MEDTRONIC **LABS**

REWIRED

WHY HEALTHCARE NEEDS TO BE UNBUNDLED AND REBUNDLED

Let's be honest: the health systems we've built are failing patients ,the very people they are meant to serve.

From Dhaka to Nairobi and even Detroit, our health systems were primarily built to provide acute care and designed to serve institutions – government, hospitals, insurers – not patients or caregivers. And every attempt to digitize them hits the same wall: a misaligned and unsustainable architecture – effective at emergencies, but ill-suited for long-term health.

Rewired is about building health systems for people—not patching them for institutions. More money and more technology, even AI, will not fix a flawed system. The future is building the architecture of healthcare systems around outcomes that matter: people living healthier, longer, at lower cost—and using technology smartly to get there.

The problem isn't tools. It's architecture.

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Rashida's story

Rashida, in a village outside Dhaka, is pregnant, diabetic, and lives with a husband recently treated for tuberculosis.

She doesn't know her health status or options. If lucky, a community health worker visits—but her care is split across three vertical programs: maternal health, NCDs, and TB. Individually, these programs work. Together, they fail. Her diabetes medication isn't checked for pregnancy safety. Her antenatal record isn't visible. Her household TB risk is never flagged.

Rashida ends up with incomplete care, while the health worker juggles disconnected protocols and paperwork that rewards reporting, not results. At the health facility, her records don't follow, and her expenses escalate. Local administrators see only partial reports, unable to plan resources effectively.

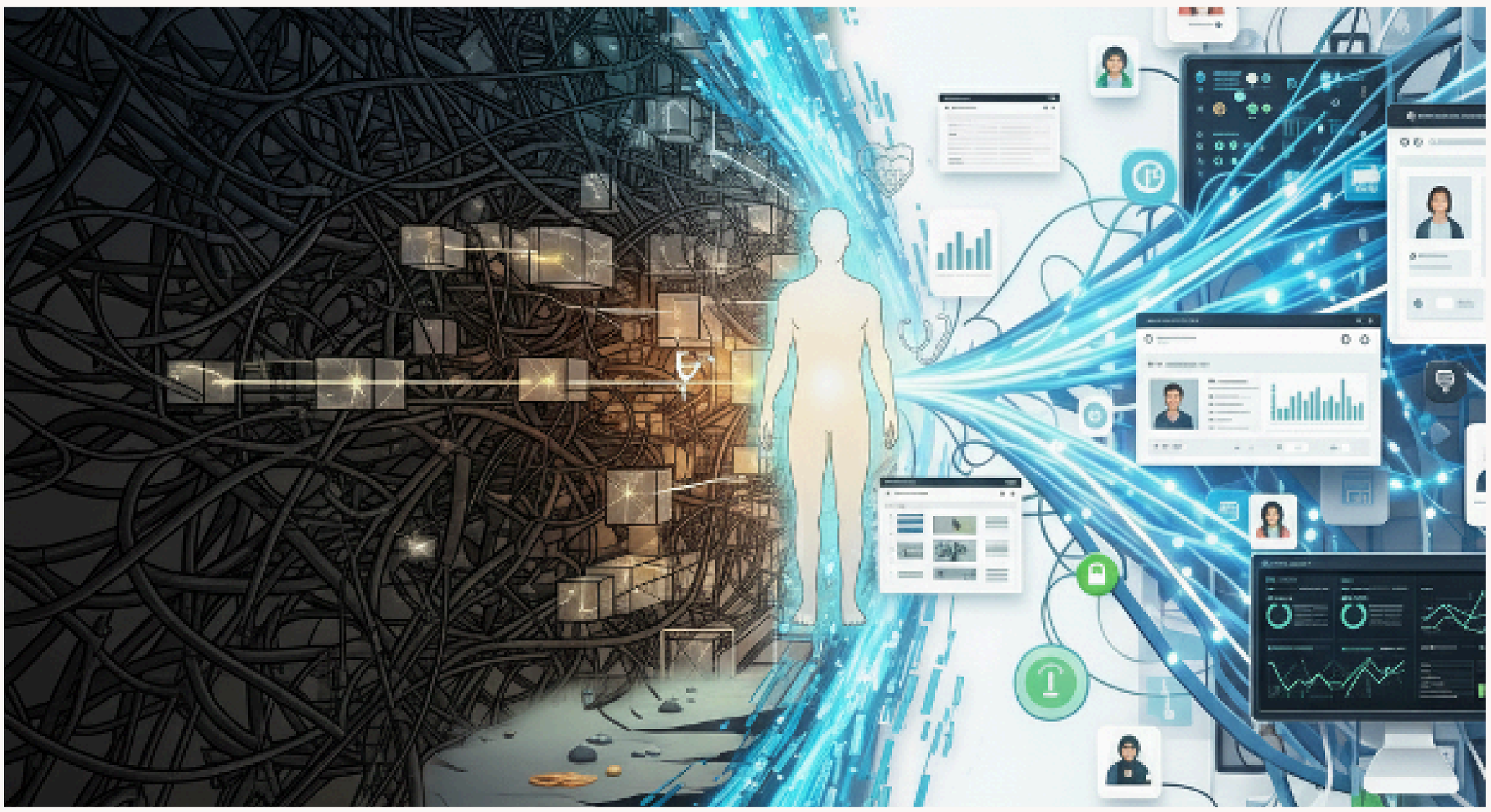
Each program is a siloed monolith: isolated, rigid, and unable to adapt. **When monoliths collide, care fragments and the system falters.** Simply digitizing more won't fix this. AI layered on top will only create faster confusion. Only an intentional architectural redesign — enabled by technology — can solve these problems.

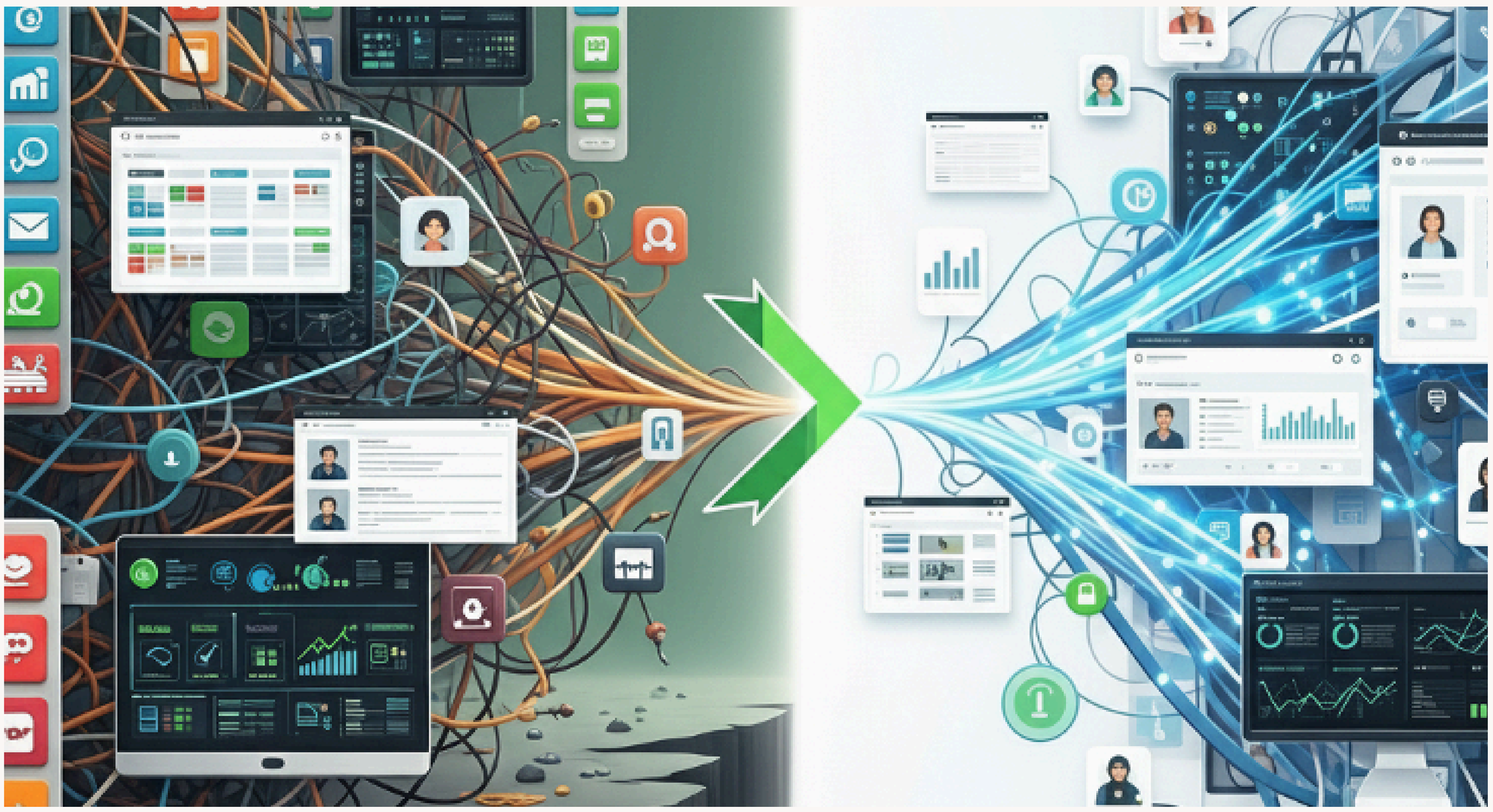
From Fragmentation to Flow: Redesigning Health Systems Architecture

Healthcare today is fragmented because it is delivered in clunky blocks—vertical programs, community health cut off from facilities, hospitals siloed by department, public and private health systems, and insurers defining narrow benefits. Each clunky block bundles services, protocols and data into its own rigid monolith.

To achieve flow, **we must unbundle these monoliths into functional components: discovery, navigation, diagnosis, planning, treatment, monitoring, and prevention.** Each of these can be modular services—delivered where and when they best serve the patient—and then rebundled with technology to maximize outcomes and efficiency. Here's what that could look like for Rashida:

She feels unwell. An AI assistant in Bangla answers her questions, screens for red flags, and books the next step. A health worker visits and completes the care protocol using one tool, syncing everything to her record.





Instead of fragmentation, **Rashida experiences coordinated care**. Prescriptions are safety-checked, linked to pharmacies, and paid without hidden costs. Reminders and counseling arrive when needed, abnormal readings trigger outreach, and if hospitalized, her care plan follows—linking seamlessly to newborn immunization and postpartum care.

Dashboards show the full picture—indicators, supply alerts, outcomes—while **protecting consent and privacy.** Financing aligns too: when care flows seamlessly across components, payment systems can reward comprehensive prevention and coordination over fragmented, crisis-driven interventions.

This is healthcare Rewired, one patient, a unified care plan, and a comprehensive payment backbone a health system that follows the patient, not the other way around. And **this is achievable with the right architecture.**

> “a **health system that follows the patient**, not the other way around"

The leapfrog opportunity

Other sectors have shown the way. Banking once separated loans, savings, and payments; now they're unbundled and rebundled around the customer. Telecoms did the same with voice, data, and messaging. Healthcare has resisted, resulting in rigidity from monoliths and chaos from fragmentation.

It's often assumed low- and middle-income countries can't afford to re-architect health systems. The opposite is true. With legacy systems never fully calcified, **LMICs can leapfrog—building stronger, patient-centric digital foundations from the start.**

Yet most efforts so far have produced a messy patchwork: dozens of vertical apps, partial registries, siloed dashboards, and now a rush of AI tools being layered haphazardly on top. The result is brittle: data rarely flows, workflows duplicate, and guidance stays locked in binders. Interoperability helps systems "talk," but it cannot alone create the foundations of care delivery.

Real transformation needs a shared infrastructure layer — the foundation for every program, provider, and innovation. Beyond health IDs and registries, they require building blocks: patient profiles, workflow engines, knowledge libraries, payment rails, and interfaces for existing apps.

As shared assets governed by open standards, these blocks let monolithic programs be unbundled into functional services—and rebundled around the patient journey. That is the path to resilient, future-ready health systems—where information drives care, workflows are optimized, knowledge is embedded in every interaction, innovations scale quickly, and payments tie to real outcomes.

> **Future-ready health systems,** where information drives care, workflows are optimized, **knowledge is embedded in every interaction**

The tests of a rewired health system

How do we know if the system is working? In the long run, the test is simple:

·**Outcomes** – Do patients get better? Can they find, afford, and complete care that improves health? Is it trustworthy?

·**Data** – How is data used at every level to improve outcomes and efficiency?

·**Cost** – Are we paying for outcomes, not episodes of care? Can we reduce overall costs while improving population health?

In most places today, the answer is "no." In a rewired system, each becomes a design goal.

The bottom line

Our healthcare architecture is flawed and must be redesigned. That's what Rewired is about. It starts with a simple question: "**If we built this system today, for the people it's meant to serve, what would it look like?**"

The answer is not more apps or AI on top. It's a patient-centered, modular system designed to learn and evolve.

It's time to build that system.

It's time to rewire healthcare

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