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EDITORIAL

Modeling European health systems: an ideal chain of services

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Introduction

After having recently designed a conceptual model of public National Health Service (NHS) for European countries and listed some clear rules of the game to make them work effectively [1], we complete our theoretical exercise imagining a rational approach that should characterize health care organizations to face the main challenges of modern medicine. Then, we design an ideal chain of health care services aimed at fostering seamless care in the NHS.

According to the literature, three highly debated issues affecting health care organizations are the controversial perception of modern medicine, the potential involvement of patients in decisions concerning their health, and the particular characteristics of job organization in health care.

Medicine science or art

The perception of modern medicine varies from the extreme of a perfect science of certainty to that of a still imperfect art of probability [2]. The former approach is well described by the 'body-as-machine' metaphor [3], in which the machine is the patient's body and the doctor is its 'mechanic' in case of failure. Physicians can make the right diagnosis and provide the right therapy for almost any illness thanks to scientific progress, so any complication inevitably arouses suspicion of clinical error [4]. The latter approach of imperfect art stresses that only uncertainty is sure in medicine and certainty an illusion, starting from diagnosis, thus clinical experience and intuition should still be the main physicians' drivers [5]. Being individual responses often unpredictable, physicians should always analyze patients case by case.

Patient empowerment

According to the multidisciplinary approach of patient empowerment (PE), patients should overcome the traditional paternalistic attitude of physicians [6]. This cultural change would imply a redistribution of power from clinicians toward patients [7], ultimately enhancing patient-centered care [8]. The real challenge for clinicians should be to ascertain patients' wishes, to understand what role they want to play for their health, keeping in mind that power cannot be given but can only be taken [9]. Inevitably, PE raises an ethical dilemma between patients' rights to self-determination and clinicians' duties for care. In fact, patients might reject clinicians' recommendations and jeopardize their health [10]. This dangerous behavior has been recently stressed by the Internet in health care [11], as clearly emerged during the recent COVID-19 pandemic.

Labor organization

The workforce organization in health care is considered somewhat particular [12]. The main reason is the greater influence that health professionals placed at the delivery of care have over daily decision-making. Although the bottom influence is a common finding in organizational surveys, it seems particularly relevant in health care because of the stronger professional discretion in performing the work [13]. Therefore, changes in clinical practice are more likely to be achieved thanks to managerial strategies aimed at building health professionals' trust through bottom–up incremental steps rather than top–down hierarchical directives [14]. More, this makes arguable any estimate of economic trade-offs generated by new organizational interventions [15], even though based on empirical results of trials.

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Potential remedies

To constrain these issues surrounding health care organizations in modern societies, we propose some remedies aimed at strengthening the rational approach which should characterize our model of NHS.

- Assuming that clinicians are the most informed patients when they or their families fall ill [16] and feel the same emotions as any other patient [17], the NHS should set up a permanent observatory to compare their health care patterns of consumption with the general population. The periodic dissemination of this information should contribute to make more realistic the general expectations of common people toward health care. Moreover, all clinicians should be enhanced to become 'testimonials' of good lifestyles (e.g., no smoke and excessive overweight), continuously reminding to patients that prevention is by far the best strategy for avoiding diseases [18].
- A hierarchical approach 'army-styled' is not recommended for health care services, which conversely need collaboration among health professionals starting from clinicians [19]. In addition to supporting junior colleagues in their professional growth, senior medical staff should be on an equal status and subdivide among them the patients in their health care facilities (like in the English NHS). In turn, nurses should manage all the practices needed by patients, recurring when necessary to the help of supporting professions (e.g., physiotherapists). Thanks to their intermediate role, nurses should be the best positioned to boost teamwork in multi-professional teams.
- A workforce organization inspired by collective collaboration should contribute to decrease the plea for patient empowerment, likely more nourished by ideological than practical issues. Rather, there should be scope for modifying some still diffused bad habits to really enhance a patient-centered approach in health care organizations. For instance, a sound change would be to adapt the time schedules of meals in hospitals to common lifestyles of people rather than to health care staff conveniences.

In general, sharing inter-professional knowledge and boosting multi-professional team building should be the main organizational strategies to be pursued in order to improve the quality of health care services provided in the NHS workplaces. Consistently, job rotation of health professionals among services should be enhanced as much as possible to favor integration. This organizational approach should also contribute to limit professional burnout and discomfort, which are dramatically increasing among health professionals. The positive approach of full collaboration should permanently become a corporate strength of the NHS. Once assumed that medicine is first a mission aimed at serving patients, working together in integrated workplaces not excessively affected by the behavior of single individuals should be the most productive and fulfilling strategy for health professionals [20]. Striving for combining parts to form a whole, the broad advantage should be a shift from an I to a We mindset for providing a truly patient-centered care and improving health professionals' well-being.

An ideal chain of health care services

Health care services are usually classified in four levels depending on when and why patients need them [21]. Primary care is the pivotal level, including first-contact services in community that should guarantee care for patients needing services. Secondary care and tertiary care include specialist services for more common and less common diseases, in practice all the hospital services. Emergency care includes all the services for sudden needs placed throughout the other levels, typically the accident and emergency (A&E) hospital service.

Community services

Historically, community services have been penalized in all western European countries by their smaller impact on local economies compared to hospitals. We fully share the widespread opinion that nowadays large-scale facilities comprising a wide range of health professionals are the pressing priority for providing community services [22]. Once assumed that all health professionals are full-time employees of the NHS (general practitioners included), the co-location of a wide range of health and administrative services should offer several advantages in this era characterized by an aging and multi-morbid population. From the supply side, an ample staff of health professionals would help to extend the daily access to services, enhance the management of out-of-hours services, and boost home care provision for patients unable to move. An adequate administrative staff should help to improve planning and management of these organizations, and to minimize fragmentation and overlaps of health and administrative services delivered in the community. Indeed, co-location should encourage staff communication, boost synergic teamwork, and eventually develop information technology skills like telemedicine [23]. In practice, beyond providing outpatient consultations during the workdays for the basic specialties, these large organizations should deliver daily urgent care for low-complexity cases so as to

filter access to A&E hospital services. This should help to integrate emergency care among the different levels, as it already happens in the Spanish NHS [24].

From the demand side, these large-scale facilities should help people to better understand the pattern of community services delivered and facilitate related access, especially for working citizens. Indeed, the access to community services is too limited in many western European countries, especially in the southern ones where many workers are still caregivers of their elderly relatives [24]. As the spread of shopping malls in the last few decades has evidenced, nowadays, most people are willing to travel around to find wide-range facilities open all day long, even in scarcely populated areas, and there is no reason why health care should be an exception [25]. Consequently, these community facilities should be highly cost-effective from both the NHS and societal perspectives.

Hospital services

Historically, hospitals are the most easily identifiable health care facilities by common people [25]. This feature has traditionally fostered the political resistance to close small hospitals in many European countries despite their limited spectrum of clinical competence and technological equipment [26], with traders and shopkeepers around hospitals being the best allies thanks to the positive impact on the local income. More, a widespread and understandable sentiment in people living outside big cities is that increasing the distance to hospitals undermines easy access to health care, especially to A&E services. Being perceived as the pillars of emergency care, A&E hospital services generate a high rate of trust among people, so that their overcrowding has increasingly become a major issue in many western European countries owing to minor events that could be alternatively treated in community.

Trying to figure out an ideal network of hospitals, we must first define what has to be part of a hospital by definition. Since hospitals are to treat acute patients, including the urgent ones, we think they should always have an A&E service for delivering emergency care. Depending upon the services and departments planned around the A&E pillar, hospitals could be classified in two classes. Local hospitals should only include the basic services (i.e., clinical laboratory, radiology, and operating room) and a few clinical departments (i.e., internal medicine, pediatrics, and general surgery) involving consultants and nurses from different specialties. For instance, the department of medicine could include a cardiologist, a neurologist and a nephrologist to fulfill the essential clinical knowledge needed to treat multi-morbid patients. A similar mix could be envisaged for the department of surgery by including a gynecologist, an ophthalmologist, an orthopedist, and an otolaryngologist. These surgical specialists might perform the easier and less costly procedures (e.g., inguinal hernia) in day-hospital, allowing patients to spend at home the postoperative period. All hospital consultants could weekly rotate in community facilities so as to favor a systemic and integrated approach. Consistently, outpatient services should be placed only in community services. More, hospital consultants should be encouraged to rotate also in the A&E services, by definition very expensive since health professionals must be available full time regardless of the daily demand.

Large hospitals should include a set of services and departments able to admit patients needing advanced secondary and tertiary care. The core of medical and surgical specialties should be consistent with the types of treated cases and vary from a neighboring hospital to another, in order to provide all the elective services needed for a large catchment population. Therefore, the same departments of nearby hospitals should focus on different and complementary fields to be able to fulfill the whole health needs. Finally, hospitals exclusively specialized in a specific setting (e.g., oncology) should be an exception, being hard to integrate in an ideal chain of services by definition.

Other services

To complete the rational network of health care services delivered by the NHS, two sets of facilities mainly staffed by nurses should be exclusively dedicated to patients discharged from hospitals for post-acute rehabilitation and to end-of-life patients for palliative care (i.e., hospices). The former should be coordinated by hospitals to optimize the follow-up, the latter by the large organizations in community to integrate them at best with local social services.

In conclusion, we must remind that prevention is by far the best strategy to make an ideal NHS financially sustainable in modern societies. Therefore, campaigning for supporting healthy lifestyles should become a mantra, starting from schools and then in media, to drastically constrain the main risk factors for the most common non-communicable diseases and cancers. This highly cost-effective approach will necessarily lead to a dramatic reduction in the burden of diseases on the health system and society as a whole, and to an improvement in individuals' quality of life too.

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Conflict of interest Livio Garattini and Marco Badinella Martini have no conflicts of interest that are directly relevant to this article.

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