



مجلس الضمان الصحي
Council of Health Insurance

Webinar 2

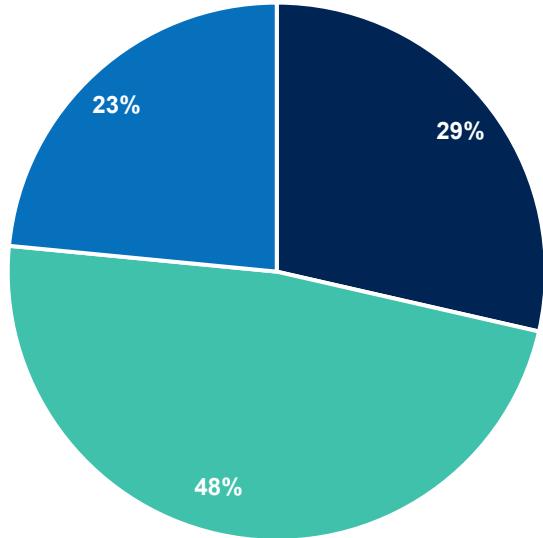
From Data to Decisions: The Monitoring Process in Daman Drug Formulary Management



Pre-Webinar Survey Analysis

1. Awareness & Familiarity

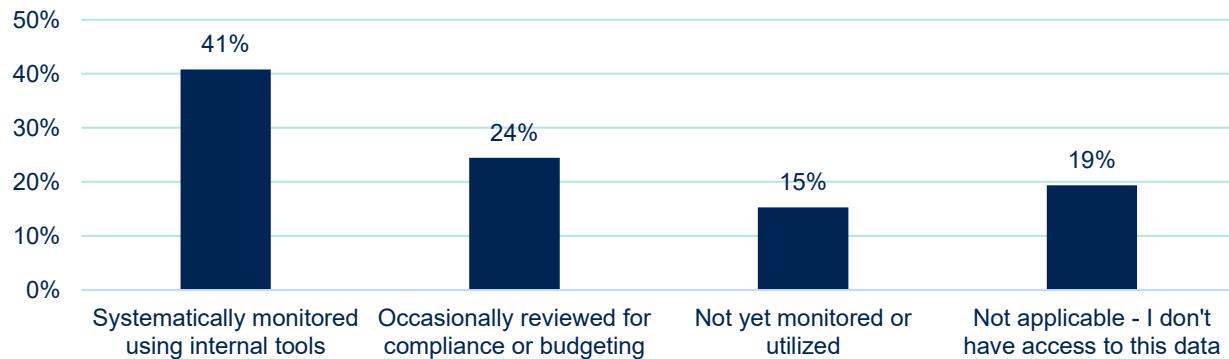
How familiar are you with the Daman Drug Formulary and the Council of Health Insurance's monitoring and maintenance processes?



- Very familiar - Actively involved
- Somewhat familiar - Aware but not directly involved
- Not familiar - This will be my first exposure

2. Experience & Use of Data In Your Organization

How is formulary-related data (utilization, compliance, or cost) currently monitored or used to support decision-making?



3. Expectations & Impact

What would you most like to gain from this webinar?



Webinar Objectives

01.

Understand the objectives and significance of monitoring within the Daman formulary management cycle

02.

Recognize how the NPHIES platform supports data collection, analysis, and reporting for formulary monitoring

03.

Identify key performance indicators used to assess utilization, compliance, and spending trends

04.

Interpret monitoring insights to inform better formulary and policy decisions

***Engage with CHI representatives and stakeholders on current challenges and improvements**

Webinar Panelists



Dr. Ibrahim Al-Juffali

CHI Pharmaceutical
Advisor
Chairperson of PTC



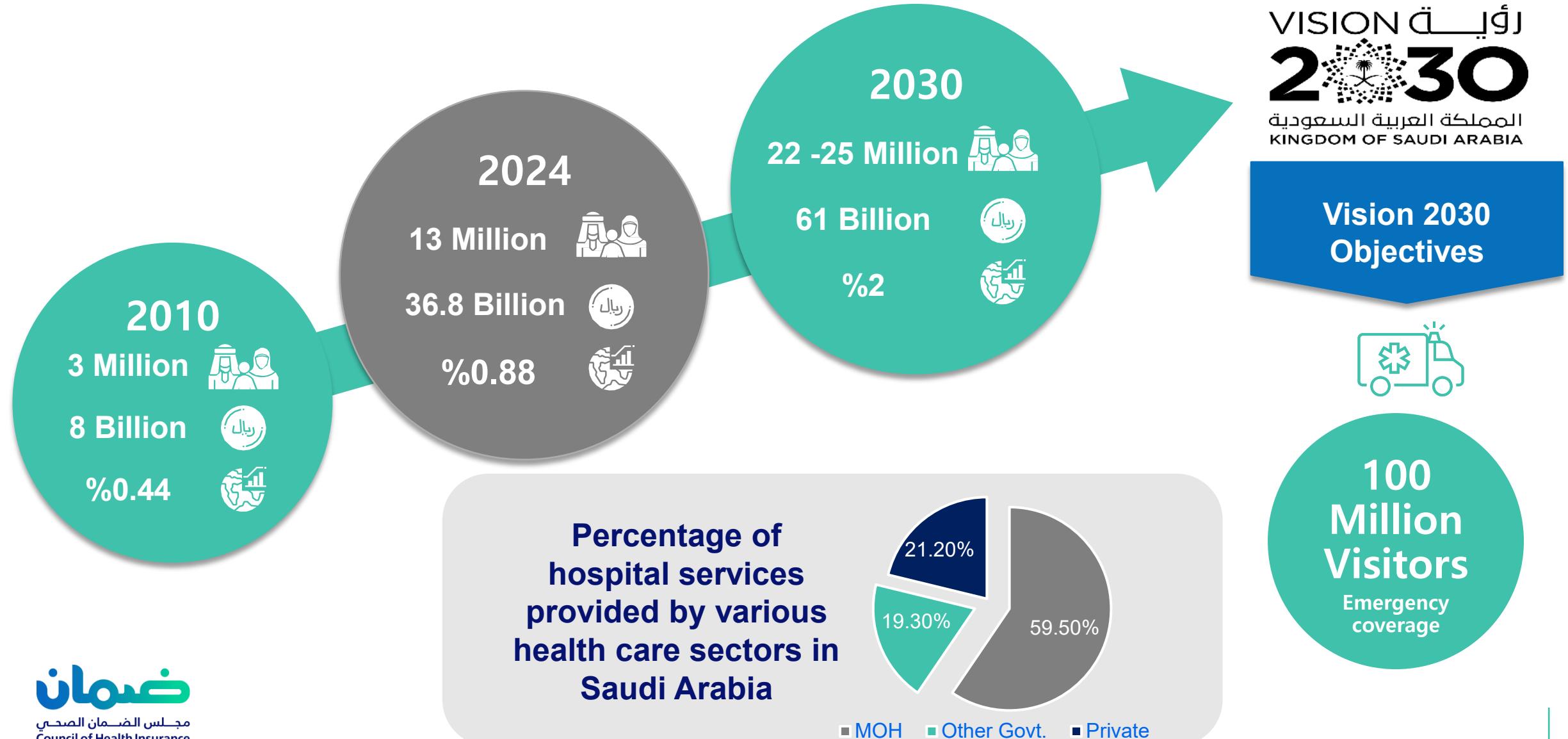
Dr. Nada Alagil

Senior Medical Advisor
CHI

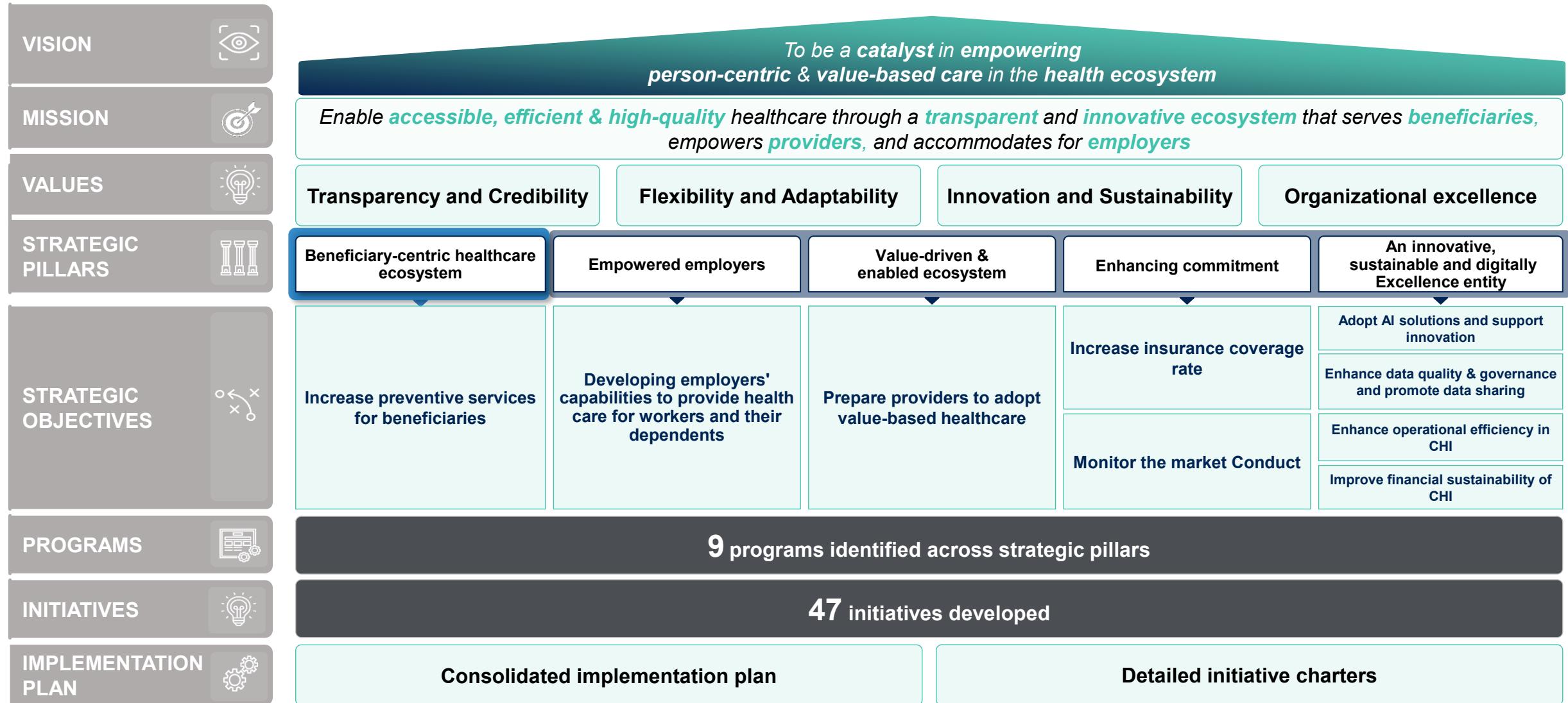
DDF Educational Webinar

Time	Topic	Speaker
09:00–09:10	Opening Remarks & Context Setting	Dr. Ibrahim Al-Juffali
09:10–09:25	Purpose & Objectives of Monitoring Reports	Dr. Nada Alagil
09:25–09:45	How Monitoring is Conducted via NPHIES	CHI representative
09:45–10:10	Real-World Insights: Utilization, Spending & Compliance	Dr. Nada Alagil
10:10–10:25	Panel Discussion: From Monitoring to Action	CHI experts
10:25–10:30	Closing Remarks and Q&A	CHI Representative

Private Health Insurance Sector growth



The value proposition was translated into a strategy house, focusing on CHI's future focus areas.



Council Of Health Insurance (CHI)



CHI SG
Dr. Shabab Alghamdi

- By 2030, our estimates indicate that the Cooperative Health Insurance Scheme in Saudi Arabia will cover **22 million beneficiaries**.
- In financial terms; this will equate to a Gross Written Premium (**GWP**) of around **SAR60 billion**;
- A full **two per cent of the Kingdom's Gross Domestic Product (GDP)**.
- We draw upon the clearly established strategic objective of the Kingdom's health care transformation agenda, **to shift to Value-Based Health Care (VBHC)**
- We foresee a **holistic approach** within the framework of the CHI's VBHC strategy, involving extensive advocacy and **stakeholder engagement** activities to foster the change.

White Paper on Value-Based Payment

Council of Health Insurance (CHI)

Husein Reka, Senior Advisor Healthcare Finance, Policy & Innovation

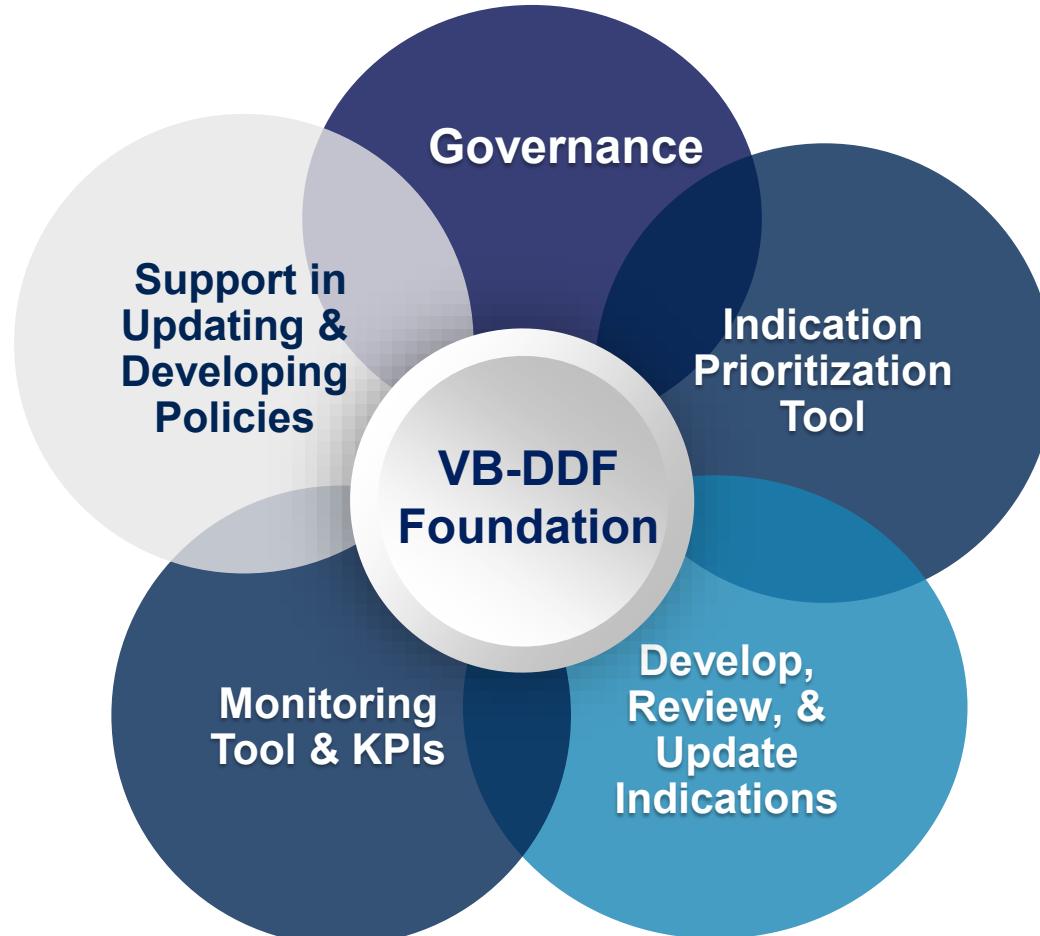
Abdullah Almaghrabi, Policy Director

Dr. Shabab Alghamdi, Secretary General

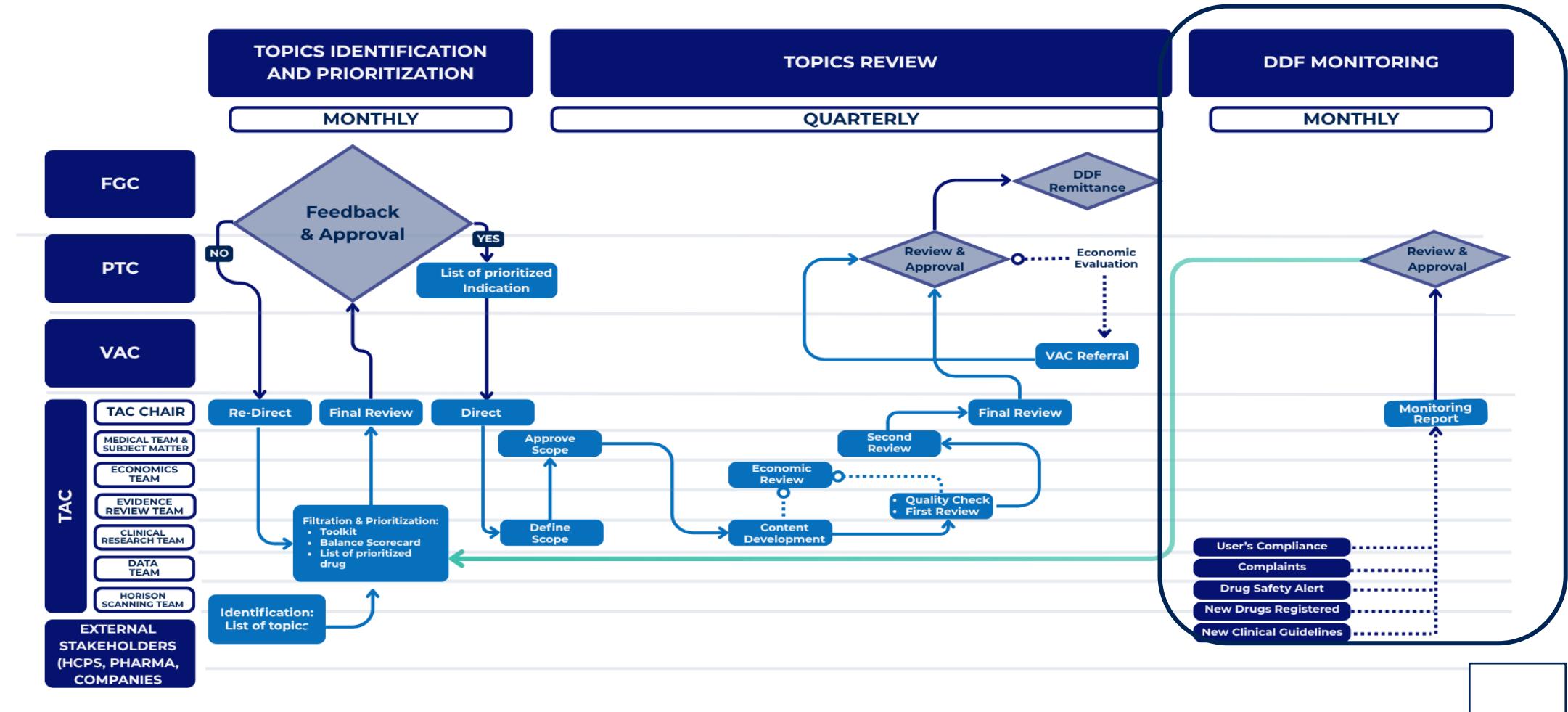
Strategic Purpose and Objectives of Drug Formulary Monitoring

DDF: A Solid Foundation towards Value based Formulary

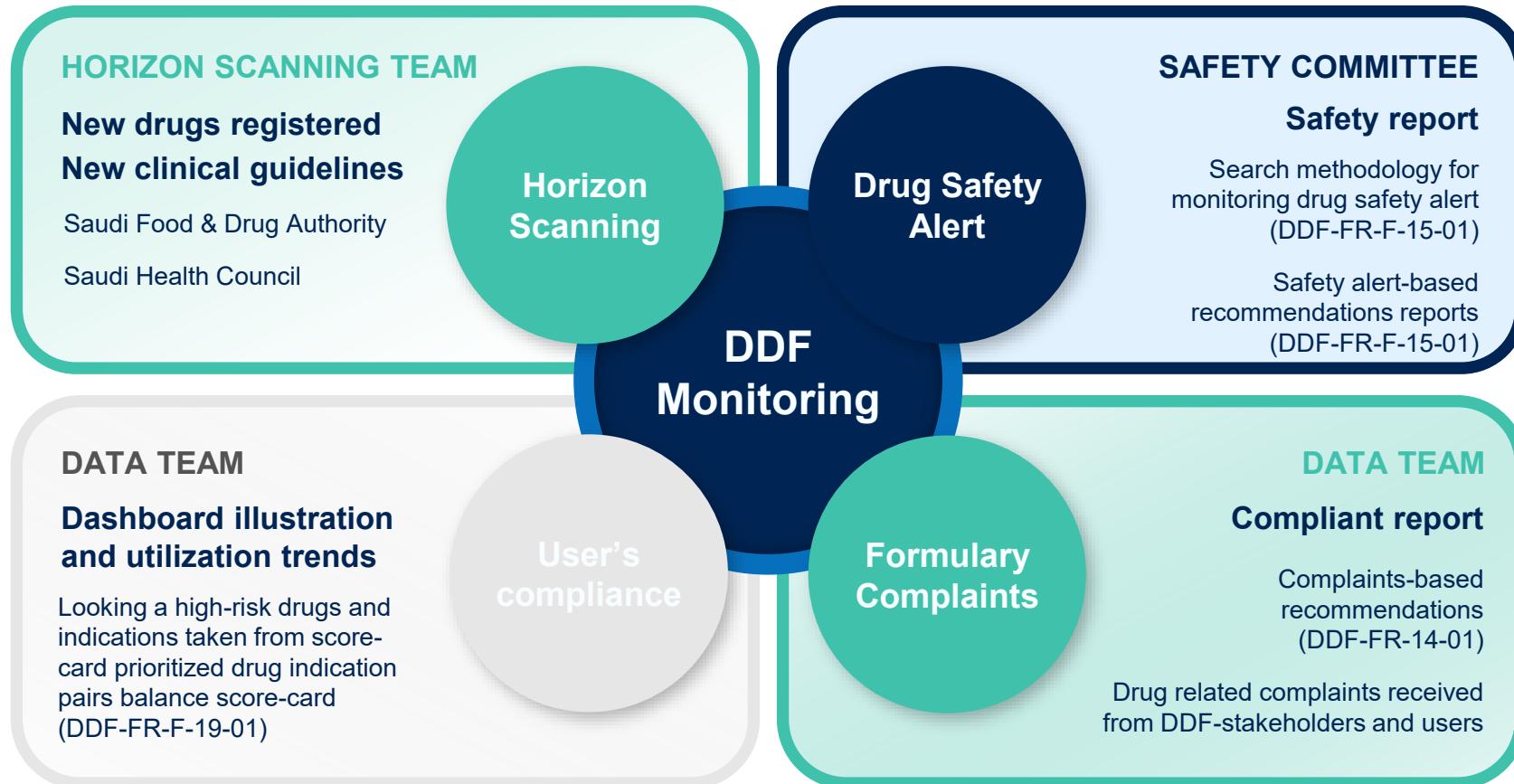
A drug formulary is a **continually updated list of medications and related information**, representing the clinical judgment of healthcare professionals with **considerations of value**, including patient outcomes, societal benefits, ethical principles, and cost-effectiveness, to support the diagnosis, treatment, and promotion of health.



Dynamic DDF Monitoring for Proactive, Data-Driven Decision-Making



End-to-End DDF Monitoring Framework: From Horizon Scanning to Compliance



Establishing KPIs Through Global and National Policy Review



Identify KPIs

A broad list of potential KPIs is compiled through a literature search and based on data shared



General & Specific Monitoring Indicators

Outlines are developed for the general and specific monitoring reports, utilizing the KPIs



Final Outcomes

The outcomes serve to strengthen policy development and generate actionable recommendations for the private sector

Examples of general KPIs used to inform policy and enhance healthcare system performance

Spending Dynamics & Impact: Unveiling Costs Within Total Healthcare and Pharmaceutical Spending

Spending Patterns Analysis: Highlighting Cost Drivers and Trend Dynamics

Utilization Patterns Analysis: Uncovering Prescribing Trends and Claim Dynamics

Claims Stratification: Insights by Payer, Provider, and Geographical Region

Exploring Specialty Medications

Generics Trends and Impact

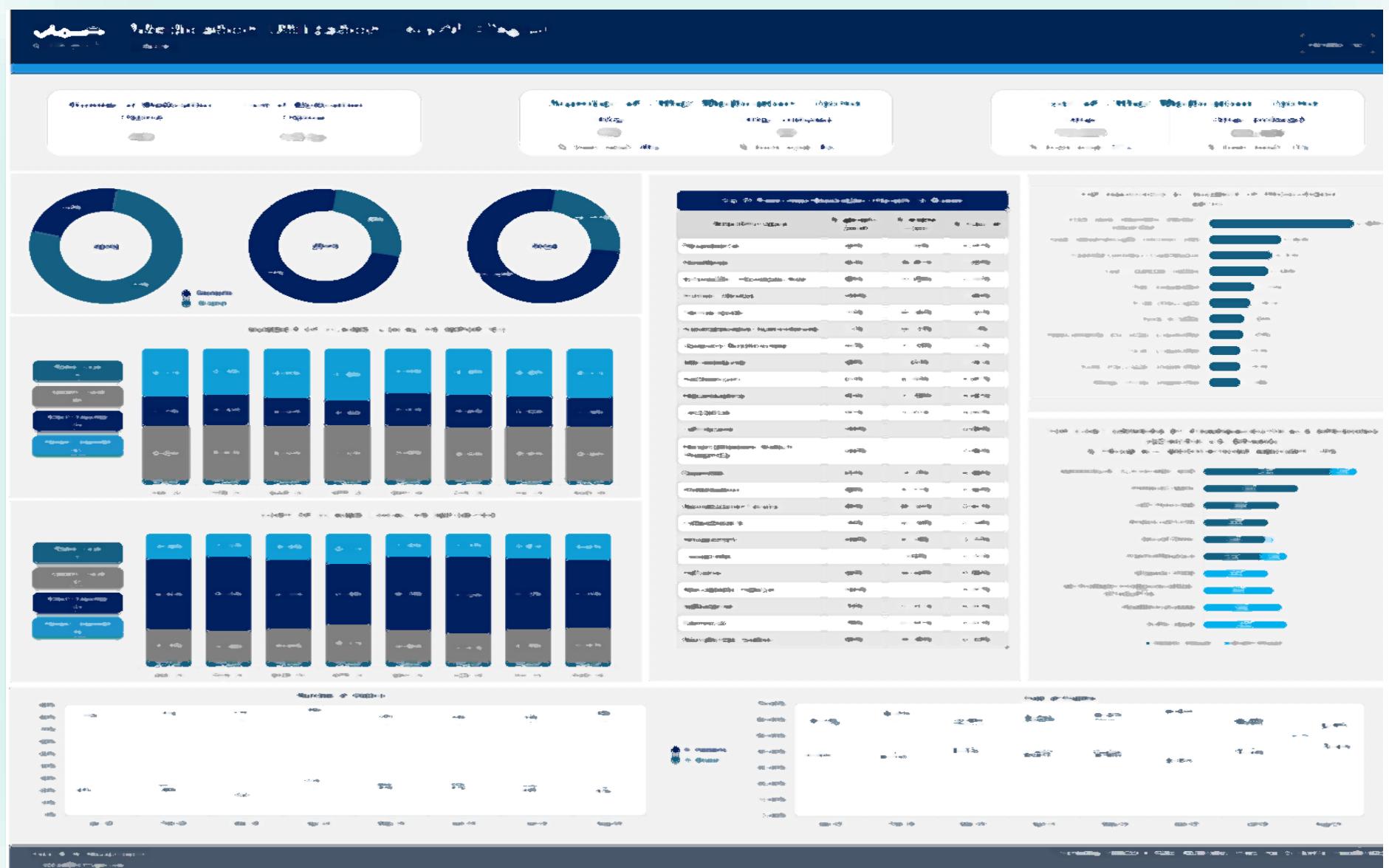
Biosimilar Trends and Impact

Access Challenges: Trends in Rejection Rates

Insights on Policy and Process Improvements

Monitoring Outputs Presented Through Interactive Dashboards

Engagement is fostered through sharing key outputs with **payers** and **providers** when needed, promoting **transparency** and **performance improvement**



Implementation of the Monitoring Process Through NPHIES

Collaborative Ecosystem for Health Insurance and Drug Regulation in Saudi Arabia

Engaging payers, providers, and regulators to strengthen oversight, compliance, and system integration

Insurance/TPA/Providers

Private sector payers, administrators, and providers play a pivotal role in utilizing national platforms such as NPHIES and DDF to enable effective monitoring and data-driven decision-making



Saudi Food and Drug Authority (SFDA)

The Saudi Food and Drug Authority (SFDA) provides regulatory leadership over the pharmaceutical sector, ensuring the approval, registration, and governance of medicines through its centralized Human Drug List.

Council of Health Insurance (CHI)

CHI oversees the Daman Drug Formulary (DDF) to regulate and monitor the private health insurance sector. NPHIES, developed with the Saudi Health Council and operated by Sehati, enables unified digital monitoring and data exchange. Together, they strengthen integration, transparency, and oversight across the health insurance ecosystem.

Toward Data Harmonization Across National Drug Systems

Showcasing key features of the SFDA Drug List, NPHIES platform, and DDF to strengthen integration and consistency



SFDA Drug Classification and Codes

- SFDA Registration Number
- Global Trade Item Number (GTIN)
- Therapeutic Classification (ATC)
- Description Code
- Scientific Code Root
- Pharmaceutical Form Code Root



NPHIES Features

- **GTIN**, referred to as “product_or_service_code” in NPHIES
- **Trade Name**, displayed as “product_or_service_description” or “Display” in NPHIES



DDF Drug Classification and Codes

- Indication
 - ICD10 AM code
 - Drug Pharmacological Class
 - Drug Pharmacological Subclass
 - Scientific Name
 - Scientific Description
- Code Root
 - Substitutable
 - ATC Code
 - Pharmaceutical Form
- Pharmaceutical Form Code Root
- Description Code
- Administration Route
- Strength and Strength Unit
- Prescribing Edits
- Quantity Limit
- Adults/Pediatrics
- Notes
- Patient Type
- SFDA Registration Status

Harmonizing the “drug language” across systems ensures interoperability, data quality, and reliable monitoring and policy decisions

NPHIES and SFDA Matching

Drug Type Standardization

Route of Administration Grouping

Strength and Strength Unit Harmonization

Benefits of Drug Data Harmonization for Payers and Providers

Enhancing accuracy, efficiency, and cost control across the private health insurance ecosystem.

Streamlined Claims Processing

Reduces claim rejections and manual reviews by ensuring consistent drug codes and classifications.

Enhanced Cost Control and Utilization Management

Enables accurate analysis of drug spending, prescribing trends, and substitution patterns to support cost-effective coverage and reimbursement..



Improved Data Accuracy and Interoperability

Establishes a unified drug language across platforms, ensuring consistent communication, reporting, and decision-making between payers and providers.

Informed Clinical and Policy Decisions

Enables better insights into substitution patterns. Supports evidence-based clinical guidelines and coverage decisions.

Key Insights Driving Utilization, Spending, and Compliance Across the Private Health Insurance Ecosystem

- *SHAPING* health policy
- *MONITORING* compliance
- *SUPPORTING* KSA's national health priorities

Pharmaceutical Spending Insights from NPHIES Data

Highlighting private sector trends in medication spending and alignment with national and OECD benchmarks



Shaping Health Policy Through Real-World Insights

Impact of Co-Payment on Generic Medicine Uptake

Implementation of co-payment policies has driven a measurable shift toward **increased use of generic medicines in Saudi Arabia's private healthcare sector**



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EMAIL: DMO@chi.gov.sa

Shaping Health Policy Through Real-World Insights

Increased Savings Driven by Greater Uptake of Generics and Biosimilars
Following Co-Payment Policy Implementation

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Shaping Health Policy Through Real-World Insights

Strengthening Policy Compliance and System Efficiency Through Payer-Provider Alignment

System Compliance Efficiency

Measured as % of claims adhering to copayment policy

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MAT April 2024

MAT April 2025

Hypertension

Real-World Insights

Monitoring Compliance

Monitoring real-world prescribing trends shows strong payer and provider alignment with CHI hypertension management guidelines

ARBs and CCBs Top First-Line Hypertension Monotherapy, While Beta-Blockers Dominate Second-Line in Both Spending and Utilization

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“First-line” antihypertensive therapy includes either: **Monotherapy** with a first-line agent (ACE inhibitors [ACEi], Angiotensin II Receptor Blockers [ARB], Calcium Channel Blockers [CCB], or Thiazide/Thiazide-like diuretics [TZDs]), or **Combination therapy** consisting of two first-line agents. “Second-line” therapy includes either: **Monotherapy** with a second-line or adjunctive agent (beta blockers, alpha blockers, centrally acting agents, aldosterone antagonists, loop diuretics, or vasopressin antagonists), or **Combination therapy** involving at least one second-line agent (with another first-line or second-line drug). Please refer to the Appendix for further details on spending and utilization of individual drug classes.

Type 2 Diabetes

Real-World Insights

Monitoring Compliance

Type 2 Diabetes Treatment Patterns Reflect Traditional Practice with Emerging Adoption of Guideline-Endorsed Modern Therapies

Initial Therapy Distribution by Diabetes Class

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Metformin and combination therapies remain the mainstay of initial diabetes treatment, consistent with Saudi National Guidelines ADA/EASD 2024–2025 guidelines.

Providers are encouraged to **align prescribing practices** with evolving guidelines that favor agents offering **cardiometabolic and renal protection**

Monitoring Prescribing Practices Through DU90% to Strengthen Guideline Adherence and Cost-Effective Type 2 Diabetes Care

Drug Utilization-90% (DU-90)

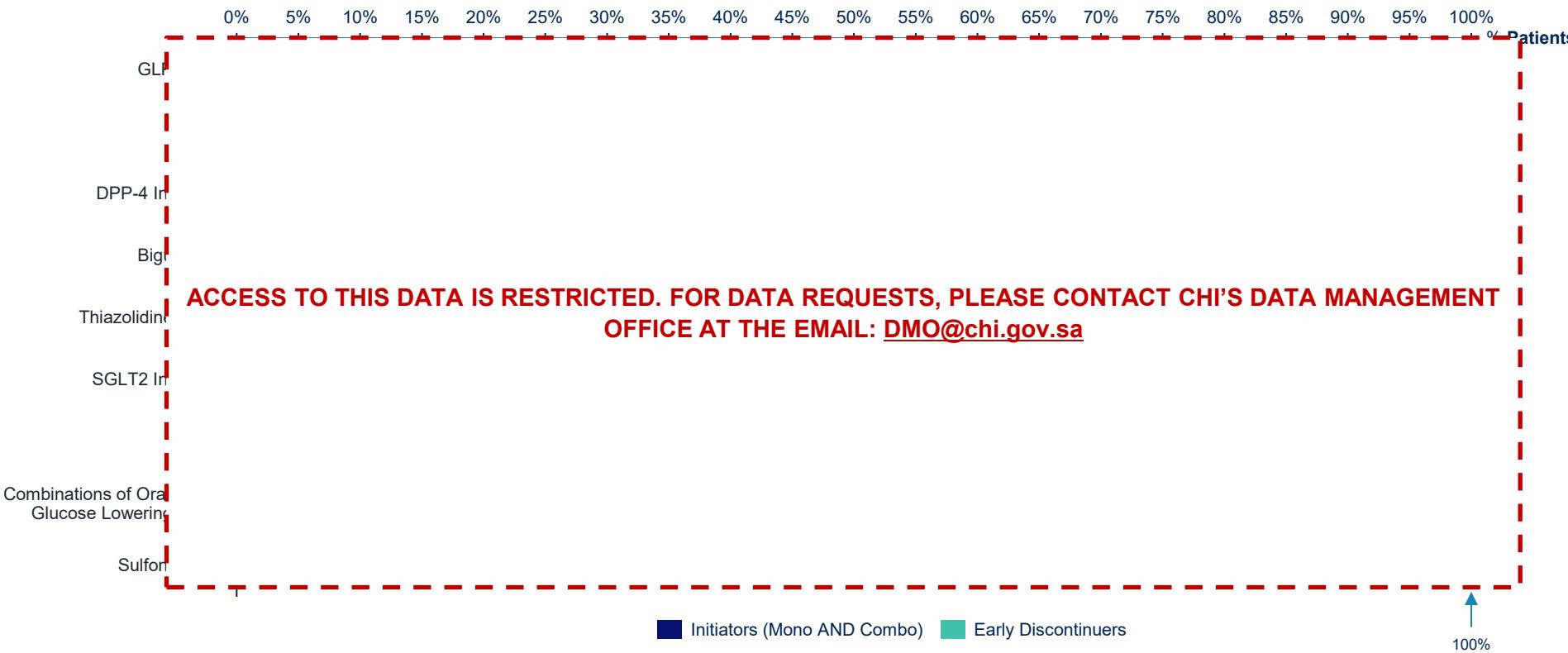


The DU90% highlights the balance between established first-line therapies and the adoption of newer, more advanced treatments, highlighting the need for monitoring prescribing practices to ensure cost-effectiveness and adherence to clinical guidelines

Monitoring Compliance

High discontinuation rates drive the need for targeted interventions, such as patient education, support programs, and strategies to improve tolerability and affordability. Enhancing persistence could translate into better long-term glycemic control, reduced complications, and optimized healthcare resource utilization.

Type 2 Antidiabetic Treatment Persistence



Antibiotics

Real-World Insights

Advancing the National Strategy for Combating Antimicrobial Resistance Through Enhanced Data and Reporting

Aligned with Saudi AMR Strategy (2022–2025) and Target 4.1.2 to optimize antimicrobial use and strengthen national surveillance

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Supporting Public Health Authority Outcome Indicators Through Enhanced Antimicrobial Use Monitoring



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*Public Health Authority (PHA); Outcome Indicator
Rate of DDD per 100 Patient-Days for Selected Antibiotics*

***Saudi Arabia's Private Hospitals:
Low Use of Reserve Antibiotics,
but High Reliance on Broad-
Spectrum Watch Antibiotics
(Meropenem, Imipenem)***

Aligning Antibiotic Prescriptions with WHO AwaRe Targets: A Collaborative Imperative for Stewardship and Sustainable Healthcare

Increasing Access Antibiotics is recommended

Access

WHO's recommended benchmark of at least 60%, the EU's 2023 level of 61.5%

Watch

EU's 2023 benchmark of 36%

Reserve

EU's 2023 level of 5.4%

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Improving Quality of Care Through Reduced Antibiotic Use in Respiratory Infections: Aligning with HEDIS Stewardship Benchmarks

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A

■ % of patients who did NOT receive antibiotics

■ TARGET % of patients to AVOID antibiotics

HEDIS Target: 85% Avoidance of Antibiotic Treatment for URTIs

HEDIS Target: $\geq 50\%$ Avoidance of Antibiotic Treatment for Acute Bronchitis/ Bronchiolitis



HEDIS Target: $\geq 66-68\%$ Avoidance of Antibiotic Treatment for RTIs

Sustaining Low Antibiotic Consumption in Saudi Arabia: Aligning Stewardship Performance with EU Best Practices

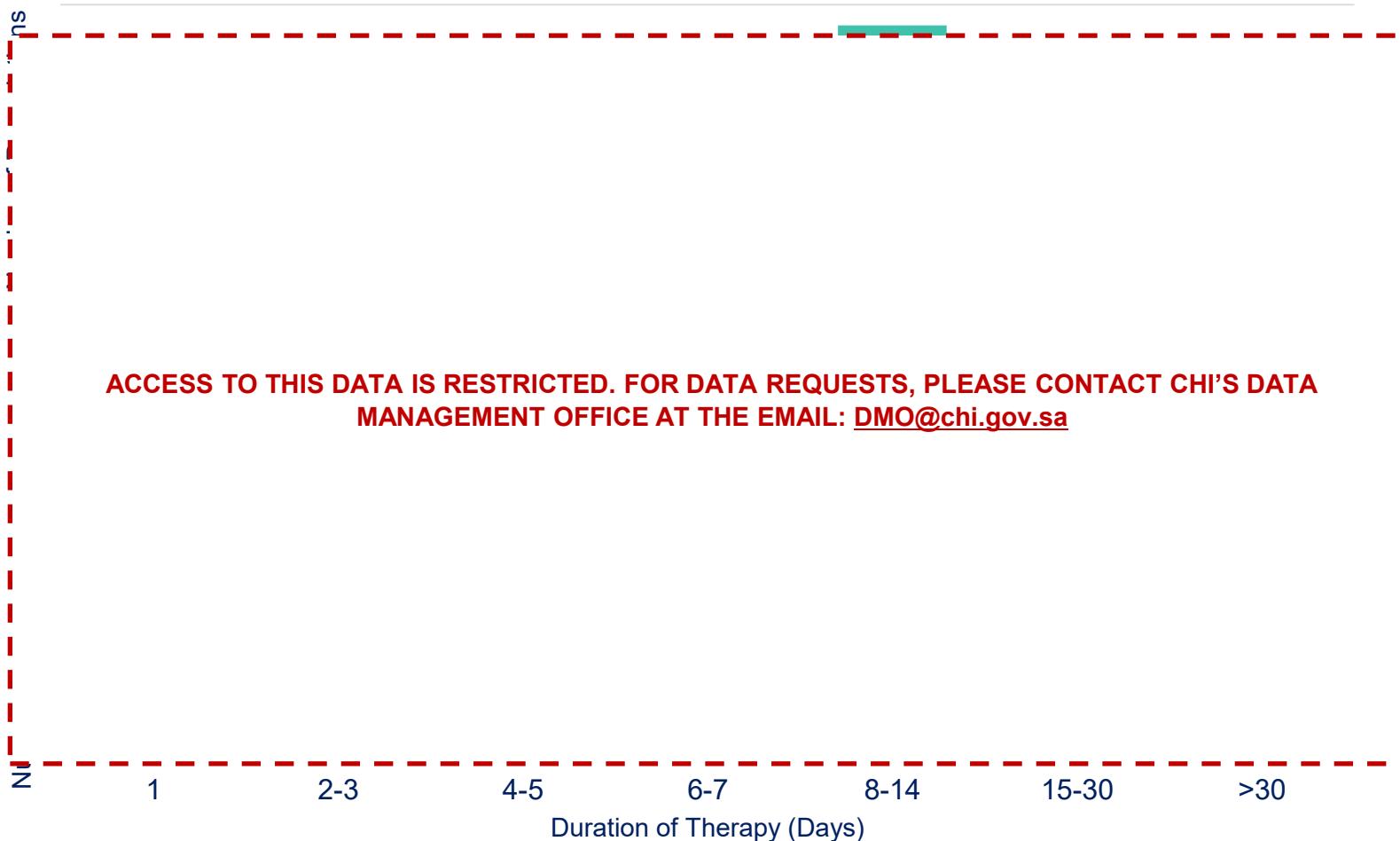
Private sector antibiotic use remains below the EU average and within the range of lower-consumption countries, reflecting progress toward Vision 2030 stewardship goals

Defined Daily Dose (DDD) per 1,000 Insured Persons per Day

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Optimizing Antibiotic Treatment Durations: Addressing Prolonged Use to Strengthen Stewardship and Reduce AMR Risk

Overall Duration of Therapy of Antibiotic Prescriptions in KSA



Longer therapy durations in KSA private practice contrast with global trends favoring shorter, evidence-based regimens

Biologics

Real-World Insights

Rising Biologic Expenditure Calls for Value-Based Policy and Strategic Stewardship in High-Impact Therapeutic Areas

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Biologic therapies now represent **18%** of total drug expenditure, with rapid growth in endocrine and oncology segments highlighting the importance of **payer oversight and evidence-based coverage decisions**

Biosimilar Growth Presents a Strategic Policy Lever for Cost Efficiency and Access Expansion

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Biosimilars Market Utilization increased by 77% from 2023 to 2024 indicating strong market uptake

Biosimilars in the United States 2023-2027. www.iqvia.com. Published January 31, 2023. <https://www.iqvia.com/insights/the-iqvia-institute/reports-and-publications/reports/biosimilars-in-the-united-states-2023-2027>. The Impact of Biosimilar Competition in Europe 2022. www.iqvia.com. <https://www.iqvia.com/library/white-papers/the-impact-of-biosimilar-competition-in-europe-2022>

Oncology

Real-World Insights

Rising Oncology and Hematology Patient Volumes Highlight the Need for National Policy Alignment on Capacity, Prevention, and Sustainable Care Delivery

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The oncology and hematology patient population continues to grow across all demographics

Strongest increase among elderly patients (+68%) and balanced growth across genders and age groups.

Psoriasis

Real-World Insights

Psoriasis treatment in KSA's private insurance market is dominated by topical therapies, representing 86% of claims with only 9% of spending

Compared with higher systemic and biologic uptake in Europe and registry data, KSA's private market remains heavily reliant on topicals, highlighting both access constraints and opportunities to optimize advanced therapy use

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Generic Uptake in Psoriasis Signals Progress, but Brand Spending Trends Highlight the Need for Policy Reinforcement

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Generics account for two-thirds of claims but only one-third of spending — emphasizing the role of payer and provider collaboration to sustain cost-effective prescribing

Dyslipidemia

Real-World Insights

High Generic Utilization in Dyslipidemia Reflects Policy Success in Cost Containment and Offers a Model for Broader Therapeutic Optimization

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Generics now account for **81% of total claims** and **66% of total spending** in dyslipidemia treatment, demonstrating strong **uptake and payer confidence** in cost-effective prescribing

Conclusion

From Data to Decisions:
The Monitoring Process in Daman Drug Formulary
Management

Conclusion – Collaborate, Contribute, Comply

To sustain value-based, data-driven, healthcare for all

At the heart of the Council of Health Insurance's mission lies a clear commitment: To **advance a value-based healthcare system** that focuses on **better outcomes** for patients and **long-term sustainability** for our health ecosystem.

The Daman Drug Formulary stands as a vital tool in this journey. It helps guide prescribers toward **evidence-based, cost-effective medication choices** that improve patient health while protecting the sustainability of the system.

Through the NPHIES platform, we can monitor **formulary adherence and performance** in real time. This brings powerful insights that allow us to track trends, measure outcomes, and take timely action.

But none of this can happen in isolation. The success of value-based healthcare depends on **strong collaboration between all stakeholders** — insurers, providers, and the pharmaceutical industry.

Together, through **partnership, transparency**, and a **shared vision**, we can transform our healthcare model into one that truly delivers value for every patient and every community.

Conclusion – Collaboration for Sustainable Health Policy

Data becomes policy when it drives accountability, transparency, and value



PATIENTS

Engage in informed decision-making and adherence to evidence-based treatments through education and transparency



PROVIDERS

Align prescribing practices with national and CHI guidelines



INSURERS

Use co-payment and biosimilar policies to drive rational utilization and measurable savings



INDUSTRY

Benefit from transparent, evidence-driven formulary inclusion and policy clarity



CHI

Maintains a closed feedback loop between monitoring, regulation, and market behavior

The Daman Drug Formulary Monitoring System is a governance engine that turns **data into action** and **policy into measurable value**

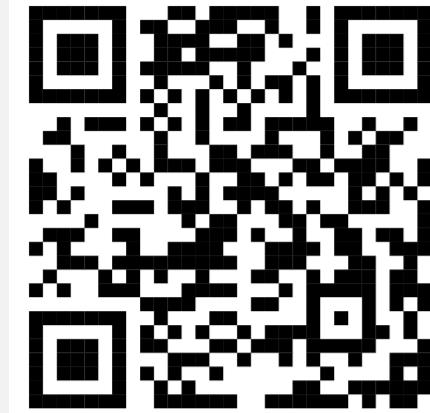
DDF Prospects – Stay Tuned

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Survey QR Code

Webinar 3- November 26th , 2025

Guiding Framework for Biosimilars Prescribing,
Dispensing, and Coverage in the Saudi Private
Healthcare Sector



Panel Discussion: From Data to Action

Your Feedback Matters!



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