

## NEW PERSPECTIVES ON THE DEVELOPMENT OF ENTREPRENEURSHIP AND BUSINESS IN THE MEDICAL FIELD IN ROMANIA UNDER THE IMPACT OF DIGITALIZATION AND THE COVID-19 CRISIS

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### **Abstract**

*The first medical activity privatized after 1990 was dentistry, and dentists were the first medical entrepreneurs in Romania. Today we are talking about a strong competitive market, a market in which we find ultra-performing clinics both in terms of logistics and that of doctors. When we talk today about health entrepreneurship, we are talking about an extremely vast field where we find doctors who run a business, a medical office, a pharmacy or managers who run a private clinic, a practice, a pharmacy, a laboratory, but also businesses with services related to the medical field (medical equipment, IT, medical insurance, marketing and medical training, etc.). The Romanian medical system, which is in full expansion, but marked by a multitude of acute problems to be solved, needs a strong private component. As the literature argues, private niche clinics and medical centers, either as an alternative to the exodus of health personnel or as a nursery of highly trained medical staff, contribute to increasing the quality of medical services and become an increasingly strong competitor of the state health system. In this paper want to present the state of entrepreneurship in the medical field in Romania, the variations of medical entrepreneurship, the stages of developing a business in the field of health, but also the most representative businesses in this field of activity that can be used as an example of good practice, referring of course to the current period which is extremely difficult but also profitable for the business environment in the medical field.*

**Keywords:** Medical services, entrepreneurship, development, Romania

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### **1. Introduction**

Entrepreneurship manifests itself in the economy in multiple and diverse forms, with very different results that are not only reflected in economic and financial well-being. Equally, entrepreneurship is linked to technological progress, job creation and the reduction of social inequalities or environmental issues. Services have become an important sector of the growing economy, encompassing most of the production and labor force in Romania. In 2019, according to data provided by the National Institute of Statistics (NIS), market services provided in November in enterprises, so the turnover of market services provided decreased compared to the previous month, both as a gross series by 4.2% and as a series adjusted according to the number of working days and seasonality by 3.0%.

**Digitalization** is a visible phenomenon that has grown in this decade, and its evolution is extremely rapid. [1] This is manifested by the adoption of digital technologies and, respectively, the use of technology on an increasing scale for storage and processing, search and retrieval of information between online users, digitalization is a profound phenomenon, with strong implications in all areas.

The creation of new business models, based on increasing connectivity, reducing communication barriers and eliminating distances, amplifies development factors, changes the way of adding value, leading to increased productivity.

Entrepreneurial activities exist in various fields of activity but the most unexpected field is the medical one where for a long period of time the public property owned the vast majority of this segment. Slowly, dental offices appeared next to which other businesses developed in the field of tourism, for example, acquiring the name of dental tourism, or business in the field of dental technology, then medical aesthetics offices or clinics near which we again find medical tourism. Private hospitals, medical offices for consultations, shops selling various medical devices have been opened, not to mention pharmacies that have had a spectacular evolution lately. Thus, the entrepreneurship in the medical field exists in various fields such as pharmacy, dentistry, health care, family medical offices or specialized in certain fields, medical clinics, etc., but we can also find doctors who have given up their medical careers to develop business in extremely different areas.

## **2. An overview of the businesses in the field of medical services in Romania**

Medical services are one of the most important segments of society, they provide good functioning of human efficiency, by treating in case of certain diseases, but also a need for information, to protect people from certain pathogenic viruses. [2] Business opportunities through this field new medical services have been developed, with the help of a modern technology, in order to increase their quality. The businesses that have been successful through medical services are: occupational medicine services, analysis collection laboratories, private medical offices, companies that produce certain products necessary for the treatment of certain diseases. In the medical field we can discuss the advantage held by doctors given the set of skills and knowledge they have and which can be successfully transferred to the business on their own. We refer here to intelligence, empathy, patience to do research, flexibility, resistance to failure, the capacity for sustained effort, a good management of situations of uncertainty and a trained thinking for firm and fast decisions.

According to the CANE classification, there are several areas of activity that are subject to many tasks in the medical field, one of them being CAEN Code 8621 - General health care activities which include: consultations and medical treatments in the field of general medicine, performed by general practitioners. In 2019 in Romania with this field of activity, were registered 2500 economic agents representing 0.12% of the total economic agents in Romania. Within these units, 8,514 employees were employed and a turnover of 1.1 mild Lei was achieved, which resulted in a profit of 355.6 million Lei. [3]

Firms engaged in specialized health care activities, CAEN CODE 8622, include consultations and specialized medical treatments in various fields, provided by specialists and surgeons, as well as family planning centers that offer medical treatments such as sterilization and termination of pregnancy, without accommodation. Statistics in this field, registered 6206 economic agents contribute, meaning 0.30% of the total existing in Romania, where 29,984 employees work and where a turnover of 5.3 thousand lei is obtained, meaning 0.36% of turnover total achieved in our country. The profit obtained in this field is not negligible at all, this being 896 million lei representing 0.78% of the net profit made in Romania. [3]

Another activity of services in the medical field is the one conferred by the CAEN code 8710 - Activities of the medical care centers, these imply activities of: old people's homes with medical care, convalescent homes, and rest homes with medical care, medical care centers, and hospital dormitories. The activities provided by these categories of companies have started to develop a lot, because they frequently use these services, especially in the case of the elderly, being a specialized point of activity for their needs. According to the statistical data provided by topfirme.ro, we can say that there is not much competition in this field of activity, because there is a number of 36 economic agents, 113 employees and a profit of 1.6 million Lei. In Romania, many more

businesses could be developed in this segment of activity, given the financing facilities in the field of social business as they are. Along with this activity, a significant role in the current entrepreneurship are also found the activities of the mental recovery and detoxification centers, exclusively hospitals under CAEN Code 8720. A number of 26 economic agents with 30 employees and a turnover of 1.6 million lei (369,473 euros) are registered here. [3] Retail sale of medical and orthopedic items in specialized stores, according to CAEN code 4774, these companies deal with the supply of utensils, devices, materials needed to perform specialized medical activities, but also for individual use. In this field, the statistics indicates a number of 778 economic agents (0.04% of total economic agents in Romania) with a number of employees of 2,899 (0.07% of total employees in Romania), achieving a turnover of 936.4 million lei (0.06% of Romania's turnover), and the profit of 134 million lei (0.12% of the net profit made in Romania) in 2019. [3]

Businesses that provide services in the medical field, as presented above are closely related to the proper functioning of the medical system, they help and support the medical system by forming certain companies such as CAEN code 8710, for nursing homes closely related to CAEN code 8622, which helps in the treatment and specialized medical consultation in various fields, and CAEN code 4774 provides the necessary tools for a proper treatment. An attractive activity for many economic agents in Romania is the one found are CAEN Code 3250 - Manufacture of medical and dental devices, apparatus and instruments which includes: laboratory equipment, surgical and medical instruments, surgical devices and accessories, equipment and devices dental, orthodontic items, dentures and orthodontic devices. Here we find 1,636 economic agents in which 6,800 people were employed in 2019. The turnover is similar to the one obtained by the economic agents with the CAEN code 4821, more precisely 1.1 mild lei but with a lower net profit, namely 205.6 million lei. As the first medical activity privatized after 1990 in Romania was dentistry, therefore, dentists can be considered the first entrepreneurs in the medical field. CAEN Code 8623 - Dental care activities include general or specialized dental care activities, for example, dentistry, endodontics, and pediatrics; oral pathology, orthodontic activities, and dental surgery activities. In fact, here we find a significant number of economic agents, namely 6,842 which means 0.32% of the total economic agents in Romania, and the turnover is 2.3 Billion lei (523.1 million euros) of which 583.9 million lei (132.7 million euros) represents profit. In 2019, a number of 14,415 employees worked here, ie 0.35% of the total number of employees in Romania. [3]

According to the statistical data provided by NIS Romania in the private environment, in 2019 there were a significant number of medical units as can be seen in table no. 1.

Table no. 1 Number of private sanitary units, by types of units, and areas of residence in Romania, 2019

Type of units	Urban	Rural	Total
Hospitals	141	14	155
Diagnostic and treatment centers	21	1	22
Specialized medical centers with hospital beds	127	8	135
Independent general practice offices	618	90	708
Independent family medicine practices	6479	4366	10845
Pharmacies	5054	2643	7697
Specialized medical centers	628	10	638
Independent dental offices	13255	2254	15509
Independent specialized medical offices	11539	493	12032
Medical laboratories	2119	56	2175
Dental equipment laboratories	2162	94	2256
Ambulance units and SMURD ((Mobile Emergency Service for Resuscitation and Extrication)	32	3	35
Other types of medical offices	505	28	533

It can be seen that the medical units in the private sector are significant in number in 2019 in the sense that we are talking about a diversity of medical units from hospitals in a number of 155, to individual family medicine offices in a number of 10845, of 7697 pharmacies at 15509 dental offices or 12032 independent specialized medical offices. All these units represent medical businesses that operate under the coordination of entrepreneurs whether they are doctors or not. One of the major moral dilemmas the medical entrepreneur faces is striking a balance between social responsibility and profitability. It is necessary to establish and maintain the profitability of the business while maintaining social responsibility for general public health.

### **3. Medical business under the impact of the COVID-19 pandemic**

Romania, together with other countries affected by the COVID-19 virus, has generated the development of new business areas, as well as existing ones but with a low turnover. Several domestic companies are reconverting, on the background of the crisis created by the coronavirus epidemic: and this pandemic represents a business opportunity for the medical field, the companies in the field being able to survive against the predictable background of the economic crisis. Although Romania is dependent on the supply of essential sanitary materials from abroad, the authorities have encouraged domestic factories to make products absolutely necessary in such cases, as well as changing the field of activity, to make materials needed to combat this virus.

The onset of the COVID crisis affected many areas of activity but some businesses in the medical field were favored. From a negative point of view, we find influences in the provision of medical services in their communities, especially on the component of services offered in family medicine or dental offices such as outpatient services, recovery services, or specialized investigations. Businesses in these fields have found a new way of providing services, namely through telemedicine (both for consultations with family doctors and for those performed by specialists). Certain opportunities have also arisen for some companies in the medical field, namely innovative acquisitions and the identification of innovative solutions that can be used for the direct or indirect treatment of COVID-19 patients.

Also, it is necessary to bring to the fore the needs of hospitals and health institutions have been met with innovative solutions offered by especially small and medium enterprises in the following areas[16] :

- Medical devices, supply chain management and logistics to help the COVID outbreak19;
- Biotechnology / health;
- Medicines, antimicrobials: promotion of new antimicrobials and medicines to deal with the new virus;
- Tools for predicting and stopping the spread of new diseases.

Also, pharmaceutical companies with research and development that have announced that they are entering the race to find a treatment against coronavirus have obtained massive capital injections or substantial increases in stock prices, while generic companies have recorded huge sales.

The IT industry, in the context of the current pandemic, has the opportunity to develop products and solutions that make people's lives easier, more efficient, healthier, and to intervene with all kinds of services to support the business of the medical field. Examples include Japanese startup companies that have leveraged cloud healthcare to combat COVID-19 during the global pandemic and accelerated the development of telemedicine and clinical trials, important tools to overcome the pandemic, and future outbreaks of disease. We can also discuss a transformation of conventional medicine into digital medicine that involves everything from telemedicine to diagnostics supported by artificial intelligence. The context of the COVID-19 crisis has accelerated

the development of mobile applications that offer users the opportunity to schedule a consultation, even video, to pay online for medical services, to request that prescriptions be sent to pharmacies and that they provide them at home.

Artificial Intelligence has the potential to revolutionize the medical field by achieving better results in the healthcare process, in optimizing the patient experience and access to health services, while improving the productivity and efficiency of care services. [13]

The medical industry accounts for 7% of European value added, according to Eurostat. It is one of the industries with the highest growth between 2000 and 2017, with a growth rate of 2% compared to an average of 1.5% in Europe. [5] Based on this information, as an example of good practices in Romania stands the company Medicaï, the Romanian startup that assists medical imaging, which digitizes medical imaging in the Cloud and allows doctors and patients to collaborate better. Also, with the help of artificial intelligence, the service can help doctors and can anonymize user data better. As Popa M., the entrepreneur behind the Medicaï platform, says, this eliminates a lot of roads, but also the problem of imaging storage. "I can even keep the tests in a kind of Google Cloud, there is no need to walk with CDs to all the doctors and I can get answers in a few hours from any doctor in this world who has access to the internet. It is useful if you want to operate in another country or you want an additional opinion ". [5]

Moreover, technology is constantly offering innovative medical devices, new drugs and treatment procedures, along with new research opportunities, for which the medical industry is becoming increasingly efficient.

Regarding the pharmaceutical industry in Romania, the analysts from KeysFin estimated that record business will be registered in 2020, in the context of the increased demand for medicines and medical equipment, generated by the pandemic. It is estimated that the growth rate will double in this 2020, and the turnover generated by the entire production and distribution chain will reach approximately 68 billion lei, a historical maximum for the local market. At the same time, the local pharmaceutical industry, along with food retail, health and social assistance, IT&C, agriculture, energy and gas and water and sanitation distributors, is expected to be relatively little affected by the pandemic (ZiarMM) [6]

#### 4. Conclusions

It can be concluded that the business in the medical field has prospered against the background of the corona virus pandemic, but there are also areas that have registered a regression, such as the dental offices that needed to suspend the activity for a while.

It can be concluded that today medicine and business have witnessed a multitude of entrepreneurial opportunities and new leaders are needed to step into the world of business and medical innovation, to develop areas such as e-Health, food science, and the internet of things, nanotechnologies etc. Given the fact that the public health system faces many problems and dysfunctions, it is considered the best method to solve them would be considered medical entrepreneurship and a good engine for achieving a developed and self-sustaining economy.

Successful medical entrepreneurs are those who understand the needs of the market and can better connect with clients by filling a necessary gap in the available health services. Medicine and implicitly the entrepreneurship in medicine are in continuous transformation and adaptation to present time's demands.

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