MEDTRONIC **LABS**

SMARTCARE:

A VISION FOR INTEGRATED, OUTCOME-DRIVEN SYSTEMS

This series showed why health systems fail patients, how they can be rewired, and what that means for people, resource planning, financing, governance, and the future.

The simple truth: fixing health systems isn't about more apps or pilots, but about rewiring architecture so care flows around people.

Digital health often fragments care: workers juggle multiple apps, patients repeat their stories, and pilots stall while systems struggle with interoperability.

In 20 countries, **70% of LMICs show fragmented primary care and 19–50% missing data**, leaving patients falling through cracks, caregivers facing catastrophic costs, and governments drowning in dashboards. The result: wasted effort, wasted money, wasted lives.

SmartCare is that architecture in practice — not another vertical program or single app, but a vision where building blocks, flexible financing, inclusive governance, and adaptive learning come together into one integrated, **performance**-driven system. Technology becomes an enabler, not a burden — especially for care providers and managers.

The journey begins where it matters most: primary health care. SmartCare PHC's building blocks take shape in this setting — the Patient Profile starts as a Primary Health Profile covering every individual, workflows begin with frontline and community services, and knowledge libraries embed national primary care protocols. It ensures seamless interfacing with referral, specialty, and whole-of-system care. By proving value at the foundation of the health system, **SmartCare PHC creates confidence and momentum while serving to catalyse rewiring across the sector.**

What SmartCare PHC Is

SmartCare PHC implements the architectural redesign described throughout this series. It takes the **building blocks** we outlined — primary health profiles, workflow engines, knowledge libraries, resource insights, payment rails, trusted registries, and shared interfaces — and brings them together into one coherent system.

The architecture is expressed through three **enabling components** that countries can contextualize and extend to meet their own priorities:

● **Spark** enables a unified frontline experience where health workers access integrated workflows instead of juggling multiple apps. Complete health information is available in a single encounter, enabling comprehensive care. Citizens receive customized guidance to support healthier choices.

● **Blueprint** enables knowledge hubs by consolidating national guidelines, international frameworks, local contextual information, training content, and AI models into one source that delivers just-in-time guidance through apps and workflows.

● **Sustain** facilitates the transformation of contextualized performance data into intelligence for policymakers and managers, enabling smarter allocation, innovative financing strategies, and real-time equity safeguards..

These three components are powered by the **SmartCare PHC Core**: modular, reusable building blocks built on digital public infrastructure principles — interoperability standards, consent and identity management, and integration adapters. The Core includes the **Workflow Engine**, the **Primary Health Profile**, and the **Knowledge** Libraries and Resource Insights.

In short, SmartCare PHC is not a fixed system but a **framework that countries can adapt, extend, and scale**, rebundling services around people's journeys through modular building blocks and shared infrastructure. It also connects with existing shared digital health infrastructure at higher levels of care, and infrastructure such as IDs, payments, data exchanges and consent systems, reducing duplication and costs. Over time, building blocks from other sectors — education, housing, social protection — can also plug in, weaving social determinants of health directly into the flow of care.

BEYOND TECHNOLOGY: WHAT MAKES SMARTCARE WORK

SmartCare PHC goes beyond digital tools. Four features ensure it strengthens whole systems rather than adding another layer of fragmentation:

●**Financing that fits context:** SmartCare PHC's shared rails allow countries to build financing mechanisms aligned with their priorities, from performance-linked payments to equity-adjusted resource distribution, and fee-for-service where appropriate. Flexibility ensures incentives align with outcomes as systems mature.

●**Inclusivity of existing systems**: SmartCare PHC integrates with and extends existing national digital initiatives, allowing apps, registries, and EMRs to plug into shared profiles, workflows, and payment rails — enriched rather than discarded. This makes SmartCare additive, not disruptive.

●**Governance and trust:** By anchoring in open standards, interoperability, and feedback loops, SmartCare PHC prevents vendor lock-in, protects privacy, and ensures accountability. Governance makes the system legitimate and adaptive, not just technically sound.

●**Futures that learn:** SmartCare PHC provides the rails for AI and innovation to scale. Protocols update dynamically, dashboards become predictive, and health workers are augmented with just-in-time support. Innovations plug in and improve the system, instead of becoming siloed pilots.

Why It Matters for Patients, Caregivers, and Health Workers

SmartCare turns abstract architecture into lived experience.

●**For patients**: Rashida's prenatal care integrates with her diabetes and TB risk. Naliaka's hypertension follow-up connects to her cancer screening. Mariama's asthma plan links school, CHC, and hospital. Mutesi avoids duplicate tests. Care is continuous, safe, and affordable.

●**For caregivers**: Families spend less on repeat visits and unnecessary medicines. They receive reminders and clear instructions, reducing anxiety and financial strain.

●**For health workers**: Josephine in India no longer juggles multiple apps. With Spark, she uses one integrated workflow that embeds guidance, reporting, and payment triggers — freeing up time for care.

This is healthcare following the patient journeys, not the other way around.

Implementation Pathway

SmartCare PHC is designed for **incremental, scalable rollout.** Countries may start with primary health care and frontline services, where the value of integration is most immediately felt. Early pilots track improvements in continuity, response times, and referrals while adapting to context. Success at the primary level builds confidence and momentum for extending into the wider health system.
The approach builds on existing strengths — health worker networks, mobile connectivity, and national digital strategies — using established platforms and APIs for sustainability.

Most importantly, SmartCare PHC's components are **enablers, not rigid solutions**. Spark helps adapt to local workflows, Blueprint can embed national protocols with global evidence, and Sustain helps align with country financing goals. Success depends on **collaborative learning with leaders and communities, not just technology.**

SMART CARE

The Bottom Line

SmartCare is the vision where everything in this series comes together: building blocks that create flow, journeys that follow people, financing tied to outcomes, governance that builds trust, and futures that learn.

It is a practical path for countries to build outcome-driven systems that are inclusive, resilient, and future-ready.

Articles 1–6 showed why rewiring is needed, how blocks create flow, what it means for people, how to pay, who governs, and how systems learn. **This final article ties it all together: SmartCare PHC — a system designed for outcomes, built on shared infrastructure, and capable of evolving with every patient, every worker, and every innovation.**

The future belongs to health systems ready to architect for integration rather than patch for institutions.

It's **time to rewire healthcare**. **SmartCare shows the way**.

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