BROKERAGE FOR HEALTH
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New Generation of Clinical Decision Support System for Optimizing Diagnosis & Therapies in Pediatric

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The main goal of this project idea is to release a new generation of clinical decision support system (CDSS) for optimizing diagnosis and therapies in pediatric. There is a linear model for drug dose determination today, called Young's formula, which just captures the age of the patient and provides the dosage of the drugs.

$$child's\ dose = \frac{age\ of\ child}{age\ of\ child + 12} \times \text{adult dose}$$

The proposed **CDSS**:

- Determines the drug dosage based on a nonlinear model
- Captures and analyzes other parameters e.g. **gender, weight, volumetric mass, the last prescribed dosage** and determines a new required dosage
- Proposes **dietary guidelines** during the treatment process
- Proposes a set of **physical activities** in the treatment of disease

Market Relevance

- Optimized diagnosis
- Integrable with smart drug dispenser
- Decreasing side effects of treatments
- Applicable in telemedicine
- Clinical decisions improvement
- Compatible with GDPR

Innovation

- Identifying the needs of users and what the system is expected to do
- New generation of CDSS
- New computation tool with the potential of finding new Biomarkers
- Data integration approach

Business Impact

- Designing the system for a clinic's specific needs
- Long term planning the implementation process
- Decreasing the human resource cost
- Best care for children
- Minimizing the human error

Contact details

Thank you!

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