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LAGOS CITY TWIN / HEALTH

Health

Domain Guide

Move from a synthetic resident to care encounters, facilities and the clinical context included in the published sample.

City	Lagos
Coverage	Public sample available
List price	$9,995 USD - standalone domain
Guide edition	Striped Donkey V5.89 - 7 September 2026

Use this guide

Read the documented coverage and limitations alongside the published sample and release evidence. Model counts and sample distributions describe their stated source and period. The final accepted order specifies licensed scope, usage rights, duration and delivery.

Useful questions

- Inspect visits and facility context
- Compare encounter and diagnosis fields
- Review longitudinal coverage and clinical limits

Scope and limitations

No synthetic citizen corresponds to a real person, and generated health histories should not be interpreted as reconstructed medical records.

Older health evidence is substantially less granular for some diseases, periods and geographies - e.g. 1920s Lagos plague figures rely on a single colonial-era report.

Some historical disease counts and epidemic evidence are available nationally rather than at Lagos-specific resolution. Those values are used as calibration evidence, not presented as direct Lagos observations.

Unless explicitly modeled via DiseaseRelationship, FCTE does not imply clinical relationship, comorbidity or disease progression merely because multiple conditions occur within the same synthetic population.

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01 How Health fits the City Twin.

FCTE models disease, healthcare access, facilities, visits and population health within the same synthetic city where people live, work, travel, age and experience historical events.

Health records remain connected to the citizens, households, geography, insurance and other city systems that shape healthcare demand.

Lagos City Twin™ · 1940-2026

02 Known and possible relationships.

Connections follow the published domain scope. Optional, contextual and planned relationships retain their stated limits below.

Domain or context	Relationship and published scope
Demographics	Patient or resident identity, lifespan, sex and ward provide care context. Dated visits must respect the resident lifespan.
Facilities and geography	Visits carry facility and area context where supplied; the same resident can have repeated visits.
Business	Facility-to-business context is optional, not an identity link on every care record.
Insurance	Care eligibility and claims can be analysed alongside health events; the public guide does not expose every physical linkage.
Transport	Mobility incidents can be compared with injury and diagnosis context. This does not assert a direct trip-to-visit join.
Water	The documented area health-profile field is nullable and is not populated by a Water-domain generation model in the cited guide.

Supporting links

Demographics

Insurance

Water

Business

Transport

03 From population health to healthcare use.

FCTE Health represents the health conditions, disease environment, healthcare infrastructure and utilization patterns needed to model healthcare within the wider city.

Health characteristics and risk patterns tied to demographic and geographic context - ward-level socioeconomic health profiles, blood group, chronic condition registries.

Disease definitions, ICD-10 diagnoses, prevalence and temporal behavior - including disease-specific weighting that changes by era and ward.

Hospitals, clinics and other modeled points of care - facility level, ownership, bed capacity and clinical staffing.

Synthetic utilization generated against citizens and healthcare infrastructure - OPD, IPD, emergency, maternity and immunization encounters.

Documented disease events that alter health conditions and healthcare demand during affected periods - 37 real, cited events across Lagos.

Relationships between citizens, geography, healthcare availability and coverage - including insurance/eligibility channel mix.

Synthetic, not clinical: FCTE Health does not reproduce real patient records, diagnoses or medical histories. It generates statistically grounded synthetic health relationships from aggregate evidence and documented modeling rules.

04 Health changes as the citizen does.

Health is not a single status field attached to a citizen - it moves through the same lifecycle stages every other domain does.

Health events remain temporally constrained by the citizen's demographic history - healthcare activity cannot occur before the citizen exists or after applicable lifecycle boundaries. Four certification checks enforce this directly: certification check (registration ≥ birth), certification check (visit ≥ birth), certification check (visit ≥ registration) and certification check (visit ≤ death) - all four caught real, large-scale violations (up to ~72% of rows) before being fixed, and all four pass live today.

A related but distinct boundary sits at the other end of the timeline: a record that was valid when generated but drifts past the platform's own in-universe "today" (NowDate). A 2026-08-05 audit traced a four-link chain of exactly this - future-dated Patient cascading into Visit, Condition, Prescription and Claim - back to a single unbounded date window, fixed the generation model, and retroactively corrected 1,096,381 live rows across Lagos. Three new checks now close this permanently: certification check , certification check , certification check . See the full audit →

Supporting links

the full audit →

05 The city remembers its outbreaks.

Select a marker below to see the underlying evidence.

37 documented events shown as 4 markers per city above - the full calendar (83 year-weighted rows, including polio, HIV, typhoid, H1N1, TB and smallpox eras) is available via the source catalogue.

Explore Historical Health Events →

Supporting links

Explore Historical Health Events →

06 Historical events aren't decorations.

Historical health events alter population-level enrollment and diagnosis tendencies during documented windows. Certification verifies directional historical response at release level; exact coefficients, probability adjustments and internal methods are intentionally withheld.

Historical health events alter population-level enrollment and diagnosis tendencies during documented windows. Certification verifies directional historical response at release level; exact coefficients, probability adjustments and internal methods are intentionally withheld.

The event modifies generated healthcare utilization according to documented FCTE rules - it does not assert an exact real-world causal visit count.

07 Evidence becomes synthetic health activity.

Health generation follows a controlled clinical lifecycle from population and geography through facility access, patient context, visits, diagnoses and downstream care records. Exact phase ordering, per-condition generation models, probabilities and orchestration are not published.

Directly supported by health statistics, surveillance or published evidence - e.g. WHO Disease Outbreak News, NCDC situation reports.

Calculated from observed health evidence - e.g. living-population baselines from Citizen/Death cohort data.

Disease burden, care access, outbreak timing and population-health distributions are calibrated to cited health evidence and validated at release level. Exact weights and thresholds remain controlled.

Individual synthetic assignments are generated under controlled domain rules. Exact sampling, assignment order and parameterization are not published.

View Health Generation Methodology →

Surveys, public-health reports and demographic health statistics.

Surveillance reports, outbreak records and epidemiological publications.

Health facility, infrastructure and geographic sources.

Official and peer-reviewed evidence for documented outbreaks and health shocks.

Open Health Source Catalogue →

Supporting links

View Health Generation Methodology →

Open Health Source Catalogue →

08 From city health conditions to one citizen's record.

Representative synthetic Lagos care records illustrate the public longitudinal model. Physical source IDs, joins and exact extraction path are intentionally withheld.

Direct synthetic records from the current City Twin™ release. No record represents a real patient.

Explore Health Data →

Public entity family	Represents	Disclosure boundary
Population health context	Area and resident health-profile context	Exact risk weights and physical fields are controlled
Care facilities	Facility type, geography and availability context	Physical facility identifiers are controlled
Care encounters	Visit, treatment and utilization context through time	Exact event-generation mechanics and fields are controlled
Disease & historical context	Disease burden and documented health-event context	Exact temporal weights and propagation mechanics are controlled

Table columns 1, 2, 3, 4, 5 (first column repeated)

FacilityId	FacilityName	WardId	Level	Type

Table columns 1, 6, 7 (first column repeated)

FacilityId	Ownership	Beds

Supporting links

Explore Health Data →

09 Does the synthetic health system resemble the city?

Three realism dimensions are defined, sourced and now run against a fully populated Patient/Visit base in Lagos - not a placeholder pass.

The certification WARN has a known, disclosed cause: visit-history volume is intentionally bounded in this release, which suppresses the per-capita rate below the cited benchmark band. The exact sampling rate and volume-control parameter are retained in controlled technical documentation.

Open Health Realism Report →

A full 21-check structural battery plus a 12-check realism pass run live against the Lagos release. All 21 structural checks pass in Lagos - the battery has grown from 19 to 21 checks since this page was last refreshed, with no new violations on either addition.

Lagos: 8 PASS / 0 FAIL / 3 WARN / 1 INFO - Lagos additionally shows certification check (population coverage 21.16%, below the 50-85% expected band) and certification check (eligibility channel mix) as WARN; every WARN/INFO in Lagos is a disclosed, documented cause, not an open defect.

Explore Every Health Check →

• certification check - Facilities populated (≥50) - 1,252 / 2,303

• certification check - One patient record per citizen

• certification check - Prescription Quantity/DurationDays > 0

• certification check - BedOccupancy never exceeds TotalBeds

• certification check - Visit dates within SeedEpoch-NowDate

• certification check - patient registration date ≥ resident date of birth

• certification check - visit date ≥ resident date of birth

• certification check - visit date ≥ patient registration date

• certification check - Discharge date ≥ Admission date

• certification check - Maternity delivery within valid window

• certification check - Mother age at delivery in [12,55] - 89,820 / 170,827 records

• certification check - visit date ≤ own citizen DeathDate

- certification check - patient/resident reference integrity
- certification check - clinical-staff/resident reference integrity
- certification check - Every citizen ward has a facility
- certification check - Health foundation ready
- certification check - condition-resolution date never a phantom future resolution
- certification check - prescription timestamp within 7 days of NowDate
- certification check - claim submission date within 7 days of NowDate

Supporting links

Open Health Realism Report →

Explore Every Health Check →

10 Synthetic health data has boundaries.

No synthetic citizen corresponds to a real person, and generated health histories should not be interpreted as reconstructed medical records.

Older health evidence is substantially less granular for some diseases, periods and geographies - e.g. 1920s Lagos plague figures rely on a single colonial-era report.

Some historical disease counts and epidemic evidence are available nationally rather than at Lagos-specific resolution. Those values are used as calibration evidence, not presented as direct Lagos observations.

Unless explicitly modeled via DiseaseRelationship, FCTE does not imply clinical relationship, comorbidity or disease progression merely because multiple conditions occur within the same synthetic population.

Informal, unreported and historically undocumented healthcare use is not directly observable. Visit generation therefore samples a controlled share of the eligible population rather than pretending to represent a universal registry (certification check). The sampling rate is a disclosed calibration choice and remains subject to realism review.

The Diagnosis phase's ward-affluence disease-risk weighting uses a citizen's current ward for their entire visit history rather than the period-appropriate historical ward the Visit phase already threads through elsewhere. Accepted as a documented limitation rather than queued for remediation, the same disposition already applied to the analogous Transport longitudinal-matching finding (certification check).

Lagos's Patient population currently covers 21.16% of citizens (certification check), below the 50-85% band the eligibility-gated model targets, and its four eligibility channels (Insurance, MaternalCare, ChildImmunization, IllnessEncounter) are not yet evenly balanced (certification check). Both are disclosed, tracked gaps in the underlying eligibility calibration, not a data-integrity defect - every generated Patient row is still internally consistent.

View All Health Limitations →

Supporting links

View All Health Limitations →

11 Health gets stronger with every release.

A transparent record of what changed, what was verified, and how the synthetic health system improved over time.

Traced and corrected a future-dating issue affecting patient registration, visits, conditions, prescriptions and claims - 1,096,381 records corrected across Lagos. Three new checks added to catch this permanently. Full audit →

Removed unnecessary performance restrictions from record generation, Lagos, with no service disruption.

Performance improvement to claims processing (the largest single cost in data generation, cut by roughly two-thirds) and a diagnosis-calculation restructure, independently verified against 5,000 real visits with zero discrepancies.

Closed a performance issue that had stalled data generation for nearly 15 hours, by adding missing indexes across four clinical records.

Fixed a patient-record generation crash affecting citizens with multiple household history entries; verified against the real failing case.

Fixed an error-handling gap that had been masking the true cause of a release run-generation failure behind a generic error message.

Standardized health-domain deployment release processes for consistency across cities.

Platform-wide scheduling reorganization to reduce cross-domain generation risk.

Added enrollment-year weighting to patient eligibility, driven by real population and historical-event data, per city and year.

Supporting links

Full change log →

Full audit →

View Full Health Change Log →

12 From an outbreak to one synthetic healthcare visit.

A documented cholera outbreak exists in DiseaseEvent - 324 reported, 9 confirmed, 15 deaths, cited to NCDC's 2024 Situation Reports.

Lagos citizens alive during Jun-Dec 2024 become eligible via the HistoricalDiseaseEvent channel in PatientEligibility.

Male, DOB 1984-10-27 - a confirmed A00 (cholera) diagnosis on a real, currently-live Visit row, dated inside the documented 6 Jun - 31 Dec 2024 outbreak window.

The diagnosis, visit and patient records above are live in Lagos today - Health generation certified 21/21 structural PASS.

Available as Standalone Domain · Multi-Domain Bundle · Full City Twin™

Supporting links

Explore This Record →

View the analysis example →

See the Evidence →

Review licensing & delivery details →

View Pricing & Licensing →

Browse Health Data →

Explore Multi-Domain Access →