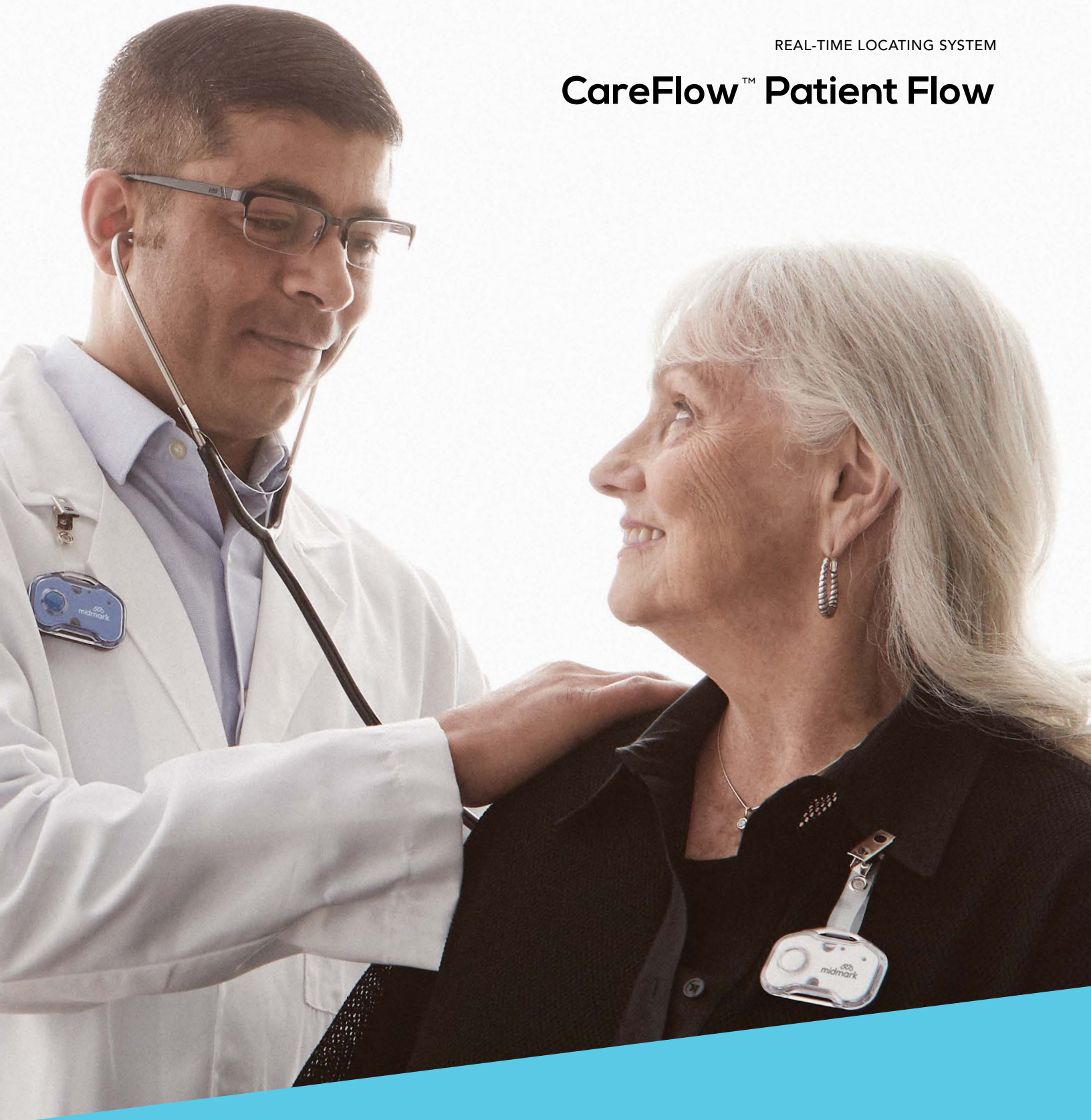




REAL-TIME LOCATING SYSTEM

CareFlow™ Patient Flow

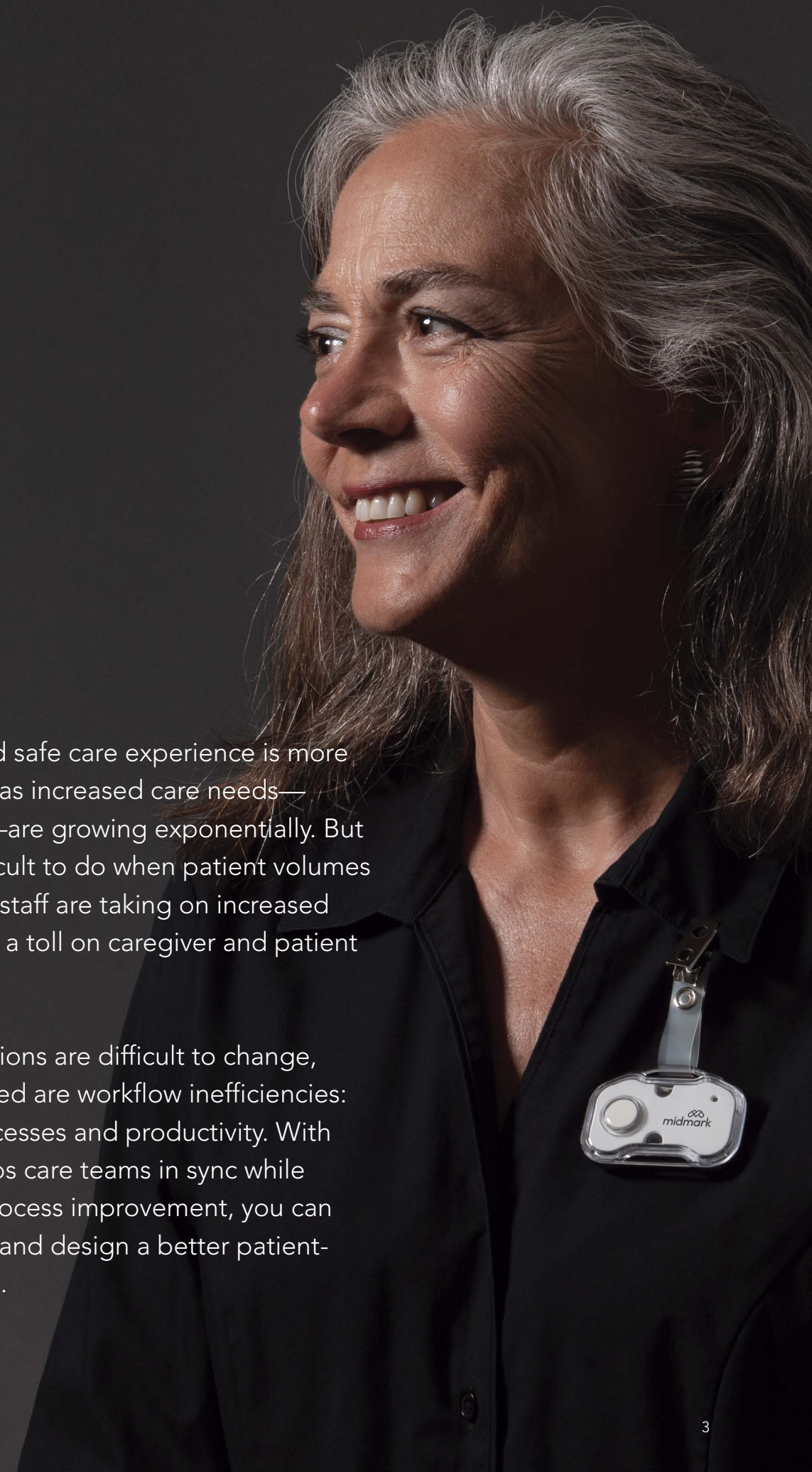


Better workflow, better care



Creating a timely and safe care experience is more important than ever, as increased care needs—outpatient to acute—are growing exponentially. But this is incredibly difficult to do when patient volumes are rising, and fewer staff are taking on increased workloads. It's taking a toll on caregiver and patient experiences alike.

Though these conditions are difficult to change, what can be addressed are workflow inefficiencies: communication, processes and productivity. With technology that keeps care teams in sync while providing data for process improvement, you can increase throughput and design a better patient-caregiver experience.



Inefficiency may be preventing you from improving patient care

Whether in outpatient clinics or acute care hospitals, staff need to operate like a well-oiled machine to successfully respond to increasing patient volumes despite resource constraints. However, the majority of healthcare systems today are plagued with inefficiencies, known and unknown.



LONG PATIENT WAIT TIMES

Patients wait too long for care, resulting in frustration and low patient satisfaction scores.

40%

of patients experience "longer than reasonable" wait times for an appointment¹

68%

of a patient visit is spent waiting² while only 32% is spent with the physician³

149 min.

Average Emergency Department wait time, up from 40 minutes pre-pandemic⁴



DECISION-MAKING WITHOUT DATA

Lack of data about operations makes it difficult to make informed decisions to improve clinical workflow.

33%

Average exam room utilization⁹

\$150

Cost per minute for labor hours, equipment, supplies and general overhead in operating rooms³

TOO MANY PATIENTS, TOO LITTLE TIME

Patient volumes are rising amid reduced resources.

10,000

people in the US reach age 65 each day, averaging 7 office visits per year⁵

17%

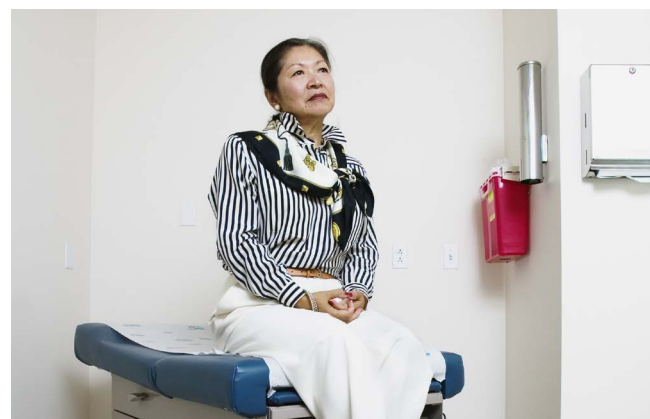
of people age 65 years or older were hospitalized in 2019⁶

2.5B

Predicted outpatient visits by 2029⁷

2M

Americans will be diagnosed with cancer in the next year⁸



STAFF BURNOUT + HIGH TURNOVER

Staff are constantly juggling administrative tasks like manual data entry and excessive clicks in the EMR. They're exhausted.

63%

of nurses report excess burnout¹¹

1/3

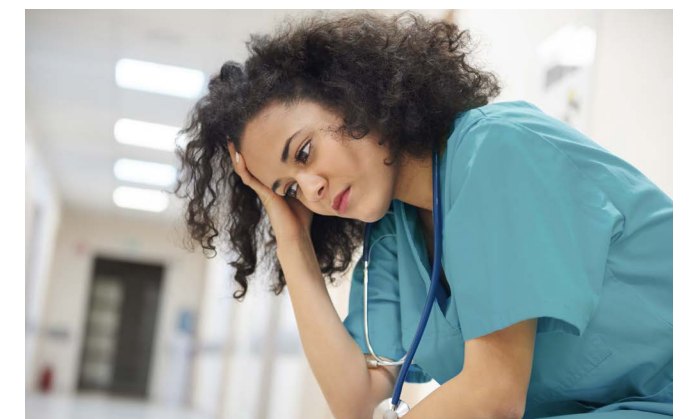
of nurses will retire in the next 10 years¹² with over half of the nursing workforce aging over 50¹³

124,000

physicians are needed by 2034¹⁴

275,000

nurses are needed in the next decade⁹



What do optimal operations look like?

Imagine a day in your facility where each patient efficiently receives timely care, and staff feel empowered and fulfilled by their work.

With real-time prompts and visual cues of what's happening in the moment, plus accurate and insightful data collection happening in the background, you can fuel a better workflow.



SHORTER WAIT TIMES

Keep visits on track by visualizing room status, next stage in patient care and how long the physician has been with the patient.

BETTER ROOM UTILIZATION

Actionable real-time information and historical analytics increase visibility into room, bed or chair status, helping provide care to more patients.

ENHANCED PRODUCTIVITY

Real-time patient location updates and automated timestamps help reduce clicks and manual data entry.

REDUCED PATIENT ALONE TIME

In-the-moment cues to help staff limit alone time, especially in sensitive settings like oncology care.

SHORTENED PATIENT VISITS

With organized, efficient workflows, non-value-added time in the patient visit is reduced, shortening lengths of stay.

MORE CAPACITY, SAME SPACE

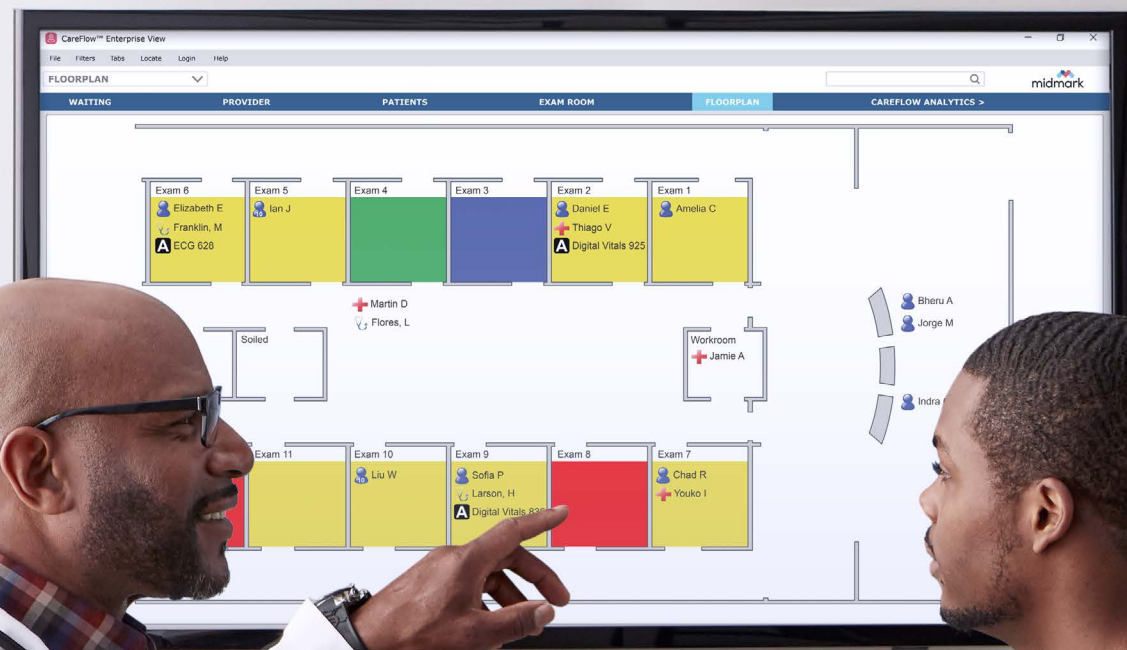
Efficient patient care and informed scheduling helps utilize space and staff resources more effectively to see more patients.

HAPPIER STAFF, HAPPIER PATIENTS

Optimizing your workflow empowers staff to focus less on logistics, more on care.

Outpatient, oncology, acute— with better workflow, comes better care

Fueled by technology, Midmark CareFlow™ Patient Flow gathers location data and turns it into actionable insights to improve workflow, inform care teams and enhance the delivery of care.

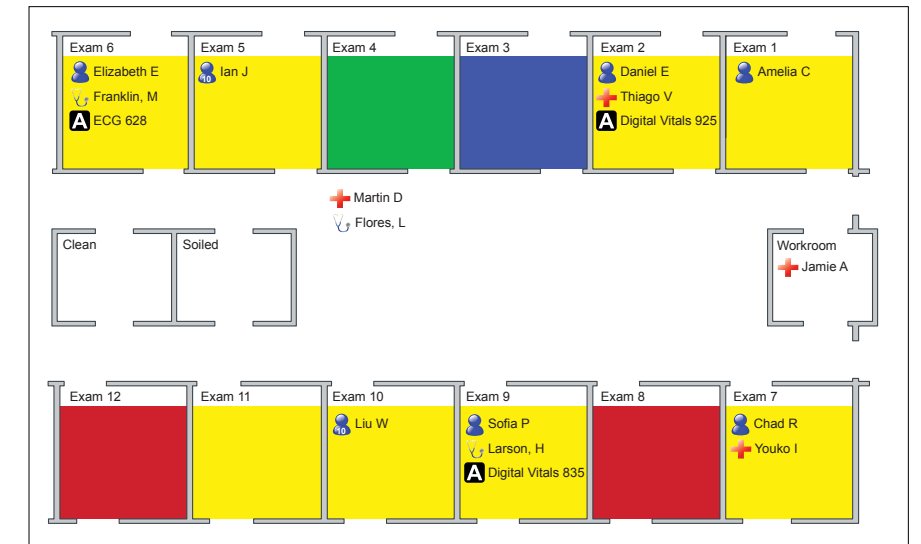


CareFlow™ Patient Flow for Clinics + Oncology

ENHANCE COMMUNICATION

Midmark CareFlow Enterprise View® allows you to quickly find patients, staff and equipment using a digital blueprint displayed on computer monitors and Glance-and-Go™ boards. This facilitates better communication to:

- Create streamlined workflows, including self-rooming
- Optimize room turnover
- Improve patient flow
- Increase resource utilization



BT	Badge	Patient Name	Current Location	Owned Room	Lab	Exam	MA	Prov
	52369	Josey Brown	Exam 7	Exam 7	✓	→		
	53258	John Smith	Lab	Exam 9		→		
	54123	Julie Green	Patient Rest Room	Exam 1		→		
	55896	Harry McDermot	Waiting Room					
	54789	Frank Stiles	Exam 5	Exam 5	✓	→		
	56421	Allen Jones	Exam 10	Exam 10	✓	→		

STREAMLINE PATIENT VISITS

Provide timely care to patients and help staff work more efficiently with Enterprise View List, an automatically updated electronic whiteboard. Patient status and caregiver interactions display in real time, and staff are prompted with visual cues and notifications of where to go next.

COORDINATE MULTIPLE ONCOLOGY APPOINTMENTS

Streamline how care teams work together by communicating when the patient is ready for treatment or the next phase in their visit, helping reduce waste of medications and time while improving the efficiency of care.

Status	Room	Patient Name	Current Location	Lab	MA	Prov	AT	TwS	SLOS	OLOS
	Rm 1	Julie Green	Patient Rest Room				0:15		0:40	0:45
	Rm 2	Josey Brown	Exam 2	✓				0:16	0:23	0:45
	Rm 3									
	Rm 4	John Smith	Lab	→				0:16	0:16	0:45
	Rm 5	Frank Stiles	Exam 5	✓			0:10		0:25	0:47
	Rm 6									
	Rm 7									
	Rm 8									
	Rm 9									
	Rm 10	Sabal Samir	Exam 10	→				0:05	0:08	0:40
	Rm 11	Lucia Rodriguez	Exam 11	✓					0:10	0:15
	Rm 12									

CareFlow™ Patient Flow for Acute Care

Same software, customized for Emergency Departments and Operating Rooms. Experience additional workflow options, best suited for you.

IN-THE-MOMENT PATIENT STATUS

Quickly find information specific to each ED or OR patient's stage of care on Glance-and-Go digital whiteboards. In the ED, this can include acuity and needed ancillary services such as diagnostic imaging, pulled automatically from the EMR.

In the OR, registration times, stage progression, duration and overall length of stay provide additional insight into surgery operations.

RS	Room	Patient	Acuity	Alone Time	OLOS	Current Location	Nrs	Phy	Nurse	Physician
Exam 1A	Smith, J	2	00:00:35	68:02	Exam 1A			Taylor, F	Jennison, A	
Exam 1B	Rodriguez, I	3		51:18	Exam 1B			Taylor, F	Jennison, A	
Exam 2A	Lee, K	5		45:35	Exam 2A			Indra, J	Billington, J	
Exam 2B	Wellington, D	3	00:02:15	62:18	Exam 2B			Indra, J	Billington, J	
Exam 3A										
Exam 3B	Davidson, P	3	00:05:12	62:18	Exam 3B			Taylor, F	Jennison, A	
Exam 4A	Lopez, M	2	00:01:32	62:18	Radiology			Indra, J	Billington, J	
Exam 4B	Samir, S	3	00:05:57	62:18	Exam 4B			Indra, J	Billington, J	
Exam 5A	Sanders, T	4	00:07:43	53:50	Exam 5A			Taylor, F	Jennison, J	
Exam 5B	Arun, B	4		53:50	Exam 5B			Indra, J	Billington, J	
Exam 6A										
Exam 6B										

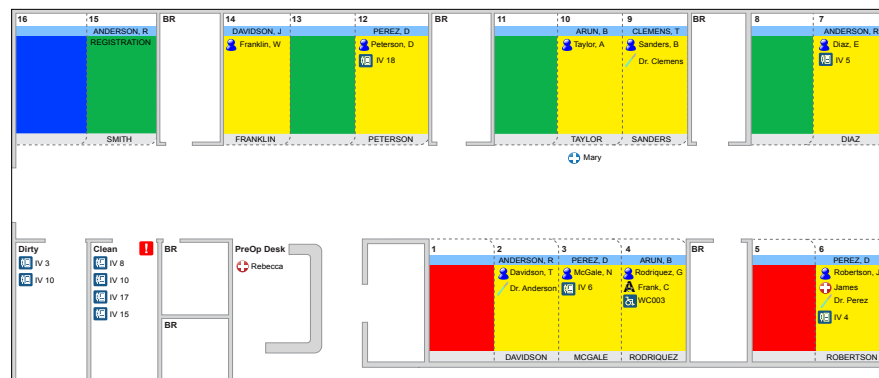
Patient ID	In OR	Surgery Start	Finish	Recovery
6225				✓
0311	✓			
1055		✓		
1266			✓	
5011	✓			

INFORMED PATIENT PROGRESS FOR ORs

In surgery settings, give families peace of mind. HIPAA-compliant digital whiteboards offer loved ones and family members an overview of each patient's progress as they move through surgery.

VISUAL INTELLIGENCE FOR ROOM STATUS

Whether in ED exam rooms, OR suites, or in pre- and post-op areas, Midmark's precise locating technology provides sub-room level data so you can see which rooms or bays are available, occupied or need cleaning.



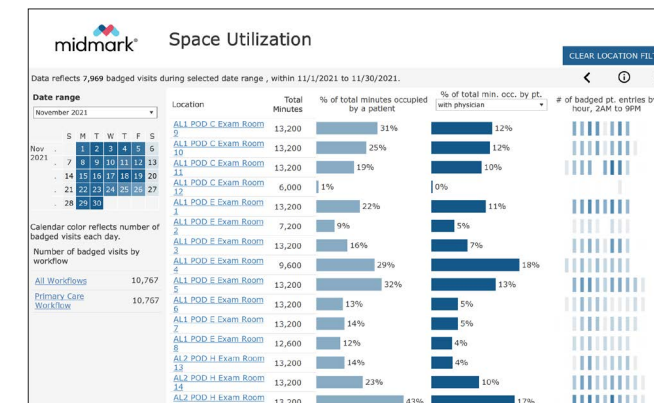
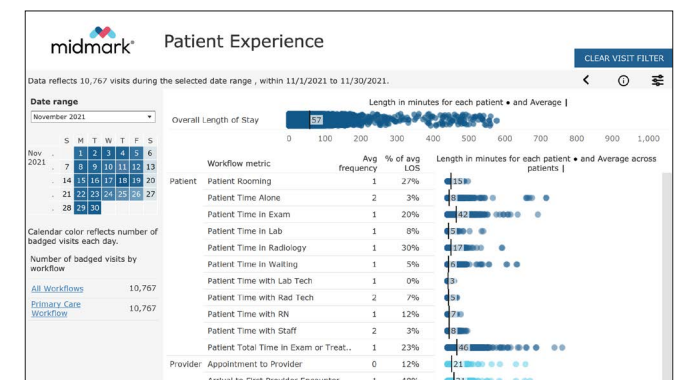
Measurable KPIs for the Care Experience

Every moment is an opportunity to collect KPI data for process improvement. The CareFlow™ Analytics suite is your gateway to not only measuring but managing performance. Below are just a few of the CareFlow metrics that can inform data-driven decision making.

FOR ALL CARE ENVIRONMENTS

Uncover the true patient experience with data on today's performance.

- Wait time
- Wait to exam room
- Wait to clinical staff
- Wait to provider
- Alone time
- Time with staff (e.g., RN or MA)
- Time with provider
- Room utilization



FOR ONCOLOGY

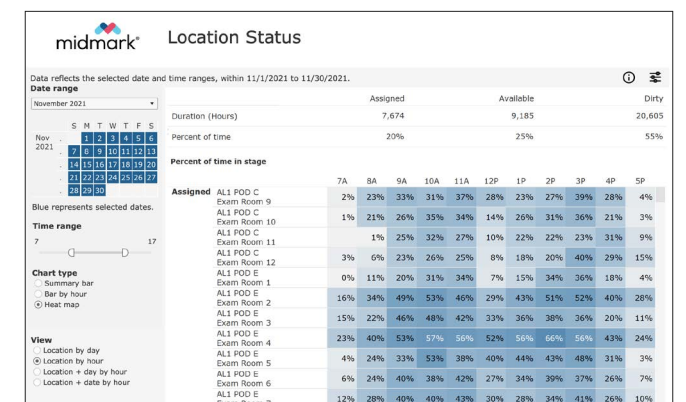
Gain insight into every workflow, from exam to infusion to radiation oncology and diagnostic radiology.

- Chair utilization
- Time in lab
- Time in exam
- Time in infusion
- Time in radiation

FOR ORs

Operating suites are one of the most valuable resources in acute care. Make utilization decisions with the right information to enhance efficiency.

- Bay, bed and OR utilization
- OR status
- Wait to pre-op
- Pre-op to anesthesia
- Pre-op to surgery start
- Time in pre-op
- Time in surgery
- Time in post-op



CareFlow™ RTLS impacts your entire workflow *with measurable results*¹⁵



Outpatient

10%

increase in clinic capacity

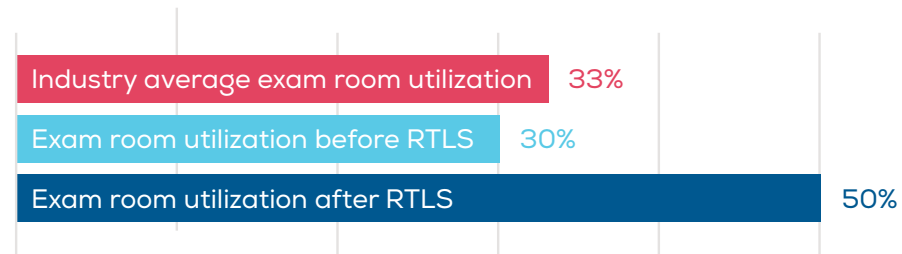
15 min.

reduction in time patients spend in the waiting room

30%

increase in provider productivity

FOR ONE CUSTOMER, IMPLEMENTING CAREFLOW RTLS RESULTED IN A 67% INCREASE IN EXAM ROOM UTILIZATION



Oncology

10%

increase in capacity without adding new rooms

5 min.

decrease in wait times per patient

1 mile

of walking saved by nurses each shift



Acute

74%

reduction in patient wait time

25%

reduction in time to discharge

0.5%

rate of patients who left without being seen

“We’re empowering staff to manage and distribute resources more effectively. Analyzing RTLS data for continuous improvement aids our efforts to improve the experience for both patients and caregivers.”

Rodney Haas

Vice President of Operational Excellence

University of Minnesota Health Clinics and Surgery Center

Patient flow optimization to fit your goals

When looking at the many ways RTLS can impact your facility, it can be difficult to know where to start. Our smart approach to RTLS automation offers three progressively sophisticated levels to help your healthcare system and staff adapt to RTLS and experience its benefits at varying levels of complexity.

CareFlow™ Patient Flow:

LEVEL ONE: BASE

Get started with Base Patient Flow—simple visibility to the real-time and historical location of patients, staff and assets with the sensory network you need for more complex workflows. Without the intricacy of workflow rules and alerts, it's quick to implement and easy for staff to learn.

LEVEL TWO: EXPRESS

Take CareFlow RTLS to the next level and optimize operations with our Express solution that offers a fixed, non-configurable set of basic workflow rules and KPIs for simple workflows that are standard across your network.

LEVEL THREE: ADVANCED

For specialized workflows in oncology, multi-specialty, EDs and ORs, our Advanced solution is right for you. We'll work with you to develop unique performance metrics and rules sets to achieve your workflow goals.

Features	Level One: Base	Level Two: Express	Level Three: Advanced
Badge Assignment Interface	Optional	Basic	Configurable
Asset Visibility	Basic	Basic	Configurable
Workflow Cues + Prompts		Fixed	Configurable
Provider Support (Button Press)		•	•
Floorplan View	•	•	•
Patient + Staff List Views	Location Only	•	•
Additional Views		Fixed	Configurable
Analytics (Includes Contact Tracing)	Basic	Full-Featured	Full-Featured

Which CareFlow™ Patient Flow solution is right for you?

New customers can start with our Base or Express solutions to become familiar with the technology before configuring workflows with the Advanced solution. Your investment is applied forward as you upgrade, making your RTLS journey easy and predictable for budgeting.

Environment	Base (Visibility + Basic Reports)	Express (Fixed Workflow)	Advanced (Custom Workflow)
Primary Care	•	•	•
Urgent Care	•	•	•
Multi-Specialty	•		•
Oncology	•		•
Eye Care	•	•	•
ED	•	•	•
OR	•		•

Additional CareFlow™ Solutions

NURSE CALL AUTOMATION

Give time back to nurses by automating your nurse call system with location data. Nurses wearing RTLS badges can cancel a patient call automatically with their presence, simply by entering a patient room, allowing immediate focus on the patient and accurate metrics on response times.



STAFF DURESS

Be proactive about safety in your facility by empowering staff to discreetly signal for help with the press of a button on their RTLS badge. Notifications are sent in real time to security personnel including who needs help, where and when.



ASSET TRACKING

Leverage CareFlow RTLS to do more with less, improving biomedical and nursing efficiency. Easily find equipment, increase utilization and reduce expenses to create a more positive care experience.



BED MANAGEMENT

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

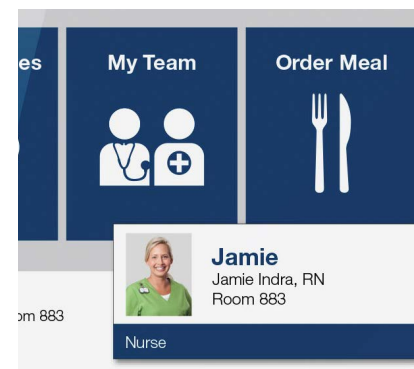
Interfaces

Create a complete healthcare ecosystem by interfacing CareFlow RTLS with your EMR, CMMS and other systems. CareFlow RTLS provides an open architecture for seamless system integration.



ELECTRONIC MEDICAL RECORDS (EMR)

Interface with virtually any EMR, including Epic®. A bi-directional RTLS-EMR integration facilitates data flow from the RTLS to the EMR, reducing manual data entry.



PATIENT ENGAGEMENT

Create a positive, interactive care experience by providing location data to patient engagement systems. As a caregiver enters the patient room, their credentials are displayed on the TV to inform and put the patient at ease.



CMMS SYSTEMS

Reduce search time for mobile equipment by adding real-time location data to your computerized maintenance management system (CMMS) by interfacing with RTLS.



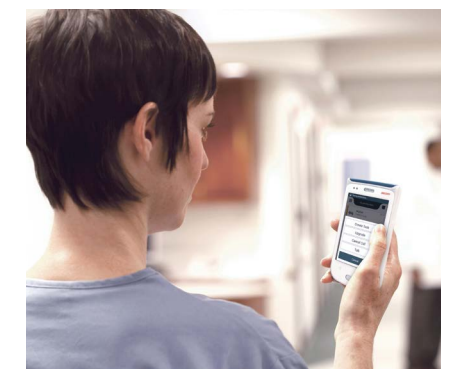
TEMPERATURE MONITORING

Integrate with Primex® or your environmental monitoring system to view temperature monitoring data along with RTLS data in CareFlow Enterprise View.



SMART IV PUMPS

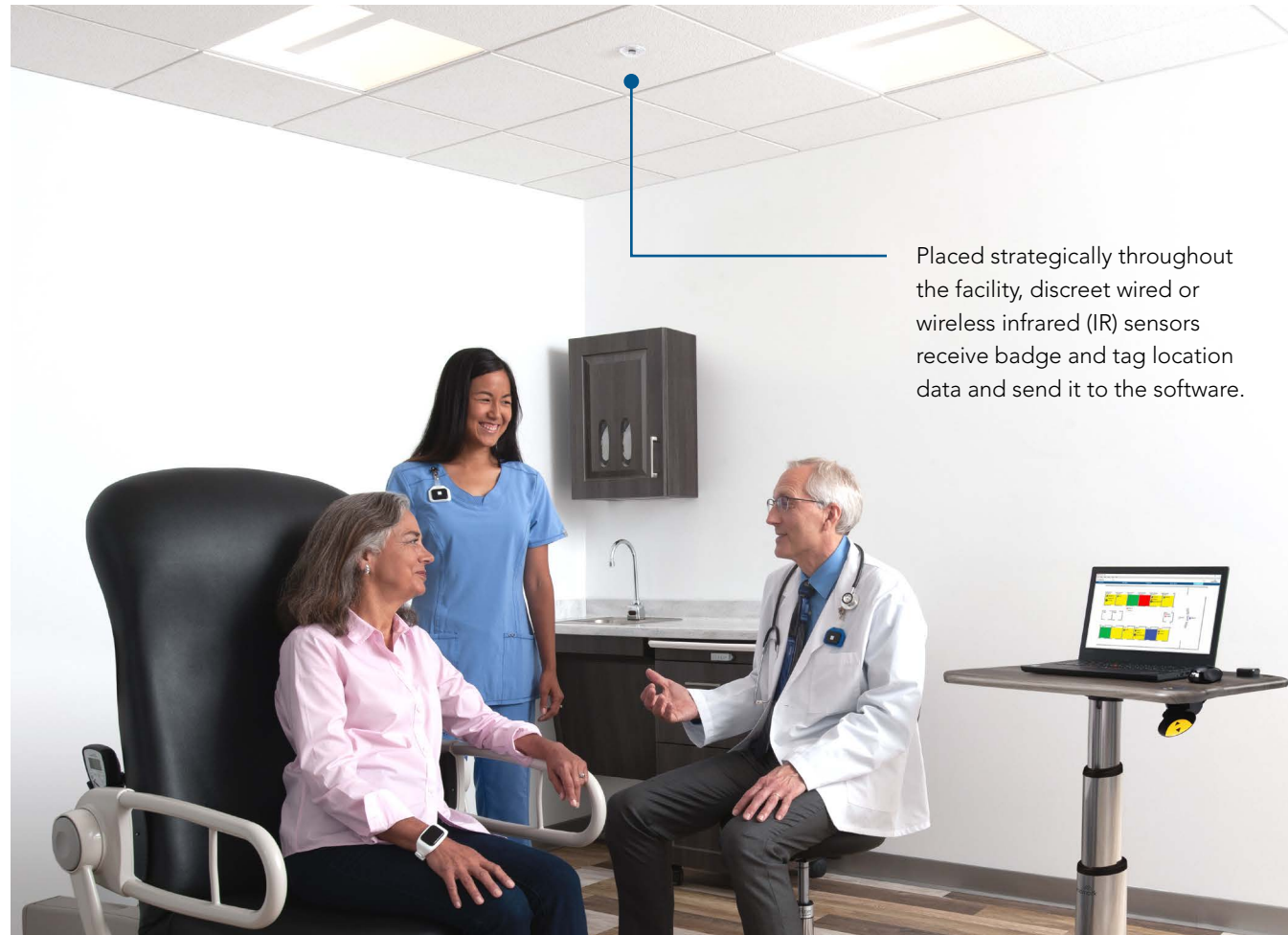
Our smart IV pump interface allows you to know whether or not an IV pump is in use—a perfect complement to our Asset Tracking solution.



ALARM MANAGEMENT + MESSAGING

Send notifications from CareFlow RTLS directly to mobile phones and other devices. You can also suppress notifications based on location to reduce noise and alarm fatigue.

Wired and wireless network options for precision locating



Placed strategically throughout the facility, discreet wired or wireless infrared (IR) sensors receive badge and tag location data and send it to the software.

Accuracy matters in the care experience. Precise and automated locating technology from Midmark RTLS offers the room-, bed- or chair-level accuracy needed to optimize patient flow.

WIRED SENSORY NETWORK

Highly precise, discreet infrared and radio frequency sensors. Once installed, little to no maintenance is required.

- Compact form factor
- Low cost sensor that offers highest location precision
- Our most widely deployed sensory network (in its seventh generation)
- Easily achieves room-, bed- and chair-level accuracy

WIRELESS SENSORY NETWORK

Same locating precision in an easy-to-install, battery-powered sensory network. No wiring necessary.

- Transmits location data without burdening Wi-Fi network
- Battery-operated sensors (uses three standard D Cell batteries; up to 3 years typical battery life)
- Easy sensor installation with no wiring required
- Easily achieves room-, bed- and chair-level accuracy

Badges that are simple, yet powerful by design

Designed to keep pace with healthcare's demands, our IR/RF RTLS badges combine versatility and durability with accurate locating.



CLEARVIEW™

Classic simplicity and reliability combined with long-lasting battery life.

- Available in multiple colors or may be customized to your facility's brand
- Compact form factor (1.65"W x 0.55"D x 2.44"H)
- Lightweight (1.06 oz with battery)
- Superior battery life (up to 2 years when following recommended best practices)

CLEARVIEW™ MINI

One badge. Multiple wearable options.

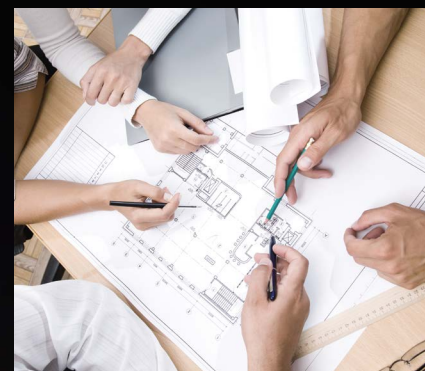
- Compact form factor (1.937"W x 0.491"D x 1.227"H)
- Lightweight (0.6 oz with battery)
- Battery life: Up to 90 days
- Silicone accessories available in white, charcoal gray, pink or blue

4 wearable options

- On the lapel using included clothing clip
- On the wrist using hospital wristband (3/4" or less; not included)
- On the lapel using silicone accessory (sold separately)
- On the wrist using silicone accessory (sold separately)

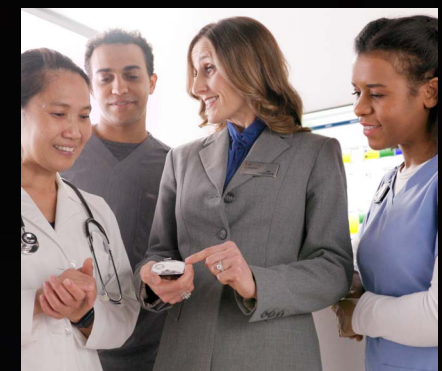


What you get with Midmark



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

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- 9 Acceptable industry average.
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- 12 Bureau of Labor Statistics
- 13 American Association of Colleges of Nursing
- 14 Association of American Medical Colleges



Designing better care.®

Midmark RTLS is an ISO 9001 Certified Company.

For more information or a demonstration, contact Midmark RTLS at 1.877.983.7787. Visit our website at CareFlowRTLS.com.

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