

YouTime — The missing reconciliation layer in home care

Why provider-centric data leaves payers blind — and how an independent beneficiary-level record reconciles requested vs. delivered home-care visits

White Paper

Architecture, Economics, and Pilot Framework

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About This Document

This white paper presents the architectural foundations, economic model, and pilot-phase methodology for YouTime, an independent reconciliation layer designed to measure and preserve continuity in long term home-care services. It outlines the transaction-level logic, multi-visit continuity analytics, and population-scale infrastructure dynamics that enable payers to gain visibility into service delivery across fragmented provider ecosystems.

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THE MISSING RECONCILIATION LAYER IN HOME CARE

Why provider-centric data leaves payers blind — and how an independent beneficiary-level record reconciles requested vs. delivered home-care visits

A white paper on the financial risk undelivered home-care visits pose to payers — and on the beneficiary-level data layer that reconciles requested care against delivered care across fragmented systems

YouTime

Prepared for home care payers — United States & Germany

Executive Summary

Over the past decade, long term home-care technology has digitized almost every part of the provider's world: scheduling, Electronic Visit Verification (EVV in the US, eLNV in Germany), and billing. It has not digitized the one relationship that matters most to a payer: whether the home visits a beneficiary requested and was approved to receive were actually delivered, continuously, over time.

The core thesis. Provider-centric software answers “**what did my employee report doing?**” It cannot answer “**Were the funded home visits requested by the beneficiary actually delivered?**” — and payers have been left to underwrite that gap without visibility into it.

The invisible expense. Undelivered, unreplaced, or quietly dropped home-care visits generate clinical deterioration and financial risk that surface only later, in the form of claims — well after the point where they could have been caught and corrected.

The proposed solution. An independent, beneficiary-centric reconciliation layer. Positioned between beneficiaries, agencies, and payers, YouTime acts as the single source of truth that continuously reconciles requested care against actual delivery across fragmented operational systems.

The model is designed to prove itself before asking anything of incumbent systems: during a pilot, continuity can be verified through YouTime alone, and once the resulting gaps are demonstrated, scaling the model turns on a single decision that belongs to regulators and payers — which record is authoritative, and for which purpose.

This paper sets out the structural blind spot created by provider-built software (Section 1), the distinct but parallel financial exposure it creates for US and German payers (Section 2), the architecture of an independent reconciliation layer and its pilot-to-production path (Section 3), the economics of pricing such infrastructure per visit rather than per seat (Section 4), what each stakeholder stands to gain (Section 5), and a three-phase pilot framework payers can run to test the thesis directly (Section 6).

Section 1 — The Blind Spot of Provider-Centric Software

1.1 The Digitization Misalignment

Existing EVV and care-management platforms were built by providers, for providers. They capture clock-in and clock-out times, manage staff schedules, and convert visit logs into claims. Each of these systems was designed to answer one question:

“What did my employee report doing?”

None of them was designed to answer the question that actually determines whether public or private care money are well spent:

“Was the beneficiary's funded care plan actually fulfilled, continuously, over the period it covers?”

1.2 The Missing Data Chain

Current systems jump straight from scheduling to billing, skipping the beneficiary's original request and rarely tracking, in a structured way, what happens after a visit is missed. The full chain that a payer needs visibility into looks like this:



EVV and billing data typically begin at “Expected Visit” and end at “Actual Delivery.” Everything upstream of the request and everything downstream of a miss — whether, and when, a dropped visit was ever made good — falls outside what current systems are built to record.

1.3 The Structural Consequence

This gap is not incidental — it follows from who builds and reports the data. Caregivers, and the agencies that employ them, have a structural interest in under-reporting missed visits, since each one represents a service failure attributable to them.

As a result, a missed visit typically surfaces only when the beneficiary — often frail, isolated, or cognitively impaired — notices the absence and manages, on their own initiative, to report it after the fact, retrospectively, and without documentation. Replacement care, when it does occur, is rarely reconciled against the original prescription or care plan, so payers cannot verify whether a visit later marked “delivered” actually satisfied what had been approved.

Section 2 — Regional Risk Analysis: United States vs. Germany

2.1 United States — The Value-Based Care & Readmission Trap

Target audience: Medicare Advantage plans, Accountable Care Organizations (ACOs), and Managed Care Organizations (MCOs).

The mechanism. Under value-based and capitated arrangements, payers carry downside financial risk for member outcomes. When a scheduled personal-care or home-health visit is missed and not immediately replaced, medication non-adherence and clinical deterioration begin quietly — days or weeks before either surfaces as a claim.

Financial impact. A hospital readmission costs an estimated \$10,000 to \$20,000 per episode, and even a treat-and-release emergency-department visit averages roughly \$700 to \$2,000 — real money at the volumes payers manage, even before it escalates further. Under current arrangements, payers bear effectively all of this downside risk while depending on the self-reporting of the same agencies whose incentives run the other way.

2.2 Germany — Budget Reconciliation in the Pflegeversicherung

Target audience: statutory long-term care insurers (Pflegekassen) — Techniker Krankenkasse, BARMER, AOK, and others.

The mechanism. Statutory care budgets (Pflegesachleistungen under § 36 SGB XI) are disbursed according to a beneficiary's assigned Pflegegrad, independent of whether the corresponding hours of care are, in fact, delivered.

Financial impact. Billions of euros in public and semi-public funds move through this system annually, yet Pflegekassen have no independent, granular reconciliation layer to confirm that a funded home-care service translates into continuous, delivered care on the ground.

The two markets differ in mechanism — capitated risk in the US, statutory budget disbursement in Germany — but converge on the same structural problem: payers fund care on the strength of provider-reported data they cannot independently verify.

Section 3 — The Beneficiary-Level Record Paradigm

3.1 Defining the Architecture

YouTime is not another EVV system, care-management platform, or CRM. It does not track caregiver hours, manage timesheets, or ask agencies to replace field software they already rely on.

Its premise is straightforward: the provider's own schedule should not be the sole authoritative record of what a beneficiary was expecting to receive. An independent record — anchored in what was requested and accepted, not only in what an agency later reports as delivered — is what makes reconciliation possible in the first place.

3.2 Positioning: An Independent Reconciliation Layer

In financial technology, operational tools manage internal workflows, while settlement and risk management rely on an independent reconciliation layer. YouTime brings this architecture to home care.

YouTime operates as an API-first reconciliation engine across three otherwise disconnected data domains:

- Beneficiary-requested home care visits.
- Provider Operations (fragmented agency systems, EVV records, caregiver timesheets, and scheduling tools).
- Payer settlement platforms (claims processing, risk management, payment and disbursement systems).

Where provider software measures internal operations, YouTime reconciles the service delta — identifying instantly what was requested, what was delivered, what was silently dropped, and what was substituted.

3.3 Pilot Phase: Dual Recording to Reveal Structural Gaps

During the pilot, caregivers can clock in through YouTime alone; providers retrieve the record via API or printed timesheet, alongside whatever visit-verification system the jurisdiction already requires.

Each visit carries a validation window set around the beneficiary's requested time. Illustratively, a visit requested at 8:00 for a duration of 60 minutes carries a default operational tolerance of ± 30 minutes on the start time, with automatic completion after 60 minutes. If the caregiver's wants to clock-in or clock-out outside that window, it is technically impossible through YouTime. The caregiver must then clock-in or clock-out through the provider's own verification system, ensuring that the discrepancy becomes visible.

This becomes critical in scenarios where continuity breaks create double-exposure risk. If the provider's caregiver scheduled at 8:00 has not arrived by 8:31, the visit is considered missed. At that moment, the beneficiary may request an autonomous replacement, who begins service at 9:00 to preserve continuity. If the originally scheduled caregiver eventually arrives at 9:30, both individuals may generate a correct “delivered” record in provider-centric systems.

Without an independent reconciliation layer, the payer may be exposed to two billable service events for what is, in reality, a single continuity-preserving visit. YouTime prevents this ambiguity by anchoring the record to the beneficiary's requested continuity window: the replacement's visit is reconciled as the legitimate service, while the late caregiver's arrival is reconciled as missed. The payer sees the discrepancy immediately, rather than discovering it only through downstream claims or audit processes.

What the mechanism is designed to catch is not occasional lateness but the pattern this paper opened with: visits that are silently reshaped, shortened, increased, doubled, or dropped without ever being recorded as such.

For payers, this is the first time continuity gaps become visible in real time, without relying on provider self-reporting.

3.4 The Political Decision: One Reference, No Double Clocking

The dual recording described above is a pilot-phase instrument, not a permanent operating model. Once it has demonstrated the scale of the gap, asking caregivers to clock in twice indefinitely is not sustainable — a

service-record standard should not double a caregiver's own administrative burden in order to prove its point.

What follows from that is not a technical integration question but a political one: which record is authoritative, and for which purpose. YouTime's proposed answer rests on a simple principle — for beneficiary care delivery, the beneficiary-level service record is authoritative; for billing, the billed service must reconcile against that record. Once this is settled, the caregiver clocks in once, through the system designated as the reference, and every downstream question — was the visit delivered, was it missed, was it replaced, what should be billed — is answered from that single record.

Just as Stripe or Plaid do not issue bank accounts but reconcile financial data across institutions, YouTime does not manage caregivers. It functions strictly as the service reconciliation layer: the provider logs the working time for payroll, while YouTime reconciles the delivery against the beneficiary's request for risk and payment reconciliation.

Where a jurisdiction currently mandates a visit-verification system as the record of working time — EVV in the US, eLNW in Germany — this proposal does not ask regulators to abolish that requirement. It asks them to decide, deliberately, which record answers which question, rather than allowing two independently “correct” systems — a valid working-time log and a valid but different beneficiary request — to quietly diverge, as they do today.

3.5 Data Protection by Design

The data footprint required to operate this model is deliberately narrow. This is an argument for a compliant design under both GDPR (EU/Germany) and HIPAA (US), not a reason to defer the question.

On the beneficiary side, the operational data required to arrange and verify a visit can be limited to contact and location information, such as a phone number and address. The phone number can also serve as the communication channel for confirming and updating visit status.

The record itself is limited to objective visit data — start time, duration, delivered/missed/replaced status — never the content of the care provided. No clinical, diagnostic, or care-plan detail is captured; the reconciliation layer operates on service-event metadata only.

The principle should be stated explicitly in any regulatory framework: collect only the data necessary to operate, verify and bill the service event. This aligns directly with HIPAA's "minimum necessary" standard in the US and with GDPR's data minimisation principle in the EU and Germany.

A clearly defined data controller (or, under HIPAA, business associate relationship), purpose, retention period, and access right for the beneficiary or their legal representative should be specified from the outset — structured through a Business Associate Agreement in the US and a data processing agreement under GDPR in Germany.

The important point is that data minimisation is not a future safeguard to be promised after deployment. It is a structural property of the service record itself.

Section 4 — The Economics of a Service Reconciliation Layer

4.1 From Per-Seat SaaS to Transactional Infrastructure

Traditional provider software typically relies on per-user, per-facility, or subscription-based pricing — a model designed for internal operational tools used by defined teams.

YouTime introduces a different unit of value: Service reconciliation as infrastructure, priced per monitored home-care visit.

Because pricing scales with the volume of home visits being reconciled rather than the number of software users, the model can extend across providers, payers, geographic territories, and populations without requiring a corresponding increase in software seats.

This places YouTime closer to other forms of transactional infrastructure — payment, identity, or verification networks — where value is generated at the transaction level rather than through user licensing.

4.2 The Economics of Risk Reconciliation vs. Operational Margins

Consider an illustrative €25 home-care visit.

The underlying economics of a visit include direct caregiver labor, employer costs, scheduling and administrative operations, facilities, and other provider overhead. The precise allocation varies by market, provider model, and contractual structure.

For illustration, a €3 reconciliation fee represents approximately 12% of a €25 monitored visit.

For a payer, that €3 fee on a €25 visit is a high-return risk-management decision, not an added cost:

- In the US (value-based care): making a missed or unreplaced visit visible in real time is what catches medication non-adherence and clinical deterioration early — before a treat-and-release ED visit (roughly \$700–\$2,000) escalates into the \$10,000–\$20,000 hospital readmission that a value-based payer ultimately absorbs.
- In Germany (Pflegeversicherung): independent reconciliation is what stops statutory care budgets under § 36 SGB XI from continuing to fund visits that were never actually rendered or were silently dropped.

Unlike purely digital verification networks, YouTime serves a population — home-care beneficiaries — for whom full self-service automation is not a realistic assumption. While a growing share of seniors are comfortable managing visits through a smartphone, a meaningful portion of the beneficiary base remains frail, isolated, less digitally autonomous, and will continue to rely on phone-based confirmation and support rather than an app alone.

This human-support layer is a structural cost of operating at the beneficiary level — not an inefficiency to be optimized away — and it is one of the reasons the per-visit fee reflects more than transaction processing: it reflects the cost of reliably reaching a vulnerable population, not just moving data between systems.

Who funds the infrastructure?

The natural economic buyer is the party responsible for the financial integrity of funded home-care services — typically Medicare Advantage plans, ACOs, MCOs, or Pflegekassen, depending on the market and contractual structure. The payer is not purchasing another workforce-management tool. It is purchasing an independent reconciliation layer that makes a previously unmeasurable exposure visible.

United States — Value-Based and Capitated Models

In the United States, this is particularly relevant under value-based, capitated, or downside-risk arrangements, where payers may bear financial consequences beyond the individual provider transaction. YouTime does not assume that every missed home-care visit produces a specific downstream medical cost. Instead, it makes the continuity failure itself measurable, *before* downstream utilization data (ED visits, readmissions, deterioration signals) may reveal it.

This shifts the payer’s decision from reactive medical cost management to proactive continuity assurance, a form of risk arbitrage familiar in financial-technology networks.

Germany — Reconciling Funded vs. Delivered Services

In Germany, the equivalent question is the reconciliation of funded ambulatory home-care services with the services actually delivered. Under §36 SGB XI, home-care benefits are provided as in-kind services, not cash allowances. YouTime adds a beneficiary-level reference that identifies requested home care visits that were delivered, missed or silently dropped, replaced or reshaped.

This gives Pflegekassen a continuity baseline that provider-centric systems cannot produce — enabling budget-integrity protection across fragmented agency operations.

4.3 Positioning: A Transaction-Level Risk-Reconciliation Model

YouTime’s value lies in reconciling the service event itself — the atomic unit of financial exposure in home care:

- What was requested.
- What was accepted.
- What was delivered.
- What was missed or silently dropped.
- What was replaced.

This creates a transaction-level reference for a service that otherwise passes through several operational systems, each with different purposes and incentives. The economic value comes from reducing uncertainty at the point where financial exposure originates — the moment a funded home-care visit is supposed to occur.

Beyond single events: continuity analytics

YouTime can also derive continuity indicators across multiple consecutive visits, such as: number of days without care and sequences of missed visits, enabling payers to detect gaps that accumulate over time, not just isolated anomalies.

- Payers gain an objective continuity datapoint for measurement, payment reconciliation, and risk management — at both the event and sequence level.
- Providers retain their existing operational and workforce systems.
- Beneficiaries gain a traceable record of whether the home care visits they requested actually occurred, including visibility into multi-day continuity gaps.

By anchoring reconciliation at both the transaction level and the sequence level, YouTime plays the same role as risk-reconciliation networks in financial technology.

4.4 Network Dynamics at Population Scale

As the number of monitored visits increases, the reconciliation layer can generate increasingly comprehensive visibility into service continuity across providers, territories, and payer populations.

Illustrative Market Scenario

At population scale, 800,000 monitored visits per day with a €3 per-visit reconciliation fee would represent approximately €876 million in annual transaction revenue:

$$800,000 \times 3 \times 365 = 876,000,000$$

This is an illustrative infrastructure scenario, not a market forecast or revenue projection. Its purpose is to demonstrate the scalability of a transaction-based model: a relatively small fee attached to each monitored home-care visit can support substantial infrastructure economics at national scale.

Scalability

The infrastructure is designed to remain lightweight and API-driven. Transaction volume can increase across providers and territories without requiring proportional expansion of operational teams.

The model therefore separates service-delivery operations from service-reconciliation infrastructure — allowing the reconciliation layer to scale across fragmented provider ecosystems while remaining independent of any single provider's workforce-management system.

Section 5 — Strategic Implications

5.1 Payers and Insurers

Real-time visibility into undelivered care; an objective, third-party basis for fraud, waste, and abuse (FWA) prevention; and a defensible path to reducing avoidable readmission-related costs and penalties.

5.2 Care Agencies

For agencies already acting in good faith, this is a benefit rather than a threat: automated, independent proof of service continuity, without operational friction or the burden of replacing existing systems. Provider systems measure the operation; YouTime measures the continuity of the requested service — the two are complementary, not competing.

5.3 Beneficiaries and Families

Transparent visibility into whether funded home visits are arriving as intended, including missed visits and replacement status.

Section 6 — Pilot Framework

Phase 1 — Baseline

Measure current visibility into:

- Requested visits
- Accepted visits
- Delivered visits
- Missed visits
- Replacements

Phase 2 — Reconciliation

Compare the independent, beneficiary-level record against:

- Provider schedules
- Provider visit records
- Provider billing

Phase 3 — Evaluation

The pilot is designed to answer one question:

“Does an independent beneficiary-level reference materially improve a payer's ability to measure and manage continuity of home care visits?”

About YouTime

YouTime builds the independent, beneficiary-level data layer for continuity of home care. The reconciliation model is technically ready and has been offered to pioneering French municipalities for field testing; the same architecture is directly reusable for the US and German markets with minimal adaptation. YouTime is now extending this approach to payer markets in the United States and Germany.

Payers interested in running the Phase 1 baseline assessment are invited to reach out directly.

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