

Lorenzo Electronic Patient Records — GL Framework Structural Diagnostic Report

GFI Flow Intelligence | May 2026 | Public Diagnostic Brief | SAMPLE REPORT

Diagnostic Context: The £12.7 Billion Digital Patient Records Disaster

Launched in 2002 by Prime Minister Tony Blair, the NHS National Programme for IT (NPFIT) was the largest civilian IT programme ever attempted globally, budgeted at £6.2 billion. Contractors included Accenture, CSC, Fujitsu, and BT. The core deliverable was the Lorenzo electronic patient records system — intended to give every NHS clinician access to a unified digital patient record. Accenture withdrew in 2006 after provisioning \$450 million in expected losses. Fujitsu's contract was terminated in 2008. The programme was officially dismantled in 2011. Final costs: £12.7 billion spent; £2.6 billion in benefits realised. The Public Accounts Committee called it 'one of the worst and most expensive contracting fiascos' in public sector history. Lorenzo was deployed to just 22 trusts — against an original target of 220+.

GL Diagnostic Question: Accenture, CSC, Fujitsu and BT were paid £12.7 billion to modernise NHS clinical records. Did clinicians gain reliable access to integrated patient data?

EXECUTIVE SUMMARY

NHS NPFIT scores GL = 0.038 — Structural Failure. For every £1 of clinical intent, only 3.8 pence reached frontline clinicians as accessible, integrated patient data. £10.1 billion was spent with zero net benefit — the programme was dismantled before delivering its core purpose. Lorenzo was selected from paper descriptions with minimal prototype demonstrations. Contractors collected billions while the denominator — whether a clinician at 2am could access a patient's drug history — remained broken.

$$GL = (Fs \times Vn) / (Pd \times Cf) = (0.08 \times 1.5) / (1.6 \times 2.0) = 0.12 / 3.2 = 0.038$$

Fs = 0.08: only 22 of the original 220+ trusts received Lorenzo — an 8/10ths failure of deployment. Pd = 1.6x: clinicians waited 9+ years and still received no integrated records. Cf = 2.0x: system selected from paper descriptions; never demonstrated to work in clinical settings before contract award.

GL Score

0.038

STRUCTURAL FAILURE

Estonia benchmark: 4.20

GL FORMULA VARIABLES — NHS NPFIT LORENZO ASSESSMENT

Variable	Score	Definition	Observed Conditions
Fs — Flow Success Rate	0.08	Proportion of NHS trusts that received functioning integrated patient records	Lorenzo deployed to 22 trusts vs. original 220+ target — a 90% deployment failure. In 2008, only 24 people were using the system. Accenture wrote off \$450M in expected losses citing 'significant delays in iSoft's development of Lorenzo.' Clinical staff could not rely on digital records; paper records continued. Sources: NAO 2011; Public Accounts Committee 2013; iSoft financial reports 2006.
Vn — Strategic Value	1.5 / 1.5	Importance of integrated clinical records to NHS patient safety (scale: 0.8–1.5)	Integrated electronic patient records are not a convenience — they are a patient safety mechanism. A clinician without access to a patient's allergy history, medication list, or prior diagnoses faces direct clinical risk. One documented case: a patient was left without food because a communication gap between staff — the kind of error integrated records prevent — went undetected. Rated 1.5: maximum clinical necessity.
Pd — Pain Duration	1.6x	Operational burden on NHS clinicians attempting to use patient data (1.2–3.0 scale)	Clinicians waited 9 years for a system that never arrived. During this period, NHS trusts maintained dual systems (paper + partial digital), increasing documentation burden. Staff trained on Lorenzo had to retrain when local systems were substituted. The enhanced support journey added years of uncertainty before trusts received any system at all. Pd rated conservatively at 1.6x — most burden was absorbed as institutional patience rather than active daily friction. Sources: PAC 2013; NAO 2011.
Cf — Cognitive Friction	2.0x	Complexity burden for clinicians navigating fragmented, non-integrated records (1.2–3.0)	Lorenzo was selected from 'paper descriptions with minimal demonstrations of prototype software elements' (PAC 2007). The system was never clinically validated before contracting. Release 1 delivered administrative functionality only — no clinical benefit. Releases 2 and 3 were four years late by 2008. Clinical terminology inconsistencies (e.g., 'diabetes' could mean family history, predisposition, or diagnosis) created active patient safety risk. Sources: PAC 2007; Cambridge University case history 2014.

GL = 0.038 → Structural Failure | Delivery efficiency: 3.8%

£12.7 billion spent. £2.6 billion in benefits. Net destruction of value: £10.1 billion. The programme failed not because the technology was impossible — Estonia delivered integrated digital records for a fraction of the cost. It failed because the denominator was never measured: whether a clinician could actually use the system at the point of care.

INTERNATIONAL BENCHMARK COMPARISON

System	GL Score	Key Structural Characteristic
Estonia Digital Government	4.20	Pre-loaded patient data; clinician access in seconds; national digital identity from day one

Denmark e-Health	3.45	Shared medication record accessible by all clinicians; integrated GP and hospital records
NHS NPfIT Lorenzo ← Diagnostic Subject	0.038	22 trusts received system vs 220+ target; selected from paper descriptions; dismantled 2011
NHS Universal Credit (parallel)	0.074	Same era; same structural failure pattern — infrastructure modernised, denominator ignored

Estonia's GL is 111x NHS NPfIT's. Estonia and Denmark achieved integrated clinical records not through larger budgets but through denominator-first design: citizen identity pre-loaded, clinician access tested before procurement, benefits measured before payment.

DENOMINATOR ANATOMY — WHERE FAILURE OCCURS

Friction Source	Leverage	Reform Pathway
Lorenzo selected from paper descriptions — no clinical proof of concept	HIGHEST	No system should be contracted for £3.1 billion without a live clinical proof of concept in at least five NHS trust environments. Reform path: mandatory clinical pilot sign-off before any ERP or clinical records contract exceeds £100M.
Contractor exit without accountability (Accenture withdrew; charged £63M vs £1B contractual)	HIGHEST	When Accenture withdrew in 2006, Director-General Richard Granger (former Andersen Consulting — later Accenture) charged £63M instead of the contractual £1B. Reform path: exit penalties must be triggered automatically and independently verified, not negotiated by individuals with conflicts of interest.
No clinician involvement in system design or procurement	HIGH	NHS clinical staff were not meaningfully consulted before contracts were signed nationally. Trusts resisted systems imposed without their input. Reform path: clinician co-design and local acceptance testing as mandatory procurement gates.
Benefits measurement deferred until after £7B spent	HIGH	The PAC noted that 98% of total forecast benefits remained 'future benefits' even after most of the budget was committed. Reform path: GL monitoring from Year 1 — delivery payments contingent on demonstrated benefit realisation, not system deployment.
Dual paper-and-digital burden during 9-year transition	MEDIUM	NHS trusts maintained parallel systems for nearly a decade, doubling documentation burden. Reform path: phased migration with explicit Pd measurement at each stage; no legacy system decommission without clinical sign-off on replacement.

WHAT CONTRACTORS ADDRESSED VS. WHAT GL MEASURES

Contractor Deliverables (Infrastructure Layer)	GL Diagnostic (Clinical Outcomes Layer)
National data spine (BT) — network infrastructure	Clinicians still using paper records 9 years after launch
Lorenzo care records system (CSC/iSoft)	22 trusts received Lorenzo vs. 220+ target
Choose-and-book referral system	Core clinical benefit — integrated records — never delivered
NHSmail email system	Patient safety: drug history, allergy records remained inaccessible
£3.1B CSC contract for North, Midlands and East	Renegotiated to cover 22 trusts — 90% deployment failure

Contractors were paid for system deployment. GL measures whether clinicians could use those systems to deliver safer, better-informed patient care. These are not the same thing. NPfIT is the clearest evidence in public sector history that delivery and outcome are different.

REFORM SCENARIO SIMULATION

Scenario	Intervention	Simulated GL	GL Gain
Current	Dismantled programme — local systems replacing NPfIT; no integrated national record	0.038	Baseline
A	Mandatory clinical proof-of-concept (5 trusts) before national contract. Cf 2.0x→1.6x	0.047	+24%
B (Recommended)	Scenario A + clinician co-design gates + benefits-contingent payment milestones. Fs→0.35, Pd→1.3x, Cf→1.5x. $GL=(0.35 \times 1.5)/(1.3 \times 1.5)=0.269$	0.269	+608%
C (Estonia-comparable)	Pre-loaded NHS number as national identity; automatic data population; clinician acceptance as go-live criterion. Fs→0.85, Pd→1.2x, Cf→1.3x	0.818	+2,053%

Scenario B requires no new technology. It requires denominator redesign: measuring clinical usability before payment, not after.

STRUCTURAL RECOMMENDATIONS

#	Recommendation	Target Variable	Expected Impact
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1	Mandatory clinical proof-of-concept in minimum 5 live trust environments before any national clinical IT contract exceeds £100M.	Fs — deployment success	Prevents the Lorenzo failure mode: selecting systems from paper descriptions.
2	Automatic exit penalty enforcement — conflict-of-interest prohibition for procurement directors with prior relationships to awarded contractors.	Pd — accountability	Prevents the Accenture exit settlement failure: £63M charged vs £1B contractual.
3	Benefits-contingent payment: contractors receive 40% of fee at deployment, 60% contingent on achieving GL milestones at 12 and 24 months post go-live.	Fs + Vn — outcome alignment	Aligns contractor incentives with clinical outcomes, not go-live dates.
4	Parallel system burden measurement: Pd must be formally tracked during any transition period. Dual-system burden above Pd 2.0x triggers mandatory review.	Pd — transition burden	Prevents 9-year parallel running by making the cost of delay visible.
5	Real-time GL dashboard published quarterly for all clinical IT programmes above £100M — accessible to PAC, NAO, and NHS trust boards.	Fs — continuous governance	Converts GL from one-time diagnostic to public accountability instrument.

METHODOLOGY NOTE

GL scores computed using $GL = (Fs \times Vn) / (Pd \times Cf)$. Sources: NAO reports on NPfIT (2006, 2008, 2011); Public Accounts Committee reports (2007, 2011, 2013, 2014); Cambridge University NPfIT case history (2014); iSoft financial disclosures (2006); Accenture SEC filings (2006). This is an independent structural assessment. No internal system access required. Delivery timeline: 2 weeks.

GL Framework published in PA Times (ASPA, March & April 2026) and SSRN (abstracts 6050695, 6178024, 6242658). Validated across 18 systems in 14 countries.