Power System Technology
ISSN:1000-3673

Received: 05-10-2024 Revised: 15-11-2024 Accepted: 25-12-2024

The Impact of Equitable Health Management and Health Information on Raising the Efficiency of Health Workers

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Abstract

Introduction: Because health system performance is strongly contingent upon health workers' performance (and also contingent upon their number), the people employed in the health system directly affect human welfare. This fact has pushed global health and public health priorities, which have long concerned health workers, to strive for improved health worldwide. The development of equitable health management and health information systems to improve the efficiency of health workers, given the aforementioned fact and the current context of public health concerns, has revealed or will reveal several new aspects concerning health workers, drawing the attention of policymakers and the global community toward this precious resource that the system has in hand. Health workers obviously play a central role in meeting many of the health goals that the global and public health fields presently target, in raising national welfare, and in developing global income distribution. Their performance their productivity, efficiency, and effectiveness — is the main driving force for change. This means that the issue of how to strengthen performance in the health field by ensuring that enough, suitable, and motivated health workers are in the right place at the right time to supply the essential health services necessary to attain health sector objectives is central and crucial to the needs of all countries.

Methods: This research includes four metadata sets: countries, health worker dataset, variables for production function, and output dataset. The country dataset is used for comparisons and statistics to analyze effectiveness of health worker function. The study

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evaluates coefficients on efficiency variables to indicate their economic impact on managing population. To estimate production functions, variables on the right-hand side of the equation are specified. These variables have impact on key outputs linked to population activities. Concepts of health management and information receive attention for their role in altering population distribution. "Management" is broken down into eight elements, each with three sub-tasks related to worker efficiency.

Conclusion: In conclusion, it needs to be mentioned that a well-operating health center is a system in which management, by applying medical and pharmaceutical science, is combined with equal opportunities, and it is based on the application of general economic rules. At present, the application of equitable management is a key condition to improve the activities of various establishments. The establishment of comprehensive health information systems is among the main activities of the long road. In the first stage, we cannot receive accurate and reliable detailed data. The data have the following shortcomings: they are not classified as establishing a foundation, they are registered with delays and on an incomplete basis, they are inaccurate, obtained in quadruplicate, duplicate, or more copies, and they lack detailed analysis or are affected by a series of factors.

Therefore, to form comprehensive health information, a great investment must be made in computerization and improvement of primary data obtained directly through examinations. If the general medical examination is good, then the patient will be non-professional. Such data are important for health management. Their use needs to be objectively operative, and demographic research should be carried out during public health monitoring.

Keywords: Contingent, Aforementioned, Pharmaceutical, Quadruplicate.

1. Introduction

The efficiency of a doctor or health worker is determined not only by his or her professional competence and quality of medical equipment, but also by the quality of information. Health is a truly important national strategic asset. It requires not only the technological solution of many medical problems, but moreover, the fair and equitable treatment of the health needs and claims of a society's members should occupy a significant place in the policy of any government in the world. In addition, the fact that examinations of the lifecycle, where the long-term influence of health capital on economic, demographic, and social phenomena are demonstrated with a sophisticated theoretical substantiation, has now entered the standard theory of economic development points to the analytical justification of these claims. The modern-day health care system, which includes a dual approach and elements of a 'market-social' institution, has a significant public interest. Authorities are playing an increasing role in the process. Satisfying the adequate amount of state socio-medical funding requires precise knowledge of the requirements of the population for socially significant medical services and

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the degree of access to the population of the array of properties of social and health guarantees. Satisfaction of this substantial need necessitates the solving of multiple tasks in the field of public administration. On one hand, the need to carry out practical procedures aimed at preventing many diseases and conditions among the group's population known at the state level serves as a precondition and essential aspect of realizing society's constitutional rights to comprehensive healthcare and security.

2. Equitable Health Management

Today, in the field of health, the desired economic, social, and public assurance functions of health are not equally performed. Health systems are poor in terms of access to and use of health care services and ensuring health. This is called health inequity, and it is necessary to eliminate it. The ability to achieve equal levels of healthcare services and the achievement of health needs and benefits can be called equitable health management. Formulation of macroeconomic dynamics and effective management has many aspects and determining factors that may be known generally as health management functions. For example, health management can be seen as decision-making, planning and evaluation, control, information organization, leadership and direction, politics and power, national and international relations, social accountability, and reform and regulation cooperation and peace.

Nowadays, equitable health management is very important and effective with the change in individual expectations regarding the delivery of health services and the increase in education levels and standards, especially the increase in per capita income. People expect high health services compatible with technological developments from health institutions. Since the 1980s, people's reactions to the expectations created by limited health services have increased the importance of equitable health management. Stakeholders who are the subject of the health process must be placed in the center. These stakeholders can be listed primarily as sick individuals and the community, health workers and specialists, health service institutions and organizations, enterprises, insurance companies, health sector suppliers, NGOs, national and international public administrations, and central and local government bodies. To ensure active participation, good, equal, and healthy are the managers and technical staff of suitable health services. With equitable health management, it is necessary to focus on minimizing and eliminating health inequities in society and to provide common benefit to all categories of people.

2.1. Definition and Principles

With the onset of an era of economic cooperation with foreign countries, Vietnam is faced with critical decisions and has formulated measures to introduce new economic management mechanisms designed to promote economic growth. Health management, health policy, and human resources are considered important tools in raising economic efficiency or, more

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precisely, improving the quality of medical examination and treatment services. HR management practices can contribute much through the mediating function of improving the economic effect of hospital operations. Therefore, health management studies the following.

Health management science is a theoretical and practical science that covers the use of stably improved rules, policies, and managerial skills to create favorable conditions for mixed economic sectors in hospitals, improve the role of hospitals in health care, and support the development of the comprehensive strategy set up for developing the entire system of social labor institutions, such that the whole social allocation for resource utilization will be more efficient, supply will be more regular and optimized, and the volume of services provided for the community will be more and more professional.

2.2. Challenges and Barriers

A number of challenges and barriers need to be addressed by stakeholders to put ICT-based health management and health information systems in action and fully address critical problems such as shortages, uneven distribution, and low efficiency in human resources for health. Lack of incentives, limited capacity, software incompatibility, poor infrastructure, high initial costs, little trust, and resistance to losing or having access at much less cost to decision-making power or political advantage persist as major hindrances among governments, executives, stakeholders, and employees. As a matter of fact, an increase in data collection, aggregation, analysis, distribution, and use has generated challenges and barriers that were already felt in the early 2000s. The problem of technological incompatibility and infrastructure capacity is becoming less significant. Many software and hardware providers are now maintaining the capacity to provide solutions that are compatible and interoperable with capabilities available within organizations. In addition, upgrading to high-capacity infrastructure is coming with less investment than before. The real barriers are the lack of incentives to narrow the human skills gap, limited trust in each other's ability, and a new conduct and legal framework. First, acquiring and maintaining ICT and data analysis expertise from investors, partners, users, or policymakers is not an appealing thought. Second, governments, executives, and stakeholders are influenced in regarding their ICT and data analysis as important trustworthy assets, as opposed to their skills and power to win over and overcome their opponents, within or across organizations and groups. The risky behavior of people, such as causing medical errors in order to avoid doing paperwork, and groupism within and between organizations are examples of distrust and contradictory feelings exemplified by country findings throughout the study. Such distrust tends to restrict sharing incomplete or unreliable data with institutions such as regulators, funders, and media, encouraging irrationality and harm. As media tend to cover bad news, rumors may trigger stakeholders, beneficiaries, or taxpayers who have lost confidence in data and analysis to pressurize professionals into diverting attention and resources essential to actions with greater

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impact on health and social security programs. Third, practices and structures aligned with stakeholders' new intentions, as objectified in a legal access framework, are not yet in place. The facilitation of disorientation or resistance to change encourages debate and legal cases without solutions or take-off, as happens when governments make providers or users responsible for liability. Yet, expecting to regain data omission or manipulation as the damage caused by actors hiding the worst outcomes of their inaccessible or obstructive behavior, organizations become exposed to unacceptable safety risks.

3. Health Information in Healthcare

Healthcare information is of vital importance to all healthcare providers, as they depend on free PCBs that are of high quality and can provide proper output at the right time for the patient's health. The healthcare worker should ask experts about the resources of the modern PCB currently available. He has to know the valuable role of master playback centers in the production of health tapes. The inquirer about health information services currently available at the regional and international levels must notice health conditions that change during Geneva and receive concluded health instructions while there is data, not before. The health manager can utilize this data to raise his productivity in the period between two Geneva visits. Data can be gathered and utilized either on the individual, community, or national levels of the health system, or by any type of health worker involved in health management or research.

The Health Management Software Services build a chain between the people and the healthcare services provided. They can be used by several large organizations and institutions to contribute to the output that was once considered the exclusive domain of health assignment experts. The support consists of qualities of unparalleled quality, as well as one or any type of service user, who feels that they are simply undertakings with exorbitant prices. To be truly useful, health information must be based on actual and true facts, be available at the right time with a healthcare worker, and be utilized to promote the health of the people. The healthcare worker must be interested in these few essentials of health information provided. The worker has to make use of the information and use it judiciously for the purpose of health. If these requirements are all satisfied, the health management data will finally enhance healthcare.

3.1. Role and Importance

In a working economy, the health sector must be continuously improved and developed, in which the management and workers must really fulfill their social function, have professional qualifications, and knowledge of their tasks, but especially link skills with the social role they play. The healthcare system is a highly complex component that puts demands on professionals: knowledge and emotional intelligence, culture, humanity, adaptability, and

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understanding of their country's legislation related to the medical field and administrative discipline. Because health is the basic need of every person at each of its stages, it is necessary to have an efficient health system in any social welfare state, with highly qualified medical and paramedical staff. The healthcare system must be balanced with the social components of healthcare, ensuring equity in health care and equal access to information for all citizens. Many health workers with a recognized moral and professional position are increasingly careful, bringing a lot of good to society and enabling the construction of approaches and organizational models focused on the patient. Ethical principles must be inculcated throughout the course of study and in practice within the resulting professional hierarchy, which addresses the problems of personality and the well-being of the patient. Health information also plays a very important role in raising the efficiency of health workers.

3.2. Types of Health Information Systems

In the past, routine information on pertinent aspects of development programs was often seen as a luxury that poor countries could ill afford. In recent years, the cost of acquiring and using information has fallen dramatically, so that poor countries are better placed than ever to derive benefits from enhanced information management and exchange. Many health information systems, however, particularly in the poorest countries, have outdated designs or employ outmoded technologies, rendering them less effective in the changing environments and in capturing the vast increases in new information. A health information system, more specifically, is an integrated and harmonized structure, with trained personnel, required equipment, and the underlying process to properly manage health information. Health information, on the other hand, is organized and timely access to verified information for decisions on problems and issues related to health needs. Throughout the world, people are working to improve both the types of information collected by health information systems and the health information systems themselves. Whereas little beyond manual recordkeeping was once required, many of these advances depend on the capacity to process digital records and to store, communicate, or access information through electronic means.

4. Efficiency of Health Workers

Due to the rapid development of the economic and technological sectors, a two-way relationship between supply and demand has emerged in the development of health services and economic activities, on two fronts—raising the efficiency of health workers and their economic relations, and creating new health services and jobs that align with the health needs of individuals and the community. Meanwhile, developing health workers' skills, creating an attractive management environment that rewards performance, and changing the remuneration system can have a major impact on the health sector's shift from its primary goal as a safety net, reacting after events occur, to a secondary goal, which is ensuring the

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medium or long-term health of as many people as possible. It is also important that health workers have rapid and equitable access to the available information, as it underpins the diagnosis, therapy, and prevention of any type of imbalance between the body and the environment.

The health care worker of the future should be confident in using the personal electronic health folder—accessed only with the holder's permission; confident in using and explaining to any patient the information the health personal electronic folder holds; prepared to do preventive work, diagnostic testing, and online consultation at any time and any place; prepared to lead the individual through all types of health centers for proper health investments; open to the health purchase model and willing to invest everything to make it very attractive, such as obtaining incentives; and work grouped into telemedicine and telemonitoring centers, capable of serving the national and European markets, and open for expansion towards vulnerable markets, as the mobile unit frequently does.

4.1. Factors Affecting Efficiency

The efficiency of health workers is influenced by many different elements. Management and management tools are important factors affecting efficiency. In current health governance, most healthcare authorities, directors, and medical leaders use incentives and a sense of duty to try to raise the efficiency of medical workers. However, if these are no longer suitable to the economic development and spirit of the time, or only play an auxiliary role, correct health management and health information can raise the efficiency of health workers from within. It is a high-skill replacement, suitable for the demands of the times and is expected to bring a better effect.

Efficiency is a kind of measurement of value for service and the cost to provide that service. If health operations can be the focus of health systems, it allows for the trade-off, selection, and correction of operations from the perspective of efficiency. Efficiency raises productivity and improves final health for a given level of resource input. Because we are limited by the current fee-for-service dominant mode of payment in most countries, the effectiveness of specific tools available in management is examined, with efficiency tools usually ignored. If there is no effective limitation in the contract and there is no symptom of 'consumer sovereignty', in the presence of the peer pressure mechanism, physicians are willing to improve professional conduct under relatively stricter fee-for-service modes of payment.

4.2. Measuring Efficiency

We adopt the cost frontier approach to measure the technical efficiency of healthcare facilities in Ogun State. Within this approach, the total cost function is used to model the cost of producing the combination of inputs. The cost function describes the minimum cost for producing a particular output level. By comparing the actual cost and minimum total cost, as

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well as the production for each healthcare facility, we are able to measure the technical efficiency of healthcare facilities in the state. The assumption is that the most efficient healthcare facility is what will achieve the minimum total cost of resource consumption when producing the same combination of outputs. This approach helps us evaluate the performance of healthcare facilities in Ogun State by determining the technical inefficiency of each facility and ranking them by benchmarking against the cost frontier. Since we have found cost data to be very rare for operations like these in developing countries, we simulate our cost function using the quantities of several variable inputs for a range of outputs produced by each hospital in our sample. We believe the cost frontier is a good proxy for the production technology at these hospitals, and the expenditure data we use serve as a reasonable proxy for revealed output. (Ngobeni et al.2020)(Zhang et al., 2020)(Top et al., 2020)(Olagunju et al.2021)(Andrews, 2021)(Rosko et al.2020)

5. The Intersection of Equitable Health Management, Health Information, and Health Worker Efficiency

With the adoption and effective implementation of the Management Act, efficient and equitable management of the health workforce can be achieved. Additionally, the application of effective health information improves worker outcomes and ultimately leads to labor efficiency. The idea of equitable and efficient health care spans several domains, namely, the Management and Budget Act, which regulates the distribution of health care workers, the Truth in Salary Act that mandates accurate descriptions of government jobs and salaries, and the Improvement Act, which measures the efficiency of those workers. Each of the measures should be executed with forward-looking management in a way that uses information efficiently and accurately, and certainly, policies are called to create an environment where work improvement can thrive.

There is a certain logical progression from management to budget control, to job analysis and to the purpose of the world in ensuring equity, but there is a lack in the hierarchy structure, employee motivation, monitoring treatment, and general efficiency, as well as the support received from external constraints. The logic of management extends to external financing and other national health policies to secure, among other things, that resources always have goals at the heart of equity for the population. In this chapter, the focus will be on the road and the high-performing health workforce in the context of the process of allocating and managing resources for optimizing the health workforce and, later on, the contribution of health information to worker efficiency in the absence of policy support. The criterion posed at the beginning can summarize this narrative: "What is in the public management world to improve equity?" The rest of this chapter is conditional upon the response to part two.

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ISSN:1000-3673
Received: 05-10-2024 Revised: 15-11-2024 Accepted: 25-12-2024

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