

The progression of value-based healthcare in the Middle East: From data to payment adjusters

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Globally, health systems are developing with a view towards the implementation of value-based healthcare. In this paper, we will look at this journey, which is being pursued through diagnosis-related group (DRG) reimbursement for inpatient services across a number of countries in the Gulf Cooperation Council (GCC)¹ region. We explore various initiatives, from data requirements and auditing through to implementation of DRGs and how this reimbursement method can be linked to quality outcomes to drive value-based care initiatives.

Background to value-based healthcare and DRG reimbursement

The concept of value-based healthcare focuses on increasing the value of health services through improving quality outcomes and reducing cost. While improving outcomes relies on monitoring and measuring specified quality metrics, cost reductions are targeted through improving efficiency and reducing wasteful services or potential abuse in the system. One notable way many health systems have managed these improvements is through changing the model of provider reimbursement; for example, moving from a fee-for-service (FFS) environment, in which healthcare providers are reimbursed for every service provided, to an alternative reimbursement mechanism where payments for all health services are bundled together for specific episodes of care. This approach can reduce the incentive for providers to provide nonessential services to the patient. Possible bundled payment arrangements include capitation arrangements, DRG reimbursement and per diem rates. While there is some debate as to whether the implementation of a DRG system on its own constitutes value-based healthcare, this is the first step being taken by a number of countries in the Middle East to move away from fee-for-service reimbursement.

A DRG system is used to assign a clinical classification to a particular inpatient admission based on features of the patient (for example: age and gender), the primary diagnosis and any additional diagnoses present at the time of encounter, as well as any procedures performed during the encounter. The level of reimbursement of each DRG is intended to reflect the relative average resource intensity of that type of encounter throughout the healthcare system. This incentivises providers to be as efficient as possible, as they will not receive additional reimbursement for any additional services not included in the average encounter. As a result, encounters with longer-than-average lengths of stay and/or unnecessary procedures and services will likely be less profitable for the providers than encounters that can be managed within the average length of stay along with evidence-based care for that DRG.

Why implement DRG reimbursement?

One of the objectives of introducing a DRG reimbursement mechanism is to transfer some of the financial risk relating to inpatient encounters to the treating facility. Implementing DRGs, and therefore applying a fixed price for a particular admission, is intended to reduce the payer's risk for a particular admission, and to encourage providers to manage each encounter within the typical resource requirements for that type of admission.

In many government-funded health systems, DRGs and the resulting case-mix index are used to evaluate the severity of cases treated by each healthcare facility as a basis of hospital budgeting. The use of DRGs by healthcare facilities allows for monitoring of case mix changes over time as well as comparisons among facilities.

¹ Now known as the Cooperation Council for the Arab States of the Gulf.

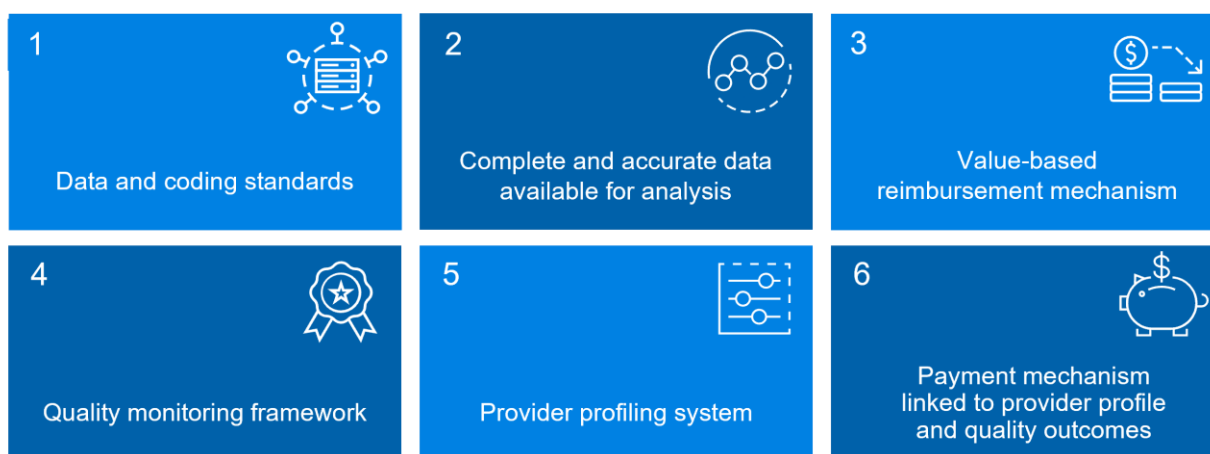
There are many different DRG systems in use globally, with many countries either developing their own DRGs or adapting existing DRG packages for use in their country. Some DRG systems cover only the facility costs relating to inpatient encounters, for example: the Medicare Severity DRGs (MS-DRGs) used by the Centers for Medicare and Medicaid Services (CMS) in the United States, while the International Refined-DRGs (IR-DRGs) used in Dubai and Abu Dhabi cover additional services, such as physician and diagnostics costs.

The journey towards DRG implementation:

Implementing DRG reimbursement or value-based healthcare is a major transformation requiring commitment and effort from all stakeholders. There are several prerequisites to implementing a value-based reimbursement mechanism. We can measure progress along this journey using six key milestones as shown in the illustration in Figure 1. Across the GCC we can find health systems at various stages of the implementation journey, and we have considered these milestones when illustrating their progress, as well as obstacles faced.

FIGURE 1: MILESTONES

Requirements for a value-based healthcare system



1. DATA AND CODING STANDARDS

Data and coding standards are the first step, and potentially the most important milestone, towards implementing DRG reimbursement and quality monitoring. Different DRG systems rely on standardised clinical coding and use software applications to allocate a DRG to a particular inpatient encounter. Generally this may require patient demographic information and clinical information as highlighted in Figure 2.

FIGURE 2: PATIENT DEMOGRAPHIC AND CLINICAL INFORMATION

PATIENT INFORMATION	CLINICAL INFORMATION
Age	Admission type (Emergency vs elective, referral, maternity etc.)
Gender	Procedure information
Primary diagnosis code	Discharge status
Secondary diagnosis codes	

All these fields would be required to assign a DRG accurately. Additional fields would be required to calculate and monitor quality metrics—for example, admission and discharge dates would be required to calculate length of stay as a measure of efficiency, historical data may be required to identify readmission etc. As multiple providers and payers are generally involved in the health system, it usually requires a regulator or government to define and monitor measures such as:

- Standardised data specifications which specify the minimum fields to be captured by providers and insurers
- Who is responsible for capturing those fields
- Mandated code sets for capturing diagnoses codes, procedure codes, pharmacy codes etc.

Although the data standards are a critical part of DRG reimbursement, there are many other applications that complete and accurate granular data could be used to support, such as population health management, provider quality profiling, risk adjustment and budgeting.

Case Study 1: Launch of the Dubai E-Claims Platform²

The Dubai Health Authority (DHA), the healthcare regulator in the Emirate of Dubai, included requirements for medical records and the management of healthcare information in the 2012 Hospital Regulation.³ In addition, the DHA launched its e-claims platform in June 2012. The regulation of healthcare information and e-claims initiative have together enabled more efficient flow of information amongst health sector stakeholders—the DHA, healthcare providers, insurers and patients. The introduction of the e-claims platform brought about several reforms, including:

- Moving from non-standardised data structures to standardised clinical coding, including diagnosis, procedure and medication codes
- Linking of insurers, providers and policyholders through a single platform
- The creation of a paperless system where all claims are submitted, processed and paid electronically

Dr Haider Al Yousuf, the director of Health Funding at the DHA at the time, said that the implementation of the e-claims platform enabled the DHA “to effectively monitor insurance services, reduce abuse, report medical and pharmaceutical errors as well as monitor consumer behaviour.”⁴

Case Study 2: Mandatory Clinical Coding in Qatar⁵

Historically, Qatar’s health system has comprised both public and private healthcare providers, with treatment at public providers funded by the state, and private healthcare funded out of pocket. As part of a broader National Development Strategy, the National Health Strategy 2011-2016 was developed, which detailed 35 projects aimed at transforming the health system. The “healthcare data project,” with the following objectives, was one of those 35 projects:

- Ensure availability of comprehensive and quality healthcare data
- Outcomes:
 - Availability of a minimum healthcare data set
 - Data warehouse established
 - Single official source for healthcare data
 - Disease registries for priority diseases set up⁶

In executing the project, the Supreme Council of Health (SCH) developed a minimum data set and mandated the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) diagnosis codes as well as the use of Australian-Refined DRGs (AR-DRGs), the DRG system developed in Australia for classifying inpatient encounters. Although the national health insurance scheme developed during the same time period was abolished in 2015, the data standards put in place for the scheme have been maintained by Hamad Medical Corporation, the public hospital operator.

2 Ashcroft, B. (20 November 2012). Dubai introduces paperless system for health insurance claims. ExpatHealth.org. Retrieved 17 March 2022 from <https://expathealth.org/country-updates/dubai-introduces-paperless-system-for-health-insurance-claims/>.

3 O’Connell, N. (February 2015). Using data for better healthcare in Abu Dhabi and Dubai. Al Tammi. Retrieved 17 March 2022 from <https://www.tamimi.com/law-update-articles/using-data-for-better-healthcare-in-abu-dhabi-and-dubai/>.

4 Dubai introduces paperless system, op cit.

5 Goldner, F. et al. (October 2013). Pricing the national health insurance scheme in Qatar – opportunities and challenges. Patient Classification Systems International 2014. Retrieved 17 March 2022 from <https://bmchealthservres.biomedcentral.com/track/pdf/10.1186/1472-6963-15-S2-A6.pdf>.

6 Qatar National Health Strategy 2011-2016. Retrieved 17 March 2022 from <https://extranet.who.int/nutrition/gina/sites/default/filesstore/QAT%202011%20National%20Health%20Strategy.pdf>.

Case Study 3: Implementation of Data Standards and an Electronic Platform in KSA

In the private healthcare system in the Kingdom of Saudi Arabia (KSA) there is widespread use of ICD-10 diagnosis codes. However, historically there has been no standardised procedure or service coding. Many providers and insurers rely on non-standardised procedure descriptions in claims submissions. This has created challenges in moving towards quality monitoring and DRG reimbursement as there is little comparability across different providers and insurers. In 2019, the private health insurance regulator, the Council of Health Insurance (CHI),⁷ published a minimum data specification, laying out the required fields for insurance enrolment data, and claims data, from clinical coding to financial information. Concurrently, CHI has been developing an electronic health information platform to collect and consolidate health information from across the private health system.

The National Platform for Health and Insurance Exchange Services (NPHIES) launched in June 2020 as a part of KSA's aim to enhance the quality of healthcare services through the latest technology. The creation of NPHIES was a collaborative effort between several entities, including the National Health Information Center (NHIC), the Program for Health Assurance and Purchasing (PHAP), the Ministry of Health (MoH), the Saudi Central Board for Accrediting Healthcare Institutions (CBAHI) and CHI.⁸

NPHIES will service both insurance stakeholders and clinical operations. The national platform aims to standardise insurance services by connecting health insurance companies with health service providers through a reliable data exchange platform to manage eligibility, prior authorisation and claims management services. It also standardises health services through unifying clinical records to improve efficiency and quality of healthcare services to improve healthcare decision-making.

CHI launched NPHIES with the target of achieving value-based, secure, accessible and sustainable health records to manage patient's clinical and financial records, in line with international best practice.⁹

2. COMPLETE AND ACCURATE DATA AVAILABLE FOR ANALYSIS

In addition to standardisation of data, accurate, consistent and complete data is essential to a value-based healthcare system in order to measure and compare the quality of care and severity of health conditions. This is a journey of transformation in many emerging markets where both providers, payers and the whole value chain must go through the change process. Hence it becomes critical that the local human resources and system capacities are available, or are developed, to support widespread implementation of the selected system across providers and payers. A comprehensive framework is required that is supported by education and training of the workforce as well as reinforced by feedback mechanisms to ensure continual improvement. This support is especially critical during the early stages of implementation when stakeholders may face a few challenges, including shortages of certified coders and additional costs of implementation.

As people, processes and technology all need to adapt to comply with new data standards, it is important to put in place formal methodologies to monitor, evaluate and provide feedback to providers on their data quality to ensure that the data quality improves over time. Different providers are likely to start with different capabilities, and so it will be up to the payer or the regulator to set up such monitoring mechanisms to evaluate the quality of data (either at the point of submission or as retrospective audits). Audits should help to ensure that the value-based payments are appropriate given the quality information available in the underlying data. A regular, independent, objective and data-driven evaluation is an important foundation of value-based healthcare to ensure that all stakeholders are complying with the requirements. In Case Study 4, we highlight an example of this close monitoring of data quality and feedback mechanism by a United Arab Emirates (UAE) regulator in implementing a data quality evaluation process through an external audit and scoring methodology, while in Case Study 5 we look at the kind of policy that can be put in place to encourage improvements in data quality.

7 Formerly CCHI, the Council of Cooperative Health Insurance.

8 CCHI. General Circular Number 1 of 2020 (GC 01-2020): Enabling Provisions Notice Pursuant to the Implementation of the UniPlat System. Retrieved 17 March 2022 from <https://www.cchi.gov.sa/en/Uniplat/Documents/1-en.pdf>

9 CCHI. NPHIES. Retrieved 17 March 2022 from <https://www.cchi.gov.sa/en/Uniplat/Pages/default.aspx>.

Case Study 4: Department of Health, Abu Dhabi's TASNEEF Audit Process¹⁰

As a part of its value-based healthcare journey, the Department of Health, Abu Dhabi (DoH) has set up a framework to improve the quality of clinical data captured by the healthcare providers. The quality monitoring framework requires regular assessment of specific metrics—or key performance indicators (KPIs)—related to service quality in the domains of efficiency, experience, outcomes and safety. DoH needed a framework to ensure that the quality indicators and clinical coded data submitted by providers is valid, accurate and complete. Hence a process was established for healthcare providers to be accredited or certified by an independent agency, TASNEEF, on objective criteria conducted through routine audits.

The key objectives of the audit and certification process are to:

- Enhance coding quality standards in the country
- Understand the quality of each facility's coding
- Improve the payers' confidence in the accuracy of the coding by each facility
- Provide healthcare providers with recommendations on the areas of improvement of quality of coding and collection and submission of clinical data
- Improve transparency in the relationship between payers, patients and providers

The TASNEEF audit team follows a detailed procedure to validate that all the fundamental requirements are in place to ensure clinical data quality with regards to structure, process and outcome. The audit verification points and scoring criteria are well defined, with clear interpretation of hard and soft errors and weighted scores for each category. The audit report clearly outlines the score in each clinical coding and process component and hence provides critical feedback on areas for improvement. The audit also allows for changes in data quality to be tracked over time.

Case Study 5: Dubai Health Authority's Policy for Healthcare Data Quality¹¹

In February 2021, the DHA published the Policy for Healthcare Data Quality. The objectives of the policy include ensuring that the health data collected in Dubai is of adequate quality for current and future uses, to promote confidence in the accuracy of any data or information collected, and to achieve the highest possible level of data quality and accuracy.

The Policy details the Emirate's requirements regarding the capture and maintenance of various categories of healthcare data, including patient demographic data and clinical coding. The Policy specifies the timelines within which various fields must be captured and the training that must be provided to healthcare facility staff, as well as which stakeholders are responsible for the quality of data. The data captured by healthcare providers is subject to both internal and external audit processes: internal audit requirements include the obligation to share a data quality report with management every two weeks, while external audits must be arranged with an accredited clinical code auditor. Fines are applied based on the number of errors or violations committed by each facility.

3. VALUE-BASED REIMBURSEMENT MECHANISM

Following the data requirements and initiatives to improve the completeness and quality of data, the next step is the implementation of the actual reimbursement mechanism. Any change in payment structure will create winners and losers and, if the reform is effective, should lead to improvements in the quality of health outcomes and a reduction in overall costs. Changes to payment systems do, however, require careful planning and implementation. All stakeholders involved, including the regulators, the healthcare providers and the payers, need to understand the likely implications, and plan and prepare for this journey. A high level of stakeholder engagement is required to ensure that all parties, and especially providers, have a good understanding of the reimbursement reform process.

¹⁰ Abu Dhabi Clinical Coding Audit (25 October 2016). Retrieved 17 March 2022 from https://www.tasneefba.ae/sites/default/files/Audit_Methodology_2016v4.pdf.

¹¹ Dubai Health Authority (17 February 2021). External Circular – Policy for Healthcare Data Quality in the Emirate of Dubai.

Because payment reforms are intended to incentivise changes in behaviour, it is important to consider whether the payment changes may also lead to unintended behaviour changes. It is unlikely, however, that providers or other stakeholders can or will change their behaviour immediately, and so even if the new system is intended to adjust payment for factors outside of providers' control, a transition period for any significant changes can help providers who may be negatively impacted to manage or mitigate the financial impact.

In practice, the implementation of a DRG reimbursement mechanism will usually allow for a period of shadow billing to allow all stakeholders to prepare for the transition.

Case Study 6: Implementing DRGs in Dubai and the Shadow Billing Period^{12, 13}

After a period of preparation and market engagement, a DRG shadow billing period commenced in the Emirate of Dubai in 2017. During the shadow billing period, providers were required to submit the relevant DRG codes along with the detailed service data. While actual reimbursement continued on a fee-for-service basis, the submission of the DRG information assisted providers, insurers and the regulator to understand the requirements of the new system, as well as the potential impact that the changes had on them from financial and service delivery perspectives. The transition to DRG reimbursement was initially expected to happen in 2019, but this was delayed several times and the DRG reimbursement was ultimately fully implemented in October 2020. The CEO of the Dubai Health Insurance Corporation, Saleh Al Hashimi, has highlighted the objectives of implementing DRG reimbursement, "to ensure quality of service, prevent duplication of health services, reduce medical treatment costs, as well as regulate and control the dispensing of medicines."¹⁴

Case Study 7: Capitation in the UAE

Dubai introduced its Essential Benefits Plan (EBP) in 2014, with the premiums that could be charged by the Participating Insurers bound by published index rates. For a few years, these products had fairly low loss ratios, and one of the possible reasons speculated for this was the use of capitation by insurers:¹⁵ insurers would pay a fixed lump sum per person insured to a provider or group of providers who would then render whatever services were required by the insured lives. One of the issues that arose from this practice is that the detailed service information was not submitted via the electronic health platform.¹⁶ In 2020, the UAE Insurance Authority (now the Central Bank) issued a Circular prohibiting the use of capitation in the health insurance market.

Case Study 8: Implementation of DRG Reimbursement and Value-Based Healthcare in KSA

KSA has adopted the Australian-Refined DRGs (AR-DRGs) for implementation in both the public and private sectors. Implementation in the private sector will be through a phased approach as the data completeness and quality improves. According to Dr Shabab Al Ghamdi, Secretary General of CHI, "fostering innovation to strengthen the quality of healthcare services"¹⁷ is one of the four key levers to improving the efficiency of the private health insurance system. This will be done through the implementation of value-based healthcare by using standardised data to develop risk-sharing reimbursement models and linking payment to quality of health services.

12 DHA (12 June 2016). DHA adopts new health insurance payment system that will improve transparency and quality of healthcare. Retrieved 17 March 2022 from <https://www.dha.gov.ae/en/DHANews/pages/dhanews589358701-06-12-2016.aspx>.

13 Pacific Prime Dubai. IR-DRG payment system in Dubai. Retrieved 17 March 2022 from <https://www.pacificprime.ae/blog/ir-drg-payment-system-in-dubai/>.

14 El Sharif, A. (8 October 2020). New healthcare billing system implemented across Dubai hospitals. Healthcare IT News. Retrieved 17 March 2022 from <https://www.healthcareitnews.com/news/emea/new-healthcare-billing-system-implemented-across-dubai-hospitals>.

15 Raj, B. (17 June 2020). Decapitating stroke for UAE third-party administrators. International Adviser. Retrieved 17 March 2022 from <https://international-adviser.com/decapitating-stroke-for-uae-third-party-administrators/>.

16 DHA. General Circular Number 01 of 2020 (GC 01/2020): Pursuant to the Health Insurance Law (No 11 of 2013) of the Emirate of Dubai. Retrieved 17 March 2022 from <https://www.isahd.ae/content/docs/GC%2001-2020.pdf>.

17 Alghamdi, S. (27 November 2019). Interview: CCHI seeks to be a pioneer in enhancing the quality of health services in the Kingdom by raising the efficiency of private health insurance. The Business Year. Retrieved 17 March 2022 from <https://www.thebusinessyear.com/saudi-arabia-2020/improvements-across-the-board/interview>.

4. QUALITY MONITORING FRAMEWORK

According to the Institute of Healthcare Improvement (IHI), the goal of a value-based healthcare system is to achieve the Triple Aim of healthcare in improving the patient experience, improving the population's overall health and reducing per capita costs of healthcare. The objective is to improve the quality of health services, measured through several dimensions, including overall health outcomes, patient safety and patient experience, while also considering the costs incurred in providing these services. Therefore, under the IHI framework, value in healthcare is the measured improvement in a person's health outcomes considering the cost of achieving that improvement. Quality metrics may be based on claims data or based on other information and reports available in the system, for example: sentinel event reporting and electronic medical records. Some examples of claims-based quality metrics in each of the four domains are shown in the table in Figure 3.

FIGURE 3: CLAIMS-BASED QUALITY METRICS

CLINICAL OUTCOMES	EFFICIENCY AND COST REDUCTION
Mortality rate in low mortality procedures	All-cause 30-day unplanned readmission rate
Percentage of adults with flu vaccination	Average length of stay
Percentage of diabetic adults receiving an annual eye exam	
PATIENT SAFETY	PERSON AND COMMUNITY ENGAGEMENT
Hospital-acquired infections	Patient satisfaction scores
Patient falls	Waiting times for services
Patient safety indicators, for example: respiratory failure following surgery	

Creating a successful quality monitoring framework requires setting priorities among these quality domains and determining what measures will be used to evaluate performance across providers. Relevant quality measures may be adapted from existing quality frameworks already in operation in other countries or measures of local importance may need to be developed. Quality measures must be risk-adjusted for the severity of patients' health conditions to provide a fair comparison of providers against the quality that can be achieved for the patients they care for. Administrative claims data and survey instruments can be useful tools, but they must also be standardised across all providers to yield information that can be used for effective quality measurement. In addition, requiring the submission of additional data beyond claims poses an administrative burden on providers that must be considered and may require the development and implementation of additional data systems.

Case Study 8: The Jawda and Muashir Quality Monitoring Frameworks in Abu Dhabi

The Department of Health, Abu Dhabi (DoH) recognised the need for a robust quality monitoring framework and launched the Jawda¹⁸ Healthcare Quality Programme in 2014.¹⁹ All healthcare providers participate in this programme, which defines all quality-related key performance indicators (KPIs) as well as the measurement process. The quality metrics include all key components of quality:

- Safety (e.g., hospital-acquired infections)
- Clinical effectiveness (e.g., unplanned readmissions)
- Timeliness of care (e.g., waiting periods)
- Outcomes (e.g., neonatal mortality rates)

¹⁸ Translates to "quality" in English.

¹⁹ Al Manna'ei, A. Jawda Healthcare Quality Program. DoH. Retrieved 17 March 2022 from https://www.dhcr.gov.ae/_layouts/15/download.aspx?SourceUrl=/Documents/Others/BPC2018/Enhancing%20a%20Positive%20Environment%20of%20Care/Jawda%20Healthcare%20Quality%20Program.pdf (PDF download).

Case Study 8 continued

These metrics are assessed and monitored based on administrative data, clinical codes and self-reported events. Healthcare providers submit data and reports on specific quality KPIs at regular intervals. Specialist and general hospitals provide data on additional metrics related to the level of care. A dedicated team at DoH conducts the analysis and generates reports based on an established scoring methodology. Dr Asma Al Manna'ei, Director of the Healthcare Quality Division at DoH, has stated that “the aim of our Jawda initiative is to drive improvements in outcome quality and access to healthcare across the Emirate of Abu Dhabi by involving healthcare facilities, healthcare professionals as well as patients, and international experts.”²⁰

The Muashir Healthcare Quality Index evolved from Jawda and was officially launched in 2018.²¹ Muashir combines the quality outcomes score from Jawda with additional metrics, such as research, innovation and staff happiness, to yield an overall diamond rating for each provider: providers achieving the highest score will receive a score of five diamonds. To ensure that the underlying data, reports and processes from the providers are valid and reliable, the TASNEEF audit and certification process for healthcare providers runs concurrently. This is a unique bringing together of key priorities in a transformative approach with healthcare providers participating in the process; systems and approaches are tested, refined and established. Over the years as providers adapt to this concept, additional KPIs are included, processes updated and wider groups of stakeholders join the quality journey as the initial inpatient-focused KPIs are being expanded now to include ambulatory care KPIs.

The natural progression of such a quality framework is to link providers' reimbursement to the score resulting from the quality assessment. While such a link has not yet been observed in the GCC countries, we have seen this practice being implemented globally. This would result in providers achieving the highest-quality outcomes receiving additional reimbursement, either per event or at a consolidated level, for example based on annual revenue. Providers who do not achieve the desired quality outcomes could either receive the basic level of reimbursement or may be penalised if specific KPIs are not met.

5. PROVIDER PROFILING SYSTEM

Value-based reimbursement goes further to define the "value" more comprehensively. It acknowledges the need to address underlying cost as well as service quality and policy objective parameters through adjustor mechanisms linked to payment. In other words, payments to providers can be aligned not only with the quality of patient health outcomes, but also with the provider's necessary resource costs for providing services that are high value. This means establishing a provider classification system that considers factors such as geographic location—either by actual geographic area or rural versus urban infrastructure—for example where specialised resources are required, or by the severity of health conditions in the population served by the provider. All these factors may have an impact on a provider's baseline resource costs.

The provider profiling system should be established considering an understanding of the factors influencing the costs of providing healthcare services in a particular market. For example, while the cost of labour is generally higher in urban markets, a small hospital in a rural area that provides important access to people in the local community may have a higher unit cost than a larger hospital located in a city that is more desirable from an employment perspective. Facilities in remote areas with smaller populations may also have a higher unit cost due to lower patient numbers. It would be important to monitor and validate that any cost differentials are due to legitimate expenses and not due to inefficiencies on the part of the provider. However, this may not be possible in practice. In addition, assessing any overlaps among the factors identified will help to avoid any duplication of reimbursement.

20 Eye of Riyadh (9 August 2017). Healthcare: Health Authority Abu Dhabi underscores the importance of patient experience. Retrieved 17 March 2022 from <https://www.eyeofriyadh.com/news/newsdetail.php?newsid=84431>

21 Jawda Healthcare Quality Program, op cit.

6. PAYMENT MECHANISM LINKED TO PROVIDER PROFILE AND QUALITY OUTCOMES

Once both the quality monitoring framework and the provider profiling system have been developed and debated with all stakeholders, these frameworks can be linked to the reimbursement mechanism. The stakeholder engagement period is vital to ensure that the actual metrics and measurement processes are understood and accepted by the providers and payers before they are used to determine the payments made for health services. If the quality framework or profiling system that is developed is disputed by stakeholders then it is unlikely that the reimbursement linked to those components will be accepted, which may lead to ongoing challenges with the system. Our final case study illustrates a mature reimbursement system outside the GCC, where the reimbursement mechanism is linked to both the provider profiling framework as well as the quality of health outcomes.

Case Study 9: Medicare's Acute Inpatient Prospective Payment System²²

The Centers for Medicare and Medicaid Services (CMS) in the United States uses Medicare Severity DRGs (MS-DRGs) for reimbursement for acute care hospital inpatient stays for the population covered under Medicare. The MS-DRG payment system is known as the Inpatient Prospective Payment System (IPPS) and covers only payment for inpatient facility services. Professional services for hospitalised patients are paid separately outside of the DRG payment.

Payments made by CMS for inpatient encounters using DRGs are adjusted based on various features of the facility, including the geographic location of the facility, whether the facility provides medical education, the proportion of patients from low-income populations and the use of electronic health records. In addition, the quality of services is considered through a number of components of reimbursement, including penalties for hospital-acquired complications and high readmission rates. The various adjustments are calculated using either fixed formulae or cost-to-charge ratios, using data from facility cost reports.

The IPPS goes through an annual review process, with any proposed changes going through a period of public comment before being modified if necessary, finalised and then implemented.

²² CMS. Acute Inpatient PPS. Retrieved 17 March 2022 from <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS>.

Concluding remarks

There is significant and rapid progress being made in terms of the development of value-based healthcare and the implementation of DRG reimbursement across the GCC region. Regulators, payers and providers are taking note of the lessons already learnt in other markets and are developing their frameworks using the knowledge obtained by the earliest implementors. GCC regulators are also able to implement changes and enforce regulation within a relatively short period of time, unlike what is witnessed in some developed countries. While the quality and completeness of data does remain a challenge through much of the region, other initiatives such as quality monitoring and changes in reimbursement mechanism are being pursued concurrently, which may also enable these countries to catch up with developed countries within a relatively short time period.

Implementing value-based healthcare and alternative reimbursement mechanisms at a system level is a journey. Milliman consultants have deep expertise and vast experience with all stages of the journey that we have discussed in this paper, from determining the ideal standardised data set to be implemented through to driving policy objectives with quality monitoring frameworks and provider profiling.



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