EVOLUTION OF REVENUE CYCLE MANAGEMENT IN THE KINGDOM OF SAUDI ARABIA



EXECUTIVE SUMMARY

Revenue Cycle Management (RCM) in Saudi Arabia is rapidly evolving alongside the nation's healthcare financing transformation from a predominantly government block funding system to a private insurance-driven and public funded mandates ecosystem. Historically, public sector healthcare relied on centralized government funding, small scale formal private health insurance partnerships with no significant health insurance or self-pay billing revenues, with mostly limited manual billing operations.

The establishment of the National Platform for Health Information Exchange Services (NPHIES) and the bold move to develop a world class yet localised Saudi Billing System and Standards (SBS) by the **Council of Health Insurance (CHI)** in the early 2020s, marked the start of standardised and structured private health insurance billing operations, while the Revenue Cycle Management (RCM) service providers certification and accreditation by CHI, was the inauguration and formalization of the Saudi RCM industry.

Private healthcare insurance expansion and mandatory insurance reforms, overseen by the Insurance Authority (IA), are driving providers to review their skilled RCM manpower needs and explore innovations across digital platforms, Al-assisted solutions, and modernised RCM systems and automation tools, supported by workforce upskilling in coding, documentation, and financial management & control. CHI licensed RCM companies on the other hand, are also significantly investing in partnerships and scaling their operational models to partner with hospitals to optimize and scale revenue operations, focusing on providing skilled RCM workforce, process optimisation, improve revenue capture, rationalise cost, and integrate advanced technologies.

Under Vision 2030, the Health Sector Transformation Program (HSTP), and the Center for National Health Insurance (CNHI) framework, The Kingdom is moving towards an inclusive national healthcare funding insurance coverage, value-based care, and national-level health information integration. With these reforms, Saudi Arabia is poised to become a global benchmark for RCM excellence, demonstrating scalable, data-driven, and value-based revenue practices.

Business Process Outsourcing & Strategic Partnerships in Revenue Cycle Management are emerging as a key enablers, making the market commercially ready. Rapid adoption of AI, automation, and digital integration is helping the Kingdom build strong foundations for a new era of efficiency, innovation, and sustainable growth.

However early RCM initiatives provided valuable learning opportunities to refine implementation approaches, it has also demonstrated the need for the healthcare providers to develop their RCM strategies and key performance indicators with realistic targets, ahead of exploring partnerships, focusing on clear measurable benefits at a reasonable pace and aligned expectations.

To help healthcare providers navigate this evolving landscape, **Santechture** has developed the **Santechture-RCM Maturity Index[™]**, a proprietary self-assessment framework supported by **SURGE Growth Partners**. The framework enables hospitals to evaluate their maturity across five key dimensions—**Technology, Process, Workforce, Financial Performance, and Innovation**.

This white paper draws on insights from the Kingdom's prominent policy makers, RCM technology experts, healthcare providers, and BPO partners, offering a comprehensive view of RCM's historic evolution, current state, and future trajectory in Saudi Arabia, highlighting opportunities for operational excellence and value-based care.



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BORWARD

Saudi Arabia's healthcare system is experiencing a significant transformation in its financial planning and sustainability. The Kingdom has strategically utilized policy reforms, digital technologies, and private sector involvement to enhance care delivery and financing. Over the past five years, these efforts have demonstrated tangible and measurable progress towards achieving Vision 2030.

Globally, the adoption of advanced and modernised Revenue Cycle Management (RCM) platforms, process automation, and use of artificial intelligence enabled agents is redefining efficiency, transparency, and financial outcomes. In parallel, business process outsourcing (BPO) RCM partners are increasingly enabling providers to focus on patient care while optimizing operational and financial performance.

With the Kingdom's ongoing rapid reforms of the healthcare funding models, it is important to take a comprehensive review of the evolution, current state, and future trajectory of RCM in Saudi Arabia.



Anas Batikhi
Founder & CEO, SANTECHTURE

while observing how the Kingdom is emerging as a regional and global benchmark in value-based, digitally enabled healthcare.

I encourage healthcare providers to take the Santechture-RCM Maturity Index™ assessment as presented in this whitepaper. This framework enables providers to evaluate RCM maturity across five key dimensions—Technology, Process, Workforce, Financial Performance, and continuous improvement through Data Insights. It will help understand current RCM state, identify performance gaps, and define the desired level of maturity you aim to reach.

1 INTRODUCTION

Saudi Arabia's healthcare system has evolved significantly over the past two decades. Historically largely government-funded, the sector now combines public and private financing. In 2025, the healthcare budget reached **SAR 260 billion**, with the Ministry of Health (MoH) receiving **SAR 86.25 billion**. **About 40% of the 35.3 million residents** are privately insured, while the remainder is covered by public providers, including MoH, military, and education sectors.

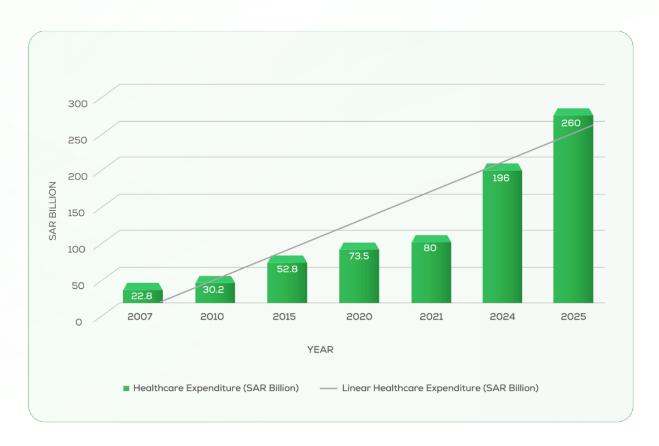
Key institutions, including the Council of Health Insurance (CHI) and the Insurance Authority (IA), regulate insurance policy, licensing, and compliance. Healthcare providers are increasingly revamping their revenue cycle management operations and systems while the National Platform for Health Information Exchange Services (NPHIES) now processes up to **90% of all claims**, enabling real-time adjudication and data-driven insights and eventually paving the way for linking reimbursement to outcomes and cost efficiency.

Saudi Arabia's health-insurance premiums grew from approximately SAR 38.6 billion in 2023 to SAR 42.2 billion in 2024, reflecting the sector's sustained expansion. Industry forecasts estimate that the overall health-insurance market could reach around SAR 83 billion by 2030, driven by rising insurance penetration, digital transformation, and the shift toward value-based care. In this environment, RCM Business Process Outsourcing (BPO) providers are well positioned to enhance operational efficiency and support both public and private healthcare providers in navigating evolving market dynamics.

This white paper provides a comprehensive analysis of Saudi Arabia's RCM landscape, covering historical trends, regulatory milestones, technological advancements, and projected developments. It serves as a reference for policymakers, healthcare providers, payers, and technology partners seeking a structured understanding of the evolving healthcare finance ecosystem.

2. JOURNEY SO FAR THE HISTORIC PERSPECTIVE

Saudi Arabia's healthcare system is historically dominated by government-owned healthcare providers, representing more than 70% of the healthcare facilities in the Kingdom, with the Ministry of Health serving as the largest healthcare provider catering for citizens' free access to healthcare at public hospitals. Overtime, healthcare expenditure grew steadily and exponentially and is expected to reach SAR 260 Billion by end of 2025, while spending continued to be managed as block budgets with limited visibility on budget spend and efficiencies due to lack of detailed costing and billing data, that usually require utilisation data and detailed billing as a prerequisite for data driven budgetary decisions and planning.



Graph 1. Trend of Healthcare Expenditure in Saudi Arabia (SAR Billion), 2007–2025

RCM is no longer a back-office function; it is the foundational data layer that will enable providers as well as the Ministry of Health (MOH) to model disease patterns, target early interventions, and ultimately realize the Vision 2030 goal of saving an estimated SAR 50 billion annually by 2035 through truly sustainable, value-based healthcare.

Stated **Dr. Kumar Menoan**Director of Medical Affairs, Sutherland Healthcare Solutions

2.1 Health Insurance Reform Impact and Growth

The evolution of health insurance in Saudi Arabia has been a cornerstone of the Kingdom's healthcare transformation. The establishment of the Cooperative Council for Health Insurance (CCHI) in the early 2000s marked the start of formal health insurance governance, introducing structure, accountability, and a foundation for broader access. The council was later renamed Council of Health Insurance (CHI), reflecting a strategic shift to accelerate digital transformation and ensure sustainable healthcare.

The CHI drove the largest transformation in the Saudi health insurance sector, putting emphasis on data driven decisions having developed the Saudi Billing System (SBS) and associated medical billing standards, and mandated the use of the unified health insurance data exchange platform, known as National Platform for Health Information Exchange Services (NPHIES), for clinical and claims data capture, shaping policy and enabling the move towards value based healthcare.

In an interview with Santechture, Oct 2025 **Dr. Wail Yar,** Executive Director of Sector Enablement at the Council of Health Insurance (CHI),

Saudi Arabia is at the forefront of a healthcare transformation. Digital platforms such as **NPHIES**, which now processes over 90% of private sector claims while supporting a unified patient identity across providers, are central to this effort. NPHIES integrates financial and clinical data across public and private sectors, enabling real-time monitoring of costs, quality, and population health outcomes, and supporting the future implementation of Value-Based Care and DRG payment models. Government backing ensures that technology drives efficiency, transparency, and improved outcomes for the entire population.

Today, approximately **40% of Saudi Arabia's** 35.3 million residents—around **14 million** people—are **privately insured**, primarily employees in private and semi-government sectors, excluding visitors and pilgrims. The remaining population is covered through healthcare providers within the Ministry of Health (MOH), military, and education sectors.

This reform-driven insurance ecosystem, underpinned by digital integration and policy alignment, is enabling a more sustainable, equitable, and data-driven healthcare system-positioning Saudi Arabia as a regional benchmark for insurance innovation and value-based delivery.

Saudi based transformation experts, **Balamugundan and Dr. Rafat**, from Sutherland Healthcare Solutions noted that

The regulatory push for RCM standardization—particularly in clinical documentation and coding—is the indispensable first step in KSA's health transformation. The resultant clean, comprehensive data, centralized via platforms like NPHIES, forms the baseline for predictive analytics, population health management, and national preventive care strategies.

Impact on RCM Practices

This rapid growth accelerated the adoption of insurance-based healthcare financing, but also revealed challenges

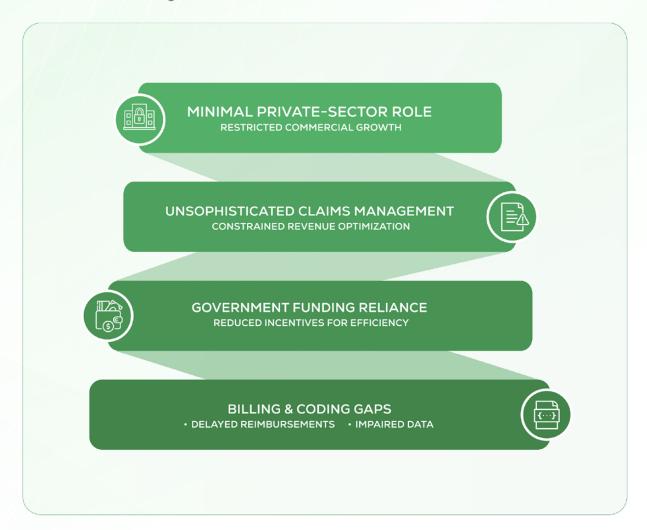


Illustration 1: Historic RCM Challenges

Over time, these challenges prompted major reforms under Vision 2030, leading to standardized billing, digital claim integration through NPHIES, and a more data-driven insurance ecosystem.

Talking to the research team, **Dr. Hazem Khalifa**, Director Operations at ACCUMED, added that:

The RCM market in Saudi Arabia is undergoing a strategic and financial transformation driven by Vision 2030. The full activation of CNHI and the shift to value-based care is the definitive catalyst, projecting the annual claims volume to surge from approximately SAR 25 billion to over SAR 80 billion by 2026. This exponential growth demands immediate, deep adoption of AI-powered automation and DRG coding. By integrating technology with a disciplined regulatory structure—backed by CHI and the newly empowered Insurance Authority (IA)—KSA is creating a full-system RCM model that ensures compliance, maximizes value, and solidifies its position as the GCC benchmark for advanced RCM by 2028.

2.2 Regulatory Milestones Leading to Present

Saudi Vision 2030, launched in 2016, represents a watershed moment for healthcare transformation. The plan seeks to diversify healthcare financing, improve quality of care, and increase private sector participation. Its Health Sector Transformation Program (HSTP) aims to modernize healthcare delivery across the Kingdom.

In the professional view of **Ahmed Alalmai**, Assistant General Director, General Department of Revenue Development & Monitoring, Ministry of Health, Saudi Arabia, states:

In my professional view, the ongoing digital transformation within Saudi Arabia's healthcare sector – particularly through Health Information Systems (HIS), NPHIES, and other advanced integration systems – forms the backbone of sustainable Revenue Cycle Management (RCM). These systems are instrumental in enabling hospitals to achieve self-sufficiency, enhance financial sustainability, and ultimately improve the quality of care delivered to patients.



Illustration 2: Vision 2030 Healthcare Initiatives

Historically, RCM faced challenges from paper-based processes, inconsistent coding, and limited interoperability. The move to ICD10 AM 10th edition and the adoption of Saudi Billing System (SBS) in early 2020s, introduced localized adaptations with proprietary national codes to standardize billing and improve accuracy across providers allowing for a national level data standardisation, unified claims processes, and billing transparency.

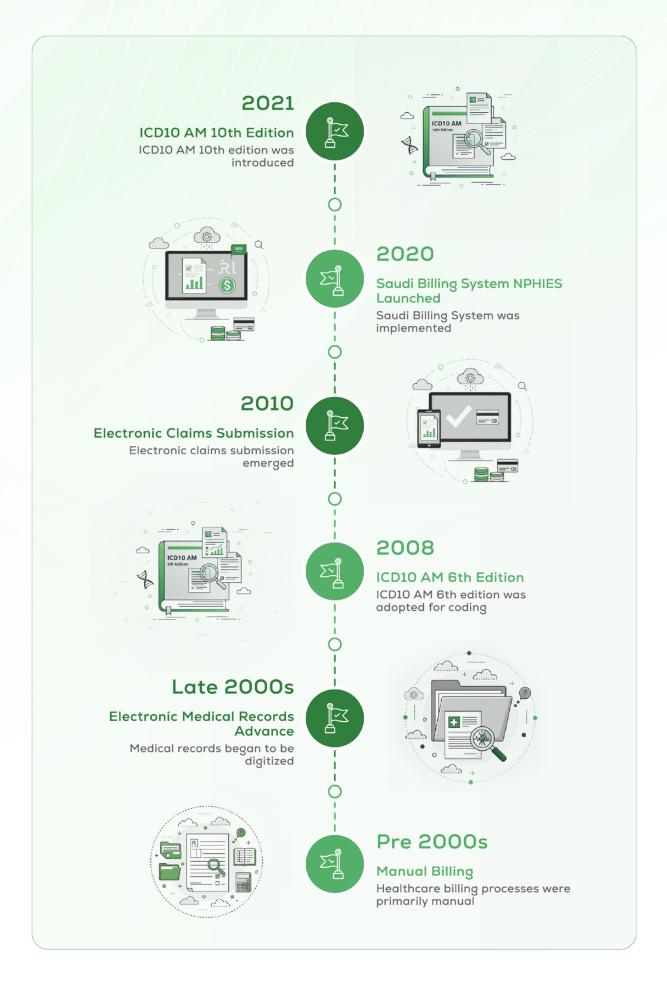


Illustration 3: Evolution of RCM in Saudi Arabia

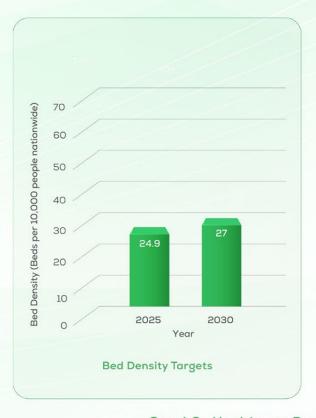
2.3 Public vs. Private Sector

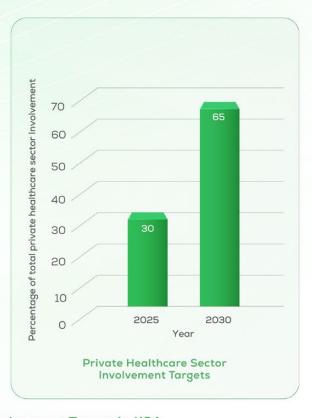
Saudi Arabia's 2025 healthcare and social development budget is SAR 260 billion, representing approximately 20% of total government spending—underscoring healthcare as a key Vision 2030 priority. The Ministry of Health received SAR 86.25 billion, reflecting continued investment in public health, prevention, and digital transformation.

The public sector currently covers around 75–77% of total healthcare expenditure, while the private sector accounts for 23–25%, a share expected to grow through ongoing privatization and public-private partnership (PPP) initiatives.

Business Process Outsourcing (BPO) represents a key strategic lever in this transformation. From perspective of **Ahmed Alalmai**, Assistant General Director, General Department of Revenue Development & Monitoring, Ministry of Health, Saudi Arabia,

As the healthcare sector advances toward privatization and performance-based operations, incentive-driven RCM models can significantly improve efficiency, transparency, and accountability He also sees the Health Holding Company (HHC) as a cornerstone in realizing this vision. Through its leadership and enabling role, HHC is helping drive alignment between digital innovation, financial performance, and healthcare outcomes – setting a strong foundation for a more agile and value-driven healthcare ecosystem.





Graph2: Healthcare Development Target in KSA

3. PRESENT DAY REVENUE CYCLE MANAGEMENT (RCM) IN SAUDI ARABIA

3.1 Current Healthcare Capacity & Market Dynamics

"In 2024, Saudi Arabia's health insurance market reached a valuation of SAR 42.2 billion, reflecting a 9% year-over-year growth from SAR 38.6 billion in 2023.

Over the past three decades, the Kingdom's healthcare sector has transitioned from a predominantly government-funded system to an increasingly insurance-driven ecosystem. This expansion has driven rising patient volumes, complexity, and insurance coverage, placing significant demands on Revenue Cycle Management (RCM) systems nationwide."

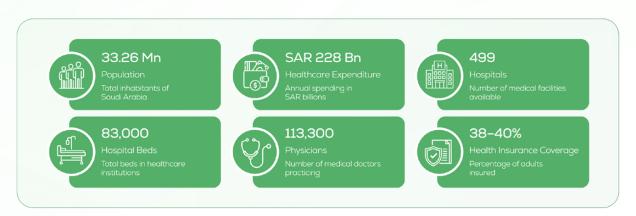


Illustration 5: KSA Key Market Content (Yr 2024)

The statistics indicates an upward trend and healthcare growth

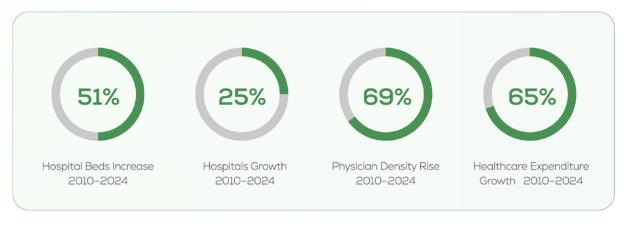


Illustration 6: Healthcare Capacity and Expenditure Growth (2010–2024)

According to Dr. Abdelaleem Shishi, Chief Group RCM Officer, Saudi German Group,

Insurance reform has increased patient volumes, but it has also amplified payer complexity. The shortage of trained Saudi coders and the need for early technology adoption are critical challenges. For DRG readiness and accurate claims management, private providers must pursue proactive strategies — including shadow billing, expanding coding teams (both local and outsourced), and investing in Al-driven RCM tools — to safeguard revenue, optimize patient flow, and maintain operational efficiency amid evolving market and regulatory dynamics.

3.2 Evolution and Sophistication of RCM Billing Systems

Saudi Arabia's RCM transformation mirrors the broader healthcare sector reform and evolution. The introduction of the Saudi Billing System (SBS) alongside ICD-10-AM classification of diseases created a dual coding framework tailored to national needs as to:

- · Ensure compliance and billing accuracy across diverse providers.
- Facilitate a national standard for claims processing via the National Platform for Health Information Exchange Services (NPHIES).
- · Consolidate billing data for auditing, reconciliation, and financial transparency.

Implementation challenges include workforce training on dual coding, maintaining coding precision, and aligning hospital workflows with national billing rules.

Feature	Saudi Arabia (ICD10-AM + SBS)	USA (ICD10-CM + CPT)	Australia (ICD-10-AM + ACHI)
Coding Standard	ICD-10-AM diagnosis & Australian Codes for Health Interventions (ACHI) localized through SBS for procedures.	ICD-10-CM (diagnosis), Current Procedural Terminology (CPT) for procedures.	ICD-10-AM diagnosis & Australian Codes for Health Interventions (ACHI) for procedures.
Billing Model	Centralized via NPHIES	Decentralized insurer- specific	Government standardized billing and insurer specific
Claims Submission	Centralised via NPHIES e-claims	Direct to Payer or via Clearing Houses	State-level direct billing and private payers
Funding Model	Government Funded Healthcare Systems and Private health insurance	Private health insurance and Government financing (Medicare, Medicaid, and VA)	Government Funded Healthcare System (Medicare) and Private health insurance

Table 1: Comparison between KSA, USA and Australian RCM billing systems

Saudi Billing System (SBS):

The Saudi Billing System, which is a medical coding classification system that unified the coding and billing of inpatient and outpatient services, was developed by the CHI in collaboration with leading international and regional expertise, taking the best practices and learning from other coding classification systems.

SBS was developed after extracting 2+ Million patient records and coding a representative sample that was then benchmarked against the leading classification systems, namely the American Current Procedural Terminology (CPT), the Australian Codes for Health Intervention (ACHI).

The resulting SBS classification system was developed as an extension to the ACHI base classification of 6,224 codes to reach 9,444 codes, allowing for better granular billing support while expanding on the base ACHI classification system coding and guidelines to be localized to fit the Saudi market needs.

	Benefits	Challenges	Opportunities
Saudi Billing System	 Unified medical procedural terminology Provides base for a national level reporting. Accurate service utilisation and price benchmarking Allows for healthcare outcomes tracking 	 Specialised coding training on SBS standards is needed to develop a local workforce which may take time to develop. Healthcare providers may lag on full implementation due to low availability of trained resources. 	 Creates a new career path and supports local jobs development. Better support for a localised Saudi DRG implementation Adoption of emerging technologies such as Al Coding and CDI though LLMs to compensate the resource gaps

Table 2: Saudi Billing System- benefits, challenges & opportunities

RCM Snapshot:

Metric	Data	Details
Estimated Total Market Volume of Annual Claims	(50-65 million claims)	Across all facilities
Initial Denial Rates	11-30%	Historically high variation among providers
First-Pass Claim Acceptance	55-60%	Indicates processing efficiency
Average AR Days	90-120	Reflects collection cycle time not including prompt payment models.
CDI & Coding Error Rates	Up to 27%	A key driver of denials
Healthcare Facilities	~10,099	499 hospitals, 2,300 primary healthcare centres, 7,000 private clinics and polyclinics, and about 300 specialized and rehabilitation centres.

Table 3: KSA RCM Snapshot (Yr 2024)

3.3 People, Process, and Technology: The RCM Triad

People:

Saudi Arabia's healthcare workforce has expanded to more than 350,000, with increasing specialization in health information management, billing, coding, and finance. Upskilling initiatives continue to support this shift Certified coder shortages (fewer than 3 coders per 10,000 encounters) challenge throughput and accuracy.

 Hospitals counter these with upskilling initiatives, certifications, outsourcing, and Al-assisted coding tools that reduce denials linked to documentation gaps.

Process:

The transition from government-financed global budgets to insurance-driven, claim-based reimbursement models necessitated standardized billing codes and electronic claims systems. The Cooperative Health Insurance Act (CHI) facilitated this modernization.

- Movement away from retrospective manual coding towards real-time eligibility verification, centralized denial management, and Al-augmented clinical documentation.
- Front-end checks and automated workflows shorten claims adjudication and boost financial performance.

Technology – The Digital Engine of RCM Transformation:

Technology is the epicenter of Saudi Arabia's RCM evolution, transforming fragmented processes into connected intelligent systems via five digital accelerators.

Revenue Cycle Management is not just a clearing house; it is an organizational function that must evolve with regulatory changes and digital transformation. The rapid pace of government initiatives leaves no room for outdated workflows or disconnected systems. Healthcare providers need to unlearn old habits and adjust their processes. When AI is integrated into solid processes and responsible governance, it becomes more than a tool; it transforms into the engine of a compliant, efficient, and fair reimbursement system.

emphasizes **Dr. Ahmed Al Tabbakh**, Vice President Revenue Cycle Management, Fakeeh Care Group

Also, Assaf Alsaab, CEO of Waseel, (Healthcare Technology Company, specializing in RCM in KSA) notes:

Waseel, as a trailblazer in Saudi Arabia's healthcare RCM sector, serves over 3,000 providers and manages more than SAR 11 billion in annual transactions. As one of the first three companies licensed by CHI, Waseel is leveraging advanced technology and operational expertise to redefine RCM standards nationwide. With Vision 2030 placing technology at the heart of Saudi Arabia's healthcare transformation, we are empowering providers to seamlessly transition to Value-Based Care-positioning the Kingdom as a regional benchmark for RCM excellence and innovation.

The potential for revenue cycle technology to rapidly and dramatically improve provider economics is immense.

RCM Pillar	Key Enablers & Metrics	Transformation Status	Ultimate Milestones/Objectives
Strategic Foundation	RCM is the foundational unified data layer for providers from both Private and Public sectors.	In-Process / Foundational Shift	Realize the Vision 2030 goal of saving an estimated SAR 50 billion annually by 2035 through truly sustainable, value-based healthcare.
Interoperability & Data Exchange	NPHIES links payers, providers, and regulators on a unified layer. Over 90% of private sector claims integrate with NPHIES.	Largely Achieved (Private Sector)	Achieve 100% real-time, seamless data exchange for all claims, eligibility, and pre-authorization across all health system stakeholders (public and private).
Intelligent Automation	Use of Intelligent Process Automation through Agentic AI reduces manual claims handling by 25% and revenue cycle time by 7-10 days.	In-Process / Scaling Up	Drive down the average Days in Accounts Receivable (AR) to an industry-leading benchmark, approaching real-time or near-zero manual claim intervention.
Clinical Documentation Improvement Through AI	Al-powered CDI supporting physician apply accurate inline documentation will increase quality and provide better support for claims medical justification and Al automated coding.	In-Process / Scaling Up	Will bring physicians documentation practices closer to national quality targets and improve patient safety.
Al Medical Coding Automation (CAC/Al)	Al-powered Medical Coding Automation improves coding accuracy to 90-95%, reducing denials. Real-time audit trails cut resubmissions by nearly 15%.	In-Process / Scaling Up	Attain near-perfect coding accuracy to minimize audit risk and first-pass denial rates (FNPR), ensuring maximum, compliant reimbursement.
Advanced Analytics & Decision Intelligence	Predictive analytics and machine learning forecast denials and predict payer behaviour. Real-time dashboards monitor KPIs (claim status, AR days, denial causes). Financial-clinical data integration informs patient-level profitability.	In-Process / Pilot & Expansion	Establish RCM as a strategic intelligence hub that informs clinical pathways, resource optimization, and value-based contract negotiation.
AI-Driven Clinical and Financial Symmetry	Al-powered DRG groupers interpret clinical notes, suggest DRGs, and flag documentation gaps. Conversational Al supports physicians with voice-based charting and coding prompts. Generative Al assists in drafting appeal letters.	In-Process / Early Adoption	Fully close the documentation gap between clinical service delivery and financial capture, linking every patient encounter directly to its appropriate value.
Data Security & Regulatory Compliance	Compliance with Personal Data Protection Law (PDPL) enforced through encryption and anonymization. Cloud RCM platforms ensure data residency.	In-Process / Mandatory Compliance	Maintain a trusted, resilient, and secure data environment that meets all national and international standards, enabling confidence in all data-driven VBH models.

Table 4: RCM transformation status and objectives in the KSA healthcare sector

Automation is no longer a choice but an essential driver of RCM efficiency and compliance. Atheer Alghamdi, Director of Business Services, Santechture, observes, technology forms the backbone of next-generation revenue cycle management, with Al and automation enabling process accuracy, transparency, and scalability. Al-assisted coding, clinical documentation improvement (CDI), and analytical dashboards are fundamental to ensuring precise and timely claim submissions. Predictive algorithms allow organizations to detect claims likely to face rejection prior to submission, enabling proactive corrections and minimizing downstream revenue leakage.

3.4 Diagnosis Related Groups (DRG) & RCM Technologies Supporting DRG Grouping and Billing Automation

For private insurance, the adoption of **Diagnosis Related Groups (DRGs)** represents a critical milestone in Saudi Arabia's healthcare payment reform. Through the implementation of the **Australian Refined DRG (AR-DRG)** system in collaboration with the **Council of Health Insurance (CHI)**, hospitals and payers can categorize patients according to **clinical severity and resource usage.** This approach enhances **transparency**, **operational efficiency**, **and precision in claims processing and financial management**, laying the foundation for value-based reimbursement models.

Key Technologies for Tech-Enabled RCM

The transformation of RCM through DRG adoption is powered by several key technologies that enhance coding accuracy, streamline claims processing, and enable data-driven decision-making:

Technology	Function / Purpose	Key Benefits
Al-Powered Computer-Assisted Coding (CAC)	Automatic ICD-10-AM and SBS coding	>95% coding accuracy, reduces denials, improves billing compliance
Al Powered Clinical Documentation Improvement (CDI)	For inline validation using Al tools for physician support to improve quality of documentation through prompts & alerts on documentation gaps.	Drives quality in documentation and facilitates more effective AI Coding Automation based on comprehensive medical documentation
Generative AI & Conversational Automation / Ambient AI	To support seamless documentation during the patient physician consultation.	Allows for more engaged discussions with their patients and freeing up clinicians to focus more on patients and provides real-time insights that can lead to better decision-making and patient outcomes.
NPHIES (National Platform for Health Information Exchange Services)	End-to-end digital claims lifecycle with embedded DRG adjudication logic	Streamlined claims processing, real-time payer dashboards, operational efficiency
Agentic Al Automations	Automate claim validation, denial rework, & workflow management	Reduces manual errors, accelerates revenue cycle, improves staff productivity
Predictive Analytics Platforms	Real-time financial insights, predictive denials, value-based reimbursement support	Informed decision-making, risk mitigation, improved contract performance
Interoperable APIs & HIS Integration and No Code/Low Code Systems Integrations	Clinical-billing data exchange, AR- DRG mapping	Accurate coding & billing, seamless EHR-payer connectivity
Cybersecurity & Audit Intelligence	Data integrity, fraud detection, regulatory compliance	Protects patient data, strengthens compliance, prevents revenue leakage

Table 5: Key Technologies for Tech-Enabled RCM

By proactively adopting these tools, providers can safeguard revenue, optimize patient throughput, and strengthen operational efficiency in a rapidly evolving insurance-driven healthcare market.

4. WHAT IS NEXT – THE FUTURE OF REVENUE CYCLE MANAGEMENT IN SAUDI ARABIA

Saudi Arabia is at a pivotal moment in healthcare transformation. The convergence of ambitious policy reforms, rapid digital adoption, and workforce development is reshaping healthcare financing and operations. Revenue Cycle Management (RCM), the critical link between patient care and financial sustainability, is evolving into a fully integrated, data-driven ecosystem connecting payers, providers, regulators, and patients in real time.

4.1 Mandatory Health Insurance and CNHI

The Center of National Health Insurance (CNHI) is spearheading the expansion of mandatory health insurance, starting with the private sector, and gradually moving toward universal coverage.

This initiative ensures that all employed residents are insured, improving access while streamlining claim processing. Integration with NPHIES and AR-DRG frameworks enables faster adjudication, greater transparency, and real-time reporting for both public and private payers. It also forms the foundation for value-based payment models and incentivizes preventive care while promoting cost containment (chi.gov.sa).

4.2 Data-Driven Growth: RCM's Expanding Market

- In 2019, Saudi Arabia's RCM market stood at SAR 3.68 billion By 2024, it grew to 5.18 billion due to rising patient numbers, a population of 35.3 million, and a growing medical tourism sector projected to reach reach SAR 29.63 billion by 2033 (CAGR 21.8%).
- The RCM market is forecasted to reach SAR 14.10 billion by 2033, reflecting a decade-long CAGR of 11.77%. This growth is driven by digital adoption, private sector acceleration, and government healthcare investments exceeding SAR 258.75 billion under Vision 2030.

4.3 Government: Architect of Interoperability and Governance

Government leadership is central to RCM transformation:

- Universal government-funded insurance will cover over 65% of the population by 2026.
- 100% of hospitals are projected to be NPHIES- and AR-DRG-compliant for regulated claims.
- Al adoption proficiency among government entities continues to improve in 2025, enabling automation, fraud prevention, and real-time auditing.

4.5 Providers: Efficiency, Upskilling, and Patient Engagement

For providers, the future means managing an unprecedented volume of claims, more complex documentation, and international patient billing. NPHIES adoption has produced measurable impacts: 25–30% admin savings, 15–20% fewer denials, median cycle times as low as 3–5 days, and sharper cash flow management.

Workforce readiness is a key gap: while 62% hospitals report being DRG "ready" in 2024, sustained investment in coder, documentation, and analytics training is now an industry imperative.

4.6 RCM Technology and the Ecosystem: The New Digital Core

RCM technology will increasingly be "invisible, essential infrastructure"—not a bolt-on department, but the financial nervous system of healthcare:

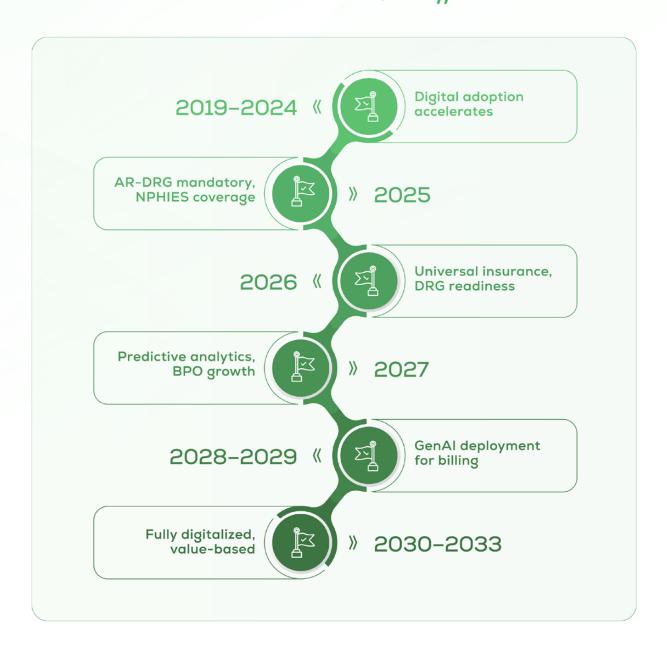
- By 2027, >80% of healthcare providers are forecasted to use predictive analytics to optimize denials and revenue.
- Medical billing outsourcing, now growing at ~14% CAGR, will encompass over 20% of the RCM market by 2030, as cloud-native BPOs and Al-driven platforms standardize and accelerate digital payments.
- Integrated claims, blockchain-secured digital audit trails, and generative AI for documentation and appeals will be universal, meeting the 100% PDPL compliance benchmark.
- By 2030, every transacted Riyal in Saudi healthcare will be automatically mapped from appointment to payment, with real-time visibility and benchmarking for all ecosystem participants.

4.7 Business Process Outsourcing (BPO) and Strategic Partnerships

Business Process Outsourcing (BPO) is becoming a critical enabler of efficiency and financial performance in Saudi Arabia's healthcare sector, particularly in Revenue Cycle Management (RCM). Leading companies and partnerships, such as CorroHealth and Santechture, are helping hospitals adopt advanced RCM solutions, automation, and data-driven processes to optimize operations.

Dr. Ali Ayach, Partner - Healthcare, Arthur D. Little, emphasizes that:

BPO in Revenue Cycle Management is a key enabler, supported by MOF-approved revenue-sharing models under PPP frameworks. With rapid adoption of Al, automation, and digital integration, the Kingdom is building solid fundamentals for a new era of efficiency, innovation, and sustainable growth.



5. CONCLUSION



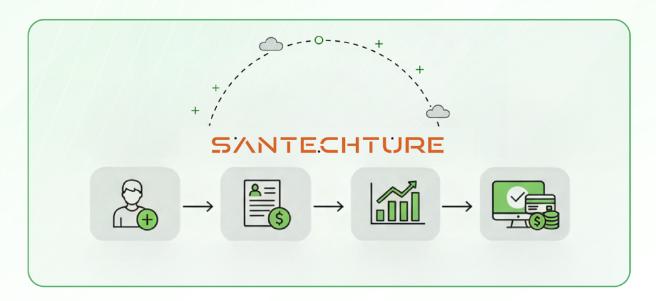
Saudi Arabia's RCM transformation exemplifies system-wide digital progression. By 2033, the RCM market is projected to triple in value, with every aspect of claims, coding, compliance, and patient experience fully digitalized and outcome focused. Saudi Arabia is positioned to emerge as a global benchmark for intelligent, patient-centred, value-driven healthcare finance. The next chapter belongs to the collective ecosystem, where payers, providers, government, vendors, and patients are interconnected, ensuring a future of efficiency, transparency, and sustainable healthcare delivery.

The nation's strategic focus on interoperability, automation, and advanced analytics is also drawing increasing attention from global investors and healthcare operators, positioning Saudi Arabia as one of the most attractive markets for future healthcare innovation and RCM excellence.

Bilal Mushtaq, Executive Vice President, Global Growth & Strategy, CorroHealth summarizes that

We are experiencing a pivotal advancement in RCM technology. Generative and Agentic AI driven Autonomous coding and DRG validation platforms will help identify under-documented conditions and missed clinical details that directly impact reimbursement, overall financial performance, and capture key population health outcome metrics. As the Kingdom is preparing for a transformational change with Value Based Health Care and DRG based payment, successful deployment of such modern cloud platforms will unlock operational efficiency and position KSA as a leader in healthcare financial management across the region.

6. RCM TRANSFORMATION SELF-ASSESSMENT FOR PROVIDERS



Powered by Santechture

As Saudi Arabia's healthcare system evolves under the CNHI framework and national health insurance reforms, hospitals face increasing pressure to adopt advanced Revenue Cycle Management (RCM) practices.

The historic journey of RCM in the Kingdom has highlighted the critical role of technology, standardized processes, workforce capabilities, and financial management in ensuring efficient revenue capture and regulatory compliance. Building on this context, the next step for healthcare providers is to **assess their current RCM maturity** to identify gaps, benchmark against national standards, and plan targeted transformation initiatives.

To support this, Santechture, has developed the **Santechture-RCM Maturity Index™**, a proprietary self-assessment tool designed to provide medical facilities with a clear, actionable snapshot of their RCM capabilities. This tool evaluates five critical dimensions: **Technology, Process, Workforce, Financial Performance, and Integration/Innovation.**

How to Use the Self-Assessment

- 1. Review each dimension and select the maturity level (0-4) that best represents your organization's current state.
- 2. Record your rating in the "Your Rating" column.
- 3. Calculate the **Total Score** by summing your ratings for all five dimensions.
- 4. The results provide a neutral, objective view of your organization's RCM maturity and highlight areas for potential improvement.

RCM Self-Assessment Table – Santechture-RCM Maturity Index $^{\text{\tiny TM}}$

					—	Your Rating
Points	0	1	2	3	4	0-4
Technology	Manual billing with basic system support	Partial automation of billing processes and use of business rules for automated billing validation	Al-assisted coding and Al CDI tools incorporated in the RCM value chain but not fully integrated	Fully integrated digital RCM platforms incorporating Al solutions for CDI and Coding	Developed and implemented own Al Models based on Historical Data and Trends	
Process	Ad hoc processes, no standardisati on	Some standardization in parts of RCM processes	Hospital-wide documented processes and incorporated into system workflows with best practices in RCM standards followed	Parts of RCM process automated based on use of Agentic AI with minimum of 30% of RCM processes automated	Full use of Agentic Al for process automation with more than 70% of RCM processes running unsupervised	
Workforce (% trained)	No formal training or certification for RCM staff	Some staff trained through in house training programs	Most staff are trained through in house training or certified from recognised RCM training bodies	Certification rate of staff certified from recognised RCM bodies exceeds 70%	Develops and contributes content and data to national training bodies to enhance quality of RCM certification quality	
Financial performance	High initial claim denials exceeding 15%	Average initial claim denials between 10-15%	Initial claim denials between 7-10%	Initial claim denials between 4-6%	Initial claim denials below 4%	
Use of Data & Insights	Mostly manual tracking of RCM financial and operational data for reporting	Limited system RCM financial and operational reporting	Access to detailed operational and financial reporting along with dashboards for key RCM KPI tracking	Full catalogue of operational and financial reporting along with user driven data analytics tools and dashboards for all RCM KPI tracking	Use of predictive analytics to forecast billing and revenue trends, identify potential denials, optimize billing processes, and enhance overall financial performance.	
Total						/25

INTERPRETATION OF RESULTS

- 0 4 Basic
- 5 12 Developing
- 13 20 Advanced
- 21 23 Leading
- 24 25 Transformational

KEY TAKEAWAYS

- Growth in market size & in claims clearly indicates a need for an automated system
- The Santechture-RCM Maturity Index™ provides a neutral, objective snapshot of current RCM capabilities.
- It helps hospitals identify gaps and prioritize areas for improvement.
- Higher maturity levels enable better revenue capture, reduce denials, and support compliance with national health insurance reforms.

AKNOWLEDGMENT & PARTNERSHIP

The authors would like to express their sincere gratitude to **His Excellency, Dr. Shabab Alghamdi,** Secretary General, Council of Health Insurance (CHI), for his inspiring leadership and in recognition for the significant contributions to the RCM industry and the wider healthcare system in the Kingdom.

The following leading experts and their organizations are also extended deep appreciation and acknowledgement for their invaluable support, insights, and guidance during the preparation of this white paper on Revenue Cycle Management (RCM) in Saudi Arabia:

Mr. Ahmed Alalmai, Assistant General Director, General Department of Revenue Development & Monitoring, Ministry of Health, Saudi Arabia – for guidance on public sector health financing and RCM policies.

Dr. Abdel Aleem Shishi, Chief Group RCM Officer, Saudi German Group – for sharing insights on private healthcare RCM operations.

Dr. Ahmed Al Tabbakh, Vice President Revenue Cycle Management, Fakeeh Care Group – for providing expertise on RCM strategies and implementation in private hospitals.

Dr. Ali Ayach, Partner - Healthcare, Arthur D. Little - for contributions on consulting perspectives and industry best practices.

Ms. Atheer AlGhamdi, Director of Business Services, SANTECHTURE – for sharing insights on RCM technology adoption and digital transformation.

Dr. Hazem Khalifa, Senior Director - Operations, ACCUMED KSA - for input on operational efficiency and revenue cycle solutions.

Dr. Wail Yar, Director of Provider Sector Enablement, Council of Health Insurance (CHI) – for advice on regulatory frameworks, coding standards, and accreditation.

Dr. Bilal Mushtaq, Executive Vice President, Global Growth & Strategy, CorroHealth – for expertise in strategic growth and global RCM trends.

Mr. Balamugundan M, Sr. Director - Healthcare Service Delivery, Dr Kumar Menoan, Director medical affairs & Dr. Arafat AlMarzouk Healthcare Consultant, Sutherland Healthcare Solutions - for support on technology-driven RCM processes and implementation insights.

Mr. Andrew Phillips, Managing Partner, Bluebridge Consulting – for his valuable peer review and expert insights that strengthened the quality and depth of this white paper.

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ABBREVIATION

Al _____ Artificial Intelligence

AR _____ Accounts Receivable

AR-DRG ____ Australian Refined Diagnosis Related Groups

BPO _____ Business Process Outsourcing

CAC _____ Computer-Assisted Coding

CHI _____ Cooperative Health Insurance Council

CNHI _____ Center of National Health Insurance

DRG _____ Diagnosis Related Groups

HHC _____ Health Holding Company

HSTP _____ Health Sector Transformation Program

HIS _____ Health Information Systems

IA _____ Insurance Authority

ICD _____ International Classification of Diseases

ICD-10-AM __ International Classification of Diseases, 10th Edition,

Australian Modification

IMARC _____ International Market Analysis Research & Consulting

MOH _____ Ministry of Health

NPHIES _____ National Platform for Health Information Exchange Services

PDPL _____ Personal Data Protection Law

PPP _____ Public-Private Partnership

RCM _____ Revenue Cycle Management

RPA _____ Robotic Process Automation

RCM KPI _____ Revenue Cycle Management Key Performance Indicator

SBS _____ Saudi Billing System

SeMA _____ Saudi eHealth Maturity Assessment

SAR _____ Saudi Riyal

VBH _____ Value-Based Healthcare

WHO _____ World Health Organization

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