

EMERGENCY DEPARTMENT SOLUTION



Stay Ahead of Variations in Demand

Industry Challenge: There's no "average" day in the ED

Emergency Departments today face significant variability in demand, but most of their planning processes and operating models are designed only for the "average" day. As a result, processes break down when EDs are overloaded, forcing teams to operate reactively: leaders adjust resourcing only after teams are already overloaded, teams scramble to discharge patients after capacity is reached, and bottlenecks are not uncovered until they are already delaying care. Ultimately, patient care suffers, and frontline teams burn out from the daily heroics required of them.

Qventus Solution: Optimize for predicted variation, flex for the unpredicted

The Qventus ED Solution enables EDs to dynamically manage variation and flex for unpredictable demand. It automates the manual work for optimizing ED process steps, anticipating crowding events, and coordinating with ancillaries to prioritize orders. This reduces the cognitive burden on care teams so that they can focus on delivering care.

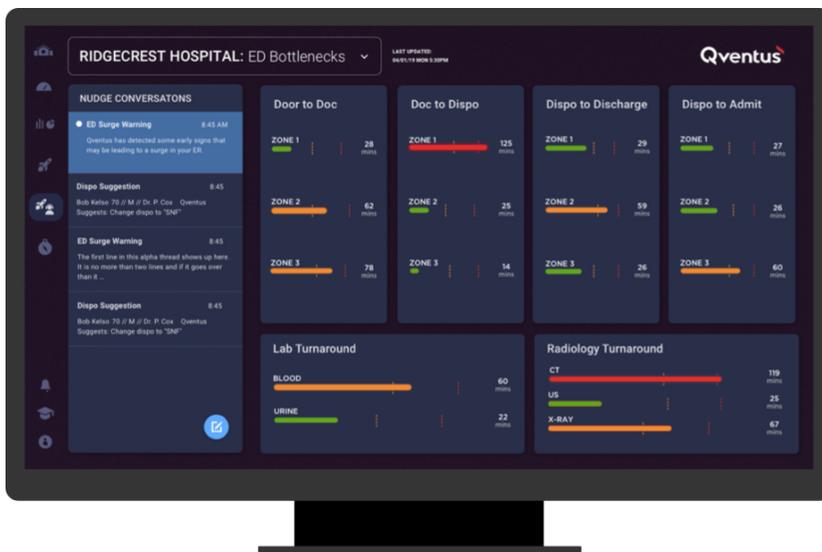
Key benefits:

- Reduce ED length of stay
- Decrease LWBS rates
- Improve staff satisfaction

"We feel like we are so far ahead now. Every ED and hospital leader now has a standard way to approach our metrics"

Jeff Reames, MD, FACP, VP of Emergency Services, Mercy

How the solution works



Optimize process steps:

Identify emerging bottlenecks and take action in real time

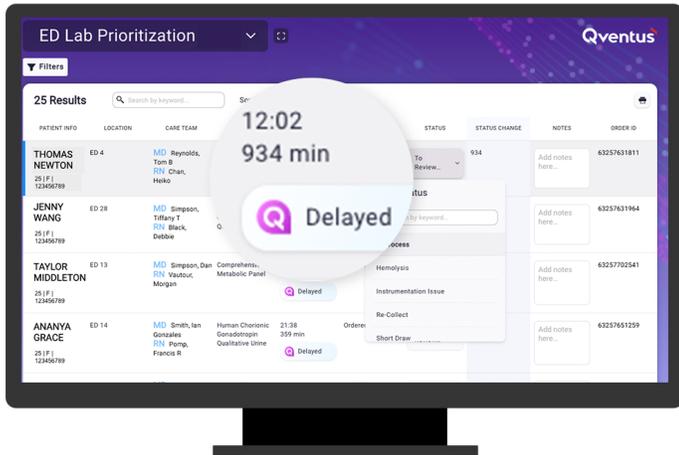
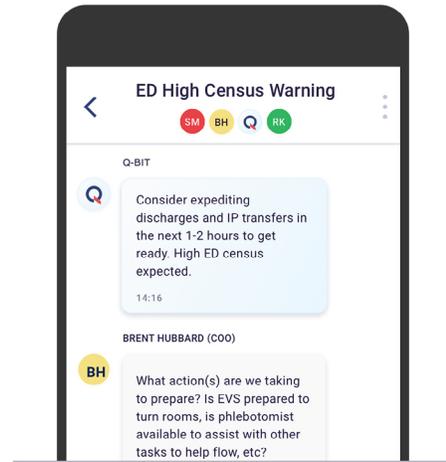
Qventus creates real-time visibility into key ED process steps and predicts emerging bottlenecks. Rather than relying on teams to uncover bottlenecks buried in dashboards, Qventus AI analyzes data in the background and automatically surfaces key rate-limiting steps to the right people at the right time through its suite of "nudges." These nudges prompt teams to take targeted, prescribed actions to address issues such:

- Clinician bandwidth constraints
- Limited ED bed availability
- Imaging / lab delays
- Admit processing delays

Anticipate crowding:

Orchestrate your crowding response before it happens

Even when emerging bottlenecks are proactively resolved, EDs can still be overwhelmed with spikes in demand. Qventus machine learning analyzes millions of data points in the background to predict crowding events hours in advance and prompts action across the broader team. Teams can easily activate hospital-wide surge plans and collaborate to proactively reduce crowding impact.



Going beyond the ED:

Automate coordination with ancillaries to optimize flow

Qventus helps imaging and other services prioritize orders with the greatest impact on patient flow. With Qventus orchestrating action to expedite, this not only prevents outstanding orders from holding up patient care, but also automates the manual coordination between care teams and ancillaries.

Uncover new insights:

Power data-driven continuous improvement

Qventus provides data-driven insights into boarding, low-acuity flow, and other key processes at the tip of your fingertips. With fewer delays waiting for custom reports, EDs can use detailed drill-downs to accelerate root cause analysis, support decision-making for split-flow models, and uncover new opportunities for continuous improvement.

Boarding Time by Bed Request Hour of Week

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Hour	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes	Minutes
0	112	49	243	83	95	96	91
1	139	220	162.5	121	125	117	86.5
2	98.5	122	319	103	123	115	78.5
3	117	276.5	92	122	160	115	124
4	105	471.5	260.5	118	98	121.5	111
5	105	266	117	119	111	111	140
6	131	215	132.5	118	168	109.5	47
7	123	149.5	140	111	168	109.5	47
8	131	149.5	140	111	168	109.5	47
9	115	149.5	140	111	168	109.5	47
10	149.5	140	140	111	168	109.5	47
11	149.5	140	140	111	168	109.5	47
12	149.5	140	140	111	168	109.5	47
13	149.5	140	140	111	168	109.5	47