**Economics and health care**

**Introduction**

In today’s world, economics plays a critical role in different areas of management in sectors of business. For example, in the healthcare, economics has over the years been used as an evaluating tool for various healthcare-based interventions and activities. However, with different economic concerns getting toll of these healthcare systems, many hospitals are focusing on how they can engage nurse managers in healthcare management (Feldstein, 2012. This is because nurse managers are currently holding a pivotal position in ensuring that clinical as well as cost-effective healthcare is provided. As a result, nurses are presently getting engaged in different trainings to better understand the financial management language as well as the different funding models. In light of these concerns, this study focuses on discussing the concepts of economics, case-mix-based information system, funding models and equally looks at how they are employed in the healthcare setting

**Economic concepts used in the context of healthcare delivery**

**Allocative efficiency**

For any health system to guarantee effective service delivery, every decision on resource allocations must always be based on efficiency. According to studies, allocative efficiency is a term that is commonly used to mean a right to equal share of the resources devoted to healthcare delivery (Shodhganga.inflibnet.ac.in, 2013). From an economic point of view, a healthcare system can be allocative efficient if the input mix used help in health care cost reduction. Usually, the allocative efficiency concept tends to take into account the efficiency around the outcome distribution as well as the productive efficiency, particularly the health outcomes which are produced using health resources.  For example, in healthcare, the allocative efficiency is always about having the right combination of health service program that improves the health of the community.

**Technical efficiency**

Technical efficiency, on the other hand, is often used to show the physical relation that exists between health outcome and resources.  It is commonly achieved when resource inputs are used to produce an improved healthcare outcome for the patients. For instance, a healthcare intervention can be efficient if it produces an equal or greater outcome from a given resource input (Shodhganga.inflibnet.ac.in, 2013). Based on the example provided, technical efficiency is merely about using a given amount of input to produce an equal amount of outcome or even more. Therefore in healthcare systems, technical efficiency tend addresses the concerns linked to the efficient use of health care resources to attain the maximum benefits.

**Opportunity cost**

An Opportunity cost is always a fundamental concept for any economist who is interested in issues associated with cost. This is because resources are usually known to be scarce as compared to the needs of the people. In healthcare, the opportunity cost can best be measured in terms of the health benefits, especially when an investment is made on the best alternative healthcare program or interventions (Shodhganga.inflibnet.ac.in, 2013). For example, working on a program that prevents an accident in childhood could be a health gain that is forgone by asthma affected children. Such economic evaluations tend to follow an approach that compares the paybacks that could be associated with alternative resources allocations. Therefore in healthcare, opportunity costs entail the amount of services that an organization delivers with the use of less or more resources used. The resultant impacts are that it often leads to better and informed decisions which might end up improving the health outcomes.

**Cost-effectiveness analysis**

This is an economic analysis that is often used to compare the effects of different outcomes with their relative costs. In such circumstances, this type of analysis is commonly used in areas where health effect monetization might be advised (Shodhganga.inflibnet.ac.in, 2013). As a tool for decisions making, the economists often used it to make cost and effective comparison on the set of medical care that should be provided amidst different alternatives available. Such comparisons always play a vital role especially when the alternative to be chosen should provide standard care. In doing so, the decision maker gains an opportunity to evaluate different innovations to come up with better decisions that improve health care services.

**Activity-based funding**

ABF is an approach that most healthcare systems such as hospital use to fund their activities, primarily from the services they render to the different patients. It is equally known to be an intervention policy that is intended to change the incentives of various health organizations through the applications of the DRG systems (Collier, 2008). Through their initiatives, policymakers have been able to create a hospital funding approach that assures patients an equitable access to health care services as well as quality care. Besides, ABF has boosted the healthcare efficiency and equally increased the transparency of the budgets which promotes accountability. Based on its applications the benefits associated with the use of ABF funding have significantly increased. Currently, the funding method performs various functions including reducing the hospital costs, increasing funding as well as spending transparency and most importantly improving efficiency as well as lowering the patient’s length of stay.

**How ABF as an incentive increases accountability, efficiency and improves access to care**

**Accountability**

Currently, different nations are struggling to use the activity-based funding systems as ways of increasing the transparency especially the allocations of different service-related funds as well as ensuring the hospitals receive the incentives that help them improve their efficient use of the funds given (Collier, 2008). According to studies the funds provided through this approach is always account for different complexities, volume as well as the intensity of care provided to patients with the unusual diagnosis. By applying the cost accounting systems, the funding approaches usually ensure that prospective processes are set for every service provided. As a result, ABF always ensure that transparency and accountability are enhanced, particularly the taxpayer funds which are mostly used in public hospitals. Besides it ensures that there is accountability in the performances of different healthcare systems.

**Efficiency**

ABF is usually known for its support particularly in ensuring health services provided are effective, and the resources to be used are allocated efficiently.  These process always involve streamlining rage processes, making plans, and spending wisely (Rosenberg and Hickie, 2013). Besides, it includes ensuring the resources and different activities of the hospital are fairly and adequately funded to meet to the needs of the populations. Study reports show that hospitals under ABF funding are always better positions to acclimatize with the payments of the ABF, especially when choosing to operate more efficiently and effectively.

**Access**

ABF always guarantees equal patient access to a comprehensive as well as integrated Healthcare Services. ABF tend to accomplish this goal in different ways including incenting the healthcare providers to reallocate their resources to improve access to various health care services better (Rosenberg and Hickie, 2013. This approach usually helps reduce the wait times commonly experienced in specific types of medical procedures. Above all, ABF always ensures that particular populations with apparent inequities get better access to care.

**Currently non-funded ABF health service provision activities**

Despite the positive outcomes realized from the ABF funding, there always exist specific provisions that often hinder the organizations from funding particular health-related services and hospitals (Collier, 2008). The criteria for blocked financing are often based on the legibility as well as the technical requirements of the hospital or services to be provided. Some of the categories of services that are currently not funded by ABF include the mental health services for non-admitted as well as the non-admitted services. Besides, they don’t support small rural hospitals as well as teaching, training and research activities.

**Case-mix-based management information systems**

Over the years the roles played by the nursing managers have significantly evolved from a simple clinician to a bed manager with evidence-based practice accountability and recently to a budget liability personnel (Hovenga, 1996). While undertaking most of these roles, it is always understood that Case-mix data ted to a play a crucial role particularly in the provision of the information commonly used for financial management and effective decision making. According to studies, Case-mix is widely known to be a scientific method that is used to produce information about healthcare, which is based upon episode classifications of the patient care that improves the management of a health system.

**Types of information case-mix-based management systems**

With the booming populations and escalating health care costs taking a centre stage in various healthcare activities, there has been a compelling need among the healthcare providers to have a system that could help control the healthcare cost through a proactive planning ad better resource allocation (Hovenga, 1996). In light of these needs, medical organizations have developed different case-mix management based information system to help with the healthcare problem that was taking the toll of many organizations. Diagnosis Related Groups is one of the case-mix information systems commonly used to categorize different in-patients who are receiving acute healthcare based on their primary diagnosis.

In the wake of this growth and expanding use of the Casemix-based management system, new classification systems of case-mix information have been generated to serve different purposes. In the U.S., HCFA, as well as the federal government, are some of the agencies that have employed these information systems for various purposes (Hovenga, 1996). For example, the AN-DRGs systems are one of the prospective Medicare payments systems that have been used in the United States since 1983 help allocate healthcare resources. Other forms of case-mix information system developed and used by different countries include Australian Ambulatory Classification system commonly used in a specialized paediatric hospital.

Besides, there is Non-Acute Inpatient (NAIP) system which commonly suits inpatients whose conditions requires institutionalized care (Hovenga, 1996). It is also used to help patients who need nursing maintenance as well as patients awaiting placemats in other care settings. In California, systems such as CLTC and FIM information system are commonly applied. For instance, CLTC is often used to manage various data in nursing homes while FIM is used for patients with care burden and functional abilities. In the USA, there exist case-mix systems such as Ambulatory Care Groups, Ambulatory Patient Groups, Ambulatory Service Weighting as well as System, Ambulatory Visit Groups. Others systems developed within the country include the Psychiatric Patient Classes commonly used for in patients with acute psychiatric episodes.

**Uses of Case-mix information**

**Financial planning**

The information generated by the Case-mix is mostly used for various healthcare funding purposes. As a tool for decision making, Case-mix use often centre on finance and costing aspects of healthcare systems (Hovenga, 1996). Since most financial and clinical information requires merging to become effective, the operational clinicians, executives as well as corporate management always apply the data from the case-mix systems to regulate costs and most importantly set the medical prices. For instance, in Tasmania, information from case-mix systems is mostly integrated within the Resource Allocation Model to help in costing the inter-regional patient flows

**Management**

In different healthcare settings, patient dependency systems which are concerned with care requirements and patient characteristics are commonly applied as a way of predicting the resource needs associated with nursing resource needs (Hovenga, 1996). In such instance, the nurse managers often use this case-mix based management information to accomplish different purposes such as planning, strategic management, developing weights of nursing service and for costing the different nursing services. Most of these management activities largely depend on timely and accurate information processing.

**Quality**

Currently, many hospitals have gone great lengths of developing clinical paths ensure that high cost or volume of AN-DRGs information is used in management to help achieve this goal. Most of the care plans generated from these clinical paths are always crucial in realizing high-quality care, optimum resource application, collaboration as well as effective communication between different disciplines (Hovenga, 1996). These standardized health care plans mostly help expedite computerization of various clinical data, which in turn helps in improving the volume of clinical research which is done at a lesser cost.

**Case-mix based management concerns regarding the quality of care and ways of addressing them.**

Under the case mix based management, there are different concerns related to the quality of care that has been raised by many healthcare providers. Most of these concerns usually include products costing and the clinical costing systems among many others (Hovenga, 1996). While considering the quality of care provided, most healthcare organizations are always perturbed by different products costing related issues. For instance, they always find it challenging to directly relate the costs incurred while providing the clinical services to the patients’ generated workload, the material used and the numbers of staff employed to provide the service.

On clinical costing system, various concerns have been raised on whether the cost for obtaining the case mix based management information is always comparative to the benefits owing to the high cots usually incurred while maintaining and implementing of the clinical costing system (Hovenga, 1996). However, there are ways through which these concerned discussed above can be addressed, for instance, products costing problems cans be addressed through the use of a Case-mix-based funding  while the clinical cost system can be addressed through the use of feeder systems such as monitoring systems for nursing workload as well as the use of departmental based systems.

**Conclusion**

Based on the issue articulated in this study, it becomes apparent that health economic takes a central role in the management of various care based activities and interventions within the healthcare system. This is because it addressed significant economic issues such as resources allocation, the quantity of resources that used in service delivery as well as the efficiency surrounding the allocations of resources.

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