

UNDERSTANDING ESSENTIAL HOSPITALS' EXPERIENCES WITH AI: CLINICAL APPLICATION INNOVATIONS

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ABOUT AMERICA'S ESSENTIAL HOSPITALS

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ABOUT ESSENTIAL HOSPITALS INSTITUTE

Essential Hospitals Institute leads research, education, dissemination, and leadership development for America's Essential Hospitals. To advance the quality, safety, and affordability of care at essential hospitals, the Institute identifies promising practices in the field, provides professional development training, promotes practice improvements, and disseminates innovative approaches to care. It does this with an eye toward improving individual and population health through community-integrated health care.

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- Harris Health System
- Henry Ford Health
- Howard University Hospital
- LA Health Services
- Prisma Health
- Spartanburg Regional Healthcare System
- The MetroHealth System
- West Tennessee Healthcare

Their perspectives helped illuminate the opportunities, challenges, and implementation considerations associated with the use of artificial intelligence (AI) in clinical settings serving diverse patient populations.

The views expressed in this brief are those of Essential Hospitals Institute and do not necessarily reflect the views of The Commonwealth Fund or the participating organizations.

TABLE OF CONTENTS

Executive Summary.....3

Introduction.....4

I. Enhancing Clinical Practice and Decision-Making.....4

Diagnostic Enhancements.....4

Time-Sensitive Diagnoses and Triage.....5

Clinical Decision Support and Evidence-Based Standardization.....5

II. Reducing Clinical Burden and Expanding Workforce Capacity.....6

Ambient Documentation.....6

Clinical Summarization, Handoffs, and Chart Review.....7

Care Coordination, Discharge Planning, and Inpatient Throughput.....7

III. Enabling More Personalized and Proactive Care.....8

Precision Dosing and Medication Optimization.....8

AI-Enhanced Treatment Planning.....8

Remote Monitoring and Chronic Condition Management.....8

Multimodal Predictive Modeling.....9

IV. Improving Patient Access, Experience, and Outcomes.....9

Patient Access and Navigation.....9

Scheduling, No-Shows, and Access Continuity.....10

Unified Patient Records and Data Integration.....10

Conclusion.....11

Endnotes.....11

Appendix: Hospital Examples.....12

EXECUTIVE SUMMARY

AI is becoming a practical infrastructure strategy for hospitals that fill a safety net role in their communities. This brief draws on examples from more than 50 essential hospitals and health systems to show how these hospitals use AI across clinical care, including diagnostic imaging, acute triage, documentation, care coordination, treatment planning, and patient access.

Ambient documentation is the most widely adopted application, with more than a dozen hospitals implementing AI tools to transcribe encounters and generate clinical notes. Early adopters report significant results: St. Luke's Health System saw a 41% reduction in documentation time and a 22% increase in face time with patients. Prisma Health describes ambient documentation, used by roughly 13,000 providers, as its most successful AI deployment. Imaging AI is the most technically mature category, with tools supporting cancer screening, stroke triage, emergency radiology, and surgical navigation across a broad range of hospitals. Predictive modeling (for readmission risk, sepsis, chronic conditions, and social risk) is growing fast but carries the most equity risk, particularly when models are trained on data that do not reflect the populations essential hospitals serve.

Hospitals seeing the strongest results pair technology with governance, workflow redesign, staff adoption support, and structured evaluation. West Tennessee Healthcare saved approximately 3,600 staff hours and reduced its observation rate by 75%, but invested heavily in lunch-and-learns, workflow redesign, and a vendor feedback loop. Eskenazi Health measures ambient documentation impact through pre- and post-use clinician surveys, overtime tracking, and burnout measures. The MetroHealth System built transparency with patients into its ambient listening rollout by requiring verbal consent and surveying patients on their experience. The organizational work around the tool matters as much as the tool itself.

The areas that require the most governance attention also have the most potential. Predictive models and social risk tools need local validation, equity monitoring, and human oversight to avoid reinforcing the disparities they are meant to reduce. Patient-facing tools (translation, portals, text-based scheduling) need monitoring to ensure they do not unintentionally favor patients with reliable technology access or English proficiency.

INTRODUCTION

This brief is part of a series developed by Essential Hospitals Institute, the research, dissemination, and leadership development arm of America's Essential Hospitals, on the use of AI by hospitals and health systems that fill a safety net role in their communities. These examples test whether a specific tool addresses a real care-delivery problem in a way that is safe, equitable, and integrated into how clinicians and staff already work.

ENHANCING CLINICAL PRACTICE AND DECISION-MAKING

Hospitals are integrating AI into clinical practice to support faster diagnosis, timelier decision support, and more consistent use of evidence-based workflows. Essential hospitals find value in helping care teams make better use of limited time and information while preserving clinical judgment.

DIAGNOSTIC ENHANCEMENTS

Imaging is one of the most mature clinical AI areas. AI can act as a second set of eyes, help prioritize urgent scans, identify findings that require follow-up, and reduce variability across readers or sites. In essential hospitals running high imaging volumes on limited capacity, that support stretches further.

Cancer Screenings and Detection

High-volume screening workflows are among the most common entry points for imaging AI. In mammography, AI helps reduce variability in image interpretation.

Rochester Regional Health uses AI to analyze mammograms more efficiently and reduce variability in image interpretation, while **University Health** uses AI-assisted mammography (Hologic Genius) to flag suspicious findings in breast tomosynthesis images for radiologist review.

AI-enabled mammogram analysis at **Stamford Health** identifies calcium deposits that might signal elevated coronary heart disease risk.

Radiology and Follow-Up Findings

Using AI to review lung scans and patient notes helped **Spartanburg Regional Healthcare System** surface approximately 11,000 additional actionable findings, including references to nodules and recommended follow-up that had not been acted on. Without clear follow-up

processes, staffing models, and care coordination workflows, hospitals end up with a growing backlog of unaddressed findings.

Emergency and Inpatient Imaging

In emergency and inpatient settings, AI imaging tools are primarily used to accelerate interpretation and support time-sensitive triage. **UCSF Health** partnered with GE HealthCare on Critical Care Suite, a portable X-ray tool that flags suspected pneumothorax at the point of care, supporting faster triage and prioritization of critically ill patients.

UC San Diego Health's "Smartly Done" effort integrates AI across radiology and imaging workflows, including CTs, X-rays, MRIs, and disease recognition, to improve the speed and consistency of image review across large case volumes. At **Boston Medical Center**, machine learning applied to neurological monitoring in the intensive care unit and pupillometry data helps clinicians detect neurological decline earlier and personalize care for patients with brain injuries.

Zuckerberg San Francisco General Hospital and Trauma Center uses RapidAI to review CT and MRI scans for suspected stroke or aneurysm, flagging large vessel blockages and other urgent findings to help clinicians prioritize patients for evaluation and treatment.

The National Association of Counties recognized **Arrowhead Regional Medical Center** for its portable AI-powered MRI system, which expands MRI access for patients who might otherwise face delays or logistical barriers.

Procedural and Surgical Support

During spine surgery at **Harborview Medical Center**, Proprio's Paradigm, a surgical navigation platform, provides real-time visualization and tracking of anatomy, implant placement, and spinal alignment without radiation exposure.

Broward Health uses the Genesis Robotic Magnetic Navigation system to treat cardiac arrhythmias through minimally invasive catheter ablation. Robotically controlled magnetic fields guide catheters with high precision through complex cardiac anatomy.

The Da Vinci 5 robotic surgical system, now in use at **San Joaquin General Hospital** and **University Medical Center of El Paso**, expands minimally invasive surgical capabilities. The surgeon-controlled platform supports greater dexterity, visualization, and precision, and includes data and workflow tools designed to improve operating room efficiency and support surgical training.

Specialty Diagnoses

At the **University of Miami Health System**, the Bascom Palmer Eye Institute uses AI to support diagnosis and monitoring of diabetic retinopathy, glaucoma, macular degeneration, and other vision-threatening diseases.

Temple Health is participating in a study of ThinkSono's AI-enabled point-of-care ultrasound system for deep vein thrombosis, which guides clinicians through the scanning process to support faster, more consistent detection without requiring a specialist for every evaluation. **UK HealthCare's** Artificial Intelligence in Medicine (AIM) Alliance brings together leaders from pathology, radiology, oncology, computer science, and other areas to build the data and informatics infrastructure needed to support AI development, validation, and deployment in multiple specialties.

TIME-SENSITIVE DIAGNOSES AND TRIAGE

AI is increasingly supporting time-sensitive clinical decisions by helping care teams identify risk earlier, prioritize urgent cases, and coordinate faster across complex acute-care workflows.

Stroke Assessment

In stroke, sepsis, and trauma care, minutes matter. AI tools embedded in acute-care workflows can accelerate risk recognition, connect the right team members faster, and help standardize care during high-stakes interventions. Reducing the gap between imaging and treatment is especially useful for health systems managing multiple facilities.

At **OU Health**, an FDA-approved stroke triage platform automatically analyzes CT scans for large vessel occlusions and alerts the care team in real time. The tool helps coordinate across emergency medicine, radiology, neurology, and interventional teams. This quick coordination is particularly important in stroke care, when

delays in imaging review or specialist notification can affect eligibility for treatment.

Similar stroke tools at **MultiCare** flag suspected cases and accelerate communication between care teams.

ECMC began using Viz.ai for stroke detection in the first quarter of 2025, primarily within emergency physician and radiology workflows.

Emergency Department Triage and Nurse Decision Support

The KATE AI platform, **scaled systemwide** at **UMass Memorial Health**, helps emergency department (ED) nurses identify patient risk, prioritize attention, and strengthen triage consistency. In **busy EDs**, where volume, acuity, and staffing pressure make it hard to catch every patient who needs faster evaluation, that kind of backup is important.

Predictive Tools for High-Risk Inpatient Conditions

Sepsis detection is one of the highest-stakes use cases for predictive AI, since clinical deterioration can happen fast. **The MetroHealth System** uses predictive models for early sepsis identification but emphasizes that the tool doesn't replace clinical judgment—it only flags risk and prompts earlier review.

CLINICAL DECISION SUPPORT AND EVIDENCE-BASED STANDARDIZATION

Best practices for high-volume, high-risk conditions are often inconsistently applied because of time pressure, handoffs, incomplete information, or variable workflows. AI can help by bringing evidence-based standards and relevant clinical information into routine care more reliably. In essential hospitals, AI also helps standardize care quality across sites, shifts, and providers.

Using Enterprise Data to Support Care Decisions

Carilion Clinic's AI-enabled **Surgical Clinical Reviewer** uses natural language processing to analyze surgical cases more efficiently, helping leaders spot patterns in aggregate and identify quality improvement opportunities at the service-line level. Unlike bedside decision support, this kind of tool works at the organizational level, learning from aggregate case data rather than supporting a single clinical decision.

Prisma Health has structured its AI strategy around how different groups use data: patients get navigation and

scheduling tools, care teams get workflow support and administrative burden reduction, and leaders get operational visibility. Prisma has deliberately set the boundary that accountability for diagnosis and treatment stays with the care team.

Building Predictive and Diagnostic Models for Complex Populations

Predictive models are only as good as the data behind them, and data from one population don't always transfer to another. **Howard University Hospital's** AI-Driven Computational Medicine and Smart Health Lab is building models that integrate clinical, genomic, sensor, imaging, and digital data in areas including sleep apnea detection, cancer risk assessment, sickle cell disease, and Alzheimer's disease modeling. Howard's approach has a distinctive emphasis on explainability and equity: the lab is working to make sure its models are trustworthy and relevant for the diverse populations essential hospitals serve.

Localizing Risk Models for Safety Net Populations

National predictive models don't always fit local realities. **Spartanburg Regional Healthcare System** uses predictive models for readmission, heart failure, and asthma risk, and is working toward more localized weighting—adjusting which data points carry the most weight for their own patient population. Conditions like asthma are shaped by housing quality, environmental exposure, and medication access as much as clinical status, and a national model might miss those patterns.¹

REDUCING CLINICAL BURDEN AND EXPANDING WORKFORCE CAPACITY

Workforce strain, including burnout, staffing shortages, and rising labor costs, is one of the most immediate pressures facing safety net hospitals. **With labor accounting for nearly half the average hospital budget** and clinicians spending substantial time on documentation and coordination rather than patient care, there's strong demand for tools that improve efficiency without compromising quality or deepening gaps in care.

Hospitals are responding with AI tools that automate routine administrative tasks, support care coordination, and standardize clinical workflows: ambient documentation, discharge planning, workflow optimization, and utilization management.

AMBIENT DOCUMENTATION

Ambient documentation tools listen to patient-clinician conversations and generate clinical notes. They are some of the most widely adopted AI applications in essential hospitals.

Reducing Documentation Burden and Improving Clinical Experience

The measurable results from early adopters help explain why ambient documentation is spreading fast. **St. Luke's Health System** reported a 41% reduction in active documentation time, a 41% reduction in time to close charts, a 22% increase in patient face time, and an estimated \$13,000 in additional annual value per clinician.

At **Prisma Health**, ambient documentation is the most successful AI deployment to date. Roughly 13,000 providers now use it systemwide. The adoption story is convincing: initial skepticism gave way to overwhelming demand once clinicians experienced the tool firsthand. That pattern suggests that addressing a visible daily pain point matters more than the sophistication of the technology.

Humboldt Park Health pairs DAX Copilot for clinical documentation with a separate AI tool that recognizes fall risk and notifies nurses. Documentation and patient safety work side by side.

Denver Health, Hennepin Healthcare, Hurley Medical Center, UChicago Medicine, University of Vermont Medical Center, UNM Health System, and WVU Medicine have all implemented AI tools to transcribe encounters, summarize visits, or generate clinical notes.

Some hospitals are extending ambient tools beyond physician notes. **Tampa General Hospital** is expanding ambient listening to nurses, capturing symptoms, observations, and clinical summaries. **Onvida Health** is partnering with Ambience Healthcare to generate documentation in real time within the electronic health record (EHR), and **Einstein Healthcare Network** (now part of Jefferson Health) is applying AI-supported documentation in radiology to improve reporting efficiency and consistency.

Building Patient Transparency and Oversight into Implementation

The MetroHealth System requires verbal consent, a simple transparency step, when ambient listening is active. When the health system surveyed patients, many said they appreciated the tool because providers focused more on them and maintained more eye contact. What started as a workforce efficiency tool also improved the patient experience.

UChicago Medicine has published patient-facing guidance explaining how the technology works. **UNM Health System** is working to address concerns about potential negative consequences in using ambient documentation tools. That concern is worth addressing directly during implementation.

Evaluating Readiness, Impact, and Sustainability

Eskenazi Health takes a structured approach to measure the impact of ambient documentation from the start, rather than trying to prove value after wide-scale deployment. The health system uses pre- and post-use clinician surveys alongside overtime hours, documentation time, and burnout measures to evaluate the tool.

ECMC is evaluating ambient dictation but has delayed implementation while focusing on its Epic transition, expecting that the EHR will eventually offer ambient functionality. This is a common decision point for hospitals weighing a best-in-class standalone product against waiting for their core vendor to catch up.

CLINICAL SUMMARIZATION, HANDOFFS, AND CHART REVIEW

Patients that essential hospitals serve often have complex histories spread over years of notes, multiple care settings, and dozens of encounters. Summarization tools can help clinicians cut through that volume by generating concise summaries, highlighting relevant information, and supporting handoffs so clinicians can more quickly understand a patient's needs.

Supporting Handoffs and Information Retrieval

During shift changes at **The MetroHealth System**, AI automatically generates a summary from medical reports and discharge information so incoming clinicians can quickly pick up the thread. In inpatient settings where patients may see multiple clinicians during an admission,

missed context during handoffs can contribute to delays, duplicative work, and safety risks.

MetroHealth also applied AI to specialty medication authorization, where pharmacists previously spent about 35 minutes manually tracking specialist information to validate required forms. The AI tool pulls the relevant data for pharmacist review, cutting that time to about three minutes.

Managing Accuracy, Readiness, and Workflow Fit

Epic-embedded generative AI at **Spartanburg Regional Healthcare System** drafts inpatient discharge summaries and multi-year outpatient history summaries. While providers appreciate the speed, leaders found it difficult to tell how often clinicians use the summaries, whether the summaries can impact decisions, or how much time they truly save. Further, summaries can omit relevant information or contain inaccuracies if the underlying data are incomplete. Hospitals adopting these tools need to monitor note quality and overreliance, not just adoption rates.

Chart summarization and discharge summary quality are high-demand areas at **ECMC**, especially as the organization transitions to Epic. The underlying point is practical: AI summarization is only as good as the data from which it draws. For hospitals with fragmented or outdated records, these tools tend to work best when embedded in broader EHR modernization and workflow redesign rather than layered on top of legacy systems.

CARE COORDINATION, DISCHARGE PLANNING, AND INPATIENT THROUGHPUT

Care coordination workflows vary widely among units, shifts, and staff roles: discharge planning, care management referrals, utilization review, and barrier escalation all operate differently depending on context. AI tools can reduce that variation by analyzing EHR data, predicting discharge readiness, and helping staff focus on the patients who need the most immediate attention.

Standardizing Care Coordination and Discharge Planning

West Tennessee Healthcare partnered with Xsolis to implement Dragonfly Navigate across case management, utilization review, and resource planning. The platform analyzes EHR data to predict patient status, generate care level scores, and identify where case managers should

focus. Dragonfly Navigate also predicts discharge dates based on documentation, disposition plans, and likelihood of discharge within 24 hours, flagging potential barriers earlier in the hospital stay. Between July 2023 and March 2025, West Tennessee reported approximately 3,600 staff hours saved and 75% reduction in observation rate, faster determinations, improved care transitions, and increased staff confidence.

The health system's rollout is as instructive as the numbers. West Tennessee used lunch-and-learns and workflow tip sheets to support adoption, and staff became increasingly comfortable relying on the system for prioritization and faster decision-making. During the discharge planning pilot, the team actively shared staff feedback with the vendor so workflows could be refined based on real use rather than assumptions.

Improving Patient Flow and Inpatient Capacity

Discharge delays limit available beds, increase ED boarding, postpone surgeries, and create additional stress for patients and staff. Throughput tools help hospitals anticipate bottlenecks and create more reliable care transitions. **Jackson Health System** used Qventus to reduce length of stay and improve surgical throughput, with an estimated \$6.7 million in annual savings.

Extending Workforce Capacity Through Remote Support

Remote care models offer another way to extend patient care coverage without adding staff. At **Henry Ford Health**, virtual sitting supports inpatient monitoring and helps identify patient risks, while remote nurses handle discharge processes. This frees bedside staff for tasks that require hands-on presence. A single remote nurse can support multiple patients, allowing hospitals to cover more ground while keeping in-person staff focused on higher-acuity needs.

ENABLING MORE PERSONALIZED AND PROACTIVE CARE

Evidence-based standards matter, though many were not designed for patients navigating fragmented access, language barriers, behavioral health needs, or unstable housing. AI can help tailor care by analyzing patient-specific data and identifying risks earlier; however, predictive models can carry risk when trained on data that do not reflect the populations essential hospitals serve.

PRECISION DOSING AND MEDICATION OPTIMIZATION

For medications with narrow therapeutic windows, getting the dose wrong can have serious consequences. Underdosing reduces effectiveness; overdosing causes harm. AI-driven precision dosing uses patient-specific data to help clinicians optimize dose selection and monitoring.

Northern Arizona Healthcare partners with InsightRX on heparin dosing. The tool integrates EHR data, visualizes the patient's coagulation status, identifies patients at risk of abnormal bleeding or excessive clotting, and simulates the likely effect of proposed doses before orders are finalized. This makes complex dosing information easier to interpret at the point of care while keeping the clinician responsible for the final decision.

Henry Ford Health draws a similar line: AI handles the calculations, but the clinician weighs patient goals, risks, and broader context before deciding.

AI-ENHANCED TREATMENT PLANNING

Oncology and radiotherapy are natural fits for AI-enhanced treatment planning because treatment quality depends on precisely identifying tumor tissue, surrounding organs, and changes in patient anatomy over the course of care.

Adaptive radiotherapy at **Henry Ford Health** (Varian Ethos with HyperSight) uses AI and on-table imaging to visualize the patient's anatomy on the day of treatment. This enables clinicians to tailor the radiation plan to the patient's current presentation, instead of relying on a static plan from weeks earlier.

The Methodist Hospitals Inc. is investing in Philips' Azurion image-guided therapy platform. The platform is designed to improve imaging, workflow, and procedural guidance for clinicians during minimally invasive procedures in neurovascular, cardiology, and complex interventional radiology.

AI-enabled surgical navigation and robotic-assisted surgery also support more precise, patient-specific procedural care. The Diagnostic Enhancements section covers **Harborview Medical Center's** use of Proprio's Paradigm platform and the Da Vinci 5 systems at **San Joaquin General Hospital** and **University Medical Center of El Paso** in detail.

REMOTE MONITORING AND CHRONIC CONDITION MANAGEMENT

Chronic condition outcomes in safety net populations are often shaped by what happens between visits: transportation barriers, follow-up gaps, medication affordability, and limited access to primary care. Remote monitoring tools can extend clinical support beyond hospital walls and create opportunities to intervene before a patient presents in crisis at a hospital.

ECMC's partnership with Brook Health pairs remote clinical teams with an AI-enabled platform to support hypertension management at home. Patients submit blood pressure readings remotely, and care teams monitor trends, provide education, and coordinate with physicians when follow-up or medication adjustments are needed. ECMC reported significant improvement in blood pressure control during the program. The model is particularly relevant for patients at essential hospitals facing health literacy, transportation, and medication affordability challenges that affect their ability to attend appointments.

MULTIMODAL PREDICTIVE MODELING

Models that combine EHR data, imaging, labs, genomics, and social risk information can identify risk and anticipate disease progression earlier than any single data source. But multimodal models also carry real risk. If trained on the wrong populations, they can miss the patients who need support most or reinforce the inequities they are meant to reduce.

Howard University Hospital's AI-Driven Computational Medicine and Smart Health Lab (described in the Clinical Decision Support section) is one of the most developed examples of multimodal modeling in a safety net setting, integrating clinical, genomic, sensor, and imaging data across conditions including sleep apnea, colorectal cancer, sickle cell disease, and Alzheimer's disease. Howard emphasizes health literacy and equity, and uses its own hospital data rather than relying on national datasets. This reflects a practical recognition unlike models built elsewhere that may not work for the patients Howard serves.

Spartanburg Regional Healthcare System's work on localized model weighting (also described in the CDS section) takes a more incremental approach. Their weighting method adjusts which data points matter most in their readmission, heart failure, and asthma risk models

based on local population patterns. Both examples reinforce that predictive models need local validation and governance.

IMPROVING PATIENT ACCESS, EXPERIENCE, AND OUTCOMES

Patients at safety net hospitals face barriers to staying connected to care. These include transportation, work and caregiving constraints, language needs, digital access gaps, and difficulty navigating complex systems. On the hospital side, high demand across call centers, portals, and scheduling systems makes it hard to connect patients to the right service at the right time. AI tools can reduce some of that friction.

PATIENT ACCESS AND NAVIGATION

Patient-facing AI can serve as a more responsive front door to the health system, or if designed poorly, serve as another obstacle for patients already facing access barriers.

Navigation and Call Center Support

Prisma Health's 24/7 chatbot "Wellby," through Artera, handles website navigation, MyChart access, appointment scheduling, and live agent connections. Wellby has hosted roughly 80,000 conversations to date and deflected about 50% of calls from a contact center that fields around 1 million calls per month.

Language Access and Message Triage

Cambridge Health Alliance uses AI-powered translation to support communication across linguistically diverse patient populations. However, caution should be used, as in a clinical context, mistranslation can affect consent, medication use, follow-up instructions, and patient trust. AI translation should supplement—not replace—qualified interpreters, language access policies, or clinical judgment.

As patient portal adoption grows, so does the volume of messages clinicians and staff need to manage. **Baystate Health** uses AI to identify urgent patient portal messages, helping staff distinguish routine questions from messages that need rapid clinical attention. This reduces the risk that something urgent gets buried in a high-volume inbox.

Using Patient Feedback to Improve Access

Traditional patient surveys miss the people least likely to fill them out. **ECU Health** uses PEP Health to analyze unsolicited patient feedback (comments, reviews, and other patient-generated input) to detect recurring concerns and identify access or service issues in near-real time. For safety net hospitals, tools like these catch patterns that formal feedback channels miss.

SCHEDULING, NO-SHOWS, AND ACCESS CONTINUITY

Missed appointments are a care continuity problem as much as a revenue one. Patients miss visits because of unreliable transportation access, work schedules, caregiving responsibilities, unstable housing, and other structural barriers. The clinical goal is to identify those barriers earlier and help patients stay connected to care.

Phoebe Health used AI-enabled scheduling tools to reduce missed appointments and increase average weekly patient encounters between January 2023 and February 2024. The health system achieved \$1.4 million in net new revenue, but the clinical point matters more: for patients with chronic conditions or unmet social needs, a missed visit can mean worsening symptoms, avoidable ED use, or gaps in treatment. AI-supported scheduling workflows can help hospitals identify missed appointments, intervene earlier, and improve continuity of care.

Prisma Health's AI-supported patient communication shifted 2,300 inbound calls to asynchronous text conversations within the first four months (saving \$4 million over two years), with a third of patients waiting less than a minute for a response. This initiative **reduced no-show rates by 33% in one year** and eliminated more than 1,000 backlogged specialty referrals in less than two weeks. Text-based communication can be easier for patients who cannot wait on hold or answer calls at work. Hospitals should monitor whether these tools unintentionally favor patients with reliable phones, internet access, or English proficiency.

UNIFIED PATIENT RECORDS AND DATA INTEGRATION

When patient information is fragmented across EHRs, claims systems, care management platforms, and third-party sources, clinicians lack full context. Patients end up repeating their histories, getting duplicate tests, following inconsistent care plans, or falling through gaps when care teams miss important information from earlier encounters or outside services. Data integration tools help by consolidating information into a more complete longitudinal view.

St. Joseph's Health built unified patient records integrating data from multiple internal systems and third-party care and claims platforms. A more complete record is useful, but the real value is giving care teams a clearer view of history, utilization, and prior interactions in different settings so they can identify patients who need outreach or follow-up. That consolidation matters most for safety net patients whose care already spans hospitals, clinics, specialists, social services, and public programs.

Nashville General Hospital is using Oracle CommunityWorks as its centralized EHR and plans to add Oracle Health Data Intelligence for population-level analytics, connecting individual care coordination with broader insight into patient needs and resource allocation.

Prisma Health developed in-house tools ("feeders") to stitch together nearly 70 internal and external data sources in a cloud-based data warehouse. The challenge isn't having data—it's getting the right data to the right people in the right workflow. Integration only creates value when information reaches the decisions people are already making.

CONCLUSION

It's clear that AI plays a key role in supporting clinical decisions, cutting documentation time, helping personalize care, improving patient access, and flagging risks earlier. For essential hospitals, even the smallest improvements in documentation time, diagnostic accuracy, care transitions, or patient access can make a meaningful difference for patients, staff, and the organization.

None of this would be possible without thoughtful implementation. Hospitals need data infrastructure that can support AI tools reliably, governance structures that maintain accountability and monitor for bias, workflow planning that embeds tools into how clinicians already work, processes that keep clinicians responsible for

verifying AI-generated output, and ongoing attention to equity (especially when AI is trained on data that may not reflect the patients safety net hospitals serve). Clinician engagement, patient transparency, vendor accountability, and structured evaluation all matter too; the hospitals with the strongest results in this brief are the ones that paired the technology with the organizational work around it.

As AI adoption grows, hospitals, technology partners, policymakers, and funders all have a role in using these tools responsibly. For safety net hospitals, the goal is to use AI in ways that strengthen care, support the workforce, and improve outcomes for the patients and communities that depend on essential hospitals.

ENDNOTES

1. Slater, Vincent. Family medicine physician, Spartanburg Regional Healthcare System. Lane, Miles. Data scientist, Spartanburg Regional Healthcare System. Virtual interview. April 14, 2026.

APPENDIX: HOSPITAL EXAMPLES

Hospital/Health System	Quick Summary	Page
Arrowhead Regional Medical Center	Portable AI-powered MRI system	4
Baystate Health	AI identification of urgent patient portal messages	9
Boston Medical Center	Machine learning for ICU neurological monitoring and pupillometry	4
Broward Health	Genesis Robotic Magnetic Navigation for cardiac catheter ablation	4
Cambridge Health Alliance	AI-powered translation for linguistically diverse populations	9
Carilion Clinic	AI Surgical Clinical Reviewer; NLP for surgical quality improvement	5
Denver Health	AI transcription and clinical note generation	6
ECMC	Prioritizing Epic implementation before layering AI tools	7
	Evaluating ambient dictation; delayed pending Epic transition	7
	Identified summarization/discharge summaries as high demand use case during Epic transition	7
	Brook Health partnership for remote hypertension management	9
	Viz.ai for stroke detection in ED and radiology workflows	5
ECU Health	PEP Health for unsolicited patient feedback analysis	10
Eskenazi Health	Pre/post clinician surveys, overtime tracking, burnout measures for ambient documentation	7
Harborview Medical Center	Proprio Paradigm surgical navigation for spine surgery	4, 8
Hennepin Healthcare	AI clinical note tools	6
Henry Ford Health	Virtual sitting, remote nursing, AI risk identification for inpatient monitoring	8
	Varian Ethos and HyperSight adaptive radiotherapy	8
Howard University Hospital	AI-Driven Computational Medicine and Smart Health Lab; multimodal models (sleep apnea, colorectal cancer, sickle cell, Alzheimer's)	6, 9
Humboldt Park Health	DAX Copilot for documentation and separate AI fall-risk detection tool	6
Hurley Medical Center	AI transcription and note generation	6
Jackson Health System	Qventus for length-of-stay reduction; ~\$6.7M annual savings	8
Jefferson Health - Einstein	AI-supported radiology documentation	6
The Methodist Hospitals Inc.	Philips Azurion image-guided therapy for neurovascular, cardiology, interventional radiology	8
MultiCare	AI stroke tools for faster imaging-to-treatment coordination	5
Nashville General Hospital	Oracle CommunityWorks EHR and planned Oracle Health Data Intelligence	10
Northern Arizona Healthcare	InsightRX for heparin dosing; EHR integration, coagulation visualization, dose simulation	8
Onvida Health	Ambience Healthcare real-time documentation in EHR	6
OU Health	FDA-approved AI stroke triage platform; CT analysis for large vessel occlusion	5
Phoebe Health	AI scheduling tools; reduced missed appointments; \$1.4M net new revenue (Jan 2023–Feb 2024)	10

Hospital/Health System	Quick Summary	Page
Prisma Health	Enterprise data/AI for navigation, clinician workflows, operational decisions, and diagnosis support	5, 6
	~13,000 providers using ambient listening; described as most successful AI deployment	6
	“Wellby” 24/7 chatbot; ~80,000 conversations, ~50% call deflection	9
	AI text-based patient communication; 2,300 calls shifted to text (\$4M savings over 2 years)	10
	In-house “feeders” stitching ~70 data sources into cloud data warehouse	10
Rochester Regional Health	AI mammogram analysis for interpretation consistency	4
San Joaquin General Hospital	Da Vinci 5 robotic surgical system	5, 8
Spartanburg Regional Healthcare System	AI review of lung scans; surfaced ~11,000 actionable findings	4
	Localized weighting for readmission, heart failure, and asthma risk models	6, 9
	Epic-embedded generative AI for discharge and multi-year outpatient summaries	7
St. Joseph’s Health	Unified records integrating internal systems and third-party care/claims platforms	10
St. Luke’s Health System	41% reduction in documentation time, 22% increase in patient face time, ~\$13K/clinician value	6
Stamford Health	AI mammogram analysis for coronary calcium detection	4
Tampa General Hospital	Ambient listening expanded to nurses	6
Temple Health	ThinkSono AI-enabled point-of-care ultrasound study for DVT detection	5
The MetroHealth System	Sepsis prediction models with clinician-as-final-decision-maker design	5
	Verbal consent for ambient listening; patient experience surveys showed positive response	7
	AI shift-change summaries and specialty medication authorization	7
UC San Diego Health	“Smartly Done” AI across radiology workflows (CT, X-ray, MRI, disease recognition)	4
UChicago Medicine	Ambient documentation and published patient-facing guidance	6, 7
UCSF Health	Critical Care Suite portable X-ray for pneumothorax detection (with GE HealthCare)	4
UMass Memorial Health	KATE AI platform for triage consistency and nurse decision support	5
UMC El Paso	Da Vinci 5 robotic surgical system	5, 8
University Health	Hologic Genius for breast tomosynthesis screening	4
UK HealthCare	AIM Alliance data/informatics infrastructure for multispecialty AI development	5
University of Miami Health System	AI for ophthalmology diagnosis (diabetic retinopathy, glaucoma, macular degeneration)	5
University of Vermont Medical Center	AI-assisted documentation for visit summarization	6
UNM Health System	AI scribe technology; flagged workforce/productivity concerns	6, 7

Hospital/Health System	Quick Summary	Page
West Tennessee Healthcare	Exilis and Dragonfly Navigate; ~3,600 staff hours saved, 75% observation rate reduction	7, 8
Zuckerberg San Francisco General Hospital and Trauma Center	RapidAI for stroke/aneurysm CT and MRI review	4