

MDStation™ and Patient's Behavioral Change

The idea behind MDStation™ is based on the existing need for an approach to patient adherence to treatment that is both holistic and tailored to individual needs, that is grounded in the principles of behavioral change and the use of interactive technology. It aims to be an efficient means of providing information, education, reminders, monitoring, communication, evaluation and support, along with the patient's and the physician's active participation in the process of adhering to a care plan and managing a disease.

Information provision / education: One of the basic factors involved in adherence and, by extension, a program that aims at reinforcing adherence is keeping the patient informed on his or her disease and treatment. MDStation™ provides up-to-date information material regarding the disease (causes, symptoms and clinical signs, modern treatment and management of its psychosocial impact) and the treatment (medication instructions). Providing information to the patient helps create a sense of security and confidence in better managing his or her condition, and more easily meet his or her goals. At the same time, MDStation™ provides educational material and detailed instructions on the proper use of treatment, thus ensuring that the medication is safely and appropriately used, with a focus on boosting patient self-confidence and independence.

Reminders: Reminders for medication taking and the timely scheduling of prescribing and obtaining medication are an essential and practical way of facilitating and motivating the patient's adherence to a treatment plan. MDStation™ provides the necessary reminders and allows the use of personalized reminders to cover each and every need of the patient's everyday schedule. Medication reminders are of an interactive nature, since they require the patient to confirm whether the treatment was followed. This way, patient behavior is recorded on every scheduled dose.

Evaluation of one of our company's patient adherence plans – in accordance with the ISO:9001 standard, which includes, among other things, reminders being

sent out as text messages and requiring patients to perform call-back confirmation after taking the medication – has shown that the majority of patients had a positive opinion of the program's **interactive nature**. The call-back confirmation factor as a means of monitoring the adherence program was dubbed as a positive one by the majority of patients and was seen as a form of communication and collaboration between themselves and our service. It must be noted that none of the patients consider the calls that they have to go about as a tiresome or dull process. Some patients evaluated this factor as their own "giving back" and "contribution" to the services offered by the program, while others saw it as an extra motivation to maintain adherence. Based on these results, it is obvious that when it comes to a program that depends on respecting the patient and his or her needs, on open communication, trust and the provision of satisfactory services, the factor of the patients' interactivity and active involvement is a positive one. Patients are not passive spectators, but are being asked to take up an active role on his or her treatment. Finally, we believe that the role of patients' interactive and active involvement in adherence programs, how this interacts with other factors and how this interaction affects adherence warrants further research .

Evaluation: According to research on behavioral change, tailoring a program to each patient's individual needs is the most efficient/encouraging form of intervention. Evaluation is an important means of defining every patient's unique, individual traits of every patient. The main attributes that should be taken into consideration in tailoring a program to a patient's needs are: demographic data, level of education, beliefs, obstacles to and motivations for change, current state and preparedness for change, self-confidence levels, previous attempts at behavioral change, everyday habits, interests, supportive environment, relationship with one's physician and others. The features of MDStation™ allow for an initial evaluation of the patient's state (e.g. through questionnaires) and the regular evaluation of the patient's course (through regular follow-up interviews and/or questionnaires). On top of that, thanks to Medical Adherence data recorded in MDStation™, it is possible to further analyze and statistically process this data in order to extract useful and definite conclusions concerning the treating physicians, the medical community in

general, or Health Care Providers (e.g. the Greek National Organization for Health Care), pharmaceutical control services (the National Organization for Medicines) etc.

Moreover, evaluation questionnaires on the patient's clinical status and its development can be created. In the hands of health care professionals, these questionnaires become valuable tools for appraising the course of the disease and treatment. Since time restrictions rarely allow the practical application of this data, the physician now has the ability to receive such important information, save it for later use and statistical processing through MDStation™ and iPAX©.

Monitoring: What MDStation™ effectively does (via iPAX© and in combination with our service) is communicating information on the patient's behavior within his or her treatment plan to the physician. Constant monitoring of the patient's behavior provides the physician with a flexible system that allows for the evaluation, guidance and timely, direct intervention in the patient's treatment plan. At the same time, it allows us to define the patient's needs and match any action taken within the adherence program to those needs.

Communication: MDStation™ uses the direct communication capabilities provided by technology (video or voice calls), reinforcing collaboration and the therapeutic physician-patient relationship. This results in the creation of optimal conditions for a more effective and meaningful communicative exchange.

Behavioral change and treatment plan adherence in particular, makes up a multi-faceted phenomenon that requires an equally diverse and constant process of intervention, adapted to the individual needs of every patient. Based on this approach, MDStation™ can be a useful tool in the therapeutic physician-patient alliance, with the upmost goal of providing optimal health care services and improving the patients' quality of life.