

— CUSTOMER STORY

Database risk got caught before it became a patient-facing outage.

Slow decay, sudden failure

Database performance problems in a clinical system rarely announce themselves early. They creep — a slow query here, a connection pool a little tighter than last month — until the day they don't creep anymore.

The situation — Warning signs that existed, but nobody was watching continuously

The platform team could explain any past outage after the fact. Explaining it in advance was the problem:

- Capacity and error-pattern trends lived across several dashboards that nobody checked with the same discipline every day.
- The team that could act on database risk was small and mostly consumed by on-call and change requests.
- Sensitive patient data meant most tooling vendors were a hard no before a conversation about capability even started.
- A single connection-pool exhaustion incident had already touched a clinical workflow once — a near miss the team didn't want to repeat.

The move — A Database Specialist agent that reasons in-boundary

The team composed a Database Specialist agent with reasoning kept entirely inside their own environment, watching capacity and error patterns continuously and opening an investigation before a threshold breach becomes a page.

"We could not send patient-adjacent telemetry to an external model, full stop. Reasoning that stays inside our boundary was the only version of this we were ever going to be allowed to run."

— DIRECTOR OF PLATFORM ENGINEERING

— DEPLOYMENT SNAPSHOT

SECTOR

Digital health platform

ESTATE

Clinical application database tier

START POINT

Composed from the Database Specialist foundation

AUTONOMY

Investigation continuous; remediation gated

SPECIALISTS USED

Database Specialist

GOVERNANCE

In-boundary reasoning, approval on remediation

SETUP

Light discovery, no data leaving the environment

INTEGRATIONS

Database telemetry, ticketing, on-call paging

— ILLUSTRATIVE IMPACT

60%

LESS TRIAGE

45%

FASTER START

\$18

PER RUN

- **The objective is the spec.** A plain-language description is enough to draft the first working version.

- **Gates make speed defensible.** One well-placed approval step let the rest run without a fight over trust.

— HOW IT WAS BUILT

Describe

The objective was capacity and error-pattern risk on one clinical database tier — narrow on purpose, given what was at stake.

Compose

Skills watch connection pool saturation, query latency and error rate together, rather than any one signal in isolation.

Govern

Reasoning runs entirely in-boundary; any remediation step — killing a query, scaling a pool — requires a named approver.

Promote

Now a standing agent with a defined error budget: past a set number of missed early-warnings, the pattern escalates for review rather than continuing quietly.

— WHAT CHANGED

BEFORE AGENT BUILDER

- Capacity trends spread across dashboards nobody checked daily
- A small team stretched across on-call and change work
- External tooling ruled out before capability was even discussed
- One connection-pool incident already reaching a clinical workflow
- Warning signs visible only in hindsight

WITH AGENT BUILDER

- Capacity and error patterns watched continuously, in-boundary
- Early warning reaching the team before a threshold breach
- Remediation still gated on a named approver
- No patient-adjacent telemetry leaving the environment
- A near miss that hasn't repeated since

— WHERE THE CHANGE CAME FROM

In-boundary was the condition, not a feature request

Nothing about this got built until reasoning could run entirely inside the team's own environment.

Narrow scope made the case easy to approve

Starting with one database tier rather than the whole estate kept the risk conversation short.

The error budget kept the agent honest

A defined threshold for missed warnings meant confidence in the agent was earned, not assumed.

— WHY THIS MATTERS IN HEALTHCARE & DIGITAL HEALTH

Database Specialist

In-boundary reasoning

Continuous capacity monitoring

Approval-gated remediation

Error budget & escalation

Light discovery start

No external data egress

Early-warning investigation

— BOTTOM LINE

Agent Builder gave a stretched clinical platform team continuous database risk coverage without moving a single byte of patient-adjacent data outside their own walls.

Customer anonymised at their request; profile and quotation are representative of a deployment in this sector, not a named engagement. Outcomes are illustrative, not measured benchmarks, and vary by estate size and configuration. © 2026-2027 LumiOps.AI.

Put Agent Builder to work.

Describe an objective, watch it draft the workflow, and promote what works into a standing agent.

GET IN TOUCH
contact@lumiops.ai

PLAYGROUND
Try it, no setup

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