

Pilot Study of Reimbursement Practices in Private Healthcare Centers in the Eastern Province of Saudi Arabia: To What Extent Do They Meet International Best Practices?

by Sulaiman Bah, PhD, MA, MPhil; Hanadi Hassan Ali Almutawa; Nouf Fahad M. Alassaf; Mai Saad Al Hareky; Aqilah Salman M. Hashishi; Zainab Jassem Hassan Alkhatir; and Jenan Ali M. Ajaimi

Abstract

This pilot study examines reimbursement practices in private healthcare centers in the Eastern Province of Saudi Arabia. The objective of the study was to assess the extent to which the private healthcare sector in Saudi Arabia follows international best practices in reimbursement, as identified in a literature review. The study examined reimbursement practices in a sample of six private healthcare facilities through the use of similar questionnaire guidelines with each facility. Similarities among the facilities' practices included the use of contracts with insurance companies and the availability of a chargemaster. Differences included the types of reimbursement software used. Bundled payment systems were identified in four facilities but were not examined in all of the facilities studied. International best practices that were not present in any of the facilities in the study included electronic transfer protocols to link healthcare facilities, insurance companies, and banks; the use of reimbursement key performance indicators; the use of diagnosis-related groups; and the integration of disease coding into the reimbursement process. Major findings of this pilot study are that diverse types of reimbursement systems are in use in Saudi healthcare facilities and that these systems are preliminary and are largely unregulated. The authors suggest that regulation and standardization would therefore be easier at this stage than at later stages of the development of private healthcare systems in Saudi Arabia.

Keywords: Reimbursement practices, Saudi Arabia, Private health care centers

Introduction

With the passage of the rules and regulations of Cooperative Health Insurance in 1999, Saudi Arabia officially endorsed private health insurance.¹ In effect, this marked the beginning of the "transition from a welfare-oriented National Health Service model to an employer-financed private delivery model."² Yet, despite the fact that this new phase began more than a decade ago, very little is known about reimbursement practices in the private sector. The topic of private healthcare reimbursement practices is important for several reasons. As studies in South Africa have shown, developments in the private health sector have a direct impact on developments in the public health sector. Also, as the private health sector grows, its regulation could become difficult.³ Further, if the Saudi government takes on the role of purchaser of healthcare, it would have to deal with reimbursement of private healthcare providers. Thus, it is necessary to study private healthcare reimbursement practices in Saudi Arabia and assess to what extent

the private healthcare sector follows international best practices in reimbursement. The purpose of this paper is to fill this gap for the Eastern Province of Saudi Arabia.

The Eastern Province is the home of the oil reserves of Saudi Arabia, and its population is cosmopolitan, comprising Saudis, non-Saudis, Arabs, and non-Arabs. By 2013, the province had 27 private hospitals, 284 dispensaries, and five private clinics.⁴ From 2008 to 2012, the number of insured (Saudis and expatriates) increased by 63 percent, from 4.80 million to 7.83 million.⁵ With this massive shift to private health insurance, a study of the reimbursement systems that are in place is needed. This article studies the reimbursement systems of a purposively selected sample of private healthcare providers in the Eastern Province. It serves as a pilot study for a possible larger study on the same subject.

The logic underlying the study is that if international best practices of reimbursement are already firmly established in the Eastern Province, then they cannot be missed. Visits to only a few health centers would prove their existence. On the other hand, if international best practices are not firmly established, one of two situations could be true. The first situation would be the existence of marked diversity in the reimbursement systems in even a small sample of health centers. This scenario would occur when no specific best practices of reimbursement are being followed. In the second situation, the reimbursement systems in a small sample of health centers would show marked similarity. This scenario would occur when health centers independently seek to achieve excellence by following best practices. Such situations arise when hospitals seek accreditation from similar agencies or through peer review. The purpose of this study is to determine the status quo in the Eastern Province of Saudi Arabia.

Methods

Many different types of reimbursement systems have been covered in the textbook *Principles of Healthcare Reimbursement*.⁶ Not all of these reimbursement systems can be described as international best practices. Reimbursement systems that transcend country-specific healthcare arrangements and have been successfully applied in other countries would fit the category of international best practices. From the literature, the following aspects of reimbursement can arguably be considered international best practices:

1. The availability of a chargemaster and its updating
2. The use of a standardized protocol for electronic transfer of funds and information between insurance companies, banks, and health facilities
3. The use of reimbursement software
4. The use of a revenue management cycle
5. The use of coding systems and diagnosis-related groups (DRGs) in the reimbursement system
6. The use of bundled payment systems
7. The use of key performance indicators (KPIs)

The data collection of the study was done in 2014 by the students in a fourth-year bachelor of science class on reimbursement methodologies. They were divided into six groups and asked to select a health facility to study its reimbursement practices. All the groups were given similar questionnaire guidelines (survey instrument) to use for collecting data. Some groups collected more information than others. The results were presented and discussed in class. In collecting the data, the students assured the respondents of the confidentiality of the study. For this reason, the names of the facilities are not mentioned.

Results

For this pilot study, six private healthcare facilities were purposively selected. Two were hospitals, two were clinics, and the remaining two were dispensaries. Four of these healthcare facilities were in Al-Khobar, one was in Qatif, and one was in Sayhat. The facilities were established from 20 to more than 60 years ago and receive all types of patients. One of the health facilities is a clinic with no beds, while the largest of the health facilities is a private hospital with 250 beds. One of the facilities has JCI (Joint Commission International) accreditation, while another has Saudi CBAHI (Central Board for the

Accreditation of Health Institutions) accreditation. The main findings are given in Table 1 and described in the subsections below.

Similarities in Reimbursement Practices

One common similarity in the reimbursement systems of the different healthcare facilities involves the contracting arrangements made with insurance companies. The number of main insurance companies that the healthcare facilities contract with ranges from 15 to 34. These companies establish a discounted fee-for-service arrangement with the healthcare facility and pay less than what is paid by uninsured patients (price discrimination).

Insurance companies usually pay within 60 days, with some paying within 120 days. Denials are present but few and are usually resolved through negotiation instead of judicial action or arbitration (for example, through the Council of Cooperative Health Insurance [CCHI]).

Another similarity is the availability of a chargemaster. All the facilities have some form of chargemaster. However the number of items on the chargemaster varies from 300 for small facilities to more than 30,000 for the larger ones. The chargemasters are updated at different intervals. In none of the facilities is disease coding used for reimbursement. Mostly, the chargemaster is used for reimbursement. The codes in the chargemasters are priced and subsequently used for reimbursement.

Differences in Reimbursement Practices

One difference in the reimbursement practices of the selected healthcare centers is in the reimbursement software used. Some use normal accounting systems including MS Excel. Only one uses professional reimbursement software. Most are not satisfied with their systems. Submission of claims to insurance companies is done through a variety of means, including manual transfer, e-mail, and courier.

Information on the use of bundled payment systems was not collected by all the groups. From the results reported, some form of bundled payment is used in four of the facilities. For one of the facilities, a simplified form of bundled payment (called package deals) was used for the following services: maternity and delivery program, comprehensive medical screening, pre-employment screening, preschool screening, and well-women and well-men programs. In another facility, a set of comprehensive tests is billed as a package.

International Reimbursement Practices Not Present

One international reimbursement practice found to be absent is the use of an electronic transfer protocol to link healthcare facilities, insurance companies, and banks. A second absent practice is the use of reimbursement KPIs. Also absent were the use of any variant of DRGs and the integration of disease coding (ICD-10) in the reimbursement process.

Discussion

This pilot study is useful in shedding light on the absence of certain practices but not useful in estimating the level of existing practices. As discussed at the beginning of this article, if international best standards of reimbursement were already firmly established in the Eastern Province, they would not be missed even in a small study. The study has shown that some aspects of international best practice in reimbursement are present in the healthcare facilities studied. A major finding in this pilot study is that diverse types of reimbursement systems are in use in Saudi healthcare facilities and are largely unregulated. Several reports suggest that the Ministry of Health in Saudi Arabia is moving toward less involvement in healthcare delivery and more involvement in regulation and accreditation of hospitals and regulation of health insurance. These findings are evidenced by the formation of the CCHI, the CBAHI, and the Council of Health Service (CHS). One of the objectives of the CHS is to “increase the contribution of the private sector to about 50% of the gross health expenditure.”⁷ If healthcare financing is heading toward 50 percent private, it means that an increasing number of Saudi patients would have to get healthcare from the private hospitals. Since the government is committed to providing free healthcare for Saudi citizens, the government would have to allow for Saudis to access private healthcare through some form of government-sponsored health insurance. Once the government enters this domain, it would have

to deal with a large number of healthcare providers, insurance companies, and banks. The practical way for dealing with these entities is to have standard protocols for transferring data between healthcare providers and third-party payers (insurance companies and government insurance programs) and a standard protocol for transferring funds between third-party payers and banks. Such data exchange between providers, insurers, and banks is sometimes handled by third-party administrators (TPAs). From 2007 to 2012, the CCHI accredited 24 TPAs.⁸ Although the TPAs are in operation, the healthcare providers in this study do not make use of them in administering their payments. As Saudi Arabia is now relatively advanced in e-government (with an e-government development index of 0.6658 in 2012), the technology exists for developing such systems.⁹

International experience suggests that if chargemaster prices are left unregulated, healthcare costs billed to uninsured patients would be very high and would exhibit marked variation between different providers. Indications are that private-sector medical costs are increasing, and (as of 2008) “governmental controls do not exist to monitor the appropriateness of care in the private sector.”¹⁰ As Saudi Arabia has been very successful in regulating the prices of drugs, this success could be built upon to regulate the reimbursement system while it is in its infancy.

Another international reimbursement best practice is the linking of reimbursement to healthcare quality. As the Ministry of Health now requires CBAHI accreditation for all hospitals, the option of linking reimbursement to quality could also be explored. This initiative is enhanced by the use of quality-related KPIs. Some hospitals are already using KPIs as part of their quality improvement programs, but our search of the Saudi literature revealed no evidence of the use of reimbursement-related KPIs.

Another approach to reimbursement is to use some variant of the DRG methodology. This methodology has been found to reduce government payments as compared to other payment systems such as fee-for-service. This reimbursement system, however, is linked to disease coding. Since Saudi Arabia has standardized its coding on the Australian version of ICD-10 (ICD-10-AM), the natural options for DRG-based reimbursement would be either the Australian DRG version (AR-DRG) or self-development. The CCHI has opted for AR-DRG as announced on its website.¹¹

Some countries are experimenting with various bundled payment systems for various reasons. For example, in the United States, some of the justifications for bundled payment include eliminating fragmentation in reimbursement, supporting the continuity of care across different healthcare settings, and enforcing quality of care. Because the last two justifications are also applicable in Saudi Arabia, bundled payment could also be explored.

Conclusion

This pilot study has shown that reimbursement systems are at a very preliminary stage in the Eastern Province of Saudi Arabia. Now is therefore the best time to intervene and bring in regulation and standardization. The two main vehicles for carrying out reimbursement-related inventions are the aforementioned CBAHI and CCHI. The avenues for intervention are many. One avenue is to introduce regulation in chargemasters, building on the drug regulation mechanisms already in place. Another avenue is to standardize the electronic transfer protocol involving providers, insurers, and banks. Other avenues include introducing bundled payments, linking payment to quality, and using DRG-related payments.

As healthcare insurance is still in its infancy in Saudi Arabia, standardization would be easier at this stage than at later stages. Once standardization has been achieved, reimbursement would be easier for the government when it becomes a purchaser or a partial commercial provider of healthcare.

A major shortcoming of the study is that the sample was really a convenience sample. Students chose facilities that were quick in accepting their requests. Hence, some chose facilities with uncomplicated administration systems. Therefore, selection was not based on provider size, staffing, or healthcare setting. For this reason, a pilot study such as this one cannot measure levels of usage of the different payment systems. To do so, a larger study would be needed.

Sulaiman Bah, PhD, MA, MPhil, is a professor in the Department of Health Information Management and Technology at the University of Dammam in Dammam, Saudi Arabia.

Hanadi Hassan Ali Almutawa is an intern in the Department of Health Information Management and Technology at the University of Dammam in Dammam, Saudi Arabia.

Nouf Fahad M. Alassaf is an intern in the Department of Health Information Management and Technology at the University of Dammam in Dammam, Saudi Arabia.

Mai Saad Al Hareky is an intern in the Department of Health Information Management and Technology at the University of Dammam in Dammam, Saudi Arabia.

Aqilah Salman M. Hashishi is an intern in the Department of Health Information Management and Technology at the University of Dammam in Dammam, Saudi Arabia.

Zainab Jassem Hassan Alkhater is an intern in the Department of Health Information Management and Technology at the University of Dammam in Dammam, Saudi Arabia.

Jenan Ali M. Ajaimi is an intern in the Department of Health Information Management and Technology at the University of Dammam in Dammam, Saudi Arabia.

Notes

1. Kingdom of Saudi Arabia Council of Cooperative Health Insurance. *Rules and Regulations*. 1999. Available at <http://www.cchi.gov.sa/en/Rules/Pages/default.aspx> (accessed September 3, 2014).
2. Khaliq, A. A. "The Saudi Healthcare System: A View from the Minaret." *World Health & Population* 13, no. 3 (2012): 52–64.
3. McIntyre, D. *Private Sector Involvement in Funding and Providing Health Services in South Africa: Implications for Equity and Access to Health Care*. EQUINET Discussion Paper Series 84 Health Economics Unit. Harare, Zimbabwe: EQUINET, 2010.
4. Kingdom of Saudi Arabia Ministry of Health. *The Statistical Yearbook for 1434 AH (2013 AD)*. 2013. Available at <http://www.cdsi.gov.sa/yb49/Pages/MixPageOne.htm> (accessed October 31, 2014).
5. Kingdom of Saudi Arabia Council of Cooperative Health Insurance. *Council of Cooperative Health Insurance Annual Report, 2012*. 2012. Available at <http://www.cchi.gov.sa/en/Studies/Reports/AnnualReports/Pages/default.aspx> (accessed November 5, 2014).
6. Castro, A., and E. Forrestal. *Principles of Healthcare Reimbursement*. Chicago, IL: AHIMA, 2013.
7. Kingdom of Saudi Arabia Council of Cooperative Health Insurance. Health care strategy in the kingdom. Available at <http://www.chs.gov.sa/En/Council/Pages/CareStrategy.aspx>. (accessed November 5, 2014)
8. Kingdom of Saudi Arabia Council of Cooperative Health Insurance. *Council of Cooperative Health Insurance Annual Report 2012*.
9. United Nations. *United Nations E-Government Survey 2012: E-Government for the People*. New York, NY: United Nations, 2012.
10. Waltson, S., Y. Al-Harbi, and B. Al-Omar. "The Changing Face of Healthcare in Saudi Arabia." *Annals of Saudi Medicine* 28, no. 4 (2008): 243–50.
11. Kingdom of Saudi Arabia Council of Cooperative Health Insurance. Circulars and information. Available at <http://www.cchi.gov.sa/en/InfoCenter/Circulars/Pages/Circular1.aspx>. (November 5, 2014).

Table 1

Summary of the Main Findings of the Pilot Study of Reimbursement Best Practices in the Private Sector in the Eastern Province of Saudi Arabia in 2014

Best Practice	Dimension of Best Practice	Facility A (Hospital)	Facility B (Hospital)	Facility C (Clinic)	Facility D (Clinic)	Facility E (Dispensary)	Facility F (Dispensary)
Chargemaster	Usage	Yes	Yes	Yes	Yes	No	Yes
	Approximate number of items	3,000	30,000	778	300	-	400
	Frequency of updating	2 to 3 years	2 years	6 months to a year	As required	-	Not regularly
Arrangement with third-party payers	Number of main insurance agencies dealt with	32	15	16	34	16	-
	Arrangement for payment	E-mail	Paper based	E-mail	Mail or courier	Paper based	Paper based
	Price discrimination	Yes	Yes	Yes	Yes	Yes	Yes
Revenue management cycle	Usage	Yes	Yes	Yes	Yes	Yes	Yes
	Experience with denials	Yes	Yes	Yes	Yes	Yes	Yes
	Average duration of payment	45 to 60 days	60 days	90 days	60 to 120 days	60 days	90 to 120 days
	Experience of delays in payment	Yes	Yes	Yes	Yes	Yes	Yes
	Termination of arrangements with some insurance companies	Yes	Yes	No	Yes	No	No
	Use of specialized reimbursement software	Yes	Yes	Yes	No	No	No
	Satisfaction with the software	Yes	Yes	Yes	-	-	-
	Plan for changes in reimbursement software	Yes	Yes	Yes	-	-	-