



DigiEduHack Solution
Barcelona - EIT Health Spain
Challenge: EIT Health Spain
DigiEduHack 2020 Challenge 2020

Priority Care: bridging the gap between patients and physicians

A clever support for patient medical appointments

Priority Care is a digital platform that empowers the patient prior, during and after the medical appointment, providing personalized insightful data about their health condition, in order to customize treatments and care.

Team: Team 3

Team members

Virginia Helena Quadrado , Félix Buendía, Xavier Lleixà

Members roles and background

Virginia Helena: Clinical and Market advisor, consulting with specialists and developers to create and customize digital platforms to the end users, creating & delivering content as well as marketing strategies to populace applications.

Felix Buendia : is an Computing Engineer and is currently working as a lecturer at UPV (Universitat Politecnica de Valencia). His main research topics are related to e-learning technology application to healthcare environments (eHealth).

Xavier Lleixà : Entrepreneurship and Product IT Specialist co-founder at Digimevo and Global Business leader with International Work Experience in EMEA, APAC and NA in technology space. Experienced in development and execution of strategies in challenging environments with a high degree of success. Strengths in new product and market creation, business transformation, partnership, competitive analysis, GTM strategy, customer engagements, and thought leadership.

Contact details

virginiahelena@gmail.com, fbuendia@disca.upv.es, xavier.lleixa@digimevo.com

Solution Details

Solution description

Nowadays, patients are using Google and other social media as the main resource to find health information. However only 20% of the search results comes from a validated or trustable source of information and 80% of the patients find it difficult to distinguish between the real and fake information. This is causing anxiety to the patients as some results are overwhelming and a waste of time for the healthcare professionals (5-10 minutes per appointment) as they need to reinform the patient .

Priority Care is a digital platform that presents the information that the patient needs at the right moment, That is done thanks to collecting all data that is generated when every time the patient accesses the content and engages with them. We are creating profiles based on the information that has been introduced by the healthcare professional to the patient and the information which the patient has been engaged with the platform. Thanks to this the healthcare professionals are able to present the information that's needed at the right momment :

1. Pre-session (before the consultation): when the patient schedules a session, he will have access to information about his issue, so he will go to the doctor will some previous knowledge about his issue, in order to make most of the time of the consultation
2. In-session (during the same session some kind of support is needed?): during the session, the patient will be able to ask proper questions instead of simply asking "what do I have?", in this way, the dialogue will be more clever from both sides. The doctor will be able to reinforce the use of the platform, directing content so the patient will keep engaged.
3. Post-session: the patient will not only follow up with the appropriate treatment, but also improving his education about his issue and how to prevent further incidents

Finally the patient will be engaged with the platform using different techniques as gamification and social network communities to create a personalized experience. Moreover the healthcare professionals would be able to prescribe clever information to their patients.

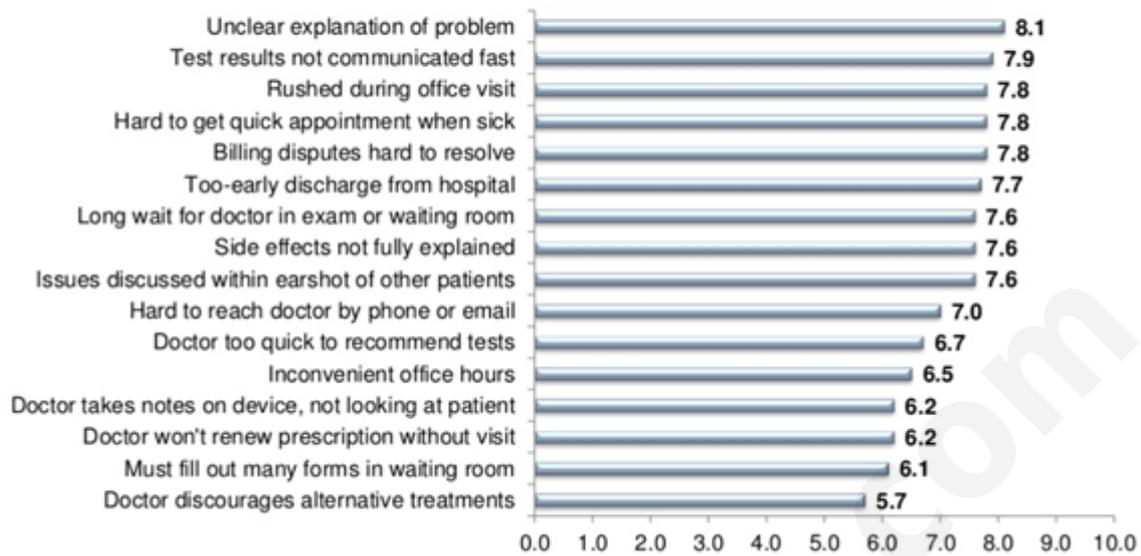
Solution context

We have detected a gap between patients and healthcare professionals on their communications during their medical appointment. This gap has been growing faster in the last years due to the time limitations on the medical appointments and the explosion of the non-validated healthcare information sources due to the social networks.

As we can see from the report from Frost&Sullivan these communication gaps are the ones that are creating the biigest pain points to the patients:

Gaps in communication, engagement, education, convenience, and respect are key pain points for American health consumers.

Americans' Biggest Grievances During Doctor Visits, US,



Note: Scores are based on a 10-point scale, with 10 seen as most annoying; N=1,000 Americans

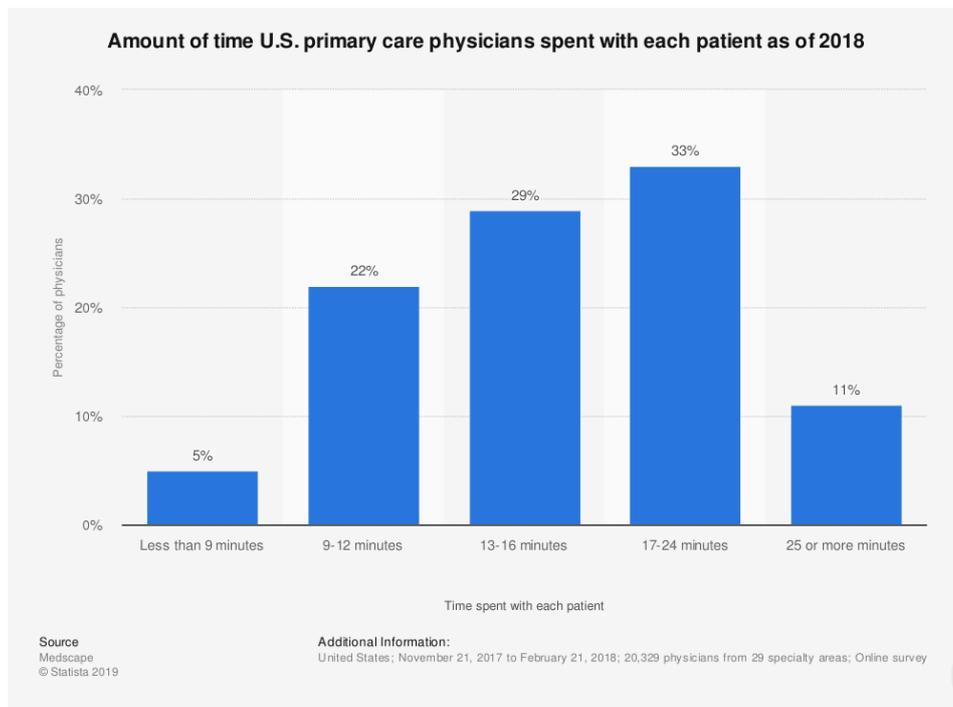
Source: Consumer Reports and Frost & Sullivan

So the main challenges that we are facing are:

- Lack of time to exchange information with the patient
- Limited time available during the medical appointment
- Data Privacy
- Patients being more conscious and informed about preventive health

On the link below we can see how tight is the time management on the medical appointment :

<https://www.mobius.md/blog/2019/09/how-much-time-do-physicians-spend-with-patients/#:~:text=O ther%20research%20found%20that%20physicians,spend%20more%20than%2025%20minutes>



Solution target group

Priority Care is a transformational platform that will change the way that patient support is provided. The solution can be used in multiple medical specialties and conditions as we have seen it with the current implementations. However, there is a clear connection which the population that's already using digital technologies in their daily lives. So the target group whom is addressed the current solution is :

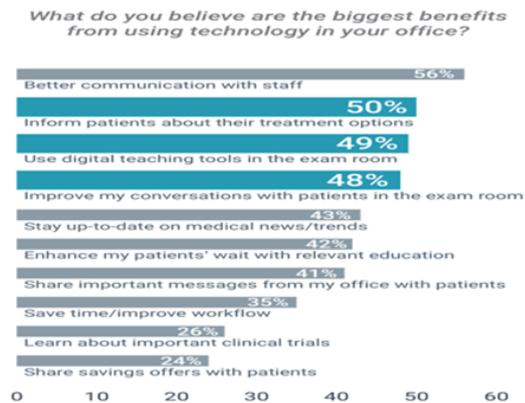
- General Practitioners as they are the first-step to provide care to patients
- Patients that have a technology mid-level knowledge (young adults and adolescents)
- Patients that want to be active on their health

Thanks to the data that we already have it through different Patient Educational Platforms which are reaching out one milion patients in a monthly basis we know that the patient segmentation it's not by age or sex or even medical conditions , it's related to the tecnology level of the patients and their cultural conditions. However, we can see that the usage of the platform it's above 60% in any of the different groups.

We need to consider the healthcare professional role here, as it's key that General Practitioners are the ones that should be promoting the usage of the platform through personalized information prescriptions.

Solution impact

We already know that the impact of using Patient Educational Platforms is huge thanks to multiple studies that's already been conducted in US. See the chart below :



We can use standardized methodologies to measure the impact like PREMs and PROMs which can help to evaluate the patient experience. Moreover with the usage of Big Data we will be able to help the General Practitioner on creating an accurate personalized experience.

Solution tweet text

Priority Care is a digital platform that empowers the patient prior, during and after the medical appointment, providing personalized insightful data about their health condition, in order to customize treatments.

Solution innovativeness

Use the same techniques as the current social networks to create profiles and provide personalized healthcare information. Our systems are comprehensive systems that transform the doctor-patient experience in the clinical environment through the use of technology and adapted content.

The most relevant technologies and innovation will come from the usage of data with :

- Text mining.
- Information retrieval.
- Syntactic analysis.
- Word embeddings..

- Pattern recognition.
- Deep learning techniques.
- Artificial neural networks (ANNs),

Independently of the content management of the devices where it is displayed, it allows us to work with a single repository and control possible updates or modifications of it in an easy and centralized way. Thanks to this technology the content can be shown in different elements that develops or integrated in elements of third parties.

Solution transferability

We choose the General Practitioners because patients don't have a diagnosis yet so we really want to be the first-step to get reliable healthcare informations. Moreover they are a great target as one of the groups with higher pressure on their time and amount of patients that they support. However we know that platform can be used in different medical specialities to provide even more tailored information to the patients, some of them could be :

- Cardiology
- Cancer
- Diabetes
- Oftalmologist
- ...

Solution sustainability

As we are leveraging a platform that's already reaching out 1 milion people on a monthly basis would be really feasible to expand it and add these new features into the platform.

Solution team work

The experience of team working has been very interesting and satisfactory since it has enabled an effective and efficient process of collaboration among the team members. Blending the different profiles of these members coming from different contexts such as academic or entrepreneur has been a great contribution. We hope to keep on this collaboration experience in further projects.