HEALTHCARE FACILITY HUB · FIELD SHEET

Joint Clinical & Facility Downtime Playbook

Updated: November 16, 2026 · Practitioner prep/reference material only. Clinical thresholds, MAR workflows, and code interpretations must be spot-checked by qualified clinical, pharmacy, and AHJ leadership.

Answers First: A joint downtime event occurs when clinical IT (EHR, nurse call, telemetry) and facility utilities (power, HVAC, medical gas, water) fail together — or when a utility outage cascades into IT/IDF closets. Stabilize life safety in **0–15 min**, execute HICS + paper cutover in **15–60 min**, and sustain + log for survey over **1–8+ hr**.

1. Cascading Joint-Failure Mechanisms (Why Silo Plans Break)

Trigger	Utility / Infrastructure Effect	Clinical / IT Cascade	Joint Control
Normal Power Loss	NFPA 110 Type 10 ATS transfers Life Safety & Critical branches in <= 10s; Equipment branch sequences later.	Un-UPS'd PoE switches, nurse call gateways, or IDF cooling drop during transfer or load-shed.	Verify IDF/MDF UPS runtime & EES branch mapping before an event.
Chiller / HVAC Outage	Server/IDF closet temperatures rise rapidly; AII/OR pressure relationships drift.	EHR local nodes throttle or shut down; OR/sterile storage humidity exits spec.	Portable spot coolers + pressure monitoring + clinical case hold.
Potable Water Loss	Zero pressure to chillers, boilers, sterile processing, and dialysis RO.	OR instrument turnover halts; EHR lab/order queues stall on manual triage.	Invoke water-restriction plan, isolate cooling loops, shift to bottled/tanker.
Cyber / EHR Blackout	Facilities BAS/CMMS on shared VLAN may lock out alongside EHR.	Manual orders/MAR + paper patient tracking; loss of automated work-order dispatch.	Air-gapped paper downtime kit + UHF/VHF radio + runner dispatch.

2. Time-Phased Role Split: Plant Ops vs. Clinical Ops

Window	Plant Ops / Facilities Lead	Clinical Ops / Nursing & IT Lead	Joint HICS Checkpoint
0–15 Min Stabilize	Confirm ATS transfer (<= 10s), generator load, fuel level, medical gas manifold pressure, and AII/OR airflow.	Confirm patient safety, manual vital/vent checks, battery backup on bedside gear, and activate paper MAR/orders.	Confirm event type (Clinical, Utility, or Both) and open HICS log.
15–60 Min Cutover	Deploy load-shed list, stage portable HVAC/lighting, verify IDF/MDF thermal limits, assign facility runner.	Distribute unit Downtime Kits, launch paper patient-tracking board, verify downtime wristband/label stock.	Establish 30-min radio/runner huddle cadence; notify external EMS if diversion.
1–8+ Hr Shift	Track generator fuel burn (96+ hr target), water/med-gas reserves, and continuous utility-log timestamps.	Audit paper MAR/orders every 2 hr; stage downtime reconciliation team for EHR restoration.	Publish shift handoff brief; log all deviations for After-Action Review.

3. Redundant Communication Tree (Joint Commission EM.12.02.01 / CMS 42 CFR 482.15)

When VoIP, Wi-Fi, and paging fail together, teams must switch immediately to pre-assigned secondary channels (practice benchmark — confirm exact channels/frequencies in your facility EOP):

Tier	Channel	Assigned Users	Verification / Fallback Rule
Primary	Hospital VoIP / Cell / Overhead Page	All clinical & facility units	If VoIP/SIP trunk drops, declare Comms Downtime within 5 min.
Secondary	UHF/VHF Two-Way Radios (Dedicated Channel)	HICS Command, Plant Ops, Charge Nurses, Security	Confirm channel parity at shift change; keep spare charged batteries in kit.
Tertiary	Analog POTS Landlines / Satellite Phone	HICS Command, ED, Switchboard, Pharmacy	Test monthly; post printed external utility/vendor/EMS numbers beside jack.
Quaternary	Designated Physical Runners + Status Boards	Unit Downtime Champions <-> HICS	Every 15–30 min round-trip with timestamped paper status slips.

4. Survey Documentation Checklist (Post-Event CMS & Joint Commission)

- [ ] **HICS Activation & Timeline Log:** Exact start/stop timestamps, Incident Commander, and utility/IT impact scope (supports 42 CFR 482.15(d) actual-emergency exercise exemption if EOP activated).
- [ ] **Utility & EES Runtime Record:** Generator start/transfer time, load readings, fuel consumption, medical gas manifold pressures, and AII/OR differential-pressure checks (NFPA 99 / NFPA 110 / EM.12.02.11).
- [ ] **Communication & Clinical Reconciliation Log:** Paper-to-EHR back-entry completion sign-off, duplicate-order check, and external notifications (EM.12.02.01).
- [ ] **After-Action Report & Improvement Plan (AAR/IP):** Root cause, corrective action owners, and target completion dates — update HVA (EM.11.01.01) and EOP within facility review cycle.

Clinical & Engineering Spot-Check Caveat: Specific medication administration windows, diversion thresholds, and local AHJ reporting timelines vary by state licensing rule and hospital policy. Confirm all clinical workflows with Nursing/Pharmacy leadership and all code timelines with your AHJ.