

Understanding the types of fraud in claims to South African medical schemes

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Background. Medical schemes play a significant role in funding private healthcare in South Africa (SA). However, the sector is negatively affected by the high rate of fraudulent claims.

Objectives. To identify the types of fraudulent activities committed in SA medical scheme claims.

Methods. A cross-sectional qualitative study was conducted, adopting a case study strategy. A sample of 15 employees was purposively selected from a single medical scheme administration company in SA. Semi-structured interviews were conducted to collect data from study participants. A thematic analysis of the data was done using ATLAS.ti software (ATLAS.ti Scientific Software Development, Germany).

Results. The study population comprised the 17 companies that administer medical schemes in SA. Data were collected from 15 study participants, who were selected from the medical scheme administrator chosen as a case study. The study found that medical schemes were defrauded in numerous ways. The perpetrators of this type of fraud include healthcare service providers, medical scheme members, employees, brokers and syndicates. Medical schemes are mostly defrauded by the submission of false claims by service providers and syndicates. Fraud committed by medical scheme members encompasses the sharing of medical scheme benefits with non-members (card farming) and non-disclosure of pre-existing conditions at the application stage.

Conclusions. The study concluded that perpetrators of fraud have found several ways of defrauding SA medical schemes regarding claims. Understanding and identifying the types of fraud events facing medical schemes is the initial step towards establishing methods to mitigate this risk. Future studies should examine strategies to manage fraudulent medical scheme claims.

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Globally, healthcare fraud is regarded as a challenge, and South Africa (SA) is susceptible to this risk.^[1,2] The Committee of Sponsoring Organizations of the Treadway Commission^[3] defines fraud as 'any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving gain'. In contrast, financial abuse is an out-of-the-norm claiming behaviour, and is usually not a deliberate attempt to commit fraud.^[4] However, in cases of fraud, the perpetrator deliberately intends to swindle and disadvantage the victim. In the healthcare context, fraud is defined by Ogunbanjo and Van Bogaert^[2] as 'a white-collar crime involving the filing of dishonest healthcare claims in order to achieve a profit'. According to Engstrom,^[5] healthcare fraud in the USA is estimated to cost billions of dollars annually.

SA has both public and private healthcare financing systems.^[6] Private healthcare sector funding is dominated by medical schemes, which are responsible for 41.8% of the total healthcare expenditure in SA.^[7] In SA, medical schemes provide a superior quality of healthcare than the public sector.^[8] In 2015, there was a total of 83 medical schemes, which paid an overall amount of ZAR138.6 billion for healthcare claims.^[9] The huge amount of money expended on claims makes healthcare funders vulnerable to fraud.^[10] The amount spent on fraudulent claims in SA has not been determined, but the estimated amount lost per year is ~ZAR13 billion in the private healthcare sector.^[11] Nortjé and Hoffmann's^[12] study, which evaluated the case content of sanctions imposed against healthcare professionals by the Health Professions Council of South Africa (HPCSA), found that 51.7% of all ethical transgressions were for fraud. In this regard, fraud was mostly committed against medical schemes.^[12] Fraud losses could threaten the financial viability of medical schemes, as

funds are diverted from the provision of healthcare. Members of medical schemes could also experience a high increase in monthly contributions owing to fraud losses.^[2]

There is a dearth of recent scholarly literature pertaining to fraud in the SA healthcare context, although most of the cases of sanctions imposed by the HPCSA on service providers were dominated by instances of fraud.^[12] The study conducted by Thornton *et al.*^[13] reviewed the existing literature to classify and explain fraud activities in healthcare. Flynn's^[10] study focused on the Australian healthcare sector, while Debuur *et al.*^[14] explored moral hazards, with a specific focus on the Ghanaian national health insurance scheme. The purpose of the current qualitative case study was to examine in detail the ways in which SA healthcare is defrauded, with a focus on claims submitted to medical schemes. Previous studies on fraud in the healthcare sector by Debuur *et al.*^[14] and Flynn^[10] were conducted in Ghana and Australia, respectively, which have different healthcare financing systems than SA. To manage this risk, SA medical schemes should first understand and identify the types of fraud committed in claims. As recommended by Young,^[15] identifying the risk is the first step in the risk management process. Fraud is an evolving phenomenon, as new schemes emerge constantly;^[13] hence, there is a need for studies to be performed.

Methods

A cross-sectional qualitative methodology was adopted in the study, as the phenomenon has not been extensively studied in the SA healthcare sector. A case study strategy was selected, as rich insights were sought from study participants pertaining to the types of fraudulent activities perpetrated against medical schemes in claims. The study

population comprised 17 SA medical scheme administrators. These are private companies to which medical schemes outsource the day-to-day running of their schemes.^[16] In 2015, 90.2% of the total number of beneficiaries were administered by medical scheme administrators.^[9] One medical scheme administration company was purposively selected as a case study, because it is one of the top three administrators that managed >25% of all beneficiaries in 2015.^[9]

Prior to collecting data, a pilot test was conducted with three experts to evaluate the approach and interview questions, and to ensure that important aspects were not omitted from the interview guide. A sample of 15 study participants was purposively selected from the medical scheme administrator chosen as a case study. Individuals who could provide the most insight and knowledge with regard to the types of fraudulent claims experienced by medical schemes were chosen as study participants. All study participants were involved in fraud management in their daily work activities. The selection criteria for participants also ensured that those with varying areas of expertise were selected. The sample included the following: hospital services, pathology, intermediary (brokers), banking, nursing, analytics, surveillance, probes, ambulance services, healthcare fraud, pharmacy and undercover investigation. Data were collected through individual semi-structured interviews. The researcher (TGL) audio-recorded the interviews and transcribed them into text. Qualitative data analysis techniques were then employed and data were initially coded with the aid of ATLAS.ti software (ATLAS.ti Scientific Software Development, Germany). Thereafter, similar findings that emerged from the data were grouped together to form themes. The trustworthiness of the study was ensured by including thick quotations by study participants to enable transferability, as recommended by Creswell.^[17] The audio-recording of the interviews and transcribing of the recordings enhanced the auditability of the findings. Furthermore, the research process, limitations and ethical requirements were fully explained in this submission to strengthen the dependability and confirmability of the study. To enhance the quality of the study, the article was subjected to independent review by a critical reader.

Ethical approval

Ethical clearance for the study was requested from and granted by the University of South Africa's Finance, Risk Management and Banking Research Ethics Review Committee (ref. no. 2016/CEMS/DFRB/003). The medical scheme administrator that was selected as a case study also granted written permission for the study to be performed. Furthermore, informed written consent was obtained from individual study participants before the interviews were conducted. The identities of the medical scheme administrator company and study participants were kept confidential. In this regard, pseudonyms were used in the results section when referring to participants' quotes.

Results

Semi-structured personal interviews were utilised to collect empirical data. Fifteen study participants were interviewed in the meeting rooms of the selected medical administrator. Transcribed data from audio to text were analysed through coding, utilising ATLAS.ti qualitative data analysis software. Patterns that emerged were grouped together to form themes.

Types of fraudulent activities committed against medical schemes

Table 1 summarises the findings of the study with regard to the types of fraud in SA medical scheme claims.

The types of fraud shown in Table 1 are discussed in the next section. Table 2 illustrates the reference system that was used, with the support of ATLAS.ti software, to report quotes from the interview transcripts.

The results of the study show that fraud is committed by service providers, medical scheme members, brokers, syndicates and through collusion. In the following sections, fraudulent activities are presented according to the respective perpetrators.

Service provider fraud

One of the participants highlighted that service providers act differently across various medical schemes, thereby implying that a specific medical scheme is deliberately targeted for fraud by certain providers. Service providers were found to be committing fraud using various methods, as depicted by the thematic map (Fig. 1). These methods involved false claims, irregular billing of codes, excessive billing for products and services, provision of unnecessary medical services, duplicate claims, excluded products and benefits claimed as covered benefits, and claims from unlicensed service providers.

False claims. The service provider fraud most commonly reported by the participants was false claims submitted to the medical scheme, even though the services were not rendered or products not supplied to the members. One of the participants explained how false claims are submitted to medical schemes:

'They are also claiming for services not rendered, that could be okay that medicine is one of them, but they are claiming for certain procedures not performed, and you could put in brackets coding maybe, so you submit certain codes that they did not render to the person.' (4:3)

Irregular billing of codes. Coding irregularities were reported, whereby service providers up-code, i.e. claim for a code of a higher value than the actual service or treatment provided. Furthermore, codes were manipulated by billing for extra codes (code padding) and through the unbundling of codes (billing for several codes instead of one inclusive code) to defraud medical schemes. One participant explained up-coding as follows:

'... providers that up-code, that is use codes of a higher value for a procedure similar in nature.' (6:1)

Excessive billing for services and products. Excessive billing for services and products was found where service providers billed for excessive time. Providers sometimes supply members with cheap products, but claim for more expensive ones. In instances where the service providers have an agreement as part of a discipline-specific arrangement, the billing rates are not adhered to. One of the study participants described this type of fraud as follows:

'Okay from my point of view, from what I am doing, certain providers that we identify, they commit fraud through dispensing cheap medicine and claiming for more expensive medicine.' (4:45)

Ambulance services also defraud medical schemes by billing for waiting periods that are not medically necessary, as indicated in the following:

'So if a person isn't injured or they are only slightly injured but they are walking around, and they want to wait for the tow truck to take their car, and they want to wait for the police and they want to wait for this one and that one.' (8:5)

Provision of unnecessary medical services. In this situation, medical scheme members are provided with a service that is not medically indicated, or a healthcare service is over and above what is required. One of the participants provided the following explanation of this type of fraud:

'We found this doctor was approaching healthy members and

Table 1. Types of fraud in South African medical scheme claims

Perpetrator of fraud	Types of fraudulent activities in South African medical scheme claims						
Service provider fraud	False claims	Irregular billing of codes	Excessive billing for services and products	Provision of unnecessary medical services	Duplicate claims	Excluded products and benefits claimed as covered benefits	Unlicensed service providers
Medical scheme member fraud	Non-disclosure of pre-existing medical conditions	Card farming	-	-	-	-	-
Employee fraud	False claims	Channelling members' refunds for claims to own account	-	-	-	-	-
Broker fraud	False medical scheme policies	Non-disclosure of the applicant's pre-existing medical condition	-	-	-	-	-
Collusion	Excluded benefits or non-medical items claimed as covered benefits	Cash plan-related fraud	Hospital colluding with independent allied service providers	-	-	-	-
Syndicated fraud	Identity theft to submit false claims	Syndicates build a health profile to defraud other products, e.g. life policy	-	-	-	-	-

Table 2. Reference system to report quotes from interview transcripts

Example	4:3
The number 4 represents primary document four on ATLAS.ti	
The number 3 represents quotation number three in primary document four	

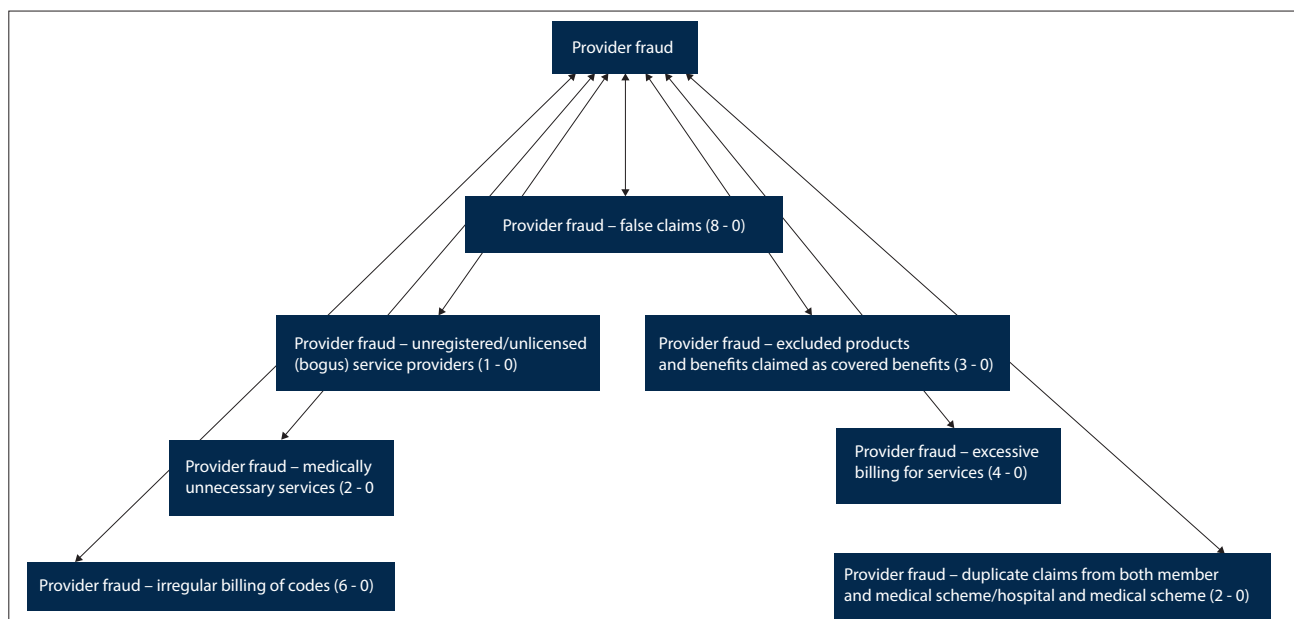


Fig. 1. Types of service provider fraud.

issuing a drug to the member. And the member, after agreeing obviously with

the doctor to get paid a certain amount, excluding the hospital time and whatever,

gets physically operated on to get these pacemakers.' (13:9)

Duplicate claims. Providers also submit duplicate claims. Instances were reported where the same claim was billed to both the member and the medical scheme, resulting in the service provider receiving two payments for the same claim. This was articulated by one of the study participants:

‘This has happened, where you have providers sitting with these double pathology payments. Where the members paid and the scheme has paid, and that accumulated money plus interest sits there and then after a while they write it off.’ (2:31)

Excluded products and benefits claimed as covered benefits. Providers claim for services or products that the medical scheme covers, but supply excluded products to medical scheme members:

‘So different providers are doing different stuff, like optometrists are supplying sunglasses and claiming for spectacles. Therefore, each provider has a different type of fraud in his field, yes.’ (4:4)

Unlicensed service providers. The providers also defraud medical schemes by utilising unqualified and unregistered service providers. One of the study participants explained this as follows:

‘And if it is a locum [stand-in], but most of the time the real doctor, if he is not there, he is aware of what is going, he uses a locum in there, the bogus doctor. We had a scam in Pretoria a couple of years ago where certain Nigerians were in a practice, every day it is a different doctor, then we realised it is not a real doctor.’ (4:48)

Fraud by members of the medical scheme

The study found that members defraud the scheme by not disclosing pre-existing medical conditions at the application stage, as well as by card farming.

Card farming. Members are defrauding medical schemes through card farming, which occurs when members share their medical scheme benefits with non-members. This type of fraud is reported to be prevalent with female members, who cover only one child on the medical scheme, but all the children then share the benefits of that one child who has cover. One of the study participants explained this as follows:

‘Other types of fraud that we do see, what we refer to as card farming, it is a generalisation, but we tend to see it more in female-owned policies. So where a lady has multiple children but cannot afford to put them all on the medical aid, she will cover herself and one of the children, but service all of the kids under that one entity.’ (14:31)

Non-disclosure of pre-existing medical conditions. Before joining the scheme, during the application stage, members fail to disclose pre-existing medical conditions to avoid waiting periods being imposed before the inception of medical scheme cover:

‘... a type of fraud is non-disclosure of medical information.’ (3:1)

Employee fraud

The study found that employees of the medical scheme administrator commit fraud by submitting false claims or changing banking details to channel the funds claimed for services rendered to the member to their own account. One of the participants explained this as follows:

‘Then of course you have another way of doing it and that is the staff working at the medical aids. There is a couple of ways that staff would do that. If you have the power to process claims you can decide if you want to pay the money into your own account or if you want to pay the member. In other words, you change the banking details.’ (1:15)

Brokers’ fraud

Brokers sometimes discourage members’ disclosure of pre-existing conditions to avoid being underwritten and waiting periods being applied. Brokers were also found to be perpetrating fraud by falsifying medical scheme membership applications. This involves creating a false application for a member or a non-existent employer group, and then submitting this to the medical scheme to earn commission fraudulently.

Collusion between members and service providers

Collusion to defraud medical schemes could occur between service providers and members, and also between medical scheme members, or between service providers. This type of fraud is aimed at claiming for excluded benefits or defrauding medical schemes and companies that offer hospital cash plan benefits.

Excluded benefits or non-medical items. In this case, the member agrees with the service provider to access excluded services or non-medical items (e.g. sunglasses and cash) by billing the medical scheme for covered benefits, as one of the study participants reported:

‘AMC pots and condoms, buying at the pharmacy, toiletries, but at the end of the day, that accumulation of that improper use of your medical aid, you are going to then also pay somewhere somehow.’ (2:21)

Cash plan-related fraud. Collusion also occurs when the member tries to access hospital cash plan insurance benefits fraudulently. The healthy member is admitted to hospital, and the medical scheme pays for the hospital, doctor and related accounts. The member then shares the cash with the provider after the claim has been paid by the insurance company.

Hospital collusion with independent service providers. In cases where members are admitted to hospital, the hospital may collude with an independent service provider by routinely providing access to the patient’s details, and allowing these providers to claim from the medical scheme for services not rendered, or which are provided in-house by the hospital. This practice is most prevalent with physiotherapists, nurses and dieticians, as explained by one of the participant:

‘Independent nurses walking around in a hospital billing us in addition to the hospital staff for what the nurse is supposed to do. And you find it a lot in the maternity environment. (11:13) ... The problem is, big problem, is with dieticians ... We should not be paying and a big concern is the physiotherapist.’ (11:8)

Syndicated fraud

Syndicated fraud may involve medical scheme members, brokers, service providers, medical scheme employees, or any other person. Other types of syndicates that target medical schemes could encompass members and/or family members. One of the participants stated that:

‘Syndicates, it all depends what syndicates, what type of syndicates, is it providers, members, you see.’ (4:29)

The study found that through identity theft, syndicates defraud medical schemes by submitting a medical scheme application for an unsuspecting member and then submitting fictitious claims. They purport that the provider of the health service has been paid, and that the member should therefore be reimbursed. The refund is subsequently channelled to the syndicate’s bank account, details of which were given to the medical scheme. Thereafter, the bank account is closed. Sometimes, the main aim of syndicates is not to defraud medical schemes, but to build a health profile that enables them to commit fraud in other member products, e.g. hospital cash plans and life policies.

Discussion

Participants in this study mostly reported service provider fraud. Medical scheme members, when sick, place their trust and even their lives in the hands of the service providers. This links with Cressey's^[18] fraud triangle theory, which proposes that people in positions of trust sometimes violate that trust by perpetrating fraud. The service providers are capable of manipulating and persuading medical scheme members to collude with them and defraud schemes for financial gain. This implies that the element of capability, which was advanced by Wolfe and Hermanson^[19] in the fraud diamond theory, is also applicable to medical scheme fraud. When, due to poor control within the medical scheme, opportunities exist for fraud to occur, service providers, syndicates, members, internal employees and brokers can be enticed to perpetrate fraud against medical schemes. This was evident in the study, as some of the fraudulent activities were directed at certain medical schemes. Nortjé and Hoffmann's^[12] study found that fraudulent activities committed by SA healthcare professionals consisted mainly of billing for false claims, which are similar to the findings of this study. Syndicate fraud committed through identity theft and the submission of fictitious claims was identified in this study, which is in line with the findings of Flynn,^[10] Pande and Maas^[20] and Nortjé and Hoffmann.^[12] Our study also found that unlicensed people pose as healthcare service providers. The utilisation of unlicensed service providers in the SA public healthcare sector resulted in the death of 94 psychiatric patients.^[21] Unlike previous studies, hospital cash plan-related fraud was reported in our study.

This article contributes towards an in-depth understanding and knowledge of the types of fraudulent activities committed in medical scheme claims in SA. However, the qualitative methodology followed in the study does not permit the generalisability of the results. The study does, however, add valuable information to the body of knowledge with regard to types of medical scheme fraud encountered by SA medical schemes, particularly via claims to the schemes. The results of the study will raise awareness among stakeholders, the general public, medical schemes, healthcare service providers, police and prosecutors, which could assist in curbing fraud in healthcare claims. As SA plans to implement National Health Insurance,^[8] the policymakers should also take cognisance of the fraud perpetrated against the medical schemes and proactively put mitigating strategies in place. The Ghanaian national health insurance study indicated that publicly funded insurance schemes are also prone to fraud.^[14] Although the current study thoroughly explored the types of fraud in medical scheme claims from the funders' perspective, the opinions of medical scheme beneficiaries and service providers were not considered. This would be a valuable study for follow-up research. Future studies should also investigate strategies to mitigate fraudulent medical scheme claims.

Conclusion

This article concludes that medical scheme fraud is committed either internally (within the company) or externally. The perpetrators of such fraud are healthcare service providers, medical scheme members and, to a lesser extent, medical scheme employees and

brokers. Organised fraudsters form syndicates to commit medical scheme fraud. Furthermore, collusion between various parties occurs to commit medical scheme fraud. Most of the fraudulent claims are perpetrated through the submission of false claims, irregular billing of codes, duplicate claims, card farming, and claiming for services that were not rendered. As fraud trends evolve over time, the findings of the study will increase awareness regarding the types of fraud experienced in the sector. Knowledge of the nature of fraud in claims will assist the medical schemes to develop appropriate strategies to successfully mitigate the risk of fraud in claims, thereby reducing fraud losses.

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- Gee J, Button M. The Financial Cost of Healthcare Fraud. London: University of Portsmouth, 2015. www.port.ac.uk/media/.../The-Financial-Cost-of-Healthcare-Fraud-Report-2015.pdf (accessed 27 February 2018).
- Ogunbanjo GA, van Bogaert D. Ethics in healthcare: Healthcare fraud. *S Afr Fam Pract* 2014;56(1):S10-S13.
- Committee of Sponsoring Organizations of the Treadway Commission. Fraud risk management guide: Executive summary. 2016. <https://www.coso.org/Documents/COSO-Fraud-Risk-Management-Guide-Executive-Summary.pdf> (accessed 27 February 2018).
- Joudaki H, Rashidian A, Minaei-Bidgoli B, et al. Improving fraud and abuse detection in general physician claims: A data mining study. *Int J Health Policy Manag* 2015;5(3):165-172. <https://doi.org/10.15171/ijhpm.2015.196>
- Engstrom NR. Retaliatory RICO and the puzzle of fraudulent claiming. *Mich Law Rev* 2017;115:639-706.
- Ataguba JE, Akazili J. Health care financing in South Africa: Moving towards universal coverage. *CME* 2010;28(2):74-78.
- Erasmus D, Ranchod S, Abraham M, Carvounes A, Dreyer K. Challenges and opportunities for health finance in South Africa: A supply and regulatory perspective. 2016. <https://www.finmark.org.za/challenges-and-opportunities-for-health-finance-in-south-africa-a-supply-and-regulatory-perspective/> (accessed 7 December 2016).
- Nevondwe L, Odeku KO. Financing the National Health Insurance Scheme of South Africa: Opportunities and challenges. *J Soc Sci* 2014;39(1):9-18.
- Council for Medical Schemes. Council for Medical Schemes Annual Report – 2015/2016. Pretoria: CMS, 2015/2016. <https://www.medicalschemes.com/files/Annual%20Reports/CMS%20Annual%20Report%202015-2016%20Annexures.pdf> (accessed 27 February 2018).
- Flynn K. Financial fraud in the private health insurance sector in Australia. *J Financ Crime* 2016;23(1):143-158. <https://doi.org/10.1108/jfc-06-2014-0032>
- Bateman C. Medical aids often their own worst enemies with fraud. *S Afr Med J* 2015;105(11):887. <https://doi.org/10.7196/samj.2015.v105i11.10197>
- Nortjé N, Hoffmann W. Seven year overview (2007 - 2013) of ethical transgressions by registered healthcare professionals in South Africa. *Health SA Gesondheid* 2016;21:46-53. <https://doi.org/10.1016/j.hsag.2015.11.004>
- Thornton D, Brinkhuis M, Amrit C, Aly R. Categorizing and describing the types of fraud in healthcare. *Procedia Comput Sci* 2015;64:713-720. <https://doi.org/10.1016/j.procs.2015.08.594>
- Debuur C, Dalaba MA, Chatio S, Adjuik M, Akweongo P. An exploration of moral hazard behaviors under the national health insurance scheme in Northern Ghana: A qualitative study. *BMC Health Serv Res* 2015;15(1):469. <https://doi.org/10.1186/s12913-015-1133-4>
- Young J. Operational Risk Management. 2nd ed. Pretoria: Van Schaik, 2014.
- CMS News. Relationships in the industry – what all beneficiaries need to know. Pretoria: Council for Medical Schemes, 2009/2010. http://www.medicalschemes.com/files/CMS%20News/CMSNews3Of2009_2010_20100419.pdf (accessed 12 August 2014).
- Creswell JW. Qualitative Inquiry and Research Design: Choosing Among Five Approaches. 3rd ed. Thousand Oaks, CA: SAGE, 2013.
- Cressey DR. Other People's Money. Glencoe: The Free Press, 1953.
- Wolfe DT, Hermanson DR. The fraud diamond: Considering the four elements of fraud. *CPA J* 2004;74(12):38-42.
- Pande V, Maas W. Physician Medicare fraud: Characteristics and consequences. *Int J Pharm Healthc Mark* 2013;7(1):8-33. <https://doi.org/10.1108/17506121311315391>
- Office of the Health Ombud. The Report into the Circumstances Surrounding the Deaths of Mentally Ill Patients, Gauteng Province. Pretoria: Office of Health Standards Compliance, 2017. <http://ohsc.org.za/wp-content/uploads/2017/09/FINALREPORT.pdf> (accessed 27 February 2018).

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