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Is Management Essential to Improving the Performance and Sustainability of Health Care Systems and Organizations? A Systematic Review and a Roadmap for Future Studies

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ABSTRACT

Recent studies have highlighted the importance of management in the health care sector. Positive correlations have been found between clinical and economic performance. Although there is still controversy regarding what kind of management and which managers should lead health care organizations and health systems, we now have interesting evidence to analyze. Starting with a systematic review of the literature, this article presents and discusses the streams of knowledge regarding how management can influence the quality and sustainability of health systems and organizations. Through the analysis of 37 studies, we found that the performance of health care systems and organizations seems to be correlated with management practices, leadership, manager characteristics, and cultural attributes that are associated with managerial values and approaches. There is also evidence that health care organizations run by doctors perform better than others. Finally, we provide a roadmap that indicates how the relationship between the management and performance of health systems and organizations can be further and more effectively investigated.

Keywords: health care system, management, performance, sustainability.

Introduction: The Value of Management and the Management of Value

All health care systems, no matter whether they are predominantly tax, social insurance–based, or market-based, have struggled with the issue of sustainability (defined as maintaining quality and service coverage at an affordable cost), particularly for the last decade [1]. Costs have risen as a result of ageing populations and the technologies developed to meet their expectations, concerns, and needs [2], and the recent economic crisis has exacerbated the problem [3]. Maintaining funding levels that are appropriate to the technology innovation curve, the demographic-epidemiological curve, and citizen expectations is an unprecedented challenge for nearly all health systems [4]. When the increase in supply costs must be covered by users, as in market-based systems, equity and access issues quickly emerge [5]. Societies around the world are pressuring health care providers to reduce costs, while stakeholders are seeking improvements in the quality of and access to services. A neoliberal critique of public service provision has also increased awareness of the "patient as consumer," intensifying existing concerns about the quality and responsiveness of clinical services [6].

Since the 1960s in Western countries, the development of new health techniques and technologies (including pharmaceuticals), the ageing population, higher expectations, and the higher relative prices of health care inputs has created a cost crisis, with increasing efforts at containment [7]. At the same time, until the 1990s, the possibility of matching skyrocketing costs with increases in funding led many health care organizations and systems to overlook inefficiencies in the production process that have subsequently aggravated sustainability issues. Throughout the 1980s, sustainability issues and the inefficiency of health care delivery were still largely addressed by putting more money into health systems, with more public resources allocated to the National Health Systems (NHS) or insurance fees increased [8]. Figure 1 illustrates the vicious cycle that often plagued tax-based systems during this period: when the technical system (the delivery system) required more resources, the characteristic response of physicians and other health professionals was to press politicians for more funding for the health care system. Within this dialogue, very little attention was paid to the effectiveness or efficiency of health care processes [9–11]: more specifically, clinicians focus on the individual patient, the effectiveness of the care, and evidence-based practices with little attention to cost control; however, addressing managerial and sustainability issues requires a vision that is oriented toward the entire population and greater attention to allocative efficiency and cost control. In retrospect, it is clear that this approach would be problematic in the long term.

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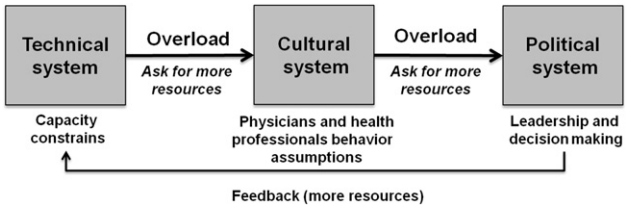

Fig. 1 – The vicious resource cycle prior to the 1990s.

Historically, the professional and cultural autonomy claimed by clinicians [12,13] largely meant that clinical processes were treated as a "black box" with which managers should not interfere. In predominantly market-based systems, some control was exerted through contractual arrangements. In tax-based systems, however, attempts at control occurred via input-output evaluations [14] (Fig. 2). More specifically, in the 1980s, control of health care expenditures was mainly based on the planning and allocation of inputs (e.g., through limitations on the number of beds, staffing, and purchasing policies). Then, in the 1990s, output measures (e.g., measures for medical visits, prescriptions, and diagnostic examinations) were introduced. Only at the end of the 1990s did health outcome measures begin to be used (e.g., measures of prevented deaths, life-years gained, and coverage of health care needs).

The content and methods of delivery processes were addressed only at the margins. Although clinical/critical pathway tools, process reengineering approaches, and lean management techniques emerged at the end of 1990s, their implementation seemed to be inconsistent and limited [15,16]. In addition, clinical governance tools and audit methods started to flourish and spread in the late 1990s [17]. For many years, the impact of general or business managers on clinical processes was quite limited.

Currently, because of the recent financial crisis, political decision makers and managers are trying to regain control over the cost of health systems through a renewed focus on controlling inputs [18,19]. Limits on the recruitment or replacement of personnel, purchasing policies, and experimentation with new technology are being imposed on health organizations. Payments and tariffs for care treatments are being renegotiated and reduced. Almost without exception, controlling expenditures in the short term means controlling inputs. The renewed focus on inputs and resource containment has several disadvantageous consequences. First, cost-containment policies do not explicitly lead to structural interventions in the working methods adopted by professionals and administrative staff at health care organizations. Second, cost and input containment policies might equally affect high- and low-performing organizations in the same health care system. Moreover, if cuts are implemented horizontally, universality is substantially impaired. Without changes in the way health care services are supplied, cuts can primarily affect access, equity of treatment, and quality.

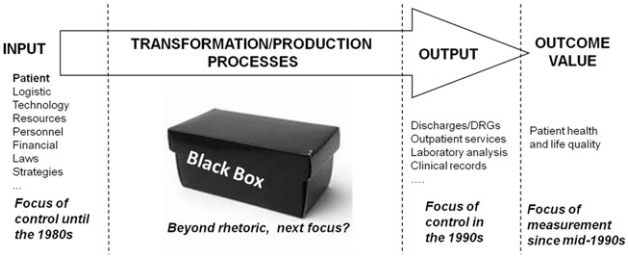

Fig. 2 – The shift in the focus of control. DRGs, diagnosis-related groups.

Beginning in the 1970s, the challenges of sustainability with health care systems were addressed by using the concept of "rationing" as one of the best ways to give patients equitable access to high-quality care within an economically rational framework. Rationing incorporated a series of different perspectives that were intended to promote 1) priority setting in decision making [20] and 2) improved delivery processes through a better understanding of and more appropriate action on the "black box" of clinical process [21]. The inappropriate use of diagnostics, drugs, and therapies, defensive medicine, artificial variability, turf wars among specialists, and resource waste could no longer be tolerated. Sensitive decisions such as those regarding when to use expensive biodrugs, prostheses, or medical devices in patients with a low probability of positive outcomes or which prostheses or drugs to use for patients with limited life expectancy are central issues within public and social insurance-based systems. However, the rationing approach achieved relatively little significant reduction in total provision, as there was a lack of consensus about services to be abandoned and little political will to confront challenging decisions.

Rationing efforts need to be undertaken with a renewed focus on the professional system to improve the involvement of physicians in addressing these challenges [22]. Management models may be helpful in this context. In fact, according to recent studies and debate, management can enhance the value produced by health systems, organizations, and professionals [23–25]. Most health systems are actively pursuing the managerialization of their health organizations [26,27]. What kind of management and which managers, however, should be used? How can management be reconciled with ethics in sensitive decisions? In the last 5 years, interesting, but limited, evidence has increasingly demonstrated that management does matter [19,28,29]. The following section describes some of the most recent studies and streams of research that address management and health organization performance, which ultimately affects the sustainability and universality of health systems. Nonetheless, we also argue that we are not likely to advance research in this field until we address the robustness of our methods and data and consider the barriers to collaborative multidisciplinary studies with a shared focus. A roadmap for such future studies is developed and discussed in the last section.

Does Management Matter in Health Systems: A Review of Literature

In recent years, both practitioners and researchers have renewed their interest in the impact of management on the performance of health systems and organizations. A systematic search of all English references was performed by using Business Source Complete, Emerald, ScienceDirect, and PubMed. Survey items that match with the following keywords were extracted: management, management practice, management impact, health care services, quality, health care organizations, and health care performance. The search included both theoretical and empirical studies with no time restrictions. Moreover, we also included the few relevant reports by international research institutes (London School of Economics, King's fund). A scientific working paper that details the methods and results summarized in the above-mentioned reports was also included in the analysis [30]. We selected 37 articles and reports on the basis of the search guidelines and their relevance to the topic.

The results of the review demonstrate that some streams of research began to develop in the 1990s, but the more recent empirical reports show that interest in evaluating the impact of management on clinical and other aspects of performance is intensifying. Presumably, this shift is connected with the fact