

Interview summary

Interviewees: Nicolás González López; Iratxe Salcedo Pacheco
mHealth Practice: **The Mangols Journey** (*El viaje de Mangols*)
Interviewers: Dolores Verdoy; Nerea González.
Date of interview: 2020-11-25

Topics:

- Initiation > **Needs assessment** (resulting in the new need for the mHealth solution).
- Execution > **Integration with EHR**

Scope of mHealth Practice

Background info about the good practice

"*El viaje de Mangols*" (*The Mangols Journey*. Walking towards a healthy life", is an innovative treatment program and work methodology developed by Osakidetza-Basque Health Service, the public healthcare system of the Basque Country, as the first line of treatment for overweight and obesity in children. It is aimed at all those Osakidetza patients who meet the criteria for inclusion, children aged 7-14 years with overweight or obesity, ensuring equity and universality of intervention this condition.

The program has been designed to be used by different profiles of health professionals at all care settings. It gives a complete turn to the standard consultation, unifies the treatment and follow-up of patients, simplifies the intervention for health professionals, modifies the form of healthcare professional-patient relationship and turns around the methodology of knowledge acquisition thanks to the educational gamification, enhanced by the individualized motivational consultation developed by the healthcare professionals. It has been designed as a virtual treatment without losing the potential of the human factor.

The objectives of "*El Viaje de Mangols*" are the following:

- To achieve an effective treatment against overweight and obesity in children. To obtain better results due to the acquisition of knowledge through educational gamification and the power of motivational consultation with health professionals.
- To empower patients and tutors, turning them into expert patients with decision-making capacity, supported by evidence-based holistic content which has been validated by a multidisciplinary team of experts.
- To promote intra-family changes, due to the collaborative work carried out throughout the development of the serious game (the two user profiles, children and tutors, constantly interact and perform joint challenges) and thanks to the individualized motivational consultation.
- To provide a solution to an existing need in the daily clinical practice of health professionals, facilitating their work and intervention in this population group and providing them with specific training and a work schedule and methodology that can be integrated into their daily clinical practice.
- To improve the effective time of consultation, due to the possibility of previous monitoring by the professional of the evolution of the patient and the tutor.

“*El viaje de Mangols*” program has three main pillars:

- Serious game prescribed from the consultations, the patients and their tutors will use it at home, acquiring scientific quality information, of holistic, accessible and pleasant character, achieving a greater fixation of the contents thanks to the gamification.
- Motivational consultations are protocolized, regulated and coordinated with the evolution in the serious game of the patient and his/her tutor.
- Total integration of the serious game with the Electronic Health Record of the Osakidetza patient. The health professional monitors, controls and interacts with the patient and the serious game from the primary care consultation.

Summary of main interview ideas

- Treatment for overweight and obesity in 7-14 years patients.
- Totally integrated with the EHR of Osakidetza-Basque Health Service.
- It brings together technology and health care professionals.
- Main pillars: serious game, motivational consultations and integration with EHR.
- Designed to be used by different professionals at all care settings.
- It works on physical and emotional health.
- It empowers patients and families, promoting change.
- It improves the effective time of consultation.
- Less clicks to enter information and follow up the patients.
- It will be implemented throughout the organization in 2021.

Scope and timeline of the mHealth good practice implementation:

- How long did it take for the mHealth practice to be implemented?

It started 7 years ago. The tools to address this problem in primary care were very scarce and with very poor results. Health care professionals needed a tool to use in primary care, the gateway to the health system. This is where the idea was born, the idea of generating a comprehensive treatment programme with a basic learning tool for children and families based on the serious game methodology, fully integrated into the clinical practice.

It was seen that there are some fundamental pillars of the initiative: family and emotional aspects related to overweight and obesity.

They had the first meetings four years ago, to start developing it in the organization (Osakidetza-Basque Health Service, the public healthcare system of the Basque Country). The first 1.5 years were a time of support, communication, explanation and convincing the organization.

- What are the key steps that were undertaken?

It was implemented when the funding was obtained; a tender was issued; they were lucky enough to bid on companies specialising in this type of Health game development. It was designed, programmed and implemented in 1 year.

Now they are working with the professionals, training them; so that in February 2021 they can offer it to the rest of the professionals. Teaching how to deal with these consultations.

- **What are the strengths and weaknesses of the implementation process?**
 - The programme is visible from the workstation.
 - The initiative responds to a problem they have every day in the practice.
 - Integration for use in a normal paediatric schedule.
 - Collaborative intelligence and work: a large group of people with different intelligences and profiles to be shared by everyone.
 - There are no differences at a clinical level between health profiles (doctors and nurses) or care levels (primary and specialised). Any professional working with children can use *The Mangols journey*, because the aim is for this to reach as many children as possible.

- **What are the strengths of the solution?**
 - Osakidetza's technological profile: they are technologists, but they also understand a lot about the business, they have become permeable.
 - They have introduced other types of profiles (e.g. equality, language).
 - They did not want the professionals to have a thousand isolated tools; they wanted them to be able to use this type of therapy/treatment from their workplace in an easy and totally integrated way.
 - Easy to understand text for a child between 7 and 14 years old (data protection for a young child to understand).
 - They have worked with two companies that are technically very powerful, very quick to understand, and have worked in unison. They have created/discovered talent in the companies. The game is based on a comic book and a narrative; the company discovered one of its team, a programmer, who has drawn the whole comic (180 pages).

Stakeholder involvement

- **What stakeholders needed to be involved for the good practice to work?**
 - They have an active group with a very important technical part and a clinical part of all levels: primary, nursing, paediatrics, specialized, nutritionists, psychiatrists. There is a driving clinical group: paediatrics and nurses from all the Integrated Care Organizations (ICOs) from Osakidetza, who have already started with the real patients in the consultations.
 - Equality and health promotion professionals have also been included.

- **What are the stakeholders' roles and activities/effort?**
 - Health professionals: see how to make "El Viaje de Mangols" more flexible and adaptable to almost any type of care. It's key to involve colleagues.
 - The care management has supported the communication work of the leader. This work of communication and of bringing the leader closer to the colleagues who are going to carry it out in the consultations is key.

- Technical professionals: knowledge of the system, being aligned with the organization.
- Key: behaving like a health system.

Barriers

- Changes of legislature and these months with the Covid affect, impact, generate uncertainty, but it has been possible to redirect in a constructive way.
- Safety regulations with minors. We had to go through many filters, legal reports on data protection to be able to have every guarantee that they would not have problems. Also filters to be able to take out the applications to google play.
- Financial obstacles.
- Time dedication, countless.
- The model of integration with EHR, with a prescription, existed, but they were the first. They were the first to put it in the Integral program manager (GIP, in Spanish, Gestor Integral de Programas).
- GIP didn't know, it couldn't (at first). Then GIP has learned many things.

Success factors

- Attitude of wanting to work, to share all at the same level, generating a team.
- Commitment of the main stakeholders.
- The idea of organising meeting points where development issues can be initiated, detected, and identified, generating symbiosis.
- The good practice has helped to manage and organize the care delivered to these patients and families.

Lessons learnt

- In addition to the technical issues, the members of the program leading team have also learned about nutrition, physical activity...
- Way of working: listening, analysing, studying, looking for alternatives; not saying yes or no quickly.
- They have grown a lot professionally and personally.
- Sharing knowledge from the same level.
- Have a very clear definition and do not abuse integration, only what is necessary.
- Less clicks. The health professional cannot go around looking for forms; they have tried to simplify it.

Outcomes

- [What were the main outcomes of implementing the mHealth solution?](#)
- The programme collects many variables and indicators; a lot of structuring work has been done to make the information easily extractable and analyzable. This information is collected and structured in EHR.

-Scales for children and parents (anthropometrics, quality of diet, physical activity, perception of physical and emotional health). Everything is collected, integrated, structured within the EHR, so that a continuous evaluation can be made.

- What is the status?

-In process. It is being implemented in some centres and professionals are being trained so that by 2021 it can be implemented throughout the whole organization (Osakidetza-Basque Health Service).

Continuous learning and outlook

- What would you have done differently? What can still be improved?

- They would have liked something more agile.
- They got what they wanted. It is in a constant process of evaluation and improvement.

- What are the future plans for exploiting the mHealth solution?

- Driving group, throughout 2021, more global implementation of Osakidetza, with the training already developed.
- Possibility of scaling up: hopefully, so that it reaches as many families as possible.

Other clarifications

It is important that, even if you download the application, it is not activated until the health professional activates it in the system, until the professional does not prescribe it. You do not want isolated tools, but those that are integrated, shared between professionals; it allows them to be able to dedicate more quality time to patients.

Is it actually used also in the consults in hospital care?

Primary care is the gateway to the system, but there are patients who are already in specialist care, and a solution must be found for them. It manages to enhance treatment, puts the patient at the centre, and it doesn't matter where the care is given.

Current status?

Future: reach out to education, they would love it; the prevention module is easily adaptable.

“El Viaje de Mangols” is in principle for people between 7-14 years, but is open to younger and older patients. It is not closed.

Integration mechanisms (IT)

The mHealth Game Tool is integrated with the Integral program manager (GIP module of the HER) in the patient's individualized plan.

The tool is supportive; it does not replace the consultation. Health is shared, the patient can be empowered. The professional is allowed to spend more effective time with the patient.

Interoperability

Semantic Syntactic Interoperability, with standards made in Osakidetza with a proprietary dictionary. There is no HL7.

Technical Interoperability: JSON, API standards.

Dependence

Dependence on Mangols can be created. To avoid that, they have developed a serious game controlling the game times, schedule....At night it doesn't work. They have worked on the colours, the voices of the actors and they have also reviewed sensitive religious details.