

# THE CONTINUITY BRIEF

ZERO-DOWNTIME CONTINUITY  
EHR RESILIENCE  
BREACH TRACKER & COMPLIANCE WATCH

AWARD · SEPTEMBER 16, 2026 · CIPRIANI WALL STREET, NEW YORK

## Chao Cheng-Shorland named a 2026 Outstanding 50 Asian Americans in Business honoree.

Spare Tire's Co-Founder and CEO receives the award at the 25th annual Gala Award Dinner on September 16, before more than 800 government, business, and civic leaders. For 25 years, the Outstanding 50 has recognized Asian American entrepreneurs, executives, professionals, and business leaders whose work has made a meaningful impact on the U.S. economy. Chao's leadership is defined by her unmatched urgency, imagination, and refusal to accept broken systems as inevitable, qualities that shape how Spare Tire approaches some of today's most complex challenges in technology, trust, and digital transformation.

25TH ANNUAL GALA AWARD DINNER · SEPTEMBER 16, 2026 · 6:00 PM · CIPRIANI WALL STREET, 55 WALL STREET, NEW YORK



WHAT'S NEW · RELEASED TO PRODUCTION, JUNE TO AUGUST

## Fourteen items, all live in production.

|                                                                                                                                                                                      |                                                                                                                                                                                        |                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ORDER SETS</b><br>Reusable bundles of orders. Admins publish an organization catalog, clinicians keep personal sets, and a whole set applies to a patient in one step.            | <b>MEDICATION SAFETY</b><br>Allergy warnings now appear across every order type. Medication orders get frequency presets and a guard against scheduled orders with an empty frequency. | <b>CLINICAL NOTES TEMPLATES · VISIT SUMMARY</b><br>Admin-managed template library, template insertion, autocomplete in notes. New Visit Summary tab in the patient chart.           |
| <b>BREAK THE GLASS · CHATS</b><br>Confidential patient information hidden by default; access requires a logged break-the-glass action. Direct messages between users inside the app. | <b>PATIENT DASHBOARD</b><br>Facility filter on the Patient tab: work one facility at a time; match patients by record number; patient list UI improvements.                            | <b>SYNC ENGINE</b><br>Clinical notes sync from the hospital EMR. Dev, test, and prod modes for the HL7 feed. Sync-back summary report for orders, vitals, MAR, and results via MDM. |

Also shipped: Therapist role · patient search rebuilt on a search engine · height and weight in vitals · full date, time, and time zone review · patient list and MAR adapted for mobile.



The Spare Tire Product Walkthrough video – a guided walkthrough of the clinical workspace clinicians use during an EHR downtime.

[youtu.be/TWBrNvKGHws](https://youtu.be/TWBrNvKGHws)  
SPARE TIRE ON YOUTUBE

ISSUE 02 · THE THEME

## Thirty-eight percent more likely to die.

When an EHR goes dark, downtime costs lives. In real-world incidents, the pattern is consistent: clinicians revert to paper.

Hannah Neprash, Claire McGlave, and Sayeh Nikpay of the University of Minnesota linked every known ransomware attack on a US hospital from 2016 to 2021 to Medicare fee-for-service claims, then compared each attacked hospital with hospitals attacked at least five weeks later. Among patients already admitted when the attack began, in-hospital mortality rose 34% to 38%. Volume fell 17% to 24% in the first week and took about three weeks to recover.

The number isolates patients who were already in a bed. It is not a story about diverted ambulances or sicker arrivals. The authors put the toll at 42 to 67 Medicare deaths across 374 attacks over six years. The study does not name the mechanism. The Ascension staff accounts on page 2 do.

SOURCES: NEPRASH, MCGLAIVE, AND NIKPAY, "HACKED TO PIECES? THE EFFECTS OF RANSOMWARE ATTACKS ON HOSPITALS AND PATIENTS," AMERICAN ECONOMIC JOURNAL: ECONOMIC POLICY 18(1), FEBRUARY 2026; "HOSPITAL RANSOMWARE RAISES PATIENT MORTALITY 38%: BLACK HAT AND HIMSS LAUNCH HEALTHCARE SUMMIT," TECH TIMES, AUGUST 2026.

PEER-REVIEWED · FEBRUARY 2026

38%

**More likely to die.** A patient already admitted when a ransomware attack begins, versus a matched patient at a hospital not under attack. Every known US hospital attack 2016 to 2021, Medicare claims.

AEJ: ECONOMIC POLICY · AEAWEB.ORG · DOI 10.1257/POL.20240594

WHAT THE STUDY MEASURED · 374 ATTACKS, 2016 TO 2021

## Six numbers from one dataset.

|                                                                                                                                                                                                                                   |                                                                                                                                                                                                                     |                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>THE DATA</b><br><b>Every known attack, linked to claims</b><br>A database of hospital ransomware attacks from 2016 to 2021, joined to Medicare fee-for-service claims. 374 attacks; nearly 42 million patient records exposed. | <b>THE COMPARISON</b><br><b>Attacked hospitals versus later victims</b><br>Each attacked hospital is compared with hospitals attacked at least five weeks later, so the control group shares the same risk profile. | <b>MORTALITY</b><br><b>34% to 38% higher in-hospital death rate</b><br>Among patients already admitted when the attack began. The figure is not driven by who arrived; it is driven by what happened to those already inside. |
| <b>VOLUME</b><br><b>17% to 24% fewer patients in week one</b><br>Hospital volume falls 17% to 24% in the initial attack week, as measured in Medicare claims.                                                                     | <b>RECOVERY</b><br><b>About three weeks to baseline</b><br>Volume returns within roughly three weeks. The clinical harm is concentrated in the window the EHR is dark and care runs on paper.                       | <b>DEATHS</b><br><b>42 to 67 Medicare patients</b><br>The authors' estimate of excess in-hospital deaths among Medicare beneficiaries over the six years. Commercial and Medicaid patients are not in the count.              |

The study measures what paper costs. The Breach Tracker on page 2 shows how long hospitals ran on it this year.

## The rule is catching up to ransomware.

HHS NPRM · PROPOSED JANUARY 2025 | OMB FINAL ACTION TARGET · JULY 2027 | AHA / JOINT COMMISSION CRR · 30-DAY BENCHMARK

For twenty years the Security Rule let covered entities treat many safeguards as “addressable,” and contingency planning for downtime often lived in that gap. The update HHS proposed in January 2025 removes the addressable category. Contingency planning, encryption, multi-factor authentication, and vulnerability scanning become required, and covered entities must be able to **restore critical systems and data within 72 hours**. More than 100 hospital systems and provider associations asked HHS to withdraw it over cost and feasibility. OMB’s target for final action moved from May 2026 to July 2027; compliance runs 180 days after publication.

The AHA and Joint Commission’s Cyber Resilience Readiness program sets the same expectation from the other direction: plan to maintain safe patient care through a **30-day** cyber outage. One measures how fast you restore. The other measures whether care continued.

| Safeguard                      | Today       | Proposed |
|--------------------------------|-------------|----------|
| Contingency planning           | Addressable | REQUIRED |
| Encryption at rest, in transit | Addressable | REQUIRED |
| Multi-factor authentication    | Addressable | REQUIRED |
| Vulnerability scanning         | Recommended | REQUIRED |

SOURCES: HHS, HIPAA SECURITY RULE NPRM, JAN 2025; HIPAA JOURNAL (WITHDRAWAL LETTER; JULY 2027 POSTPONEMENT); FIERCE HEALTHCARE; AHA / JOINT COMMISSION CYBER RESILIENCE READINESS PROGRAM.

## What four weeks of paper looks like.

Ascension, May 8 to June 14, 2024. Thirty-seven days without the EHR across about 140 hospitals. 5,599,699 individuals affected. No dollar figure ever assigned to the attack.

01

**The first 24 hours**  
Orders go to paper. Runners carry them to pharmacy and lab. Staff told Michigan Public and KFF Health News they worked without the automated checks the EHR applies to orders and medications.

02

**Days 2 to 7**  
Improvised workflows. Nurses described charts stacked on counters, missing results, and a near-miss dosing error in a neonatal unit caught by a colleague. Some EDs on divert.

03

**Weeks 2 to 5**  
Staff described to reporters a patient who waited hours for lab results and died; Ascension has not confirmed a causal link. MyChart stayed offline. Ascension refused to pay Black Basta.

04

**After restoration**  
Every paper note, order, and result is entered after the fact. Gaede’s 23 days took seven months to reconcile. Ascension has not described its reconciliation period publicly.

SOURCES: ASCENSION UPDATES MAY 8 TO JUN 14, 2024, AND JUN 12, 2024 (SEVEN OF ~25,000 SERVERS); HHS OCR BREACH PORTAL, DEC 2024; MICHIGAN PUBLIC / KFF HEALTH NEWS / NPR, JUN 19, 2024; HIPAA JOURNAL.

BREACH TRACKER

**AnMed Health**

JUL 26, 2026

106 care sites out of Anderson, South Carolina, anchored by the 461-bed AnMed Medical Center. Sixteen days to full read-write EHR access; **11 facilities still closed** two days after that, and the count went up, not down. On August 27 AnMed confirmed copied files may include Social Security, driver’s license, and financial account numbers. No full-restoration date has been published. The day-by-day sequence is below.

SOURCES: ANMED STATUS UPDATES; HIPAA JOURNAL; BECKER’S HOSPITAL REVIEW, AUG 10 AND 27, 2026; HEALTHCARE DIVE; FOX CAROLINA; THE RECORD.

| ORGANIZATION      | DATE     | DOWNTIME      | IMPACT                                                           |
|-------------------|----------|---------------|------------------------------------------------------------------|
| AnMed Health      | JUL 2026 | 16 days EHR   | 11 of 106 sites still closed on day 18                           |
| Boston Scientific | AUG 2026 | ~1 week       | Shipping halted; new device remote-monitoring activations paused |
| McKesson          | AUG 2026 | None reported | Data exfiltration from two business units; scope under review    |
| Brockton Hospital | APR 2026 | ~2 weeks      | Anubis; ED on divert; ~2TB stolen                                |
| UMMC              | FEB 2026 | Weeks         | Epic down; all 35 clinics closed                                 |

SOURCES: COMPANY STATUS UPDATES; SEC FILINGS; HIPAA JOURNAL; BECKER’S HOSPITAL REVIEW; FBI/CISA REPORTING, 2026.

DAY 0 · JUL 26

Malware takes down network, phones, and internet system-wide.

DAY 1 · JUL 27

83 of 106 facilities closed. Imaging and radiation oncology shut.

DAY 4 · JUL 30

13 sites closed. MyChart offline. Bring meds in original containers.

DAY 15 · AUG 10

10 facilities still closed, several of them outpatient imaging.

DAY 16 · AUG 11

Full read-write EHR access restored. MyChart partial. 6TB theft claim unverified.

DAY 18 · AUG 13

11 facilities closed, one more than on Aug 10. Last count published.

EVERY HOSPITAL IN THE TRACKER PUBLISHED THE DATE ITS EHR CAME BACK. NONE HAS PUBLISHED HOW LONG ITS CLINICS STAYED CLOSED AFTER THAT DATE. SOURCES: ANMED STATUS UPDATES; HIPAA JOURNAL; BECKER’S; HEALTHCARE DIVE; FOX CAROLINA.

01

**Continuous standby**  
CRR 02 · COORDINATE RESPONSE DURING DOWNTIME  
Separately hosted cloud, separate credentials, last four weeks of patient data synced over standard HL7. Live before the outage.

02

**Activation on outage**  
CRR 03 · PREPARE STAFF TO FUNCTION DURING AN INCIDENT  
Ransomware, power, vendor failure, or a planned upgrade takes the EHR offline. Clinicians open Spare Tire on an IT-cleared device. No training required.

03

**Care continues**  
CRR 01 · MAINTAIN SAFE PATIENT CARE DURING DISRUPTION  
Notes, orders, medication verification, vitals, bed management. Every action timestamped with a full audit trail. Nothing goes to paper.

04

**Validated sync-back**  
CRR 04 · IDENTIFY AND MITIGATE RISKS TO CONTINUITY  
CyberVault validates the returning EHR data before anything writes back. No manual re-entry. A clean record of the downtime period for the auditor.

You do not have to win a 72-hour restoration race if your clinicians never stopped working. **The financial case for the same benchmark, from six disclosed hospital cyber events: Thirty Days on the Balance Sheet, sparetire.io**

START HERE

**The Complete Guide to EHR Downtime Continuity.**  
Activation roles for the first 12 hours, six criteria for scoring a continuity layer, and the map to HIPAA, Joint Commission, and CMS requirements. At sparetire.io.

Read the guide sparetire.io

Book a 20-minute demo →

Talk to us: [info@sparetire.io](mailto:info@sparetire.io)