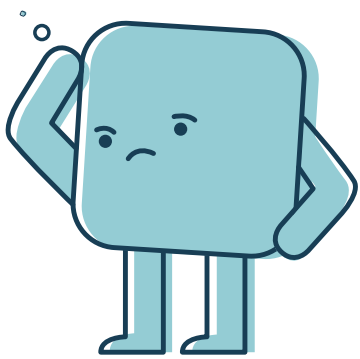


SMART SERIAL RADIATION APPOINTMENT SCHEDULER



The growing number of patients treated with radiotherapy requires a profound change in the management of radiation oncology units to offer patients an advanced service while maximizing their human and machine resources. Staff working in large-sized hospitals must consider approximately ten different variables pertaining to each patient's oncological and psychosocial context before planning radiotherapy treatments. These variables continue to increase due to the rise in personalized medicine in oncology treatments.

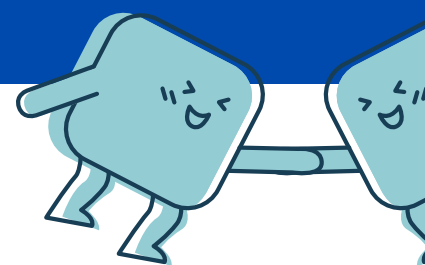
PROBLEMS



Staff involved in radiotherapy treatment has reached the limit of human processing capacity regarding the number and assessment of variables relevant for devising proper radiotherapy treatment plans. First of all, the **characteristics of the tumor** – its type, size, aggressiveness, location - which determine the most appropriate therapy. Secondly, **the patients**: how are they feeling, where do they live, what is their level of autonomy, etc. Thirdly, the available human resources (e.g., considering who is on sickness leave or on vacation). Last but not least, the **availability and condition of machines** (e.g., are there any broken ones, under maintenance?). All these variables need to be considered for the increasing number of patients (hundreds or even thousands) along with not uncommon emergencies causing appointment changes.

OBJECTIVES

Enhancing the efficiency and effectiveness of patients' **flow management** in radiotherapy departments while, at the same time, improving the efficacy of treatment protocols, increasing the use of available machines, reducing stress and the limits of processing capacity of administrative staff.



THE SOLUTION

An AI based **software for serial radiation appointments** consisting of an AI algorithm that analyzes the complex and wide set of data associated with the therapeutic protocols and helps to optimize patients flow, machine deployment and staff availability. As a secondary component, a chatbot, integrated into the AI-based software. This chatbot will enable a dialogue between patients and scheduling managers regarding the acceptance or rejection of appointment changes. It will contribute to increasing the overall efficiency of the scheduling management process.



VALUE PROPOSITION

The smart scheduler solves concrete everyday problems related to patient flow, thereby increasing patients', professionals' and healthcare providers' satisfaction and effectiveness. Patient satisfaction means positive clinical outcomes while professional satisfaction translates into higher healthcare delivery quality standards.

MARKET

Healthcare: Hospitals with radiotherapy facilities, care centers
Industry: Software companies (radiation planning, Oncology Information Systems, hospital appointment schedulers)

BENEFICIARIES

Physicians, nurses, schedulers / planning appointment coordinators, patients and their relatives / caregivers and hospital managers

SOLUTION PROVIDERS

Main solution provider:

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Providers of synergic

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