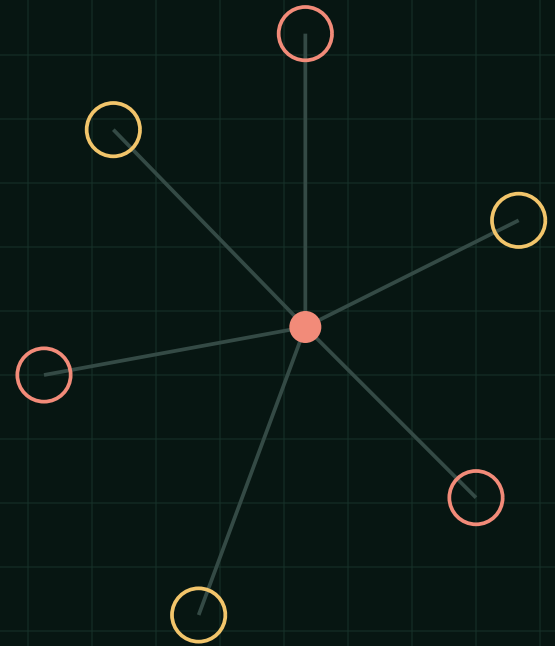


Capacity, Time, and Authority to Act

Aggregate service capability, acceptance windows, movement, support, and accountable action in one planning model



HEALTHCARE AND EMERGENCY RESPONSE

Capacity is not an open-bed count. It is a time-qualified claim about aggregate service capability, support, acceptance, movement, uncertainty, and authority.

EVIDENCE AND AUTHORITY BOUNDARY

This guide is not clinical decision support. It does not diagnose, triage, prioritize, assign a patient, select a destination, direct care, activate a facility, dispatch transport, establish command, provide legal advice, establish privacy or accreditation compliance, or evidence a health outcome.

02 | OPERATING PROBLEM

An open bed does not create an open path

A facility may declare space while staffing, service capability, acceptance time, sustainment, transport cycles, or decision authority prevents the represented network plan from resolving.

CAPABILITY**Service, not a generic count**

- Keep aggregate categories and units explicit.
- Bind staff, equipment, supplies, utilities, and ancillary support.
- Do not add unlike capabilities because both are called beds.

TIME**A capacity claim expires**

- Represent observation, effective, acceptance, valid-through, and horizon times.
- Do not silently extend a declaration.
- Recalculate when the remaining movement window changes.

MOVEMENT**The path can be the constraint**

- Model cycle capacity, travel, turnaround, handoffs, and route state.
- A planned cycle is not a dispatch.
- Arrival remains distinct from receipt and clinical acceptance.

AUTHORITY**Coordination is not command**

- Facilities retain their declarations and clinical authority.
- Transport and incident authorities retain their actions.
- A network view cannot allocate a person or compel acceptance.

DO NOT COLLAPSE

This guide is not clinical decision support. It does not diagnose, triage, prioritize, assign a patient, select a destination, direct care, activate a facility, dispatch transport, establish command, provide legal advice, establish privacy or accreditation compliance, or evidence a health outcome.

03 | DECISION TRACE

Six gates from aggregate need to reported effect

The trace helps planners locate the binding constraint without manufacturing a regional clinical or command authority.

01

REQUEST OWNER

Aggregate need

Receive an externally defined service category, quantity, horizon, source, and stated uncertainty.

02

FACILITY

Facility declaration

Preserve each facility's category, support conditions, observation time, and valid-through interval.

03

PLANNING MODEL

Time and support gates

Reject expired acceptance, missing staff or equipment, and unsupported sustainment as unresolved or unavailable.

04

TRANSPORT MODEL

Movement path

Test cycles, capacity, travel, turnaround, route state, handoffs, and arrival before the horizon.

05

ACCOUNTABLE PEOPLE

External activation

Keep facility acceptance, incident decisions, clinical judgment, and dispatch behind their actual authorities.

06

OPERATIONS

Reported receipt and effect

Record what named sources report about acceptance, movement, arrival, correction, cancellation, and unresolved state without inventing completion.

TRACE RULE

A green calculation means only that the represented facts and authored rules resolved for this revision. It is never a substitute for the external evidence or authority named at the final gate.

04 | MODEL CONTRACT

The planning contract keeps unlike facts apart

Every represented capability needs an identity, unit, time interval, source, state, and owner appropriate to its scope.

Object	Required identity	State and time	Owner / gate
Need	Aggregate service category, quantity, origin, horizon	Observed, estimated, revised, uncertain	External request owner defines the planning need
Capability	Facility, category, unit, support bundle	Declared, constrained, unavailable, contradicted	Facility owns the declaration
Acceptance	Category, interval, conditions, revision	Open, closing, expired, withdrawn	Receiving authority owns acceptance
Movement	Mode, cycle capacity, route, handoffs, destination	Planned, authorized, dispatched, arrived	Transport authority owns action states
Plan	Run ID, horizon, source set, rule revision	Draft, reviewed, authorized externally, stale	Planner calculates; accountable roles act

STATE DISCIPLINE

Known, stale, missing, contradicted, and not-applicable are different states. A safe model does not coerce any of them to zero, false, available, or approved.

Paired use-case fixture: four facilities, one horizon

This distinct A-D fixture comes from the paired use case; the canonical Insight also preserves NETWORK-27. Its abstract service units do not represent patients, beds, diagnoses, or clinical assignment.

FORMULA

usable full-horizon capability = sum of declared units that pass acceptance, support, time, and movement gates

Facility	Declared	Full-horizon usable	Reason
A	8 through 22:00	8	Acceptance and represented support span the horizon
B	7; revised end 20:00	0	Acceptance expires before the 22:00 horizon
C	6 through 22:00	6	Acceptance and represented support span the horizon
D	Reserve 8	0 initially	Requires activation, support confirmation, and two cycles
Initial network	Need = 20	14	A 8 + C 6; shortfall = 6
Decision state	No D activation yet	Unresolved	Calculation cannot activate, accept, or dispatch

EXACT BASELINE

Initial full-horizon represented capability is $8 + 0 + 6 + 0 = 14$. Against aggregate demand of 20 abstract units, the modeled plan is short by 6.

06 | REVISION PROPAGATION

Support and movement change the answer

The model changes only after accountable sources accept new facts; it never turns a computed option into an operational order.

Revision	Accepted fact	Exact consequence	Planning state
R0	A = 8; C = 6	14 usable against need 20	Short by 6
R1	D support confirmed	D remains gated until movement is feasible	Still unresolved
R2	Two cycles x 4 arrive by 21:00	D contributes 8; total becomes 22	Margin = 2
R3	One transport cycle lost	D contributes only 4; total becomes 18	Short by 2
F1	B shown as open at 19:00	Its 20:00 end still fails the 22:00 horizon	Must not count 7

- R2 demonstrates represented aggregate feasibility, not clinical suitability or a transfer decision.
- R3 changes the network arithmetic without changing any facility's nominal declared count.
- Every view must expose its horizon, source revisions, unresolved gates, and the authority boundary.

CORRECTION RULE

A correction changes only the dependencies it reaches. The system must expose stale derivatives, preserve the earlier release, and require the same configured review and authority gates for the successor.

07 | HUMAN AUTHORITY

Planning support does not create clinical or command authority

The model can connect declarations and test a represented plan. Qualified people and institutions retain every consequential judgment and action.

Accountable role	Supplies or decides	Grid boundary
Facility capability owner	Declare aggregate service capability and support	The model cannot attest to facility readiness
Receiving authority	Open, condition, revise, or withdraw acceptance	An apparent window cannot compel acceptance
Clinician	Make patient-specific clinical judgments	No patient-level data or recommendation belongs in this fixture
Incident / jurisdiction lead	Set strategy and exercise lawful authority	A shared view does not establish command
Transport authority	Authorize, dispatch, reroute, and close movement	Feasible cycles are not dispatched assets
Planner	Compare predefined aggregate alternatives and constraints	A plan is not activation or allocation
Data steward	Accept corrections, definitions, and quality states	Connector success does not establish source truth
Security / privacy owner	Approve identity, access, exchange, and recovery controls	The guide does not establish compliance

SEPARATION OF DUTY

Identity, permission, review, authorization, submission, external acknowledgment, and receipt are separate states. No computed result should silently advance across them.

08 | INTEROPERABILITY

Share the minimum state needed for the decision

A connected planning surface should preserve institutional boundaries, failure states, and the difference between a declaration and an action.

IDENTITY**Category and institution**

- Facility, aggregate service, unit, horizon, source, and revision.
- No patient identifier is required for this exercise.
- Purpose and exchange scope stay explicit.

TIME**Windows and clocks**

- Observation, effective, acceptance, route, arrival, and valid-through times.
- Time zone and cutoff semantics are typed.
- Expiry propagates to every affected view.

SECURITY**Selective exchange**

- Least privilege, authenticated sources, logging, revocation, and recovery.
- Test unavailable connections and delayed corrections.
- Do not infer privacy or security approval.

AI**Assistance without authority**

- AI may summarize, map, flag inconsistency, and propose tests.
- It may not diagnose, triage, assign, activate, dispatch, or approve.
- Human disposition and provenance remain visible.

CONNECTED-EDGE RULE

A successful API call establishes only the observed protocol result. It does not prove semantic agreement, source truth, authorization, external execution, final receipt, security approval, or resilience.

Test the planning boundary under stress

Evaluation should prove exact propagation, unresolved-state handling, institutional separation, and safe degradation before any operational consideration.

Failure injection	Required behavior	Passing evidence
Expired acceptance	B contributes zero to the full horizon	Interval arithmetic and view trace
Missing support	D remains unresolved even when nominal units are visible	Support-gate state
Lost cycle	22 becomes 18 and margin +2 becomes shortfall 2	Reperformance and dependency trace
Unit mismatch	Unlike service categories cannot be added	Typed-unit validation
Stale facility view	Every derivative declares stale after a source revision	Revision IDs on each surface
Unauthorized activation	A passing plan exposes no activation or dispatch action	Role and action-surface inspection
Partial outage	Unavailable source becomes declared unresolved	Degraded-mode test and recovery record
Correction after release	Prior plan stays reconstructable; successor explains change	Immutable versions and link

EVALUATION GATE

Predeclare acceptance thresholds, roles, fixtures, clocks, failure injections, evidence, and stop conditions. Record every deviation; do not retrofit the success claim after seeing the result.

10 | SOURCES AND LIMITS

Public context, explicit scope

Use each source within its own date, institution, subject, and applicability. The maintained online Insight carries the fuller argument and current editorial context.

01 ECFR	42 CFR 482.15 - hospital emergency preparedness www.ecfr.gov/current/title-42/chapter-IV/subchapter-G/part-482/subpart-B/section-482.15
02 DEFENSE HEALTH AGENCY	2024 National Disaster Medical System Federal Coordinating Center Guide health.mil/Reference-Center/Publications/2024/06/06/2024-FCC-Guide
03 ECFR	42 CFR 482.12 - hospital governing body www.ecfr.gov/current/title-42/chapter-IV/subchapter-G/part-482/subpart-B/section-482.12
04 ASPR	Hospital Preparedness Program www.aspr.gov/readiness-response/healthcare-readiness/hpp
05 ASPR	HPP cooperative agreement and recipient reporting www.aspr.gov/readiness-response/healthcare-readiness/hpp/cooperative-agreement-recipient-reporting
06 ASPR	Medical Surge Capacity and Capabilities executive summary www.aspr.gov/readiness-response/healthcare-readiness/performance-measures-guidance-reports/mscc/preliminaries/executive-summary
07 ASPR	Medical Surge Capacity and Capabilities foreword and dated context www.aspr.gov/readiness-response/healthcare-readiness/performance-measures-guidance-reports/mscc/preliminaries/forward
08 ASPR	Healthcare coalition companion executive summary www.aspr.gov/readiness-response/healthcare-readiness/performance-measures-guidance-reports/mscc-healthcare-coalition/preliminaries/executive-summary

FINAL LIMIT

These sources have distinct scopes and do not prescribe the Grid proposition or endorse it. The fixture contains abstract aggregate units only. Passing it cannot establish clinical safety, operational readiness, command legitimacy, legal sufficiency, or health-system performance.