

Human Resource Management and Clinical Productivity in Nigerian Federal Medical Centres

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Abstract

Purpose: This study evaluates the impact of human resource training and development of Nigerian Federal Medical Centres (FMCs) to determine if the investment objective is yielding the desired results.

Design/methodology/approach: The paper employs regression analysis to ascertain the statistical significance of the investment costs of human resource development on patients' admission time, discharges and deaths, as surrogates for staff productivity.

Findings: The study found that staff development and training costs of the Nigerian FMCs is not statistically significant to the identified clinical performance parameters.

Practical implications: These findings are instructive to the managements of the FMCs as it has brought to the fore the need to review the staff training and development strategies with a view to enhancing the pay-offs in terms of clinical productivity of the FMCs.

Originality/value: This study has provided an empirical link of strategic human resource management and productivity in healthcare organizations in Nigeria.

Paper type: Research paper

Keywords: Human resource development, clinical productivity, Federal Medical Centres, Nigeria

I. Introduction

There is a global resurgence of interest in workforce productivity which has been established as a critical factor in the strength and sustainability of an organization's overall performance (Koopman et al., 2002). Macfarlane et al. (2011) confirmed that even though "people issues" are important, so ubiquitous and so hard to solve, an organization depends on its workforce and it is usually people who make or break efforts at complex change. Of all the factors of production, essentially consisting of the 6Ms – men, machines, money, materials, methods and minutes (Osisioma, 2001), the success of any type of organization depends most importantly on human beings because they take the decisions, and provide the knowledge, the energy and co-operation through which organizational objectives are achieved. Apparently, the value placed on personnel by the organization makes their training and development of paramount importance in updating and upgrading imperative for enhanced productivity within the organization. It follows, therefore, that the management of human capital is the most important determinant of organizational performance, especially in the service industries. Academics and policymakers have emphasized the importance of a skilled, knowledgeable and committed workforce for both the patient experience and health outcomes within healthcare (Macfarlane et al., 2011).

Federal Medical Centres (FMCs), as health service organizations, place a high premium on staff training and development in consideration of their operational mandate of dealing directly with the people and their lives. Accordingly, FMCs have invested a lot of resources in the training and development of staff over time as a way of enhancing their performance towards fulfilling their general mandate of effective health care delivery to the people. Though the investment objective is not in doubt, it is not clear if the investment in the human resource development at the Centres is yielding the desired results. By its nature, the effectiveness of any health service institution is judged by the degree to which it makes its impact felt to the patients (Sani, 2001). It is therefore important to subject the performance of the Centres to a process of review and evaluation so as to demonstrate the contributions these investments in human resource development are making towards the overall organizational mandate. Thus, this study is an evaluation of the impact of the training and development programmes on clinical productivity in the Centres, with a focus on Federal Medical Centre, Makurdi.

1.1 The Concept of Training and Development of Human Resource

Training helps employees to perform specific tasks, while development prepares the employees to assume more tasks and responsibilities by helping them to realize their full potentials (Nwachukwu, 2000). Training is the systematic process of altering the behavior of employees in a direction to enhance the realization of organizational goals. Development, on the other hand, is the process by which employees gain the

experience, skills and attitudes to become or to remain successful leaders in their organizations. Development deals with those activities undertaken to expose employees to perform additional duties, thus ensuring assumption of positions of importance in the organizational hierarchy. The objectives of training and development are the same, as both enhance the employees' capacities to contribute optimally to the development of the organizational goals (Olaniyan and Ojo, 2008). Both training and development are at the heart of human resource utilization, productivity, commitment, motivation and growth. The three concepts of training, development and productivity are terms that are intertwined. The essence of personnel training in an organization is to ensure the development of human resource and a well developed human resource enhances productivity in the organization. Theoretically, this situation holds true in all organizations.

Technological innovations taking place everyday render today's skills and methods ineffective for tomorrow's activities. It is therefore necessary for organizations to ensure that employees without the necessary skills are helped to acquire them, while those who do possess the requisite skills are helped to update them. Organizations introducing new technologies, and those relying on internal promotions to fill vacancies, are more likely to have formal training programmes with the intended positive effects on labour productivity (Bartel, 1989). Human resource, like any other resource of an organization, must be properly and adequately managed if efficiency in its use is to be attained. Where human beings are efficiently managed in an organization, the other resources of the organization will almost always be efficiently utilized and organized. The emphasis placed by any organization on the training and development of employees is an implicit emphasis on productivity.

Medical personnel, who are often faced with ever increasing new and improved methods of patients' diagnosis and treatments, use and reinforce techniques acquired from training and development to help improve quality and customer service within their organizations. Medical institutions therefore recognize the value and importance of providing opportunities to all staff, both medical and paramedical, to develop their job-related knowledge and skills; and expects that the beneficiaries' effectiveness will be enhanced to make richer contributions in their service delivery.

1.2 Evaluation of Productivity Measures in Medical Centres

Staff training and development are geared towards solving specific organizational needs. The current shift towards problem-based learning (PBL) suggests that staff development needs PBL to be a key component in any work implementation strategy. As a result, several attempts are being made by researchers to determine factors that can facilitate efficient accomplishment of organizational goals. This is essential in determining priority areas of training and development in the organization. It is important to realize that training and development is not an end in itself. It is a means, an organizational technique, which needs to be appraised from time to time to ensure that it is contributing meaningfully to the overall organizational objective. The benefits of evaluating training and development include promoting organizational efficiency by linking efforts to train and develop staff to operational priorities, goals and targets.

A critical component of service strategy in high-contact environments is service encounter management. Effective service encounters are a result of the quality of employee development, including systems for work and job design, training and development, and attention to employee wellbeing. Results of empirical analysis by Goldstein (2003) indicated that service strategies reflecting the dimensions of development drive employee outcomes such as productivity and satisfaction. In an exploratory research, Bartram et al. (2007) linked strategic human resource management (HRM) and outcomes in healthcare organizations and found some correlation between these as well as wide variability in the value placed on strategic HRM by managers. A Medical Centre is a good example of where medical and paramedical personnel render services in high contact service environments; it is imperative therefore that it should appreciate the importance of employee development in service strategy design for managing service encounters.

Lerner et al. (2004) determined that negative health-related productivity impact varied with the type of work employees performed. This could mean that employers can reduce health-related productivity loss by identifying health and productivity improvement priorities. Focusing on the experience of introducing PBL into nursing and midwifery curricula at the University of Dundee, Murray and Savin-Baden (2000) argued that staff development played a key role in the effectiveness of the subsequent implementation of PBL. Major areas that have been considered under the rubric of health and productivity management (HPM) in organizations include absenteeism, employee turnover, and the use of medical, disability, and workers' compensation programmes. Results of empirical studies by Goetzel et al. (2001) indicated substantial opportunities for improvement through effective coordination and management of HPM programmes. Additional benefits include identifying cost effective and valuable training events or programmes, leading to better focused learning and development, and ensuring the effective transfer of learning into the workplace. Several working environment factors affect staff productivity. For instance, absenteeism affects productivity, but even when employees are physically present at their jobs, they may experience decreased productivity and below-normal work quality - a concept known as decreased presenteeism (Koopman et al., 2002).

While these are generic factors to all organizations, there are productivity factors that are peculiar to a Medical Centre. For instance, adjusted rates of patients' discharge, readmission, length of stay, and deaths were employed as indicators of hospital efficiency in New Haven and Boston in USA (Wennberg et al., 1989). Early discharges from hospital have been used as an indicator for the analysis of clinical efficiency by Bone et al. (1993) who recommended that mortality and quality of life data should be used as outcome measures of clinical productivity. West et al. (2002) actually found a strong association between staff appraisal, employee training and team working, and overall patient mortality in English hospitals. However, according to Macfarlane et al. (2011 p. 56):

In only a few examples was HR [human resource] performance data systematically collected and linked with organisational performance management processes ... particularly in large healthcare organizations, and consequently opportunities to understand and develop the link between HRM and improved organisational outcomes are likely to be missed.

This postulation is as relevant to the Nigerian environment as it is in the UK's because literature search reveals very scarce studies that link human resource training and development to performance in health organizations in Nigeria. Worse still, there is no known empirical evaluation of human resource development and staff performance in FMCs in Nigeria, hence the research gap. The consequence is that this important organizational strategy is left to hunches of managers without evidential justification for their decisions. As a way of filling the gap, this study adapts mortality and quality of life outcomes by utilizing patients' discharges, length of stay and deaths as proxies for measurement of clinical efficiency arising from training and development at the Federal Medical Centre, Makurdi. This may help to define future human resource development objectives of the Centres because the evaluation of productivity and the learning processes during training and development in clinical experiences has the advantages of incorporating customer care, teaching, and administrative productivity (Ladyshevsky et al., 1998).

1.3 Federal Medical Centres in Nigeria

Primary healthcare is to be provided in Nigeria by Local Governments, secondary health care by State Governments and tertiary health care by the Federal Government (Ministry of Health, 1995). In operationalizing this policy, the Federal Government has established at least one tertiary health institution in each State of the Nigerian Federation. Federal Medical Centres were established nationwide in states that do not have Federal University Teaching Hospitals. The exception to this rule is Lagos State, which has one such centre in addition to a Teaching Hospital. As at the beginning of 2016, there are a total of twenty two FMCs all over the country. As a general rule, most of the Centres are situated in the state capitals, especially in situations where the apex secondary health institution run by the state does not adequately meet the demands for specialist health care by the citizenry. The general mandate given to all the FMCs within the framework of the laws establishing them is to provide qualitative, affordable, specialized/tertiary level hospital care to the citizenry and to ultimately reduce the burden of diseases within the communities, through provision of prompt and emphatic preventive, curative and rehabilitative services. The participation of stakeholders in the affairs of each FMC is captured by the representation of each interest group on the Board of Governing Council of the institution. From community representation, to private interest and professional groups, the constitution of the Board is broad-based. The Minister of Health, as the Chief Health Officer of the country, is fully represented on every Board of all the FMCs. Given the homogeneity of these establishments, mandates, management and operational oversight of FMCs in Nigeria, the findings in one can be justifiably generalized.

II. Research Methodology

Essentially, employee review and evaluation is the process of finding out how the development or training process has affected the employee, entire workforce, and the organization. In a first time realist evaluation of a complex health organization, Macfarlane et al. (2011) employed "theories of change": recruitment, roles redesignation, workforce planning, linking staff development to service needs and shared learning and knowledge exchange to conclude that funding make a measurable contribution to the quality of care through the training with differing levels of success. This study focuses on impact evaluation of the training and development of doctors and nurses of Federal Medical Centre, Makurdi for a period of ten years spanning between 2001 and 2010. This period is determined by availability of data. The choice of doctors and nurses is informed by the fact that they deal more directly with the patients and are more directly linked to the chosen variables. The study derives its data from FMC Makurdi which is located in the North Central geographical zone of Nigeria is the largest medical service organization in Benue State. The study employs annual total costs of training and development as surrogates for management's investment for the purpose. This is regressed against number of patients admitted, discharges made, and deaths recorded for the period separately for medical doctors and nurses, and then the aggregate annual training and development expenditure for both doctors and nurses. These variables are also determined by data availability. The regression results are shown in Table 1 below which has different panels for doctors, nurses and the aggregation of the two.

Table 1 Regression Coefficients of Human Resource Development and Clinical Productivity					
Panel 1: Doctors' Development Costs and Productivity					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	2.233	11.31		0.197	0.850
Patients admission time	0.000	0.006	-0.072	-0.17	0.872
Total discharges	-0.002	0.004	-0.373	-0.48	0.646
Recorded deaths	0.036	0.037	0.751	0.984	0.363
Panel 2: Nurses' Development Costs and Clinical Productivity					
Constant	1.981	2.615		0.758	0.477
Patients admission time	0.000	0.001	0.087	0.202	0.847
Total discharges	0.000	0.001	-0.208	-0.27	0.797
Recorded deaths	0.008	0.009	0.688	0.899	0.403
Panel 3: Aggregate (Doctors & Nurses) Development Costs and Clinical Productivity					
Constant	4.214	13.579		0.31	0.767
Patients admission time	0.000	0.007	-0.043	-0.1	0.923
Total discharges	-0.002	0.005	-0.350	-0.46	0.665
Recorded deaths	0.044	0.044	0.756	0.992	0.359

The results show that even though the patients' admission time in the centre is negatively correlated to staff training, indicating reduced period of patients on admission. This is, however, not statistically significant. Surprisingly, total number of patients' discharges is also reduced for the study period. Even though there may be several interpretations to justify the result, however, the fact remains that it is not statistically significant. There is a positive but statistically insignificant relationship between staff training and development and number of deaths recorded. Though this is against a priori expectation, it can be assigned an appropriate explanation if the history of the dead patients is taken into consideration. On the whole, the overall result is that the investment on staff training and development has not made significant impact in respect of the tested parameters.

III. Conclusion

Medical Centres place high premium on staff training and development so as to improve quality of their health care delivery. This is imperative because not only that their operations are carried out in high-contact environments, it is often faced with increasing new and improved methods of patients' diagnosis and treatments, which sometimes literally leaves patients' fate hanging in the balance. Like other FMCs, the Makurdi Centre has been investing in staff training and development over the years. While there may be generic factors to all organizations, there are productivity factors that are peculiar to a medical centre. Thus, this study evaluates the impact of the training and development on patients' admission time, discharges and deaths.

Employing regression analysis, the study found that staff development and training of the Centre is not statistically significant on the selected performance parameters. This result is instructive to the management of the FMCs. It has brought out the need to review the staff training and development strategies with a view to effective accomplishment of organizational goals.

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