

From Challenge to Solution

A Roundup of Practical Technology Approaches Already Working in Hospitals

The West Health Accelerator at AHA's Health Research & Educational Trust

Hospital and health system leaders are under pressure from many directions at once, including rising patient acuity, persistent workforce shortages, and financial sustainability. They are also navigating a steady stream of new technology, with vendors lining up to promise fixes for these challenges. Sorting through all of that can make it feel like the only way to keep up is to build a strategy from the ground up, pick a platform, launch a pilot, and hope it scales.

But hospitals do not have to start from zero. Across the country, hospitals and health systems have already tested technology-enabled approaches to strengthen care delivery, support care teams and improve day-to-day workflows. Just as important, they have learned what it takes to implement those solutions in real care environments.

The West Health Accelerator at AHA's Health Research & Educational Trust helps leaders build from that experience rather than recreate it. By bringing together proven technology-enabled solutions, practical resources and real-world implementation examples, the Accelerator helps hospitals move more directly from a pressing problem to a proven path forward. This roundup highlights practical starting points across EHR optimization, virtual care and AI utilization and integration, connecting common priorities with approaches already being put into practice and generating results.

Wherever your organization is on its journey, this is a place to start. And if you have questions, want help identifying a solution that fits your priorities, or are ready to explore deeper engagement, the Accelerator team is ready to connect.

Find a Solution for Your Organization's Priorities

The Accelerator's current areas of focus and resource library are organized around three domains where technology can help hospitals and health systems address pressing clinical, workforce and operational challenges: EHR optimization, virtual care, and AI utilization and integration.

Make Evidence-Based Care More Reliable through the EHR

Addressing sepsis, postpartum hemorrhage, and preventable complications in hospitalized older adults are persistent patient safety priorities. Hospitals have already built strong clinical protocols to address these challenges. The opportunity now is to give those protocols an even more reliable way to reach the bedside, so the standard of care holds steady shift after shift, backed by technology rather than memory alone.

The opportunity here isn't a new platform. It's getting more out of what most hospitals already have: the EHR. The three solutions below show what that looks like in practice, with standardized alerts, order sets and escalation pathways built directly into workflows clinicians already use.

Recognize Sepsis Risk Earlier and Support a Reliable Response

Solution: AI-Driven Sepsis Detection and Management

The Priority:

Sepsis contributes to at least 1.7 million adult hospitalizations and more than 350,000 deaths in the U.S. each year, making it one of the leading causes of inpatient mortality, according to the Centers for Disease Control and Prevention. Rather than developing a new protocol to address this challenge, the opportunity lies in recognizing risk sooner, cutting through alert fatigue and ensuring a reliable response.

How the Solution Works:

This solution pairs AI-driven clinical decision support with a digital surveillance layer built directly into the EHR. It continuously analyzes real-time patient data to flag early signs of sepsis risk, then routes that risk as a role-based, workflow-native alert, so the notification reaches the clinician who needs it rather than broadcasting to the entire care team at once. Each alert links directly to an evidence-based order set and an escalation pathway, so the next step is built in rather than left to memory. Dashboards track alert-to-action rates, time to intervention and outcomes, giving quality teams a continuous read on whether the system is working as intended.

What it enables:

Earlier intervention and improved risk-adjusted mortality, reduced variation in screening and escalation, fewer avoidable ICU transfers, a shorter length of stay and stronger situational awareness across care teams.

Best fit for:

- Hospitals working to strengthen early detection with tools already embedded in their EHR
- Health systems aligning sepsis protocols across multiple sites
- Quality teams focused on reducing variation without adding new alert burden

See it in action

Ochsner Health

Ochsner Health in New Orleans deployed an EHR-embedded, AI-driven sepsis predictive model across its hospital system, pairing the technology with clinical workflow redesign and strong multidisciplinary governance. Results included a 20% reduction in risk-adjusted sepsis mortality, alert-to-action rates exceeding typical benchmarks, fewer avoidable ICU transfers and floor codes, and reduced length of stay. Ochsner received the 2024 HIMSS Davies Award of Excellence for this work.

[Explore the full solution](#)

Identify Postpartum Hemorrhage Risk Earlier and Standardize Response

Solution: Postpartum Hemorrhage Risk and Response Toolkit

The Priority:

Postpartum hemorrhage (PPH) occurs in an estimated 3% to 5% of U.S. deliveries and accounts for about 14% of maternal deaths (National Library of Medicine, CDC), making it one of the most common and most preventable causes of maternal morbidity.

How the Solution Works:

This toolkit calculates a dynamic PPH risk score that updates throughout labor and delivery as new data and clinical events come in, so risk isn't assessed once and forgotten. Context-specific prompts activate standardized response pathways and evidence-based orders when needed, while integrated tools support accurate, real-time quantitative blood loss tracking – often the hardest part of PPH response to get consistently right – and strengthen coordination among obstetric, nursing, and anesthesiology teams during high-risk moments. Dashboards and reports then surface trends and variation across units and shifts to support ongoing improvement.

What it enables:

Earlier identification of hemorrhage risk, standardized care across teams and sites, stronger multidisciplinary communication during emergencies and reduced variation in maternal safety practices.

Best fit for:

- Hospitals working to reduce maternal morbidity
- Obstetric programs implementing evidence-based safety bundles
- Health systems aligning maternal care across multiple sites

See it in action

WakeMed Health & Hospitals

WakeMed, a multi-hospital system in North Carolina with nearly 10,000 births a year, implemented the toolkit across its obstetric units beginning in 2022, combining automated risk scoring, quantitative blood loss tracking, and guided-response pathways. Since implementation, WakeMed has seen sustained reductions in obstetric hemorrhage, fewer severe PPH events and a stronger, standardized team-based response across its three hospitals.

[Explore the full solution](#)

Make Evidence-Based Care for Older Adults More Consistent

Solution: EHR-Embedded Safety Bundles for Older Adults

The Priority:

Adults 65 and older make up about 13% of the U.S. population, but they account for more than a third of hospital admissions and nearly half of inpatient spending, and they tend to have longer average hospital stays than younger adult patients (U.S. Census Bureau, AHRQ). Much of the potential for improvement in this space is concentrated in a predictable set of complications that would benefit from a consistent approach, including delirium, medication events and functional decline, alongside mobility, pain, sleep and nutrition needs, where a consistent approach makes an outsized difference. Best practices for geriatric care are already well established.

How the Solution Works:

This solution's opportunity is in embedding those practices directly into everyday workflows so they show up consistently, unit after unit. The solution turns evidence-based pathways for these areas into standardized, EHR-embedded care plans, paired with age-specific clinical decision support built directly into everyday workflows. As a result, guidance appears where clinicians are already working, rather than in a separate reference. As patients approach discharge, the system automatically generates a tailored discharge summary from structured data already in the chart, thereby strengthening continuity of care at one of the riskiest transitions. Systemwide performance monitoring rounds out the model, giving leaders a way to track adoption and refine it over time.

What it enables:

Fewer complications such as delirium and medication events, more consistent application of geriatric best practices, reduced variation in care delivery, and stronger coordination across clinical, operational, and technology teams.

Best fit for:

- Health systems working to improve outcomes for hospitalized older adults
- Organizations reducing variation in geriatric care across multiple hospitals
- Clinical leaders integrating evidence-based care models directly into the EHR

See it in action

Mass General Brigham

Mass General Brigham in Boston is deploying the model across nine hospitals, academic medical centers and community hospitals, in both urban and rural settings. The phased rollout has reduced variation in care for older adult inpatients, improved coordination across clinical, operational and technology teams, and driven more efficient use of inpatient resources.

[Explore the full solution](#)

Extend Care-Team Capacity through Virtual Care

With an estimated 158,600 RN positions still unfilled nationwide, hospitals are under growing pressure to create capacity, improve patient flow and make better use of the nursing workforce they have. That kind of pressure creates a clear opening for virtual care models to protect two of the moments that matter most in a patient's stay: admission and discharge. These are the points where risk is assessed, medications are reconciled and patients get the education that shapes what happens after they leave. Virtual care offers a proven way to keep that experience consistent even without adding bedside strain.

Expand Bedside Nursing Capacity During Admission and Discharge

Solution: Virtual Nursing for Admission and Discharge

The Priority:

This model moves two of the most time-intensive, variable tasks in a patient's stay off the bedside nurse's plate and onto a centralized team, without losing the personal connection.

How the Solution Works:

Virtual registered nurses conduct admission histories and medication reconciliation remotely over secure audio-video technology, then deliver structured discharge education through the same kind of virtual encounter, ensuring patients get consistent guidance regardless of how busy the unit is that day. Clear handoff protocols keep virtual and bedside nurses coordinated rather than duplicating each other's work, and admission and discharge documentation happens inside the existing EHR, so it streamlines the record rather than creating a second one. The result is more consistent execution of two high-stakes tasks and more bedside time freed up for direct, hands-on care.

What it enables:

Faster discharges and improved patient throughput, reduced administrative burden on bedside nurses, more consistent discharge education and follow-up planning, and stronger coordination across care teams.

Best fit for:

- Hospitals addressing nursing workforce strain
- Systems looking to improve discharge efficiency
- Multihospital organizations centralizing admission workflows across sites

See it in action

Hackensack Meridian Health

Hackensack Meridian Health, a large New Jersey-based health system, rolled out virtual nursing for admissions and discharge across 18 hospitals and more than 500 care locations. One year after launch, the system reported an 11.6% reduction in length of stay, a 2-point reduction in falls with injury, a 65% reduction in RN traveler hours and a 0.68% reduction in readmissions.

[Explore the full solution](#)

Use AI to Reduce Burden and Improve Workflows

Roughly one in five physicians spends more than eight hours a week on the EHR outside normal work hours, according to the American Medical Association, and about 42% report at least one symptom of burnout. Documentation burden is more than an efficiency problem. When charting competes with patient interaction and routinely extends the workday, it directly affects clinician satisfaction and the sustainability of the job.

That is why more healthcare organizations are exploring how AI can address this challenge. The most promising applications are not simply about automating more work. They are about giving clinicians time and attention back by reducing the administrative burden built into everyday care.

Ambient AI for clinical documentation is one example already being used at scale, with the potential to improve both the clinician workflow and the experience of practicing medicine.

Reduce Documentation Burden and Restore Time with Patients

Solution: Ambient AI for Clinical Documentation

The Priority:

This solution addresses documentation burden at its source, during the visit itself, rather than after hours.

How the Solution Works:

Secure audio tools capture the patient-clinician conversation in real time, and AI generates a structured draft note aligned to documentation standards before the visit ends. Clinicians then review, edit and finalize that note inside their existing EHR workflow, keeping a human in the loop throughout. Because the drafting happens during the encounter rather than after it, the model directly targets a primary driver of ambulatory burnout, after hours “pajama time”, while also producing more consistent, structured notes for coordination and billing. Implementation is built around HIPAA compliance and established data protection standards from the outset since the technology captures live patient conversations rather than layering on afterward.

What it enables:

Reduced documentation burden and after-hours charting, faster completion of clinical notes, greater clinician focus during visits and more standardized documentation quality.

Best fit for:

- Ambulatory practices looking to reduce documentation burden
- Health systems addressing clinician burnout
- Organizations standardizing documentation across clinics

See it in action

Corewell Health

Corewell Health, a nonprofit health system serving communities across Michigan, piloted ambient AI for 90 days before expanding it enterprise-wide. During the pilot, clinicians reported a 61% reduction in cognitive load, a drop in after-hours documentation from 4.3 to 2.2 hours per week, and that 90% reported more focused patient attention and 85% reported increased job satisfaction. The solution is now deployed across 21 hospitals and 300 outpatient and post-acute sites.

[Explore the full solution](#)

Four questions to ask before investing in technology

What stands out across these examples is not just the size of the results, but how they were achieved. Ochsner reduced risk-adjusted sepsis mortality by 20%. Hackensack Meridian was able to decrease length of stay by 11.6% and reduce RN traveler hours by 65%. Corewell reported being able to achieve a 61% reduction in clinician cognitive load. These outcomes were not the result of broad technology overhauls. They were focused changes aimed at specific problems, implemented in real care environments and intentionally measured. Taken together, they point to four questions leaders should ask before adopting a new tool or approach.

Will it create capacity where we need it most?

In each of these examples, technology allowed existing teams to do more with the capacity they already had. That might mean giving nurses more time at the bedside, helping clinicians spend less time documenting or making an evidence-based response easier to execute consistently. In an environment where adding staff, time or resources is increasingly difficult, that may be one of the most useful ways to evaluate technology in the first place. Does it create more capacity from what is already there?

Are we applying it to a workflow where improvement can have outsized impact?

The strongest use cases tend to sit at points where delay, variation or administrative burden have an outsized effect on what happens next. Admission and discharge can influence throughput. Earlier recognition of clinical risk can change the course of care. Documentation burden follows clinicians well beyond the patient encounter. These are high-leverage moments. Improving them can have consequences well beyond the task itself.

Will it make care more reliable while preserving clinical judgment?

Much of healthcare still depends on the right person remembering the right thing at the right moment, often under significant pressure. The solutions in this roundup begin to shift that burden away from individual vigilance and into the way the work itself is designed. That does not replace clinical judgment. It creates a more reliable environment for clinicians to exercise it.

Will it create measurable change that we can truly preserve?

Adoption alone is not much of an outcome. A more useful question is whether the technology changes capacity, clinical performance, workforce experience or the reliability of care in a way the organization can see and sustain. That is a higher bar, but it is also what separates technology that gets implemented from technology that actually matters.

These examples suggest a more practical way to think about innovation. The goal is not to put more technology into care. It is to identify where care is constrained today and use technology deliberately to loosen those constraints.

This is just the start

The solutions featured in this roundup are an initial set of resources designed to give hospitals practical starting points for technology-enabled adoption. As the Accelerator's work progresses, you can expect the following:

- **The solution library will continue growing.**
This first group of solutions creates a foundation, with more proven tools to be added over time.
- **New case studies will be added to bring the work to life.**
Future case studies will help demonstrate how hospitals and health systems are applying technology-enabled solutions in real-world care settings.
- **Field examples that will help expand the view of what is possible.**
Beacon site results, champion perspectives and learning collaborative insights will continue to add additional context as the Accelerator hears more from the field.
- **Opportunities for people to engage and stay connected.** Keep visiting the Accelerator technology hub, watch for new resources, and reach out with questions, solution needs or examples from your own organization.

This ongoing expansion will help the Accelerator better reflect what's working across the field, highlight a broader range of care delivery and operational priorities, and give leaders more ways to explore approaches that may align with their organizations' goals.

Reach out with a specific goal, a workflow that needs attention, or a question about where to begin. Our team can help map your priorities to a proven solution, connect you with peer health systems, and point you toward beacon sites, champion perspectives, and learning collaboratives that can move the work forward.

Take the next step

- Explore the full solutions library at nationalaccelerator.org/solutions
- Learn about beacon sites, champions, and collaboratives at nationalaccelerator.org/about-us
- Connect directly with the Accelerator team at nationalaccelerator.org/contact

