

#### **GET STRONG TO FIGHT CHILDHOOD CANCER:**

## UNIVERSITĀTS**medizin.**

# DEVELOPMENT AND IMPLEMENTATION OF THE "FORTEE GET STRONG"-APP AS A DIGITAL APPROACH TO PROMOTE EXERCISE IN CHILDHOOD CANCER PATIENTS

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#### BACKGROUND AND AIMS

Digital tools and new technologies can support and maintain physical activity behaviour. Childhood cancer patients suffer from physical inactivity, cancer-related fatigue, and reduced health-related quality of life. The Europe-wide, multi-centre FORTEe trial (funded by the EU) aims to mitigate these issues in childhood cancer patients by implementing exercise therapy and increasing physical activity using digital approaches.



#### **METHODS**

As part of the trial, the "FORTEe Get Strong" app was developed to engage childhood cancer patients in exercise training and healthy behaviours.

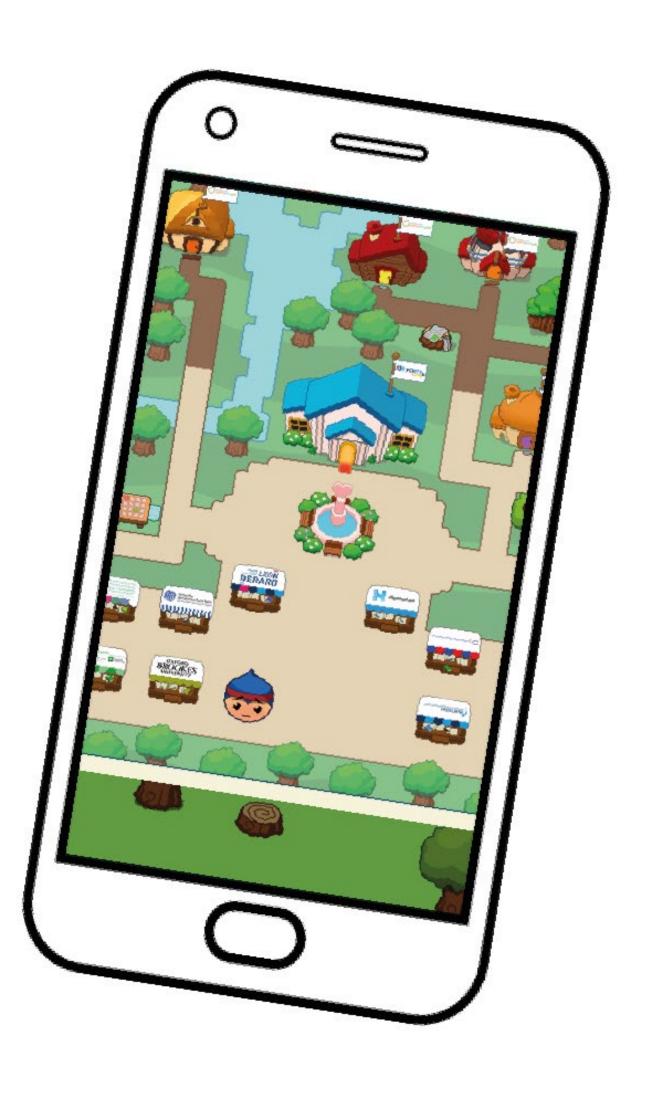
Developed in close collaboration between scientific and clinical partners, a software engineering company and patient representatives, the "FORTEE Get Strong" app was implemented for the use on Android and iOS devices in seven languages (Danish, English, French, German, Italian, Slovenian, Spanish). The mobile app uses gamification to create a child-friendly environment for health education. Young patients can navigate a personalised avatar through a virtual village containing interactive elements: i) mini-games, including the FORTEe-Quiz, provide health-related knowledge in a fun way; ii) instructional exercise videos focus on motor skills such as endurance, strength, flexibility, coordination and gait. By offering varying levels of difficulty, the app provides a safe and personalised exercise opportunity.

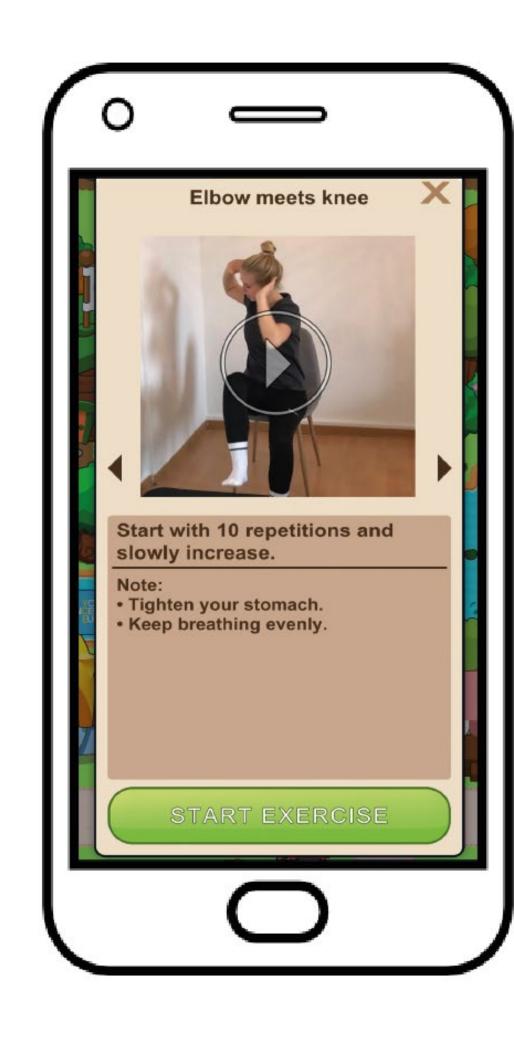


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#### **RESULTS**

The "FORTEe Get Strong" app was developed in the context of the wider multicentre FORTEe trial and implemented at 10 European trial sites. The patient app is an innovative approach to promote healthy behaviours and physical activity in childhood cancer patients. The integration of gamification and tailored exercises increases engagement and knowledge retention. As the FORTEe multicentre trial progresses, further evaluation will assess the long-term impact of the app on the physical and psychosocial well-being of young patients.







#### CONCLUSION

The "FORTEe Get Strong" app is a promising tool in paediatric exercise oncology, offering a creative and adaptable means of supporting children with cancer on their journey to improved health and fitness.





Find out more about the application on fortee-project.eu

