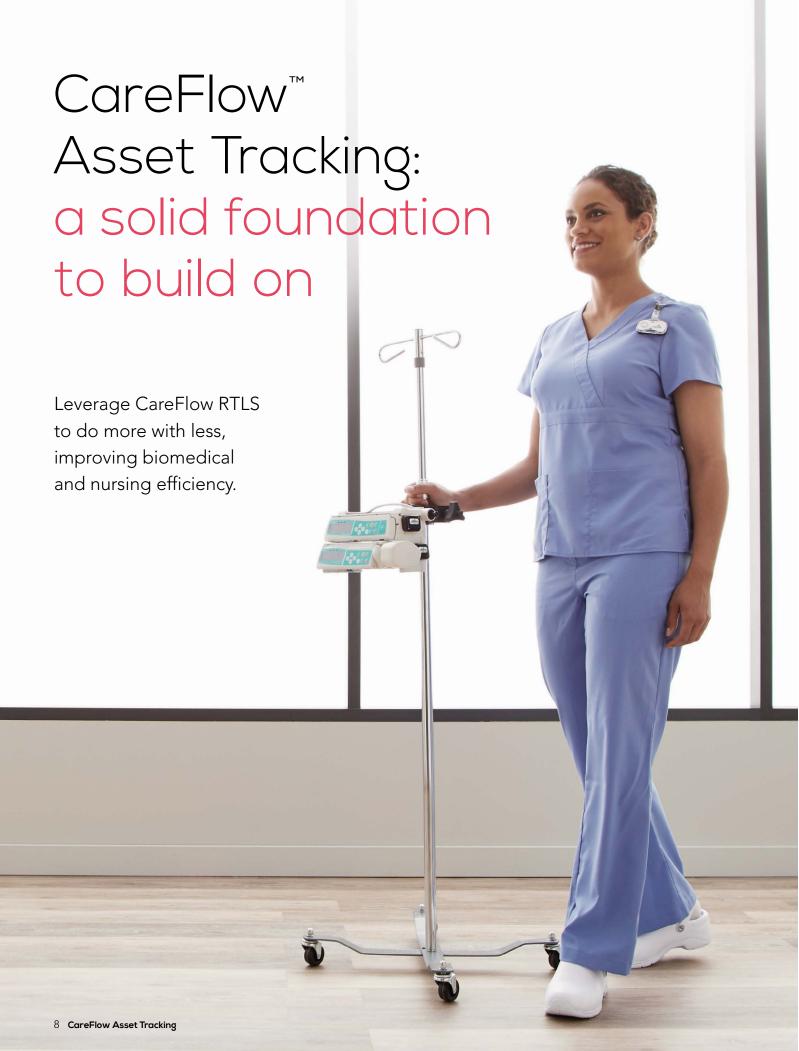
#### **02 ENHANCED WORKFLOW FOR** PREVENTIVE MAINTENANCE

Location data enhances preventive maintenance routines so biomedical teams benefit from a more organized, informed approach to their daily work.

#### **BETTER PATIENT CARE**

When properly maintained equipment is easily found, nurses spend more time at the bedside and less time searching. With increased focus on caregiving, patient satisfaction scores can improve by as much as 15 points.<sup>4</sup>

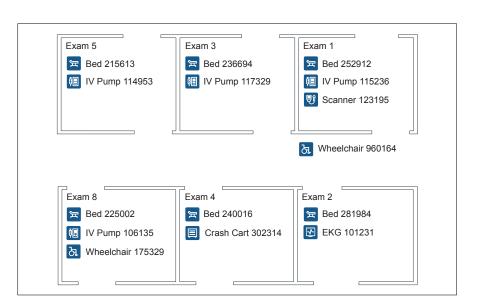




Туре	Tag #	Asset ID	Desc.	Location	Time Entered	Manufacturer	Model	Owner	PM Date	Batt. Chg Date
<b>∮</b> ⊞	31007	115236	IV Pump	1st Floor East Exam 1	3/22/22 9:18:14 AM	Baxter	Sigma Spectrum	Pat Trnsprt	3/10/2022	10/10/2022
<b>Ģ⊞</b>	31062	117329	IV Pump	1st Floor East Exam 3	3/22/22 10:02:02 AM	Baxter	Sigma Spectrum	Pat Trnsprt	3/10/2022	10/10/2022
Ģ⊞	31074	114953	IV Pump	1st Floor East Exam 5	3/22/22 10:15:24 AM	Baxter	Sigma Spectrum	Mat Mgmt	3/25/2022	08/15/2022
<b>∮</b> ≣	31088	106135	IV Pump	1st Floor East Exam 8	3/22/22 9:15:57 AM	Baxter	Sigma Spectrum	Pat Trnsprt	3/25/2022	08/15/2022

#### **QUICKLY LOCATE ASSETS**

The sortable data on the CareFlow Enterprise View® List allows you to quickly find assets and view PM dates as well as other asset details.



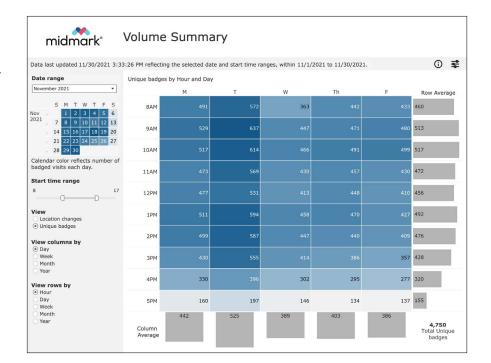
#### **VISUALIZE ASSET LOCATIONS**

CareFlow Enterprise View Floorplans graphically represent the locations of mobile medical equipment in key areas of your facility.

#### IMPROVE OPERATIONS WITH HISTORICAL ANALYSIS

Take the guesswork out of assetrelated decision making with CareFlow Analytics, including a full suite of reports:

- Movement History
- Location History
- Interactions
- Volume Summary
- Time in Locations
- Inventory + Low Battery



#### Enhance CareFlow™ Asset Tracking with optional, advanced functionality

Add rules-based automation and interfaces to proactively manage equipment.

PAR Asset Type View  Asset Type PCU Pump  T						
UNIT	COUNT	ALERT	CRITICAL	PAR	HIGH	EVENTS
All Units	151	Low	130	152	172	Φ
Pediatric Care	21	Low	18	22	24	Φ
ıcu	25		20	23	26	•9
Rehab	5		4	5	6	•
1N	11	High	9	10	11	ψ
ıs	23	Low	21	24	27	ψ
Oncology	26		21	24	27	•
ED	16	Critical	18	20	22	ψ
Surgery	16	Low	15	17	19	Φ
Distribution	6		3	5	7	Ð
Biomed	2		1	2	3	<b>4</b> 9
Total	151					

#### **OPTIMIZE INVENTORY WITH PAR MANAGEMENT**

Visually manage assets with periodic automatic replenishment (PAR) levels to know at a glance which units are running low on key assets and which are overstocked.

Keeping tabs on asset inventory allows hospitals to use equipment to its fullest capacity and save on unnecessary equipment expenditures. PAR Management is easily configurable and scalable to fit each facility's specific goals and needs.

#### RECEIVE ALERTS FOR PATIENT SAFETY

If an asset that's been designated for recall or is past its PM date is detected in a patient room, alerts are sent to designated workstations.

#### REDUCE INVENTORY SHRINKAGE WITH EXIT ALERTS

Receive alerts when assets are seen near areas where they may exit the facility.

ļ	Attention	Recalled IV Pump 116347 is present in Patient Room 2105	:27	×
!	Attention	Crash cart 302316 is near South Hall Exit	:15	×
!	Attention	IV Pump 115236 is past PM Date - present in Exam Room 1	:10	×
!	Attention	IV Pump inventory is below threshold in Clean Utility 4S	:01	×

Туре	Tag #	Asset ID	Desc.	Location	Time Entered	Manufacturer	Model	Owner	PM Date	Batt. Chg Date	Recall
<b>P</b>	31007	115236	IV Pump	1st Floor East Exam 1	3/22/22 9:18:14 AM	Baxter	Sigma Spectrum	Pat Trnsprt	3/10/2022	10/10/2022	X
Ŏ.	31062	117329	IV Pump	1st Floor East Exam 3	3/22/22 10:02:02 AM	Baxter	Sigma Spectrum	Pat Trnsprt	3/10/2022	10/10/2022	×
<b>P</b>	31074	114953	IV Pump	1st Floor East Exam 5	3/22/22 10:15:24 AM	Baxter	Sigma Spectrum	Mat Mgmt	3/25/2022	08/15/2022	×
<del> </del>	31088	106135	IV Pump	1st Floor East Exam 8	3/22/22 9:15:57 AM	Baxter	Sigma Spectrum	Pat Trnsprt	3/25/2022	08/15/2022	×
	31090	119954	IV Pump	1st Floor East Exam 7	3/22/22 8:32:01 AM	Compression Th	Vasopress DVP	Mat Mgmt	4/12/2022	09/12/2022	
ਰਿ	31133	960164	Wheelchair	1st Floor East North Hall	3/22/22 8:18:14 AM	Invacare	Invacare 3000	Pat Trnsprt	5/18/2022	09/18/2022	
<b>1</b>	31150	131612	Media Cart	1st Floor East Exam 12	3/22/22 10:40:24 AM	Samsung	DVD with monitor	Pat Trnsprt	5/18/2022	09/18/2022	
	32010	101753	Peds Infusi	1st Floor East Exam 10	3/22/22 10:05:36 AM	Smiths Medical	Medfusion 4000	Mat Mgmt	6/18/2022	09/18/2022	
	32050	123126	Syringe	1st Floor East Exam 9	3/22/22 9:52:14 AM	Smiths Medical	Medfusion 2500	Mat Mgmt	7/10/2022	08/10/2022	
	32075	103319	Syringe	1st Floor East Exam 11	3/22/22 10:24:51 AM	Smiths Medical	Medfusion 3500	Mat Mgmt	8/10/2022	09/10/2022	

#### VISUALLY MANAGE PM ACTIVITY

When PM dates are entered into the system, the CareFlow Enterprise View® List highlights any asset nearing or past its PM date.

#### ADD LOCATION INTELLIGENCE TO YOUR CMMS

Reduce the need for multiple applications by displaying information in your computerized maintenance management system.

#### EFFORTLESSLY COMMUNICATE RECALLS

Marking an asset as recalled visually communicates on all CareFlow views that the equipment should not be used in patient care until the recall status is corrected.

#### INTEGRATE TEMPERATURE MONITORING

Add your temperature/environmental monitoring dashboard to CareFlow Enterprise View.

#### SIMPLIFY ACCESS WITH ACTIVE DIRECTORY

Interface CareFlow with your facility's Active Directory database to easily manage access to RTLS applications.

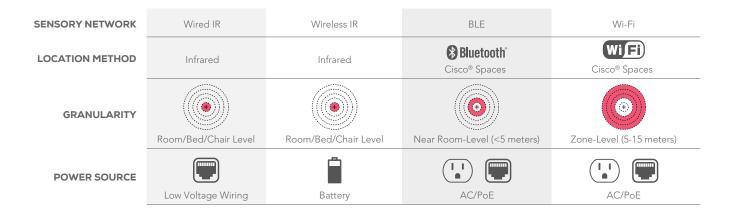
"With RTLS, staff no longer spend time searching for equipment-instead, they use that time to provide direct patient care, to efficiently maintain assets for safer patient care, or to perform other value added tasks."



Information Systems Analyst Billings Clinic

## Sensory Networks with Infrared, BLE + Wi-Fi options

#### Mix-and-match locating technologies to suit your needs



#### LEVERAGE YOUR EXISTING INFRASTRUCTURE WITH HYBRID TECHNOLOGY

Deploy Midmark's highly precise IR technology where accuracy is needed to drive workflow automation, and elsewhere rely on compatible Cisco® technology for facility-wide asset tracking using Bluetooth® Low Energy (BLE) or Wi-Fi locating.



#### WIRED IR SENSORY NETWORK

Achieve room-, bed- and chair-level precision with our IR sensors for nurse call automation and other RTLS workflow solutions.



#### WIRELESS IR SENSORY NETWORK

Our easy to install, battery-powered IR sensory network provides room-, bedand chair level precision, no wiring required.



#### **BLE OR WI-FI LOCATING**

Combine an IR sensory network with a compatible Cisco ecosystem for economical, scalable asset tracking using BLE (near-room level) or Wi-Fi (zone level) signaling technology.

## A simple and powerful design for reliable locating

Finding equipment for patient care and preventive maintenance has never been easier than with our line of BLE, IR and Wi-Fi asset tags, all powered by RTLS.

#### HYBRID TECHNOLOGY TAGS FOR MAXIMUM FLEXIBILITY

Our hybrid technology asset tags combine the trusted precision of infrared with BLE or Wi-Fi signaling, so you can install IR sensors where needed for precise location, then rely on your Cisco network elsewhere.



#### **BLE/IR ASSET TAG**

The BLE/IR Asset Tag communicates location using both BLE and IR signals, allowing you to leverage the precision of IR where our Wired Sensory Network is installed while supplementing with BLE. Up to one year of battery life.



#### WI-FI ASSET TAG

The Wi-Fi Asset Tag combines IR and Wi-Fi RTLS for hospital-wide visibility, plus precision locating where you need it. Up to 18 months of battery life.

#### RELIABLE INFRARED TAGS FOR FULL SENSORY NETWORKS

For facilities with full infrared sensory network coverage, our IR/RF asset tags offer the highest location precision and long-lasting battery life.



#### IR/RF ASSET TAG

A reliable IR/RF RTLS tag for roomlevel (or better) accuracy, used with our Wired or Wireless IR/RF Sensory Networks. Up to two years of battery life.



#### IR/RF MINI ASSET TAG

The same precise IR locating technology in a smaller size. Up to two years of battery life.

#### Additional CareFlow™ Solutions



#### **STAFF DURESS**

Deploy a personal duress button across your health system to diffuse dangerous situations and support the culture of safety.



#### **NURSE CALL AUTOMATION**

Automate your nurse call system with location data. Nurses wearing RTLS badges can cancel a patient call automatically with their presence, allowing immediate focus on the patient and accurate metrics on response times.



#### PATIENT FLOW

Automate bed/room status to accelerate turnover times and eliminate tedious data entry. When patients wear badges, staff can see which beds/rooms are available, occupied, dirty or being cleaned without any manual input.



#### **INTERFACES**

Create a complete healthcare ecosystem by integrating CareFlow RTLS with your EMR, CMMS and other systems. Midmark RTLS provides a seamless architecture for a connected healthcare ecosystem.



# What you get with Midmark



#### SUCCESS COACHING + EXPERT PROJECT MANAGEMENT

Our Success Coaches are with you every step of the way, pre-sale to post-go-live, helping you with decision making, change management and process improvement using RTLS data. They'll work together with our highly knowledgeable in-house clinical experts and regionally-certified System Integrators, using a proven methodology for successfully deploying CareFlow RTLS in the clinical environment.



#### COMPREHENSIVE EDUCATION, IN-PERSON + VIRTUAL

An experienced nurse educator from our Clinical Solutions team or your local System Integrator will conduct onsite training for super users on best practices for wearing badges, using software and running reports. For our Advanced Patient Flow customers, we also provide System Analyst education that enables your team to configure and support the system. In addition, on-demand virtual tutorials are available through our online knowledge base.



#### EXTENSIVE, TIME-TESTED WORKFLOW EXPERTISE

For more than three decades, we've helped health systems improve operations and create better experiences for patients, nurses, providers and staff. From simple asset tracking to complex patient flow solutions, which we pioneered more than 15 years ago, Midmark RTLS and our nationwide network of local support offers the proven expertise your health system needs to catalyze positive change using accurate, reliable technology.

#### SOURCES

- 1 Midmark RTLS customer interviews
- 2 Ladd Insight Report: Voice of the Clinical Leader Regarding RTLS. February 2021
- 3 https://www.gallup.com/access/323333/q12-employee-engagement-survey.aspx
- 4 Insipring Innovation: Patient Report of Hourly Rounding, Institute for Innovation, 2014



Designing better care®

Midmark RTLS is an ISO 9001 Certified Company.

For more information or a demonstration, contact 1.800.MIDMARK, or call Midmark RTLS directly at 1.877.983.7787. Visit our website at midmark.com.

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