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Forum on Harnessing Artificial Intelligence for HeAlth Equity

25-26 March 2026

Online and In-Person, ADB Headquarters, Manila, Philippines

Ministry of Health
of the Republic of Uzbekistan

State Health Insurance Fund
of the Republic of Uzbekistan

Health Financing & AI in Uzbekistan: Supporting Fair Coverage and Protection

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State Health Insurance Fund

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Uzbekistan: demographics & health profile

- **Population**: ~38 million (2025 est.)
- **Total area**: ~450 thousand km²
- **Urban vs rural**: ~50/50%
- **Life expectancy**: 75.1 (all), 72.5 (male), 76.9 (female) (2024)
- **Maternal mortality ratio**: 14,8 per 100,000 live births (2024)
- **Infant mortality rate**: 9 per 1,000 live births (2024)
- **Health insurance coverage**: ~100% (pilot regions), nationwide by the end of 2026

Source: National Statistics Committee of the Republic of Uzbekistan

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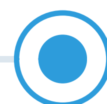
Key milestones of the health financing (& AI) reform

2018



Comprehensive reform agenda

Health financing and PHC transformation put at the core of system reform (PD-5590 & other normative acts).

Universal Health Coverage (UHC)

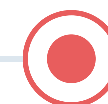
2020

Syrdarya pilot + SHIF

Strategic purchasing agency established; contracting and IT solutions began in pilot implementation (PR-4890).

State Health Insurance Fund

2024

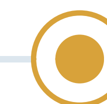


Scaling up the reform

Gradual expansion of the reform; medicines reimbursement program revised; national AI strategy approved (PR-311; PR-358; CMR-619).

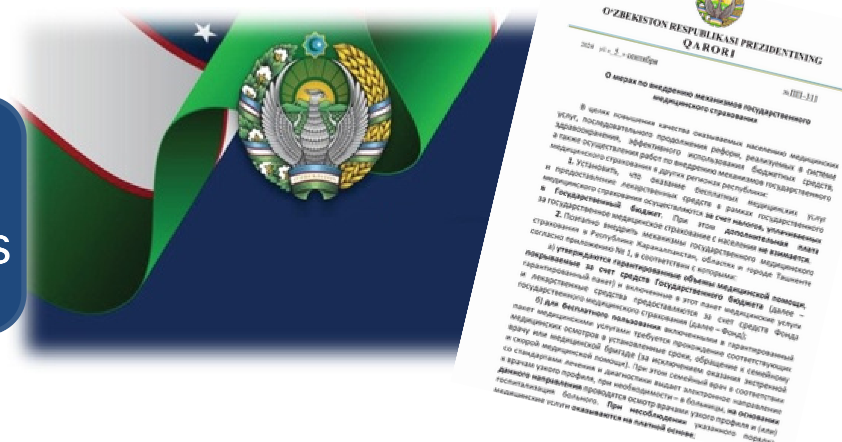
Presidential & Governmental acts

2025-2026



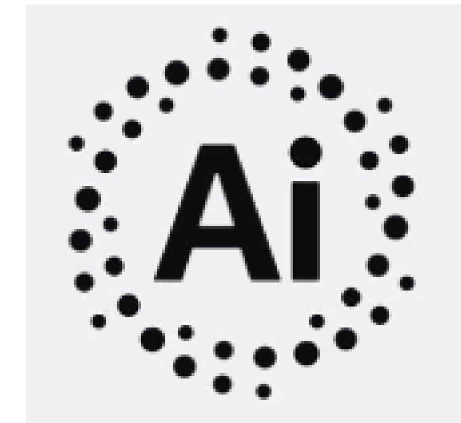
Consolidation of results and improvement

Nationwide roll-out; state-guaranteed package revised, but real cost and payment rules still leave gaps; regulation of the use of AI (CMR-382; Law-1115).



Resolution of the President of the Republic of Uzbekistan No. PR-358/2024
“On the approval of the **Strategy for the Development of AI Technologies until 2030**”

- **Healthcare** named as a priority sector for AI deployment and service efficiency.
- Focus on implementation of AI projects aimed at **predicting, diagnosing, and identifying treatment** methods for diseases.
- **Analysis** of drug demand, production volumes, and financial information.



Law of the Republic of Uzbekistan No. 1115/2026
Regulation of relations arising from the **use of Artificial Intelligence**

- Information resources created using AI and information systems operating based on AI technologies **must not harm** a person, his life, health, freedom, honour, dignity and other inalienable rights.
- When making legally significant decisions related to **human rights and freedoms**, one cannot rely solely on the conclusions of information resources created using AI and information systems operating based on AI technologies";
- **Unlawful processing of personal** data using AI technologies, their dissemination in the media, telecommunications networks, or the Internet, are considered administrative offenses and are punishable by a fine.

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Aspects of the state health insurance implementation

- **General budget funding** that ensures that all citizens, including informal workers and vulnerable groups, are covered regardless of their employment status.

- **Coverage of the population with healthcare services:**
  - ~100% of the republic's population is covered by SHI.
  - The population has access to free health services within the ***state guaranteed package***.
  - Specialised treatment is provided free of charge upon referral from a family doctor.

- **Purchase of medical services:**
  - Negotiation & conclusion of contracts between SHIF and healthcare providers.
  - Use of new payment methods (per capita in PHC, DRG etc.).

- **Digitalization:**
  - Implementation of medical information systems.
  - Electronic referral & electronic prescription systems.

The core policy challenge

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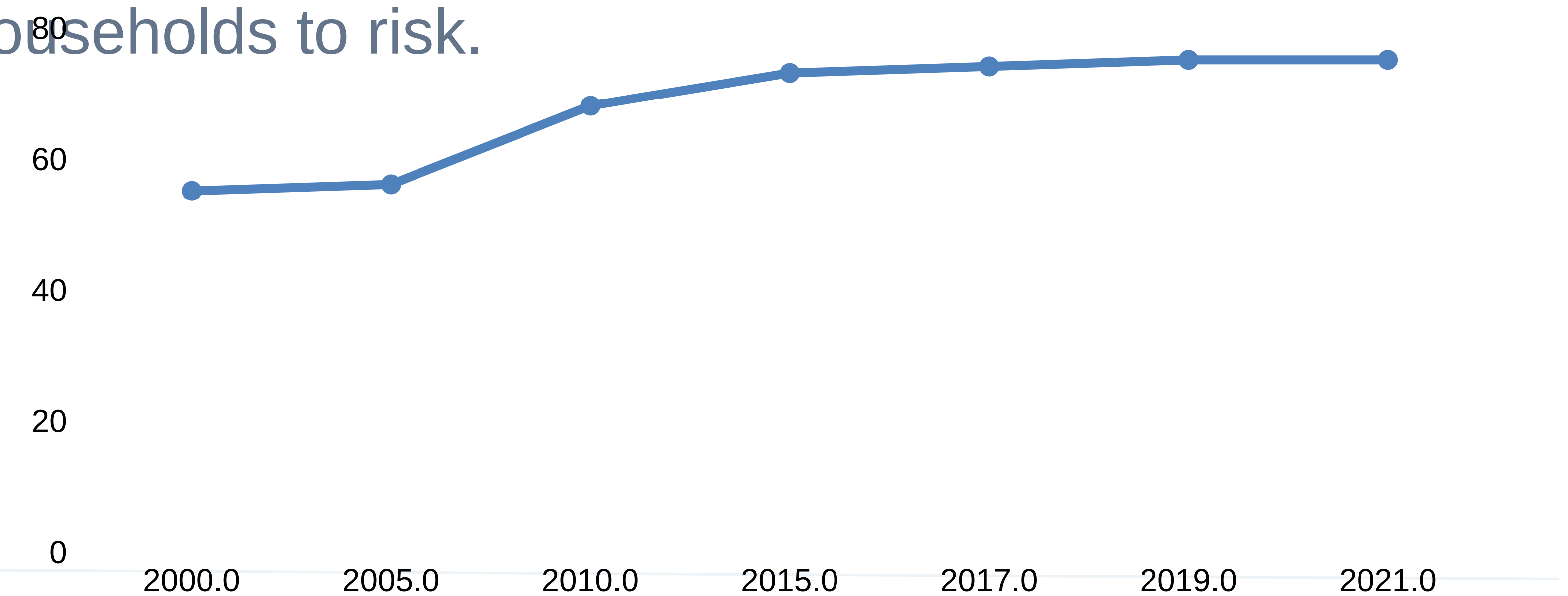
Coverage has improved, but paying for care still exposes many households to risk.

75 / 100

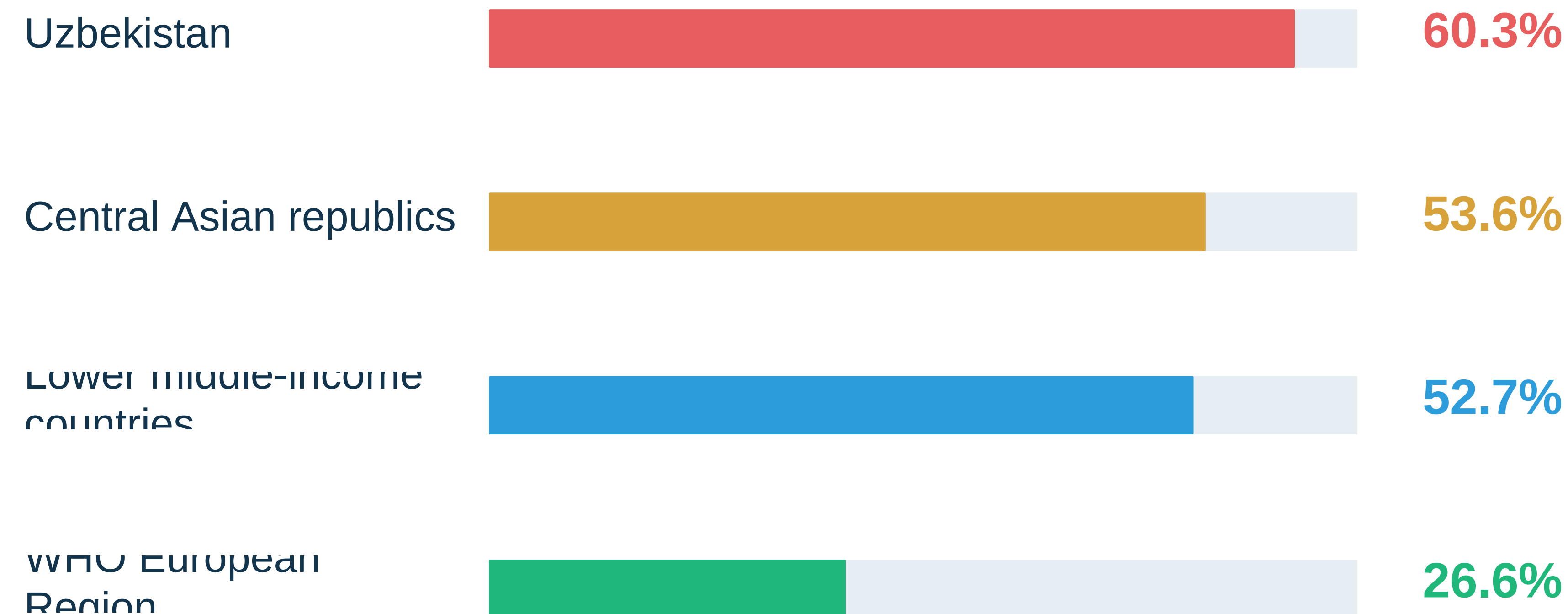
UHC service coverage index (SDG 3.8.1) in 2021

Up from 55 in 2000

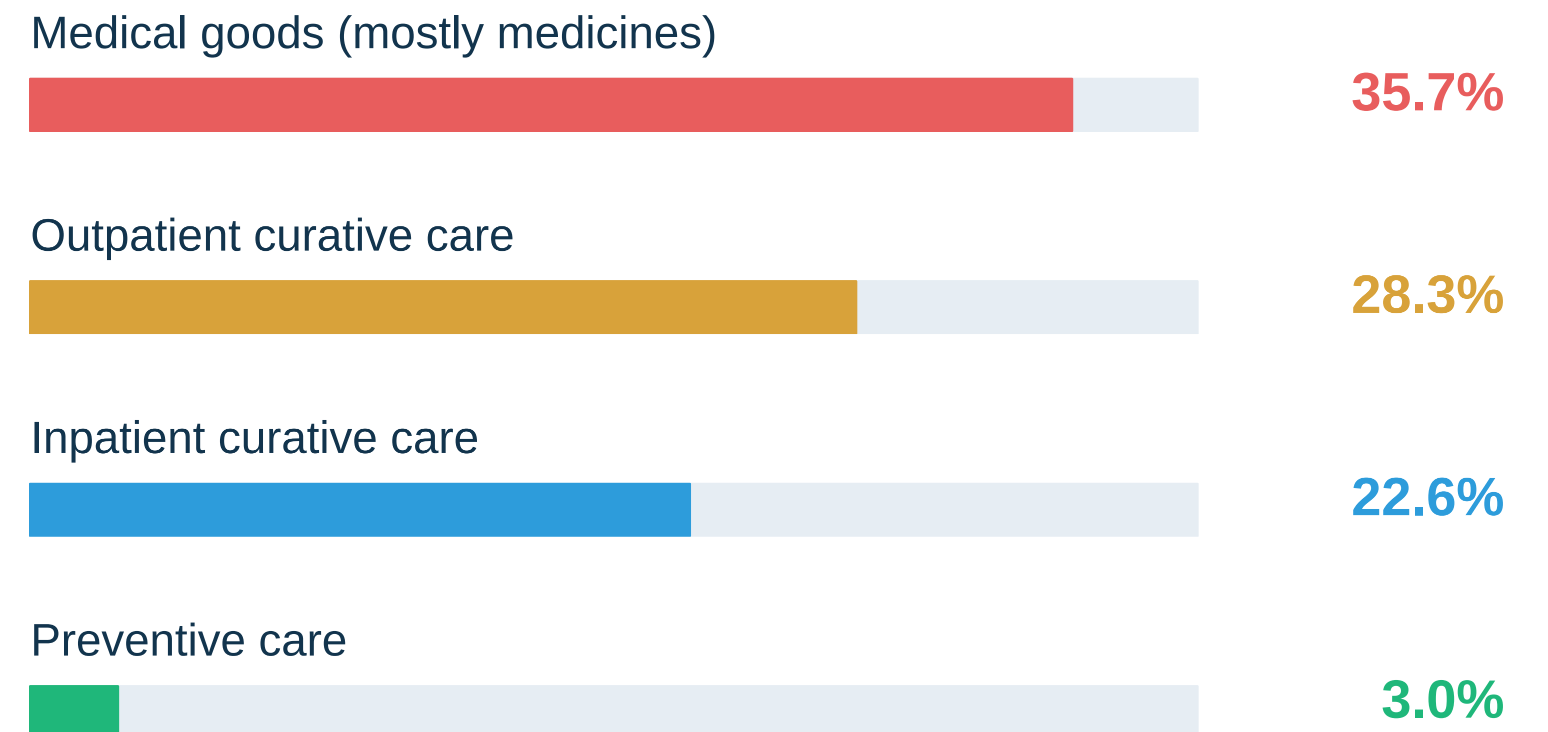


60.3%

Out-of-pocket share of health spending in 2021



Where health spending goes (2019)



Only 22% of medicines prescribed in outpatient care are funded publicly (WHO 2023)

The implication: the next phase is not only more services, but better financial protection — especially for medicines, outpatient care, and rural access.

Medicines reimbursement programme

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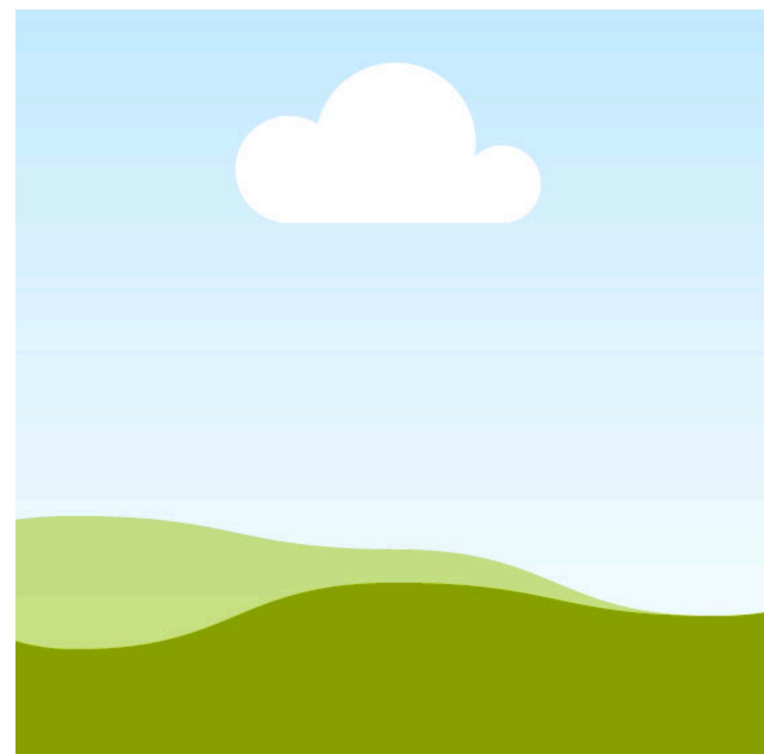
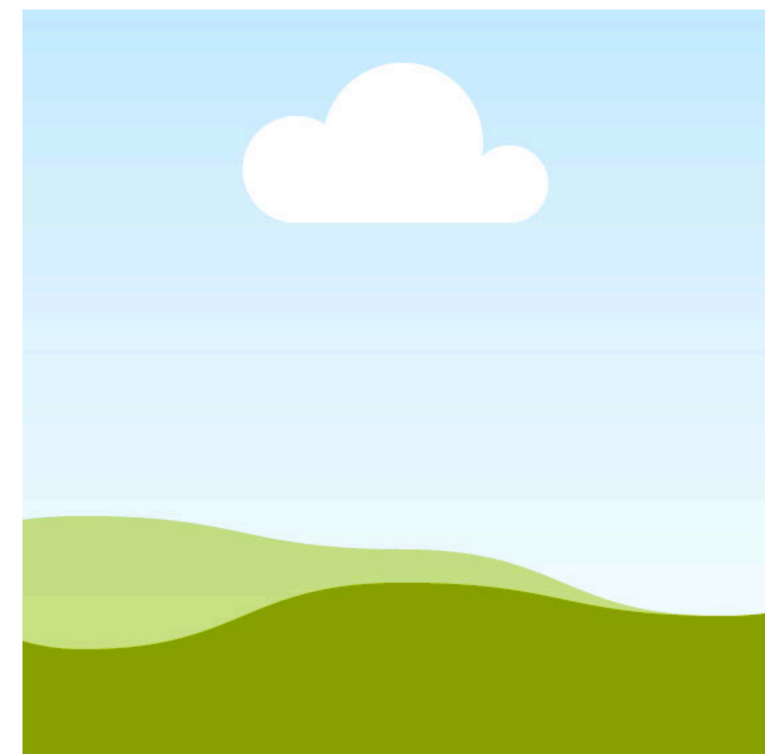
- Mechanism for protecting the population and ensuring the availability of affordable medicines
- Introduced in 2022 (11 INNs), extended to 28 INN in 2024
- Direct reimbursement from SHIF to pharmacies
- e-Prescription & invoicing system
- Based on Essential Medicines List (EML)





Planned programme extension, adding 5-10 INNs every year, based on modern protocols & evidence

Public spending on health & burden on population

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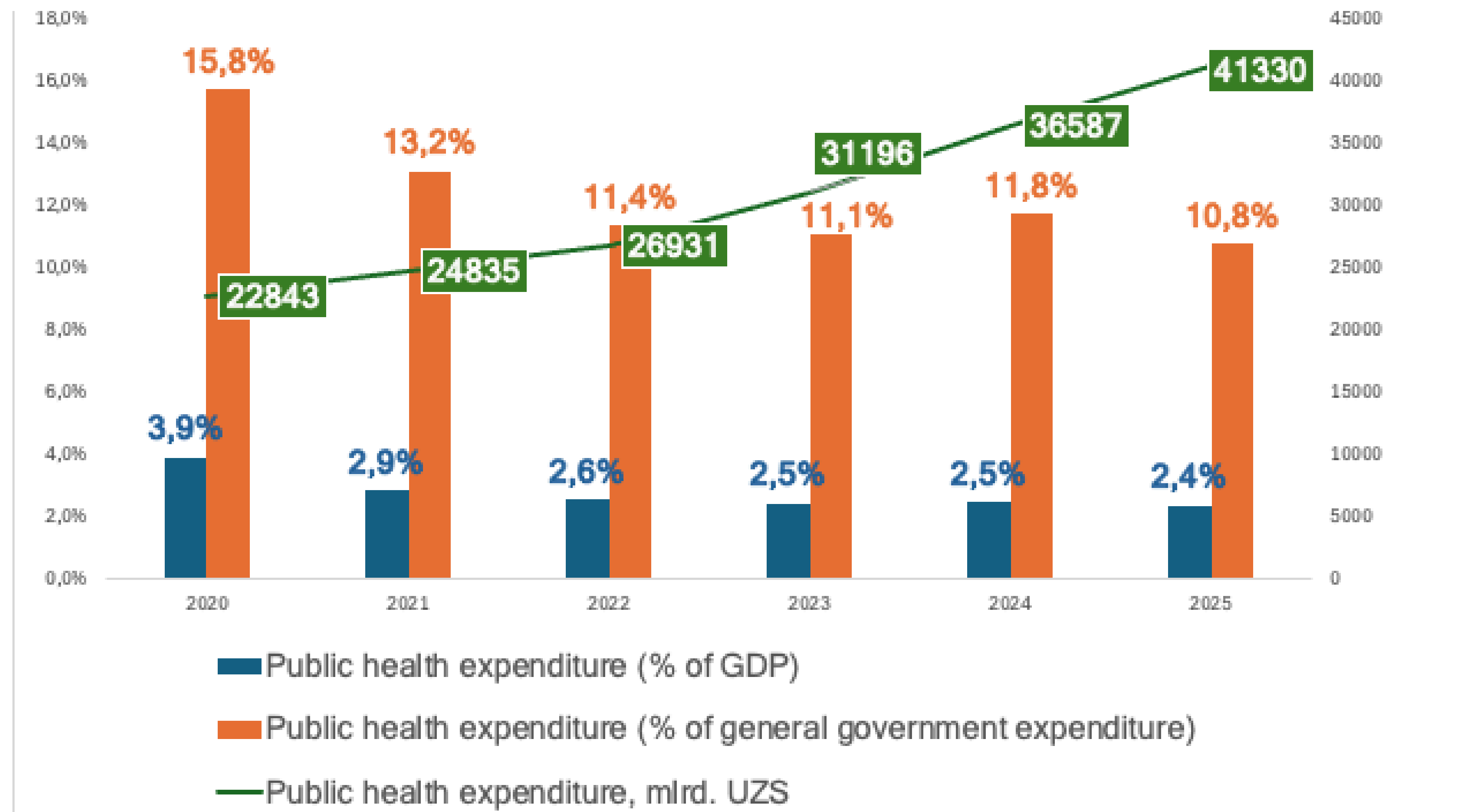
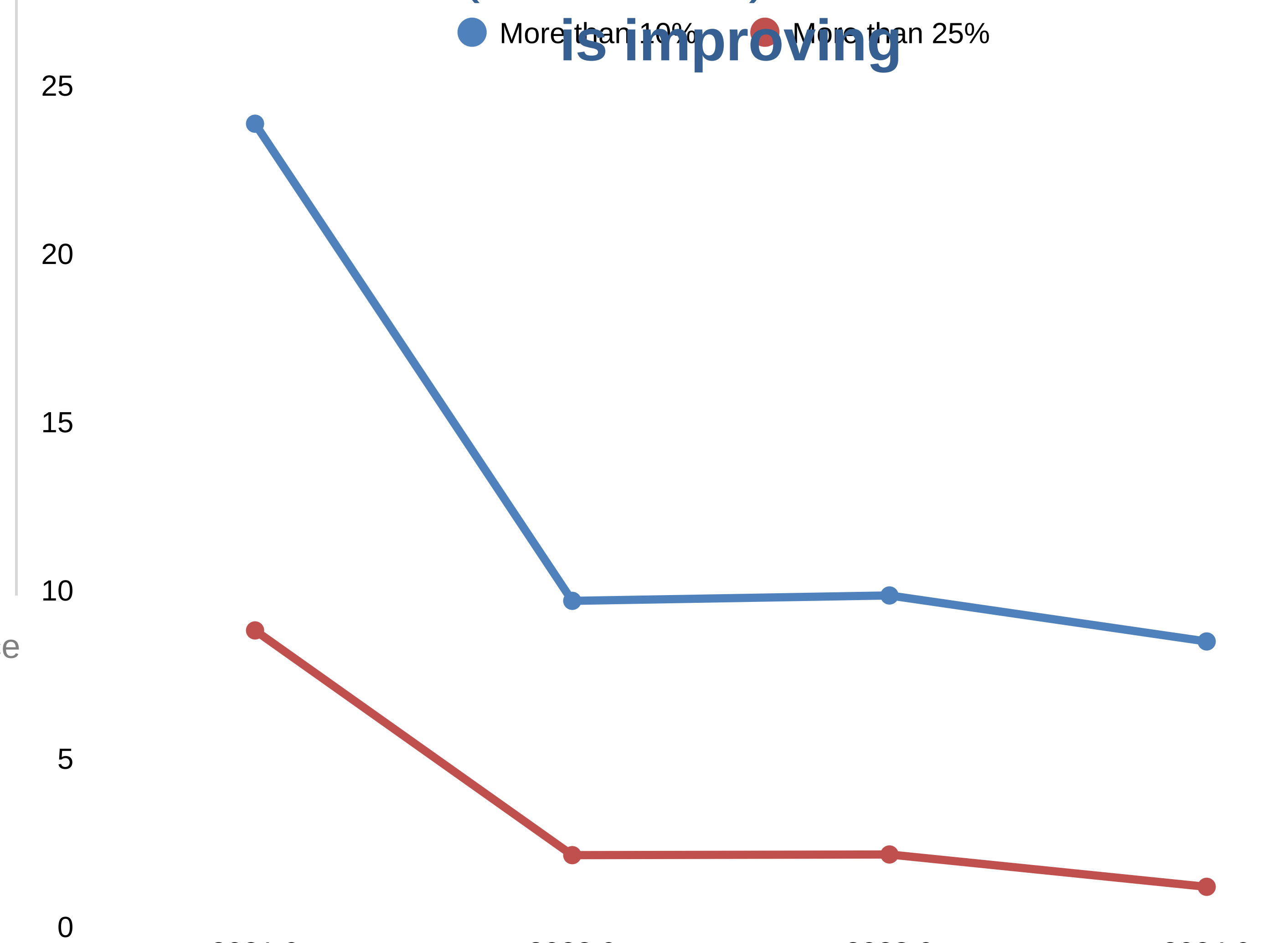


Source: Ministry of Economy and Finance

Proportion of population with large household expenditures on health as a share of total household expenditure (**SDG 3.8.2**) indicator **is improving**



Source: National Statistics Committee of the Republic of Uzbekistan

5%

Public health expenditure (as % of GDP) by 2030

Strategy “Uzbekistan 2030” (Presidential Decree No. 21/2026)

Information system architecture

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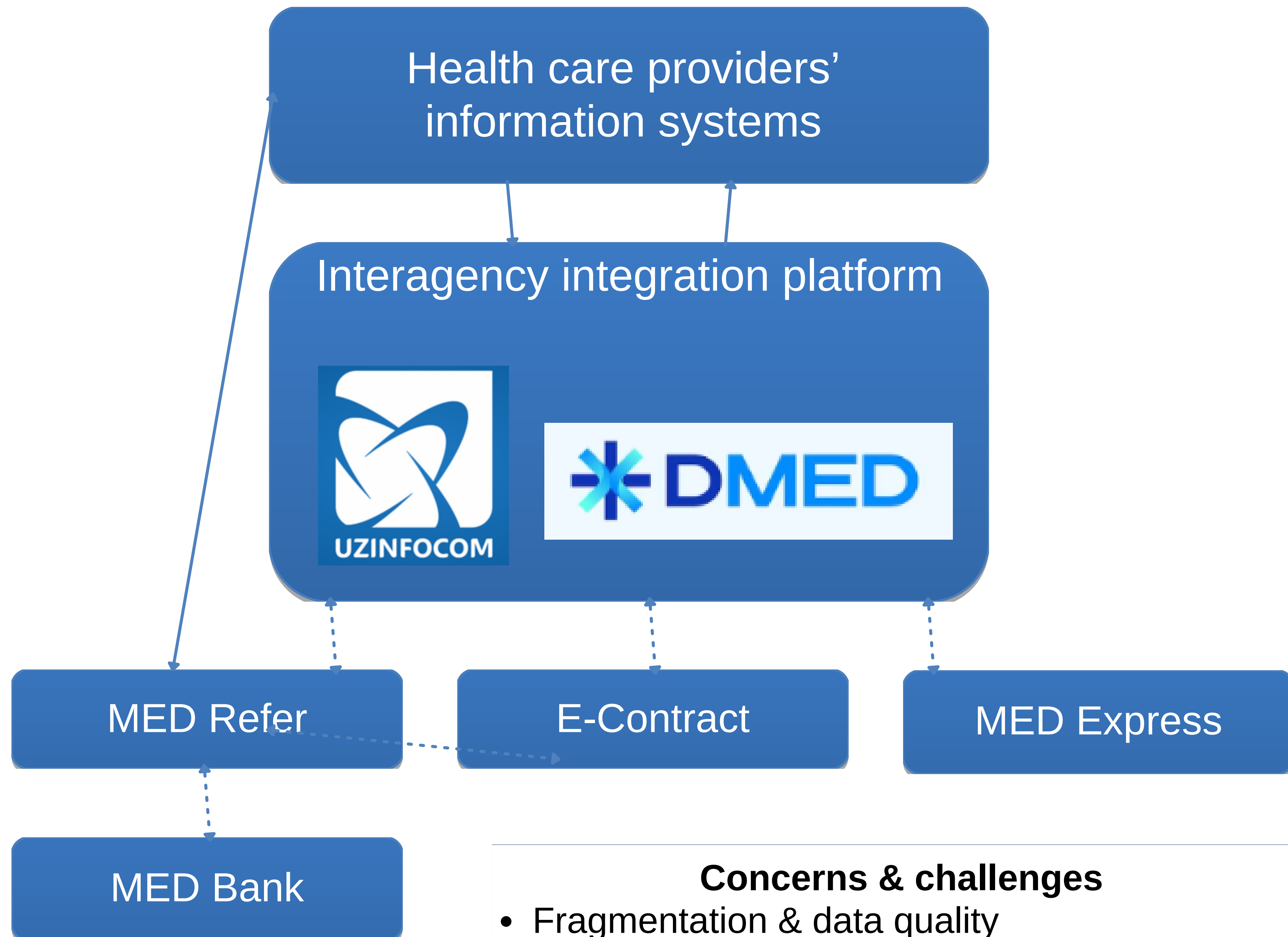
Current

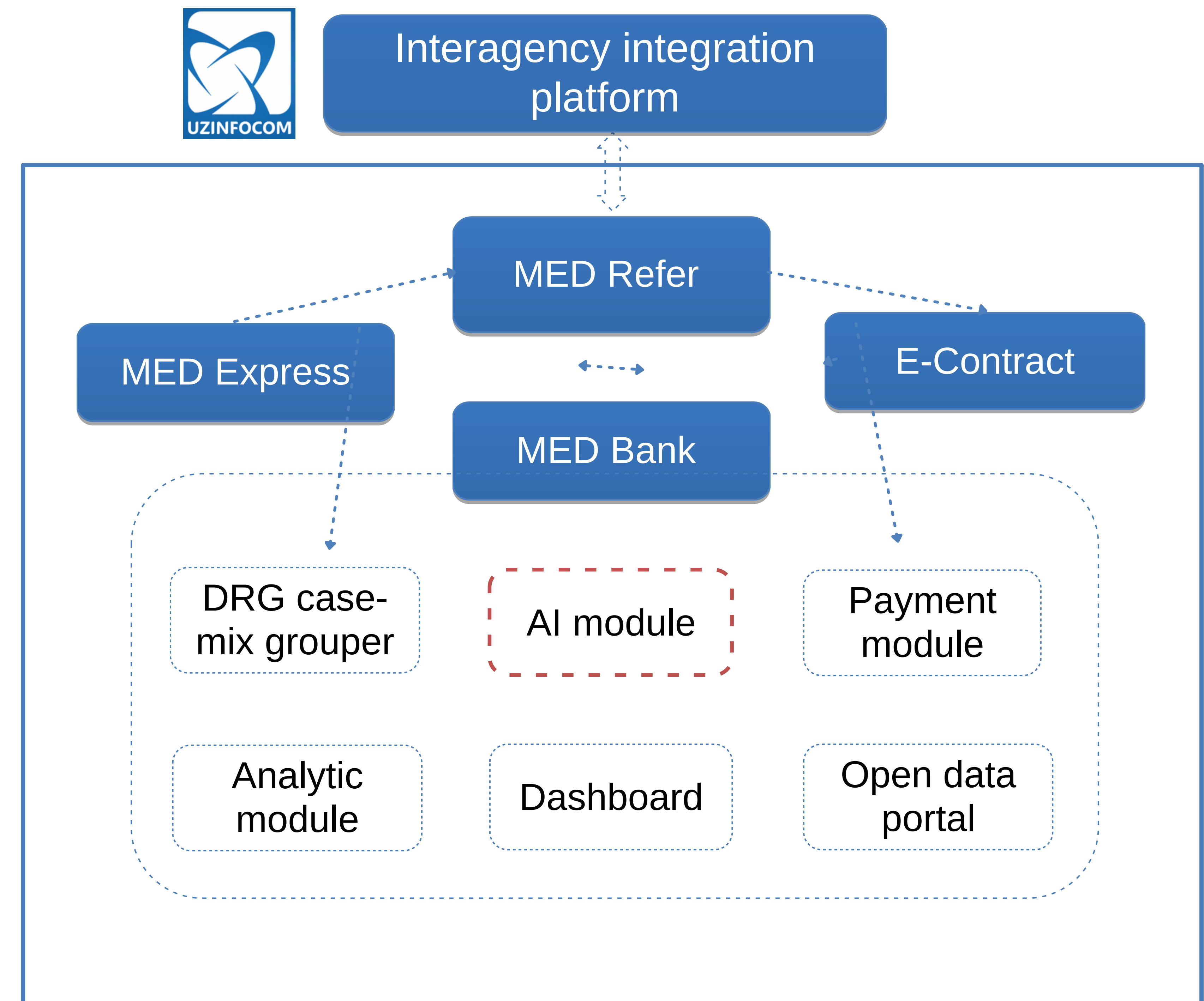


Concerns & challenges

- Fragmentation & data quality
- Interoperability still developing
- Trust and acceptance among providers
- Funding for digital transformation

Planned

SHIF digital information ecosystem



Potential areas for AI use

Digital foundations already exist inside SHIF

MED Bank

Enrollment, insured population profiles, and analytics
AI value: duplicate detection, risk segmentation, utilization forecasting

DMED IS

Prescription reimbursement and medicine expenditure tracking
AI value: anomaly detection, adherence patterns, drug budget forecasting

State Health Insurance Fund of the Republic of Uzbekistan

Purchasing, claims, referrals, medicines

MED Express

Clinical records and episodes of care, including the future DRG environment
AI value: coding support, claim review, severity and cost prediction

MED Refer + e-Contract

Referral evidence and provider contracting workflows
AI value: referral appropriateness review and smarter purchasing decisions

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DRG-based hospital payment reform: where AI can add value

Design

Improve coding quality and grouper validation through AI-assisted audit of diagnoses, procedures, and discharge summaries.
Support cost analysis by flagging outliers, missing cost items, and unusual length-of-stay patterns before DRG weights are set/updated.

Implementation

Use predictive analytics for shadow billing, hospital impact simulation, and identification of facilities at risk from tariff changes.
Prioritize training and technical support where documentation quality and data completeness are weakest.

Control

Detect upcoding, duplicate claims, gaming of complications/comorbidities, and abnormal referral or readmission patterns.
Pair all alerts with human review, appeal routes, and transparent audit rules to protect providers and patients.

For Uzbekistan, DRG-based system is a strategic purchasing priority. The safest entry point for AI is decision support around coding, costing, simulation, and fraud analytics, introduced gradually alongside regulatory safeguards and provider dialogue.

AI implementation should follow a staged pathway

1 Assessment & planning

Review coding quality, completeness, and interoperability across existing IS, and data

Prioritize 2–3 high-value use cases: inpatient claims / DRG support, fraud analytics, and medicine reimbursement analytics

2 Pilot

Start in a manageable setting such as Syrdarya with selected hospitals and real claims volumes

Track adjudication time, coding consistency, fraud flags, and provider feedback before wider rollout

3 Scale-up

Integrate models into contracting, budgeting, and claims workflows with retraining and monitoring

Use open standards, role-based access, and institutional ownership inside SHIF and partner agencies

Cross-cutting requirements

Data protection, explainability, procurement against open standards, and internal SHIF capacity for AI oversight are prerequisites rather than add-ons.

Guardrails: fairness, trust, and governance

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Risk	Design response	What it means in practice
Bias or exclusion	Audit by oblast, rural/urban, sex, and poverty proxy	Never let a model auto-deny coverage, medicine, or referral access; use human review and appeals.
Weak data quality	Pilot on a minimum dataset and back-check against paper records	Because paper and digital records still run in parallel, begin with narrow use cases and a manual override
Opaque decisions	Require explainable signals and logged justification	Any recommendation that affects cost or access should be visible to clinicians, purchasers, and supervisors.
Privacy risk	Use role-based access, minimization, and audit trails	Financial and clinical data need separate permissions, with clear stewardship inside government.
Vendor lock-in	Procure against open standards and interoperability	Systems should plug into SHIF and e-health modules, not create a second disconnected stack.

Good governance is not a side issue. In this context, it is what makes AI usable at a

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AI should help Uzbekistan pay better for health — not ask patients to pay more

Fairer

Use AI to widen effective coverage, identify hardship risk, and make entitlements easier to use.

Smarter

Target medicines, referrals, and strategic purchasing first — the areas with the clearest financing payoff.

Safer

Pair every model with human review, appeal routes, open standards, and routine equity audits.

If those three conditions hold, AI can support a health financing model that protects households better while giving government a stronger basis for equitable purchasing decisions.

Thank you for your attention!