HEALTHCARE FACILITIES IN NIGERIA: REDEFINING STANDARDS AND DEVELOPING PERFORMANCE BENCHMARKS FOR THE PROFESSIONALISATION OF FM PRACTICES

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Healthcare in Nigeria is delivered by three tiers of government: the federal, state, and local governments. Public hospital buildings suffer as facilities management (FM) functions are often neglected, with significant adverse effects on the operation of public hospitals. Most government hospitals have no tools for measuring FM performance. The aim of the study is to propose a performance measurement framework by redefining standards and developing performance benchmarks to improve current practices and to professionalise FM. The research adopted mixed qualitative and quantitative approaches to explore key issues and barriers to FM practices with stakeholders responsible for the management of hospital assets. The findings provided pointers on how to develop performance measurement in FM. Adoption of the FM performance measurement framework will assist policy makers in public hospitals in Nigeria to drive key organisational changes in the way assets are managed to support healthcare delivery and the professionalisation of FM.

Keywords – healthcare facilities, facilities management, performance measurement

INTRODUCTION

In Nigeria today, the provision of health care facilities seems to be at a low ebb as many Nigerians are exposed to the danger of death (Abel 2014). Indeed, poor healthcare services in the country have contributed to an increase in mortality rates in the country. Statistics of health indices from international agencies point to the fact that 58 years after independence, Nigeria is still far from achieving the minimum required health standard. A recent World Health Organisation (WHO) report shows that 466,000 Nigerian children die at birth out of the 4.1 million infant deaths recorded globally (WHO 2017).

The provision of health care in Nigeria remains the functions of the three tiers of government: the federal, state, and local governments. The primary health care system is managed by the 774 local government areas (LGAs), with support from their respective state ministries of health as well as private medical practitioners. The primary health care has its sublevel at the village, district, and LGA levels (Adeyeye *et al* 2010). The ministry of health at the state level manages the secondary health care system. Patients at this level are often referred from the primary health care. This is the first level of specialty services and is available in

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different divisions of the state. The state key health care provision comprises laboratory, diagnostic services and rehabilitation. Teaching hospitals and specialist hospitals provide the tertiary primary health care. At this level, the federal government also engages the voluntary and nongovernmental organizations, as well as private practitioners (Ahmed and Gidado 2010).

The World Health Organization (2010) reported that the growth of performance measurement uses in FM amongst public hospitals in Nigeria is very slow compared to other developing countries. It ranked Nigeria 187 out of 191 in health system performance. Nigerian government is seeking ways to improve the position. Most public hospital buildings in Nigeria suffer from inadequate physical conditions (Pati *et al* 2010).

Public hospital buildings in Nigeria are generally old and in a poor state of repair. The hospitals are faced with many challenges including poor maintenance culture and there is a need for the professionalization of FM. It is therefore essential for every hospital district to have an effective FM performance measurement plan of its facilities. The lack of proper performance FM systems in public hospitals resulted in problems of various nature (Orubuloye 2008, Abukhder and Munns 2013). FM is viewed as a secondary function in public hospitals; professional FM expertise barely exists in most of them. Thus, few hospitals determine the maintenance needs for their facilities (Ilozor 2013, Kirkham *et al* 2012).

The aim of the study is to propose a framework for performance measurement by redefining standards and developing performance benchmarks to improve current practices and to professionalise FM. Following the introduction, the literature review is presented, followed by the outline of the research methodology underpinned by qualitative and quantitative approaches. The findings based on case studies of major public hospitals are then discussed to provide the basis for developing a performance measurement framework for FM.

CONCEPT OF FACILITIES MANAGEMENT

Traditionally, FM has been seen as the management of buildings and related building services. The growing trend is to view FM as the management of non-core organisational assets and activities to support and increase the efficiency of the core businesses of an organisation (BIFM 2013). The goal of FM has now evolved into improving organisational effectiveness by helping the organisation to allocate its resources in a way that allows it to flourish in competitive and dynamic markets. Measurement of FM performance is one of the three essential issues for effective implementation of a facilities strategy (Akhlaghi 1997). FM is a term that encompasses a wide range of activities involved in the effective management of built assets. It involves the total management of all services that support the core business of the organisation (Bootle and Kalyan 2002). The existence of active FM may help identify potential problems with maintenance and running costs before they result in component breakdown and even temporary shutdown of buildings (Reeve 2000). It can provide a disciplined framework for the examination of many of the relationships between decisions and the satisfaction of the end user of the property, whether in economic or environmental terms (Figure 1).

Measuring the performance of an FM system also provides a framework for redefining standards, developing performance benchmarks and reviewing user satisfaction as business and other circumstances change. It is clear that FM is an umbrella term under which a wide range of property and user related functions may be brought together for the benefit of the organisation and its employees as a whole. Therefore, the aim of FM should be not just to optimise running costs of buildings, but to raise the efficiency and suitability of the management of space and other related assets for people and processes, in order that the mission and goals of the organisation may be achieved at the best combination of efficiency, cost and quality. The scope of FM includes: Hard (FM) services (such as building maintenance, groundwork, landscaping) and Soft FM services (such as cleaning, catering, security) (Robinson and Scott 2009). FM has the potential to contribute significantly and it is important to identify and measure the extent that it supports, or can be adapted to, the changing needs of organisations, and contribute to productivity, profitability, service and quality (Mole and Taylor 1992).

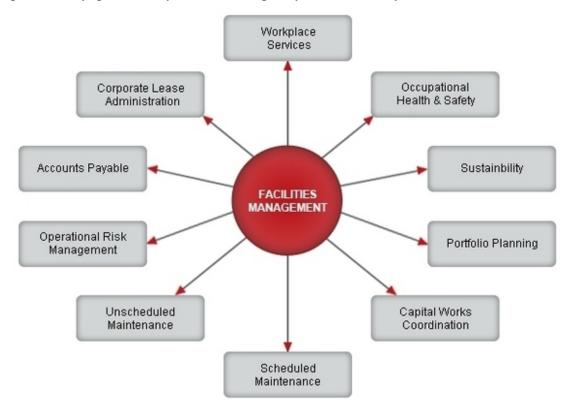


Figure 1: Scope of facilities management (adapted from Hronec, 1993)

THE NEED FOR PERFORMANCE MEASUREMENT

FM has the potential to contribute significantly to organisational efficiency and it is important to identify and measure the extent that it supports, or can be adapted to, the changing needs of organisations, and contribute to productivity, profitability, service and quality (Mole and Taylor 1992). Measurement of FM performance is one of the three essential issues for effective implementation of a facilities strategy (Akhlaghi 1997). Performance measurement systems historically developed as a means of monitoring and maintaining organisational control, which is the process of ensuring an organisation, pursues its strategies that lead to the achievement of its overall goals and objectives (Djerdjouri 2015). In attempting to change the focus of an organisation, Goyal (2007) suggests that performance measurement is a key agent of change. The four potential benefits that can arise as a result of having an appropriate performance measurement system are: satisfying customers; monitoring progress; benchmarking processes and driving change (Chotpanich 2014).

Performance measures are used to ensure that an organization is achieving its aims and objectives (Jensen 2008). The measures are used to evaluate, control and improve production processes (Mathew and Michael 2010). Mudrak et al (2014) discussed how performance measurement can be built and used as a motivational tool. Inappropriate performance measurement is a barrier to organizational development since measurement provides the link between strategies and actions according to Santos (2009). Inappropriate measures lead to actions incongruent with strategies not well formulated and communicated. For these benefits to be realized, it is necessary for organizations to implement an effective performance measurement system that, "enables informed decisions to be made and actions to be taken because it quantifies the efficiency and effectiveness of past actions through acquisition, collation, sorting, analysis, interpretation, and dissemination of appropriate data" (Santos 2009). Appropriate performance measures for soft and hard FM should provide and strengthen this link, and both lead to attainment of strategic goals and impact on the goals and strategies needed to achieve them. It has long been recognized that performance measures can be used to influence behaviour and thus, affect implementation of strategy (Loosemore 2004). Strategies are realized through consistent decision-making and action (Bell 1992). Indeed, performance measurement is seen as an integral part of the strategic control cycle.

CHALLENGES FACING HEALTHCARE FACILITIES IN NIGERIA

Many hospital organisations are transforming their culture as a means by which they may improve performance. FM has a positive role to play in enabling the transformation either by supporting the hospital organisation as part of the holistic drive for change or by acting as a catalyst, leading the way for others to emulate (Becker 1990). For these benefits to be realised it is necessary for hospital organisations to implement an effective performance measurement system (Neely 2008). Public hospital buildings in Nigeria are often in a poor state so it is essential for every hospital district to have an effective FM performance measurement plan of its facilities. The hospitals in Nigeria have poor maintenance culture and are faced with many other challenges. Research conducted by the Amaratunga and Baldry (2002) concluded that hospital organisations use performance measurement systems as the basis for management to perform better. However, the lack of proper performance FM system in public hospitals in Nigeria is caused by problems of various nature (Orubuloye 2008, Abukhder and Munns, 2013).

There is a major challenge that arises from government subvention due to the irregular flow of funds. This implies that the hospitals must rely on the other sources of finance for running the healthcare facilities (Nutt 2010). There are delays in the payment of the subvention confronting the hospital and at times, the subvention for some periods is not received (Anderson and McAdam 2004). There is also a gradual reduction in the amount of subventions received exacerbated by the fact that the monies received from government are often 'ring fenced' for only health workers' salaries and administrative expenses (Bell 1992). There is no component of the subvention directed specifically for investments and the delivery of FM services (Kirkham *et al* 2012). The inability of patients to pay fees and

charges is another problem and some patients often default in settling their hospital bills (Ilozor 2013). There are additional problems including government's influence in determining the fees to be charged (Pitts and Goyal 2004).

Other challenges include exploitation largely around control of resources and lack of accountability for resources in the hospital creating crisis. Poor accountability and the control of financial resources flowing around various units of the hospital is always a cause of friction (Okoroh 2012). There is also the problem of incompetence due to poor recruitment practices. When appointment to management/administrative positions are made based on entry level qualifications and specialty, regardless of experience and further training, the best candidate may not be favoured (Ahmed and Gidado 2010). While entry qualification and specialty are basic, it must be appreciated that further training and experience are required in order to function effectively in a top management position (Adeyeye et al 2010). There is a widespread culture of government sponsoring public officials abroad for treatment at the expense of investing and modernising the healthcare infrastructure delivery system (Okoroh 2012). Even the leaders who ought to show their commitment by example are guilty of this practice demonstrating a lack of faith in the Nigerian healthcare system, which is why they support health tourism by flying themselves and their cronies to other countries with highly developed healthcare systems (Orubuloye 2008).

Finally, there are inadequate tools for measuring output. Most government hospitals have no tools for measuring the work output of their staff (Ilozor 2013). Significant latitude is therefore given to individual staff to work as expected, but this is largely abused, creating divided loyalty and double-dealing. Measuring outputs should be linked to the inputs that are required to deliver the standard of healthcare facilities, hence the need for an FM system redefining the standards for both soft and hard FM and developing performance benchmarks that would support the delivery of key outputs expected of public hospitals. However, the poor understanding of FM performance measurement in public hospitals in Nigeria is a major barrier to healthcare service delivery (Ilozor 2013). Redefining standards and developing performance benchmarks is crucial in developing and transforming FM as a profession in Nigeria. Although the area of performance measurement is not new, this concept is neither well established or standardised across and even within FM organisations.

RESEARCH METHOD

The aim of the research is to develop a framework for performance measurement in facilities management (FM) for the public hospitals in Nigeria. Review of the literature was the initial step and this included an in-depth examination of literature relating to performance measurement in organisations in general and performance measurement in FM organisations in particular. A pilot study was conducted as a crucial step to improve the quality of the research by focusing on the data collection phase (Miles and Huberman 2014, Easterby-Smith *et al* 2018, Yin 2014). From the conclusions of the pilot study, the research focused on the following key questions:

• What are the economic, technological and managerial factors or drivers that influence the development of performance measurement?

- How can the needs of public hospitals be captured in the development of an FM performance measurement system?
- How can performance measurement change public hospitals?

The preference for the case study strategy derives from the fact that the main research questions are in the form of "how", and case studies provide the ability to examine contemporary events – the development of performance measurement framework in FM for the public hospitals in Nigeria by dealing with a wide range of evidence (Creswell 2013). For the purpose of this research, an important criterion was the selection of case studies based on areas with significant population (i.e., more than 70% of the Nigerian populations use the case study hospitals selected). The existence of FM practice was another criterion to compare the current and "best practices" (Yin 2014). A multiple case study design was adopted to achieve more robust conclusions by considering a range of similar and contrasting cases to strengthen the reliability of the findings of the research (Miles and Huberman 2014).

KEY FINDINGS AND DISCUSSIONS

A summary of case study organisations and findings from interviews with the senior and middle management and operational staff are presented below. Most of the organisations provided feedback on the practical validity of case study findings. The feedback was incorporated into the final research which was the basis for development of a performance measurement framework for the public hospitals in Nigeria.

Summary of case study organisations:

Lagos University Teaching Hospital: Lagos State University Teaching Hospital popularly known as LASUTH is a state-owned teaching hospital in Lagos, Nigeria. It is strategically located in Ikeja, the state's capital. LASUTH also shares structures with the College of Medicine, Lagos State University. The hospital was established in 1955 from a small cottage health centre by the Old western region. It was converted into a teaching hospital in July 2001.

National Hospital Abuja: National Hospital Abuja is a hospital in Abuja, Federal Capital Territory, Nigeria. The institution was formally established under Decree 36 of 1999 (Act 36 of 1999). Originally the National Hospital for Women and Children, the hospital opened on 1 September 1999. The hospital received its current name on 10 May 2000.

University Teaching Hospital Enugu: The University of Nigeria Teaching Hospital (UNTH) Ituku/Ozalla Enugu, has come a long way. It began early in the 20th century as a standard general hospital for Africans built by the colonial administrators. It later metamorphosed into a general hospital on the attainment of Nigeria's independence in the 1960s. However, at the end of the Nigerian civil war in 1970, the then government of East Central State transformed it into a Specialist Hospital with effect from July 1, 1970.

University College Hospital Ibadan: The University College Hospital, (UCH) Ibadan was established by an August 1952 Act of Parliament in response to the need for the training of medical personnel and other healthcare professionals for the country and the West African Sub-Region. The establishment of the Hospital followed a Visitation Panel in 1951 to assess the clinical facilities for the clinical postings of medical students registered for M.B.B.S. degree of the University of London. The visitation panel, led by Dr. T.F. Hunt of the University of London rejected the enhanced facilities provided by the Government/Native Authority Hospital at Adeoyo, Ibadan following the establishment of a Faculty of Medicine in the University College, Ibadan (now University of Ibadan) in 1948.

University Teaching Hospital: The hospital was established in 1955 from a small cottage health centre by the Old Northern region. It was converted into a teaching hospital in July 2016.

Main findings from analysing the responses

Insufficient Resources and Lack of Performance Measurement Tools A key challenge noted was a shortage of budget allocated to FM maintenance. Relating to other resources available in maintenance, it was agreed that there was a shortage of resources in the form of methods and analytical tools. Respondents also agreed there were no FM performance measurement tools and the FM departments are poorly equipped with no advanced instruments and machines to carry out inspection, maintenance work and other aspects relating to the management of the assets effectively.

Problems with Leadership, Co-ordination and Understanding of the Scope of FM Respondents disagreed that there was effective leadership in their organisations as there was no clear vision advocated and the mission was not clearly addressed to deal with employee loyalty and employee confidence which were both low. The respondents disagreed that there was co-ordination and co-operation between the different departments within the hospitals and maintenance managers were empowered to do their jobs. The respondents also asserted that top management had no clear understanding of the scope of FM and maintenance requirements and disagreed that there was a good housekeeping system. The lack of training programs, critical in FM particularly in areas of maintenance was raised by respondents. The responses showed that public sector hospitals have not clear rules for updating of FM checklists. Furthermore, the effect of culture on the delivery of quality programs was also noted so was the lack of a customer feedback system, essential for driving any improvement in services.

PROFESSIONALISATION OF FM: THE NEED FOR A PERFORMANCE MEASUREMENT FRAMEWORK

Given the catalogue of problems identified in the case studies, there is need for the professionalization of FM for continuous improvement. A performance measurement framework would provide the basis for the public hospitals in Nigeria to understand their own processes. A further benefit is that it can lead to a set of "best practices" and "lessons learned" that can be used internally to improve the Nigerian public hospital's management practices activities. These lessons learned, and best practices can also be shared with other public agencies, thereby facilitating the development of tools and ideas that can benefit the broader government public agency in Nigeria (Then 2016). First, the case studies clearly demonstrated that the scope of FM is not well understood. The definition of FM is poorly understood, and it is not being practiced in an appropriate way. The traditional narrow approach of maintenance is applied compared to integrated FM systems to drive strategic operations. The lack of understanding in FM definitions and functions is possibly the root problem of the passive development of FM as a professional cadre in public hospitals in Nigeria. FM practice is not guided and most often its importance is neglected in business strategies (Pitt 2014), hence there is a need for the professionalization of FM.

Second, performance measurement ensures that decisions are based on facts. Hence, there is a need for redefining standards and performance benchmarks for FM in public hospitals in Nigeria. It means that decisions by the public hospitals to take any action in improving business or healthcare delivery are based on defined standards to be measured using measurement of tools or models for measuring performance supported by a professional cadre of FM specialists.

The key FM standards should be redefined in terms of 'soft FM' and 'hard FM' based on best practices. In the context of public hospitals in Nigeria it is important to redefine 'what' is required in terms of standards for hard facilities management (FM) services (such as building maintenance, groundwork, landscaping, etc.) and soft FM services (such as cleaning, catering, security, etc.) and how it supports core services (non-FM) such as teaching, nursing, surgical and medical services in public hospitals. The level of requirement (performance benchmarks) for each soft and hard FM service category should be stated with a 'pass' or 'fail' criteria for assessing performance and setting rectification periods if a service fails. The soft and hard FM service performance standards as part of an integrated FM system should both be linked to the performance measurement framework for monitoring and feedback and taking appropriate actions (see Figure 2).

Services Accident &	Scope of Facilities Management Services	<u>Monitoring and Feedback</u> <u>Mechanisms</u>
Accident &		
emergency (A&E) Diagnostic imaging	Examples of SOFT FM Security	Weekly Cleaning Audit
imaging.	Mail management Catering	Yearly PAT Testing Monthly Facilities Audit
Healthcare Strategic goal: to increase responsiveness to healthcare Services Services Services Services Services Diagnostic imaging. Anaesthetics. Breast screening.	Office moves	Settina up Monitorina
	Set FM Performance Benchmarks	
j	maging. Anaesthetics.	Diagnostic

Figure 2: Conceptual FM Performance Measurement Framework

Hinks (2009) argues that the success criteria for FM are more likely to be associated with innovation. He further suggests that predominant features of good FM in the future may major on value, adaptability, novelty, support for new processes, and timelines, and herein lies the performance assessment challenge for FM. In terms of value for money, the FM performance plan should describe how to meet business needs and how optimising cost may be measured.

The proposed framework will serve as a management tool that will enhance the management and reporting of the FM activities by measuring the level of achievement and results in public hospitals with respect to both soft and hard FM

to support core healthcare service delivery. It will enable top management and the government to make more informed and effective choices and decisions about FM practices. By developing such a framework, the Nigerian public hospitals will be in a position to utilise concrete, objective information and data on which to make sound management decisions and report to clients, stakeholders and government. Another important aspect will be the professionalization of FM as a distinct discipline in Nigeria with the knowledge and skill sets required. Development of standards and benchmarks for good FM practices will encourage specialised training in FM and codification of best practices.

CONCLUSION

The existing research has highlighted the increasing importance of performance measurement. However, the literature in the FM area is still evolving given the lack of clarity over many concepts. There are existing performance measurement frameworks but they do not capture the context and specific challenges of public hospitals in Nigeria. There is therefore a need for the development of performance measurement framework in FM for the public hospitals in Nigeria. This research can therefore contribute to addressing the knowledge gap through the development of a systematic evidence-based framework with identification of the elements to be taken into consideration in redefining standards and developing performance benchmarks for continuous improvement of public hospitals in Nigeria. Adoption of the performance measurement framework in FM will assist policy makers in public hospitals in Nigeria to drive key organisational changes in the way assets are managed and to move away from a culture of narrow 'maintenance approach' to a holistic approach integrating all aspects of FM for the optimal delivery of healthcare services. The outcome will also provide policy makers in public hospitals in Nigeria with tools for accountability.

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