

# The Diabetes Mellitus Patient in the pandemic context



## Summary

The following report analyses the legislative measures implemented during the state of emergency in Romania for the purpose of identifying and establishing further development measures favoring patients suffering from diabetes mellitus. It has been generally recognized that diabetes mellitus patients are one of the most vulnerable categories of patients facing COVID-19, thus there is a need of ensuring continuous and efficient access to health services. All presented recommendations resulted in the aftermath of a debate featuring experts from the medical community and patients' associations – focused on the management of the diabetes mellitus patient.

**Experts provided three lines of actions in form of recommendations as follows:**

- 1. Developing a common patient monitoring program;**
- 2. Maintaining the telemedicine system/on-line consultations;**
- 3. Acknowledgement of therapeutic education for diabetes mellitus patients as a medical service and the establishment of a proper financing tool for it.**

In what follows, the analysis focuses on these three recommendations discussing the difficulties imposed by the current context on both patients and medical staff. The report identifies and offers possible solutions and activities fostering the implementation of the thus far mentioned priorities.

## Context

Currently, the world is facing an increase in the number of patients suffering from chronic non-communicable diseases. Within this category, an important place is occupied by diabetes mellitus. According to UN's data, estimates show that globally, approximately 425 mil. people suffer from diabetes mellitus, a number which can potentially double in the next decades. In



what concerns the European Union, estimates reach a number of 66 mil. people suffering from said illness with a bit under 2 mil. located in Romania. An important mention to be made is that all statistics solely refer to active diagnosed cases, as there is an estimation that the number of people unconsciously suffering from diabetes mellitus is much higher. Consequently, of utmost importance for experts developing strategies are the prevention and early-detection of diabetes mellitus.

In this new context the health system finds itself in Romania, since establishing the state of emergency, several amendments have been brought to the “medical act” and the way in which diabetes mellitus patients benefit from health services. Some of the newly adopted provisions have fundamentally changed the functioning of the health system, however, further adjustment to the context is needed.

One future challenge for years to come is chronic diseases' management. It is for this reason that best-practice examples should represent a focus point for responsible institutions. One such example is the involvement of local public authorities and their allocated responsibilities in managing the health of the population.

1. The number was estimated by applying the prevalence estimated in the “IDF diabetes” Atlas to the number of people aged 20-79 estimated by the United Nations Population Division. The estimate includes both diagnosed and undiagnosed diabetes. - Source: National Institute of Public Health, [http://insp.gov.ro/sites/cnepss/wp-content/uploads/2018/11/ANALIZA\\_Diabet\\_2018\\_rev.pdf?fbclid=IwAR2hCYuQM0tHpeVSeY-5UxPr5s3Cag38us2SWmRL1-LCt-we5OCGg-qnlZw](http://insp.gov.ro/sites/cnepss/wp-content/uploads/2018/11/ANALIZA_Diabet_2018_rev.pdf?fbclid=IwAR2hCYuQM0tHpeVSeY-5UxPr5s3Cag38us2SWmRL1-LCt-we5OCGg-qnlZw)

# Results, Conclusions and Recommendations

In Romania, the outburst of the COVID-19 pandemic and the context created by the implementation of the state of emergency, exposed the prevalence of intrinsic and extrinsic deficiencies in the system of medical services destined for diabetes mellitus patients. In what concerns the former, worth mentioning are the registered distribution discontinuities and restricted access to certain drugs, medical staff shortages in the area of diabetology, difficulties in issuing online prescriptions and respectively the collapse of information based digital platforms. Concomitantly, the continuous legislative flux led to issues of interpretation, transposition and implementation of relevant norms and provisions. All of the above resulted in extrinsic issues – patients' fear being predominant due to the limited access to treatment and the established correlation between diabetes mellitus and the comorbidities prone to be vulnerable when infected with SARS-CoV-2. Given the context and all mentioned difficulties, a series of recommendations and proposals were established with the purpose of developing health policies for the therapeutic area of diabetes. These were created and envisioned to have the patient's needs as core.



## Recommendation 1: Developing a common patient monitoring program

### PROBLEM/CHALLENGE

It was also within the recent context that patients who were unable to remain at their registered residence experienced difficulties in picking-up their prescriptions in a county other than that in which the prescriber is located. Parallel to that, prevalent was also the confusion associated with the competences and responsibilities delegated to General Practitioners and whether they can prescribe drugs included on the treatment scheme for diabetes mellitus. GPs were unable to prescribe the drugs without a recent letter issued by the diabetologist, finding themselves in the situation of being unable to neither prescribe drugs, and respectively insulin nor monitor and manage the patient properly. In a similar manner, without access to patients' medical files or history the diabetologist had no overview of the treatment schemes followed by its patients (e.g. in cases of diagnosed hypertension or dyslipidemia treatment). These situations continued even after the liberalization of online consultations.

Important to mention, however, is that difficulties were not only experienced by the patients considered to be active cases of diabetes mellitus. All throughout the pandemic, the screening and diagnosing activities were severely slowed down. The diabetes diagnosis, management and patient monitoring are activities conducted by a specialist in diabetes, nutrition and metabolic diseases.

Prevention consists of specific procedures such as actions of risk evaluation of the asymptomatic adult alongside interventions for early diagnosis of diabetes and curative medical services at the level of primary health-care.

A mention to be made is that, on the prevention component, the General Practitioner can conduct screening and diagnosing activities. Currently, diabetes mellitus can be diagnosed by means of three tests with different degrees of susceptibility but similar diagnostic value (GAJ; TTGO; HbA1c). Contrary to the proven efficiency of TTGO, certain disadvantages such as the lengthy testing duration and sample instability have rendered the test unfeasible in the COVID-19 context. Similarly, in what concerns the GAJ Test – the most common methods of diagnosis, less efficient than TTGO – only offers an indicator of the current level of glucoses and is rather susceptible to conditions of stress. The latter requires several visits to the doctor in the diagnosis stage. Conversely, given the context of the pandemic, both diabetes mellitus prevention activities and those for patient monitoring have been limited by the potential risk to which this vulnerable category of patients would have been exposed (e.g. lengthy testing duration, several testing visits).

#### **CAUSE**

All in all, limited to nonexistent access to information and the lack of an integration system allowing for proper patients' monitoring based on medical history, prescriptions and treatment schemes issued by both specialists and GPs can result in aggravating to even fatal consequences. Moreover, recommending common testing methods without consideration for possible risks to which the patient is exposed can lead to patient drop-out from the monitoring programs and discourage screening and diagnosing activities.

#### **PROPOSED SOLUTION**

Taking into consideration all of the above, the recommendation is that of creating a common patient monitoring program fostering information exchange and ensuring availability of treatment irrespective of the current location of the patient. By means of such a program and/or platform, the patient's medical history together with its personalized treatment scheme will be available to all interested users. This endeavour can be implemented in association with the development of the patient electronic file. The latter benefits of an already existent legislative framework under the aegis of the National Health Insurance House and is financed through European Funds.

When referring the screening and diagnosing activities, the recommendation is that of using the glycated haemoglobin test as an incipient method or complementary to diagnosis. This test has the advantage of being non-invasive, stable and serves as a general marker indicating the average glucose level on a period of three months – it would serve as a compromise but efficient method of diagnosis given the current context. Including the glycated haemoglobin in the paraclinical medical tests package that can be recommended by the General Practitioners once a year for those people aged 45 and higher for whom a cluster of diabetes risk factors has been identified – would foster easier and continuous access to prevention and diagnosis methods and would greatly reduce the risks to which the patient is exposed.



## Recommendation 2: Maintaining the telemedicine system/on-line consultations

### PROBLEM/CHALLENGE

In what concerns access to medical services, several patients raised red flags on medical cabinets being over-crowded and experienced difficulties when asked to personally pick-up prescriptions and supplies from the cabinet. More than once, despite specialists warning of possible fatal consequences, diabetes mellitus patients opted for interrupting treatment based on the above arguments.

Thus, in the present context, implementing the telemedicine system was a means of protecting the patient and ensured social distancing.

### CAUSE

For both specialist doctors and GPs, the online consultation system qualified as best-practice. Thus far, access to specialist consultations has proven difficult, most patients neglecting the three months period for check-up. Consequently, diabetology specialists recommend the creation of a framework allowing for an established number of online consultations depending on the needs of the patients.

Concerning the accessibility to online/digital consultations, patients reacted positively and did not raise any complaints, clarifying their doubts by seeking the help and assistance of acquaintances.

### SOLUȚIE PROPUȘĂ

For ensuring a proper and smooth functioning of an online consultations system, there is the need of amending and supplementing the Framework Contract and legislation surrounding the basic services packages, so that it creates a legal system in which doctors can carry-out online consultations. Amendments should refer to medical protocols and malpractice and clarify procedures for issuing prescriptions, carrying-out consultations and respectively regulate the number of allowed online consultations/hour.



## Recommendation 3: Acknowledgement of therapeutic education for diabetes mellitus patients as a medical service

### PROBLEM/CHALLENGE

During this period of insecurity, the need for developing a know-how through education in domains such as proper nutrition and a healthy lifestyle has thoroughly increased. At the same time diabetes mellitus patients cannot do this alone and require specialized medical supervision.

### CAUSE

Therapeutic education – in which a variety of people ranging from medicine students, resident doctors, to nurses can be involved – is a necessary health service for patients suffering from diabetes mellitus. Specialists even recommend online education webinars, grounded in a well-established curriculum through which patients can be informed and guided by educators (from relevant associations) and doctors.

### PROPOSED SOLUTION

Amending the legislative framework so that it provides for including therapeutic education services in the basic primary and specialised health services package together with a reimbursement scheme for costs associated with such services.