INDIVIDUALIZED MEDICATION FOR CHILDREN USING A CLINICAL DECISION SUPPORT TOOL

PEDeus AG is a subsidiary of the University Children's Hospital Zurich. Their innovative, web-based Clinical Decision Support (CDS) tool "PEDeDose" is used by various Swiss clinics, practices, and pharmacies to support healthcare professionals in determining the optimal medication dosage for children. The trilingual web platform (DE/FR/EN) is always accessible and can be integrated into existing clinical IT systems. The platform offers an efficient medication query with a certified calculator to determine individual dosages for young patients. At the beginning of 2022, konplan assumed responsibility for the development of "PEDeDose" to further enhance medication therapy and the safety of children through clinical decision support. Our focus was the integration of new functions and the determination of correct medication dosages for premature babies.

Accurate analysis and further development using agile methods
After a thorough analysis of the existing platform, the most important findings were integrated with the customer's roadmap to establish the next steps for the project. Clarification of the development process according to current medtech industry requirements and agile methods of software development formed the foundation. Our optimal support of PEDeus using modern software development processes combined with many years of medtech industry experience allowed us to elevate "PEDeDose" to a much higher level with multiple new functions.

Important foundation for further successful releases
In addition to new functions for calculating medication for premature babies and improving patient-specific dosage, konplan made recommendations for a more stable and cost-efficient hosting and migrated the solution to Azure, Microsoft's cloud computing platform. The result: a stable software solution that is easy to maintain. The effective cooperation between PEDeus and konplan was very apparent based on the clear and uncomplicated communications using the shared DevOps platform and the successful implementation of the release.

Result
- Safe medication
- Increase in quality and efficiency
- Feature «premature babies»
- Cost savings (migration to the cloud)

Methodology & Technologies
- Php / symfony
- Docker, MariaDB
- API: Rest service
- Azure Services

Scope of Services
- Feature development
- Migration to Azure Cloud
- Support & maintenance
- Technical documentation (IEC 62304/SW Safety class B)

10 months

4 employees – konplan
3 employees – customer

Acquisition, further development, deployment release, maintenance & support

Customer

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