

ضمان

مجلس الضمان الصحي  
Council of Health Insurance



# From Vision to Value: Population Health Management in Saudi Arabia's Private Health Insurance Sector

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# Preface

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Cascading from Saudi Vision 2030 and the Health Sector Transformation Program to improve the health of the Saudi population, the Council of Health Insurance has envisioned population health management as a catalyst to improve health outcomes as solidified in the 2021 white paper *Improving Health in Saudi Arabia Through Population Health Management*. Since then, we have strived to develop and advance our programs to enable healthcare providers to measure and improve the health of CHI beneficiaries.

As we embark on this transformative journey towards value-based healthcare, population health management (PHM) plays a critical role in leveraging data and transforming it into insights to address the needs of defined populations and provide targeted care. As our population grows and private health insurance coverage expands, proactive and collaborative efforts are needed to ensure population health outcomes are achieved. This white paper has been developed by CHI to demonstrate rationale, strategic direction, and regulatory considerations for advancing PHM across Saudi Arabia's private health insurance sector.

As a result of this work, we have launched our population health management program in August 2024. The program aims to improve health outcomes of CHI beneficiaries and focuses on preventive care and high-quality and efficient care by increasing the number of healthcare providers who implement population health management programs within their organizations. Today, we are expanding the program to include further healthcare providers and partners and advance our methods to facilitate sustainability of these programs.

We are proud to contribute to the agenda of population health management in the Kingdom that will add value at all levels across healthcare organizations and beneficiaries towards creating a vibrant society.

Sincerely yours,

Supporting protection  
of all our Beneficiaries

**DR. SHABAB ALGHAMDI**  
Secretary General  
Council of Health Insurance





## Abbreviations

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CHI	Council of Health Insurance
PHM	Population Health Management
HSTP	Health Sector Transformation Program
NCDs	Non-Communicable Diseases
NPHIES	National Platform for Health and Insurance Exchange Services
VBP	Value-Based Payment
NCQA	National Committee for Quality Assurance
NHS	National Health Service (England)
VBHC	Value-Based Health Care
PHA	Population Health Alliance
WHO	World Health Organization



## Executive Summary

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Saudi Arabia's healthcare system is amid a significant transformation. Within this evolving landscape, the Council of Health Insurance (CHI), as the regulatory entity for provision of healthcare in the private health insurance sector, has embraced **Population Health Management (PHM)** as one of the strategic initiatives for driving value-based healthcare (VBHC) by enabling and facilitating healthcare providers to adopt PHM programs.

This white paper aims to describe CHI's PHM strategic roadmap and the synthesis behind our approach. In our assessment of private healthcare providers and private health insurance companies, PHM programs were deemed important and tied to organizational strategies. However, there were significant variations in PHM program maturity, operational capacity, and alignment with preventive care models across private healthcare providers. While many providers reported initiating PHM-related efforts, particularly in chronic disease management and screening, gaps remain in workforce preparedness, data utilization, and incentive alignment. Some private insurance companies have launched targeted services but barriers to full implementation remain including misaligned incentives, inconsistent program standards, and limited contractual flexibility. These findings along with other considerations have shaped CHI's PHM Strategic Roadmap.

CHI is committed to drive VBHC by improving health outcomes, designing healthcare around the person, and developing innovative payment schemes. PHM is a cornerstone for a proactive, data-driven, and outcome-based driven healthcare ecosystem that keeps people healthy. With collaboration across healthcare providers, employers, health insurance companies, beneficiaries, and national entities, we could shape tomorrow's healthcare.

## 1. Introduction

Saudi Arabia's healthcare system is in the midst of a significant transformation. Cascading from Saudi Vision 2030 to ensure a vibrant society<sup>1</sup> and the strategic objectives of the health sector transformation program (HSTP),<sup>2</sup> there is a huge emphasis on disease prevention, access to care, quality of care improvement, and creating value for populations. Within this evolving landscape, the Council of Health Insurance (CHI), as the regulatory entity for provision of healthcare in the private health insurance sector, has embraced **Population Health Management (PHM)** as one of the strategic initiatives for driving value-based health care (VBHC) by enabling and facilitating healthcare providers to adopt PHM programs.

PHM is a proactive, data-driven approach to improve the health of defined populations. It aims to shift care models from episodic and reactive care to coordinated, preventive, and outcome-focused care.<sup>3-5</sup> PHM has the potential to strengthen healthcare systems by improving population health, enhancing experiences of care, reducing cost of care, and improving the work-life of healthcare workers.<sup>6</sup> At CHI, we strive to align private health care provider practices with this emerging model through regulation, performance monitoring, and support for implementation to improve the health and wellbeing of CHI beneficiaries.

In this paper, we aim to describe our PHM strategic roadmap and the synthesis behind our approach to be able to support and cascade PHM implementation across private healthcare providers in Saudi Arabia.

## 2. Background

### 2.1 Defining Population Health Management

Many countries and organizations define PHM slightly differently while generally to some extent agreeing upon its core principles. PHM encompasses proactive, person-centered, and data driven approaches for improving health outcomes of defined populations by delivering timely, cost-effective, and targeted interventions across the continuum of care. The PHM concept links clinical care delivery models, public health and prevention, payment systems, and data analytics in the interest of maximizing health and wellbeing.

The table below summarizes definitions from leading international health bodies, indicating an emphasis on prevention, health outcomes, and the role of data integration.

**Table 1.1 Definitions of PHM and Shared Characteristics**

Source	Definition
<a href="#">National Health Service (NHS)</a>	Data-driven approach to improving health outcomes by shifting from reactive care to proactive, preventative interventions that reduce hospitalizations and address healthcare inequalities. <sup>7</sup>
<a href="#">World Health Organization (WHO)</a>	A people cent[er]ed, data driven and proactive approach to manage the health and well-being of a defined population, considering the differences within that population and their social determinants of health. <sup>8 (p.5)</sup>
<a href="#">National Committee of Quality Assurance (NCQA) – Adopted from Population Health Alliance (PHA)</a>	Population health management is a model of care that addresses individuals’ health needs at all points along the continuum of care through participation, engagement and targeted interventions for a defined population. <sup>9,10</sup>

Common Characteristics Across Definitions:

- **Defined populations** are the unit of focus.
- Use of **integrated, real-world data** to segment/stratify risk and monitor progress.
- Emphasis on **prevention, early intervention**, and chronic disease management.
- Emphasis on **cost-effective** and impactful solutions.
- Focus on improving outcomes that **matter to patients**.
- **Coordination** across providers and systems to deliver coordinated care.

## 2.2 CHI's Adopted Definition of PHM

To ensure consistency across the private health insurance sector, CHI adopts the following definition published by the PHA:<sup>9,10</sup>

Population Health Management is a care model that addresses the population and individuals' health needs at all points along the continuum of care through data-driven, cost-effective, and evidence-based interventions.

This definition reflects CHI's commitment to advancing a model that is:

- **Strategic** in its use of data for population-level planning and measuring impact.
- **Person-centered**, supporting population needs at different levels of care.
- **Value-driven**, achieving health outcomes for the money being spent.

## 2.3 The Importance and Urgency of PHM

On a national level, there are multiple challenges that drive PHM at scale:

- Growing and aging populations will increase the demand and need for healthcare.
- Rise of non-communicable diseases (NCDs) such as cardiovascular disease, diabetes, and hypertension, attributing to morbidity and mortality.
- Vision 2030 and the HSTP call for improved population health.
- Growing emphasis on alternative payment models such as value-based payment (VBP) and risk-adjusted capitation models that will reshape how care is financed and delivered. These payment models create incentives for outcomes achieved rather than volume of service, thus fostering efficiency and accountability throughout the system.

Specifically, in the private health sector there are further drivers towards PHM:

- The expansion of mandatory private health insurance coverage, including but not limited to domestic workers and visitors, is greatly boosting the insured population. As coverage increases, the demand for cost-effective, preventive, and coordinated care becomes a priority.
- Employers, as purchasers of health plans, are invested in the health of their workforce. Understanding the link between health and productivity, employers are expecting better health outcomes and value from healthcare expenditures.

- Cost containment among both providers and private health insurance companies underscores the urgency of preventing and managing chronic conditions and improving care efficiency.

There are several factors that facilitate CHI's regulatory role in PHM across private healthcare providers:

- Leveraging claims data from the National Platform for Health and Insurance Exchange Services (NPHIES) in Saudi Arabia for population-level analytics, measuring health outcomes, and tracking improvement.
- Standing rapport between CHI and beneficiaries and building awareness about preventive care and emerging PHM programs.
- Other projects and initiatives at CHI that drive value-based healthcare support the private sector in building foundations and reforming care delivery. These trends are all creating an environment that is more favorable for advancing PHM within the private health insurance sector.<sup>11-13</sup>
- Stakeholder collaboration across the healthcare ecosystem including the Deputyship of Population Health at the Ministry of Health, Public Health Authority (Weqaya), Saudi Health Council, Health Holding Company, the Center for National Health Insurance, academic institutions, scientific societies, and community partnerships.

## 2.4 Scope of This White Paper

This white paper has been developed by CHI to demonstrate rationale, strategic direction, and regulatory considerations for advancing PHM across Saudi Arabia's private health insurance sector.

We will address the following:

- Assess current PHM readiness among relevant stakeholders, including providers and private health insurance companies.
- Provide a shared understanding of PHM, grounded in global best practices and adapted to Saudi context.
- Establish a basis for CHI's PHM Roadmap, including phased in approaches, activities, and measures.

While the focus is on CHI population - the privately insured population, this paper also aims to support national alignment with Vision 2030, HSTP, and other national regulators. The findings and recommendations are relevant to global, regional, and local organizations seeking to build an integrated, prevention-oriented healthcare ecosystem.



### 3. Methodology

Saudi Arabia is uniquely positioned to accelerate PHM adoption due to several national-level and sector-specific drivers that are reshaping its health system. These drivers reflect policy, financial, technological, and demographic shifts promoting PHM.

#### CHI Beneficiaries: Our Target Population

CHI serves a defined population, now exceeding 13 million beneficiaries, which represent more than one third of the national population. The majority of beneficiaries are employees and their dependents and a fewer proportion of premium residents, tourists, and umrah visitors who span a range of socioeconomic, occupational, and geographic backgrounds.

#### Data Collection

To establish a robust understanding of PHM within Saudi Arabia's private health insurance sector, we used several qualitative data collection approaches including:

- **Documentation review:** An extensive analysis of over 50 internal and external documents related to PHM initiatives and healthcare practices, providing insights into existing policies and best practices.
- **Stakeholder engagement:** In-depth interviews with more than 15 key stakeholders, including CHI officials, healthcare providers, health insurance companies, and industry leaders, offering firsthand accounts of challenges and opportunities in PHM implementation.
- **Global best practice review and case studies:** A thorough review of international best practices in PHM, identifying strategies that could be adopted to develop CHI's PHM program.

We distributed two self-administered surveys that have been customized to insurance companies and healthcare providers, respectively, to measure the adoption of PHM in their organization and their readiness to implement PHM. In addition, we analyzed beneficiary data from NPHIES claims to categorize our population based on demographic data, healthcare utilization patterns, and health conditions to inform targeted interventions and improve outcomes.

The subsequent section will delve into the key outputs of this assessment, serving as a foundation to inform PHM program implementation planning (1) Baseline results and (2) CHI PHM roadmap.

## 4. Provider Engagement and PHM Readiness: Insights and Opportunities

CHI conducted a healthcare provider readiness survey to evaluate the current state of PHM adoption across private healthcare delivery organizations. The assessment, which included 24 out of 88 respondents, revealed significant variation in PHM program maturity, operational capacity, and alignment with preventive care models. While many providers reported initiating PHM-related efforts, particularly in chronic disease management and screening, gaps remain in workforce preparedness, data utilization, and incentive alignment. The table below summarizes key findings, including current initiatives, structural challenges, and priority areas for regulatory support and capacity-building.

**Table 4.1. Summary of Provider Engagement in PHM: Insights and Opportunities**

Category	Key Findings
<b>PHM initiatives</b>	Most common <b>initiatives</b> related to PHM included screening for chronic conditions, chronic disease management, and preventive care campaigns.
<b>Challenges</b>	<b>Resistance to Change:</b> Cultural or organizational resistance to adopting PHM practices. <b>Workforce Capacity:</b> Limited number of trained personnel in PHM roles. <b>Data and Analytics:</b> Choice of tools and application of analytics to assess population health. <b>Care Management:</b> While preventive metrics are monitored, only a small number of providers have taken action. <b>Incentives:</b> Volume-based payments discourage PHM investment.
<b>Opportunities</b>	<b>Incentive Alignment:</b> Introduce financial rewards for prevention and chronic care management. <b>Capacity Building:</b> Provide PHM training and resources. <b>Collaboration:</b> Foster joint efforts across private health insurance companies, providers, and public health institutions. <b>Patient engagement:</b> Educate patients and include them in making decisions about their health.

## 5. Private Health Insurance Companies' Engagement and PHM Readiness: Insights and Opportunities

To assess private health insurance readiness and engagement in PHM, CHI conducted a structured survey with 14 out of 27 responses from health insurance companies and third-party administrators (TPA) operating in the private health insurance sector. The findings revealed that while many insurance companies share strategic alignment with PHM objectives and have launched targeted services, barriers to full implementation remain. These include misaligned incentives, inconsistent program standards, and limited contractual flexibility. However, insurance companies also expressed strong interest in expanding PHM through employer partnerships, pilot programs, and shared financial incentives. The table below summarizes key insights from the assessment, including both structural challenges and actionable opportunities.

**Table 5.1. Summary of Private Health Insurance Companies Engagement in PHM: Insights and Opportunities**

Category	Key Findings
Shared goals	<b>Shared goals</b> included improving population health and patient experience and reducing per capita costs.
Services based on health risks	Private health insurance companies provide tiered <b>services</b> : preventive care for low-risk beneficiaries, etc.
Challenges	<p><b>Standardization:</b> Non-standardized approaches to PHM across different health insurance companies.</p> <p><b>Contracts:</b> Short contractual duration between health insurance companies and providers impacting beneficiary retention.</p> <p><b>Incentives:</b> Misaligned incentivizes with providers for preventive and promotional care.</p> <p><b>Investments:</b> Long-term benefits of PHM and the upfront investment required including long-term return on investment.</p> <p><b>Data and Analytics:</b> Choice of tools and lack of integrated data to analyze beneficiary health.</p>
Opportunities	<p><b>Create business case:</b> Strong financial rationale due to potential cost savings.</p> <p><b>Employer engagement:</b> Employer partnerships to promote employee health (e.g., annual health checks).</p> <p><b>Collaboration:</b> Willingness to co-develop and test full PHM cycle<sup>14</sup> with providers.</p>



## 6. Lessons Learned from Benchmarking and Global Best Practices

CHI identified lessons learned that facilitate the establishment, activation, and scaling of PHM programs throughout the healthcare sector:

- Collaborations across multiple stakeholders and sectors are needed to provide care beyond healthcare organizations to be able to address social determinants of health.
- Digital infrastructure including optimizing data quality, data integration and interoperability, protection of patient privacy, data sharing agreement policies, and timeliness of data are needed to develop and apply PHM tools and advanced analytics including PHM insights.
- Population outreach programs focused on promotion and prevention with an aim at engaging and educating people on how to proactively manage their health and wellbeing.
- Leveraging employee wellness initiatives beyond health insurance benefits such as fitness memberships and stress management counseling.
- Aligning goals and incentives between providers and insurance companies ensures accountability and sustainability.

## 7. PHM Strategic Roadmap

Key findings from our baseline assessment informed CHI's PHM Strategic Roadmap. This strategic roadmap extends from our previous Population Health 5x5 strategy,<sup>15</sup> and has been structured to phase-in different stages of PHM implementation across private healthcare providers.

Our PHM Strategic Roadmap is aligned with CHI's organizational strategy and is valid for the next two years (until 2027), with minor updates if needed. It outlines our main goal, objectives, key activities, and success measures including conditions we are currently focusing on.

Figure 7.1 CHI PHM Strategic Roadmap

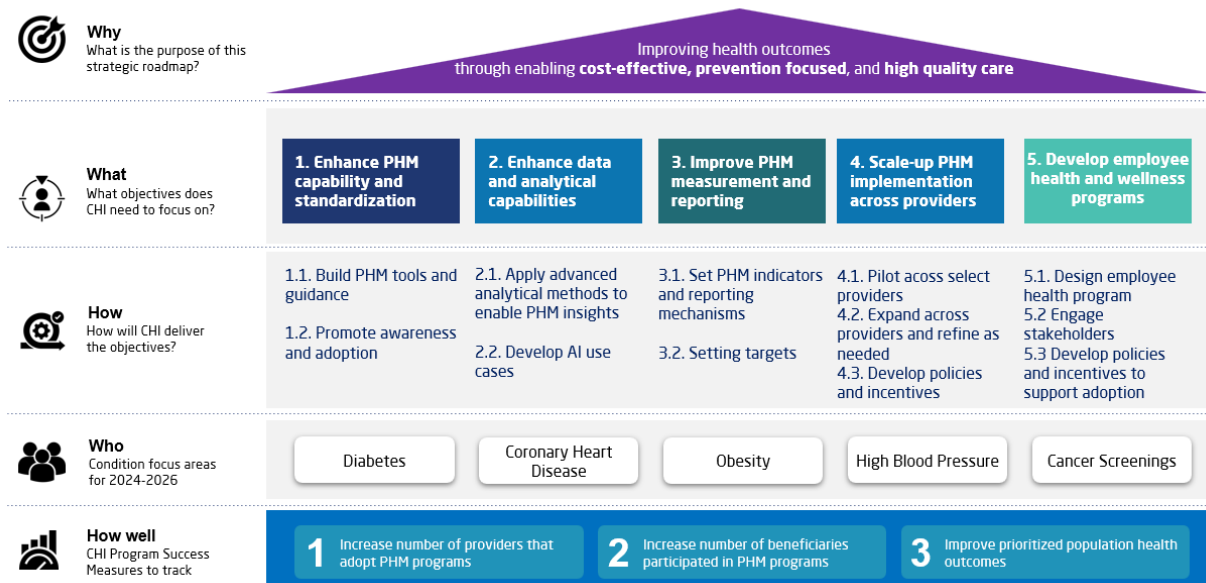


Figure 7.2 CHI's PHM journey consists of three phases aimed at achieving the envisioned matured state






## 8. Conclusion

In shaping tomorrow's healthcare, it is crucial to understand system and sector-level readiness including challenges and opportunities across different stakeholders. Findings from this paper could inform future PHM program planning, regulations and policies, and implementation considerations within the private health insurance sector.

CHI is committed to creating a conducive environment for the progressive establishment of PHM through enabling healthcare providers and facilitating collaborations and engagement with relevant stakeholders. We anticipate that this commitment will improve population health outcomes of CHI beneficiaries.

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