

The 12 Laws of Healthcare Operations

The hidden physics of flow, capacity, and reliability — and how to design for it.

Huddle-board edition — write on it.

TIER I — THE PHYSICS OF FLOW

Laws 1-5

- 1 The Invisible Work Law**
Coordination work expands wherever visible efficiency leaves no room for it — migrating into after-hours, into memory, and ultimately into error.
- 2 The Utilization Paradox**
Past a point, higher utilization buys sharply accelerating delay. A system pushed toward 100% is not efficient; it is seizing.
- 3 The Variability Cascade**
Small, unbuffered variations compound across departments until routine delay becomes clinical risk.
- 4 The Fragility Principle**
Maximum utilization converts loose coupling into tight coupling. Ordinary disruptions become system-wide collapse.
- 5 The Coordination Tax**
Every handoff costs capacity. When information moves slower than clinical need, the system pays in delayed care.

TIER II — THE STRUCTURAL CONSTRAINTS

Laws 6-10

- 6 The Team Familiarity Effect**
Stable teams build the shared mental models that reduce friction — and, the evidence indicates, lower mortality risk.
- 7 The Workforce Stability Rule**
Reliability tracks team stability. The relationships that carry coordination dissolve faster than headcount can replace them.
- 8 The Discharge Bottleneck**
Exit velocity governs capacity. A hospital rarely runs out of beds; it runs out of discharges.
- 9 The Clinic Capacity Illusion**
A schedule booked to 100% is, for new acute need, already closed.
- 10 The Measurement Error**
Systems move toward what they measure. Manage the wrong number and you reward the behaviors that destabilize care.

TIER III — DESIGNING FOR RELIABILITY

Laws 11-12

- 11 The Slack Requirement**
A protected buffer of idle capacity is not waste. It is the infrastructure of flow, safety, and learning.
- 12 The System Design Law**
Optimizing a single part degrades the whole. Reliable organizations engineer global flow, not local productivity.

SPOT IT → FIRST MOVE

diagnose in the huddle, act this week

TIER I	Spot it: waits growing while everyone works harder	→ First move: plot your unit's own wait-vs-utilization curve.
TIER II	Spot it: full beds, closed schedules, strangers on every shift	→ First move: measure exit velocity and the Stranger Ratio.
TIER III	Spot it: every fix pops up as a new problem elsewhere	→ First move: protect one buffer and defend it for 90 days.

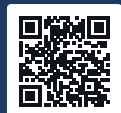
KEY METRICS — how to measure the three moves above

Log what you find in the 12-Week Huddle Guide (in the Team Kit).

Your own curve	— time the same routine task, same clock, on a light and a full day; report both times, not a ratio.
Exit velocity	— two numbers, separately: % discharges out by noon + median order-to-physically-out (ADT/EHR timestamps).
Stranger Ratio	— non-core shift-hours ÷ total shift-hours; core = permanently assigned here. Local proxy — trend within your unit; don't benchmark across hospitals.

Which law is your unit fighting today?

Today our friction is _____ (Law ____) Owner: _____



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