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### Essay

## Training of General Practitioners in Accordance With the Requirements of the Colombian Social Security System

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#### ABSTRACT

The following is a historical perspective of the most relevant concepts and events that resulted in the development and structuring of the model for the Social Security System in Healthcare, and of the curricular models for medical training in Colombia. This review highlights the controversial issues and the aspects that warrant agreements that would lead to improvements for the benefit of the two areas, namely, training of general practitioners and the quality of healthcare provision.

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#### La formación de médicos generales según los requerimientos del sistema general de seguridad social en salud en Colombia

##### RESUMEN

Con un enfoque de análisis histórico se hace una reflexión sobre los conceptos y hechos más relevantes que han llevado al desarrollo y estructuración del modelo de Sistema General de Seguridad Social en Salud (SGSSS) y de los modelos curriculares de formación médica en Colombia, para establecer los puntos que constituyen controversia y los aspectos que ameritan un acuerdo de voluntades que podrían llevar a mejorar en beneficio de los dos sectores tanto la formación de médicos generales como la calidad del sistema de prestación de servicios de Salud.

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Coordination among healthcare training institutions, regulatory agencies and health providers of the Health System created under Law 100 of 1993 is subject to varying perspectives that worsen the current, crisis considering that they compromise timely and effective service provision.

The goal is to examine the origins of the medical training system in order to identify common areas that may be used as a basis for guiding education approaches designed to structure a professional profile suitable for the new technological and organizational realities in healthcare.

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Between 1975 and 1993, the Colombian Health System was supported on three pillars: social security, public sector, and private organizations.<sup>1</sup> Funding sources were several or mixed. For 15 years, there was no decentralization, although important steps were taken in regionalization, levels of care, policy consolidations, and preventive models in accordance with international guidelines.

In the 1990's a diagnosis revealed failures in the system. Only 31% of the population had access to healthcare services; provincial entities were assigned complex roles such as customer service, environment, health education, community participation and continuing education, creating inefficiencies in the system. The quality of healthcare was poor, and the mechanisms for expense allocations were amenable to corruption; budgets were prepared on the basis of historical data, and the system showed inequality and absence of solidarity.<sup>2</sup>

The underpinnings for the health reform were articles 48 and 49 of the Political Constitution, which shifted the concept of health from a concept of fundamental right to that of public service.

Law 100/93 implemented a social security model<sup>3</sup> based on the principles of universality, solidarity and efficiency, free market, competition and user discretionary ability to select the service provider, regulation mechanisms, financial solidarity between the contributive and the subsidized regimes, and specific planning and coordination roles for the government sector.<sup>4</sup>

As a production chain, the system is able to identify the primary stakeholders: customers, suppliers, managing organizations (EPS) and healthcare providers (IPS). It operates as a regulated market system under the oversight and control of the Ministry of Health, the Regulatory Commission (CRES) and the Health Superintendency. Transactional costs are high due to the uncertainty of the demand and the complex nature of the inputs to be negotiated; transactions have oligopolistic, and even monopolistic, characteristics.<sup>5</sup> There is a marked imbalance, in terms of numbers and costs, between the contributive and the subsidized regimes.

There was ambiguity in the establishment of primary healthcare, with a focus on education and specific programs around prenatal care, vaccination, and growth and development as the main pillars. This was a setback in relation to achievements of the previous system, evidenced by the reemergence of vector-transmitted diseases, perinatal/child mortality, and low vaccination coverage.<sup>6</sup>

In 2010, coinciding with the world economic recession, the crisis became evident as a result of structural and operational failings. The deficit, amounting to an estimated 900 billion pesos, evidenced the regulatory chaos, considering that the largest health management organizations (EPS) had reported profits.<sup>7</sup>

The reform considered changes in service provision, although it did little or nothing regarding the desirable competencies of the healthcare workers.<sup>8</sup>

Little attention has been paid to quality and timeliness in the impact analyses.<sup>9</sup> Services are deficient at all levels within the system, but more so in basic care, where concepts such as "the deadly journey" or the need to resort to action for civil protection are rampant and undermine the prestige and credibility of the system,<sup>10</sup> to the extent that managers and

providers pay too much attention to financial results, at the expense of social benefits.<sup>11</sup>

### Medical Education: From the Comprehensive Past to the Specific Present

In the mid 1970's, medical education followed the Flexnerian model: minimum requirements for admission, minimum duration of the program, basic and clinical divisions, tenured professors, teaching hospitals that depended administratively from their Universities, faculty excellence, and research.<sup>12</sup>

Training was focused on pathophysiological analysis and aimed for skills requiring knowledge of structural damage and dysfunction. Until the passing of Law 100/93, general practitioners had to make therapeutic decisions in the ambulatory and hospital settings. Risk-focused prevention was approached superficially.

With technological advances came the optimistic approach to chronic diseases such as cancer, degenerative diseases, transplants, and viral infections that had been considered unsolvable in the past. These led to a priority interest in specialization,<sup>13,14</sup> since the job of the general practitioner is limited to routine control and referral activities.<sup>15</sup>

The System has had a deleterious impact on one of the pillars of medical training: the university hospitals, many of which have closed for "restructuring".<sup>7</sup> Service providers (IPS) do not consider teaching-service agreements profitable, and there are limited possibilities of training in clinical competencies such as semiology. Students face restrictions in their approach to patients, which undermines the possibility of training professionals capable of winning the trust of their patients and of interpreting disease processes.

Technological breakthroughs in the field of diagnosis, available only in Level III hospitals, lead students, in the absence of training in semiology, to learn how to interpret results. Consequently, when faced with the clinical practice in a Level I healthcare institution, without advanced technology to work with, they fall into a crisis of performance that translates into error and higher costs (because their option is to make referrals).

Graduate programs in Colombia date back to 1962: the Colombian Association of Medical Schools (ASCOFAME) created the General Council of Medical Specialties and established minimum requirements and the duration and structure of the programs.<sup>16</sup> In 2002, it proposed a flexible and adaptable undergraduate curriculum designed to train professionals that fit the requirements of the EPS and IPS organizations.

The medical training goals and the financial goals of the Social Security System have a perfect fit, where general practitioners will be excellent at making diagnosis and management decisions of the most endemic diseases.<sup>17</sup>

The practice environment limits the physician's own independence and initiative since it imposes regulations framed within a financial perspective: it pays no heed to the complex circumstance of the formal medical practice and the role that time plays in terms of prognosis and timeliness for solving simple problems that may become complicated within a short period of time. This functional structure, far from

regularizing costs, results in the inability to intervene promptly because of lengthy paperwork that increases the cost of care.<sup>18</sup>

## New Approaches to Medical Training

Change calls for new thinking about adequate strategies to maintain a medical training methodology aimed at developing in the students the competencies suited to the epidemiological profile.

Priority must be given to pathophysiological and risk approaches in order to determine the characteristics of the patient's environment that impact prognosis. Preventive medicine must be the underpinning for primary health care.

One new paradigm and two training methodologies have emerged: problem-based learning (PBL) and simulation techniques framed within the concept of evidence-based medicine (EBM).

EBM and epidemiology explore various areas such as etiology, prognosis, therapeutic guidelines, prevention, efficacy and effectiveness, impact and quality of technology, thus creating a sound body of knowledge in health. EBM is a learning process that integrates clinical experience and evidence: how to find the best information and analyze it for validity and usefulness. It integrates clinical experience with the best levels of evidence for the benefit of the patient.<sup>19</sup>

PBL, as a teaching approach, facilitates teaching and learning, emphasizes self-learning and self-training. It is a dynamic constructivist approach that promotes cognitive autonomy. Instructors teach and students learn as they work on meaningful problems, error is used as an opportunity, and self-assessment and individualized qualitative learning evaluation are valued.<sup>20</sup>

Simulation provides expertise, mental fluency and timely response; in critical situations, these are necessary, inescapable and undeferrable skills. The experiences with simulation started in aviation, to help pilots respond quickly and correctly in short periods of time, in simulated flying conditions.<sup>21</sup> However, no simulation model can replace the live experience of dealing with human beings in the role of patients.

In an attempt at building training scenarios, simulated medical situations have been explored using actors. Although it has not been evaluated, this could be an option.

The drive to do research is a competency that has received only partial attention in training. Epidemiological research, together with PBL methodologies, could potentiate the ability to create knowledge, and could represent a unique educational strategy in the future.

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