

**INTED 2023**

**BUILDING AN EDUCATIONAL APP TO  
SUPPORT PHYSIOTHERAPY PRACTICE  
IN ACUTE CARE**

António Alves Lopes

# Background



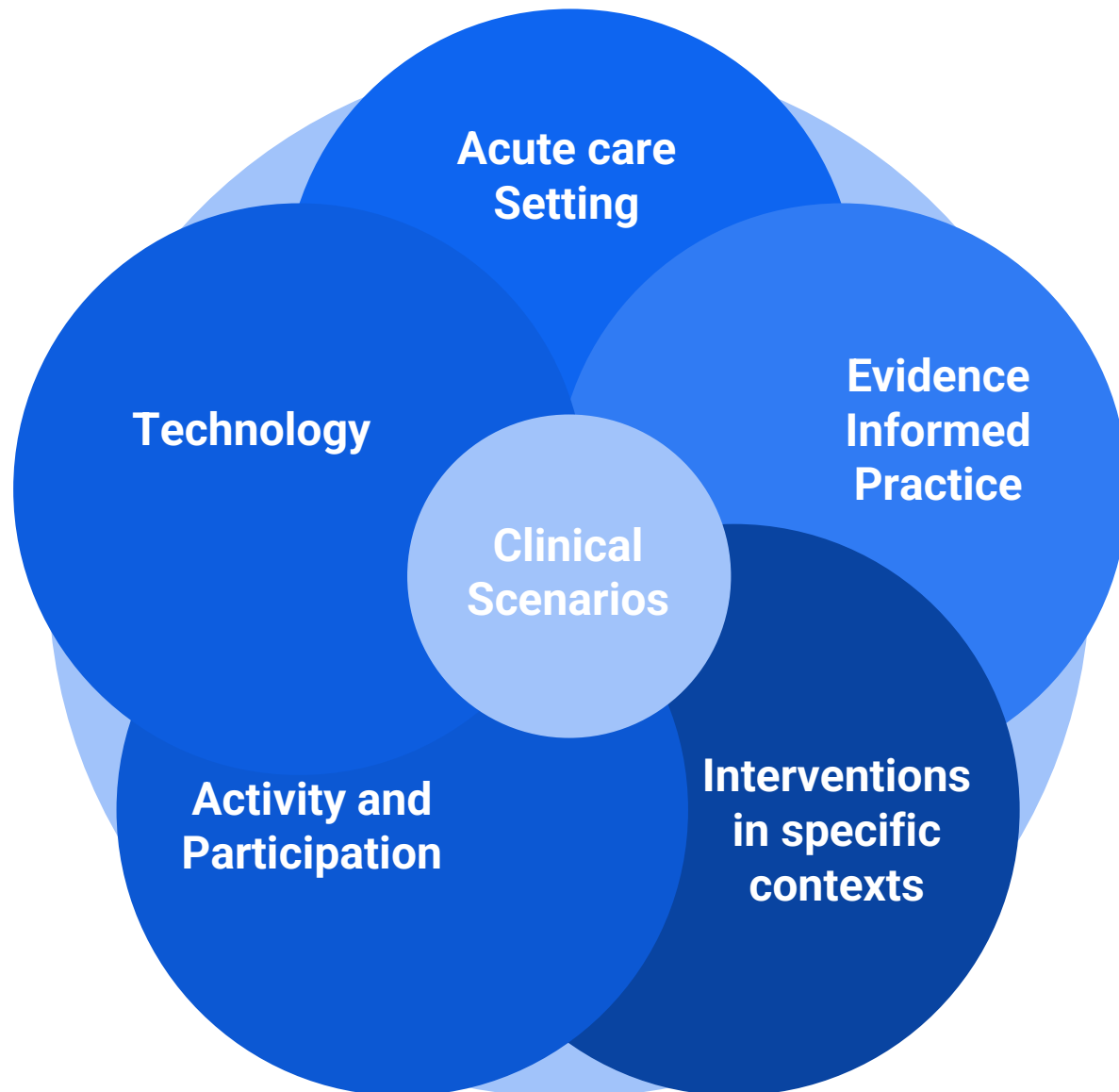
- Acute care is a type of health care that is designed to address a short-term illness or injury. It is typically provided in a hospital or other health facility and is focused on the immediate treatment of the condition.
- The goal of acute care is to stabilize the patient and address the immediate health problem, after which the patient may be discharged or transferred to a different level of care, such as long-term care or rehabilitation.
- Physiotherapists play an important role in acute care settings. Physiotherapists should have competences to intervene in conditions and contexts throughout the life cycle of their clients/patients.

# Background



To meet the increasing demand, physiotherapists should have the competencies to intervene in all conditions and contexts throughout the life cycle of their clients/patients, Alcoitão School of Health Sciences, Portugal and the Hanze University of Applied Sciences, the Netherlands took the initiative to develop an International Minor Physiotherapy in Acute Care, to address the ongoing demand, using the opportunities given by the ERASMUS+, namely student and teachers mobility programs.

# Background



The content was developed using the international descriptors of competences of the Physiotherapist in Acute Care.

Based on that several topics are discussed with the students:

- Acute care Setting
- Evidence Informed Practice
- Interventions in the different contexts
- How to promote Activity and Participation
- **Technology to support practice**

The pedagogical and assessment strategies were chosen to reflect the competencies to be achieved.

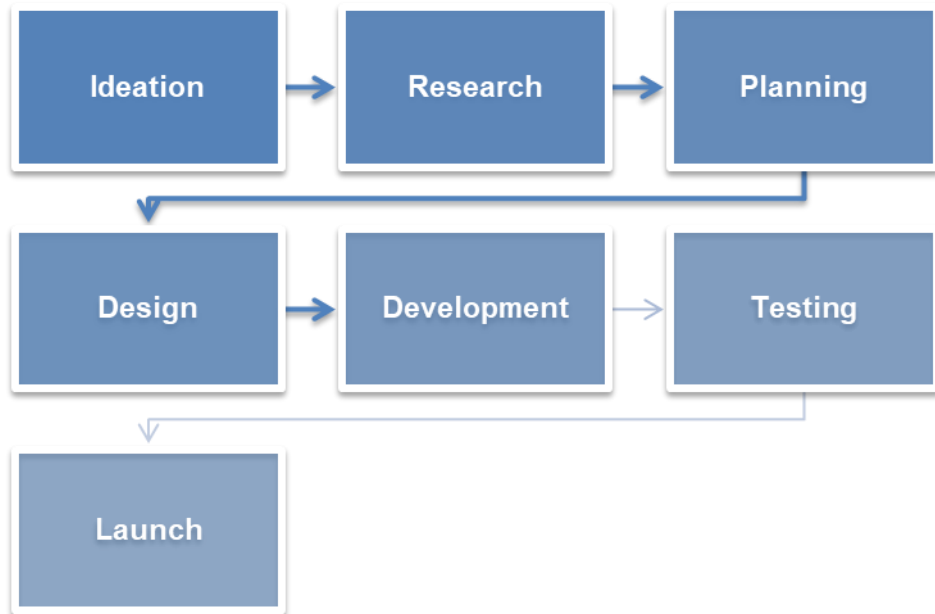
# Background



**Image source:** <https://mhealthintelligence.com/news/top-10-healthcare-mobile-apps-among-hospital-health-systems>

- Mobile devices in health, mobile devices, such as smartphones, and tablets, have been widely adopted by health professionals.
- These devices are quickly becoming some of the main instruments for accessing clinical information, especially for novice health professionals and students.
- Health mobile apps can be used for a variety of purposes, including tracking, and managing health conditions, accessing health information, and connecting with healthcare professionals for remote care.
- In the educational context, besides supporting the learning process, mobile apps could be a useful resource for clinical support and professional development and may offer a range of features such as, resources for clinical decision making, such as calculators and reference materials, up-to-date information on best practices and guidelines and providing easy access to online courses and lectures

# Methodology



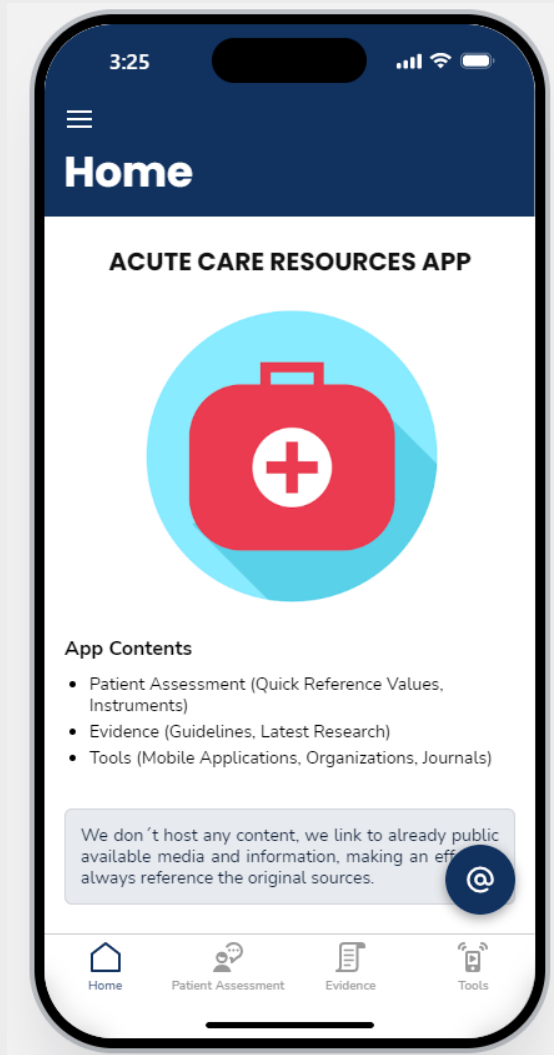
- To facilitate easy access to updated information related to Acute care Settings (health and professional guidelines, media resources) we decided to develop and implement a Mobile App available to all physiotherapy professionals and students.
- The app was developed in the curricular year of 2020-2021, as a student project, included in the International Minor in Physiotherapy in Acute Care organized in partnership with Alcoitão School of Health Sciences (Portugal) and the Hanze University of Applied Sciences, Groningen (Netherlands).

# Methodology

The development of a mobile app involved several steps of project development, which included:

1. **Ideation:** that includes the process of creating the idea for the app and identifying the aims to achieve.
2. **Research:** after the idea has been identified, the next step was to do a context needs assessment to understand the target audience and focus for the app.
3. **Planning:** The planning phase involved creating a roadmap for the development of the app, including defining the goals, features, and timeline for the project.
4. **Design:** In the design phase, the user interface and user experience of the app are developed including creating user paths and visual designs. For the contents and features, the students were divided into different working groups to develop the different sections of the App. The content was developed using international guidelines and research related to physiotherapist practice in Acute Care.
5. **Development:** During the development phase, the app was built using a free online tool ([glideapps.com](https://glideapps.com)) and divided into 3 main sections: Patient Assessment, evidence resources and tools.
6. **Testing:** After building the first version of the app, it was tested using student feedback, to ensure that it was functioning properly and meeting the requirements and goals of the project.
7. **Launch:** Once the app is complete and passed all user testing, was publicly launched, and made available to the Physiotherapy educational and professional context.

# Results

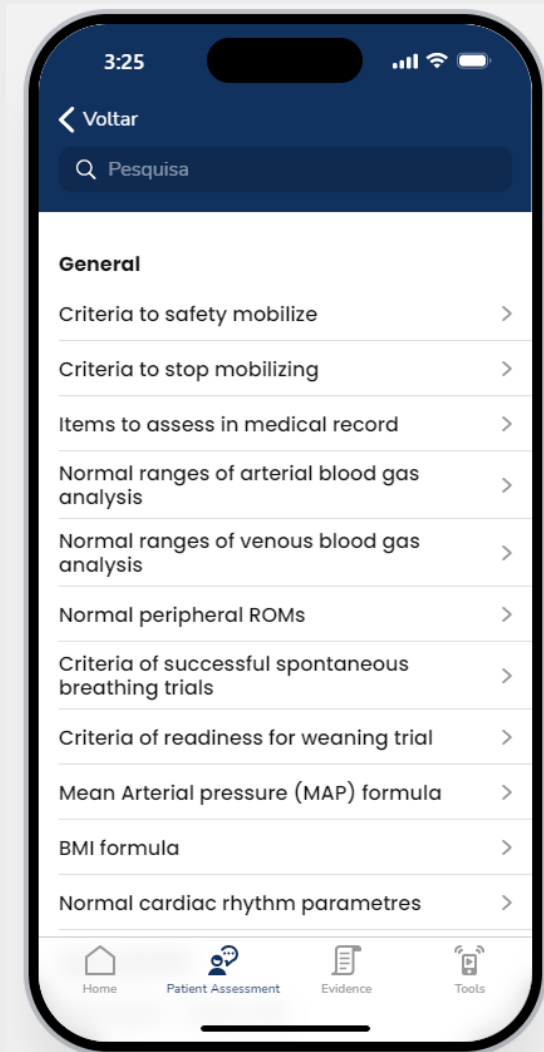


The mobile app was developed using a free online tool ([glideapps.com](https://glideapps.com)), which allowed for the easy and efficient creation of the app.

The app was divided into three main sections: Patients Assessment, Evidence, and Tools.

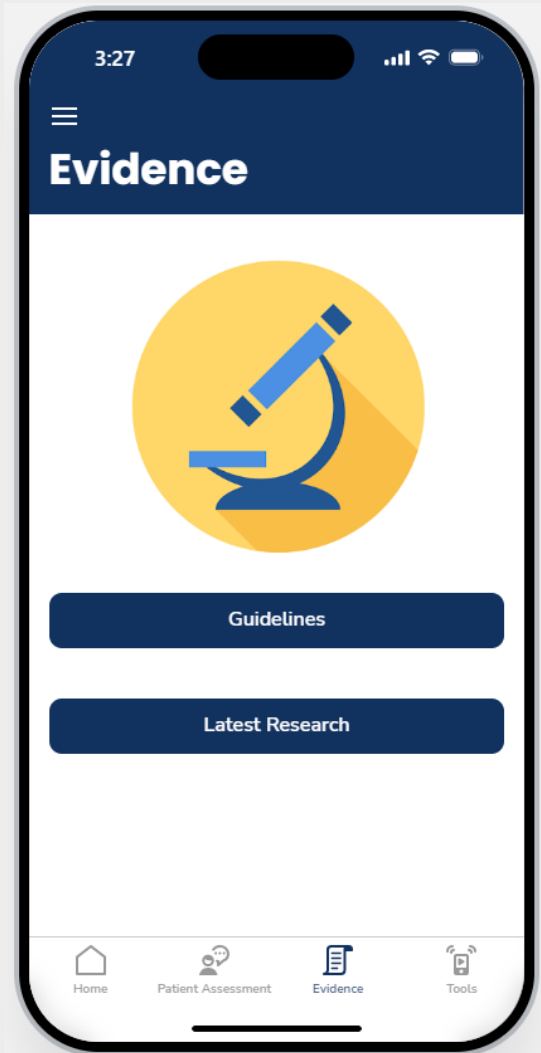


# Results



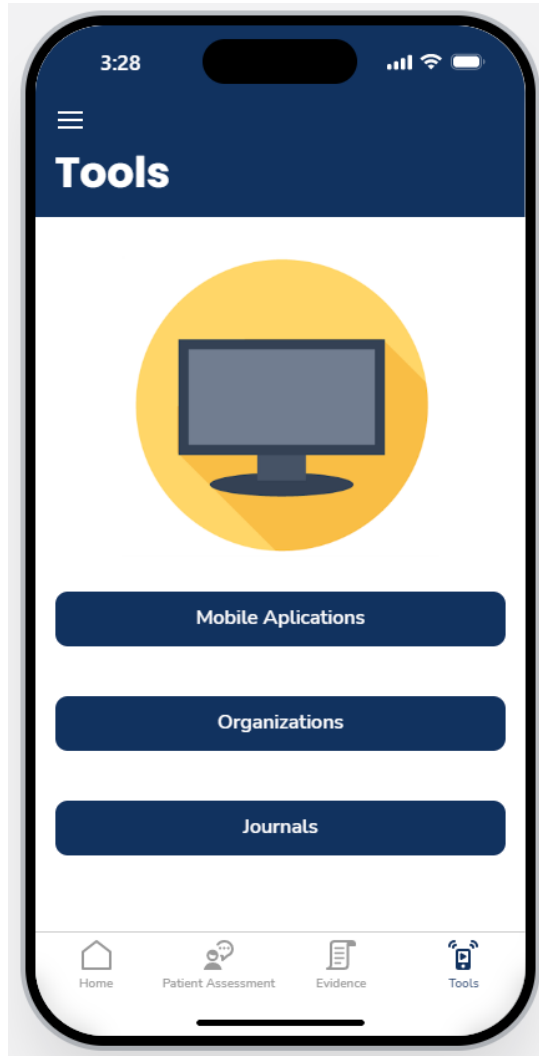
The Patients Assessment section covers quick reference values and instruments that are commonly used in acute care contexts. This section is designed to provide quick and easy access to important information that is frequently used to assess and diagnose patients in acute care settings.

# Results



The Evidence section contains a list of guidelines and the latest research related to this topic. This section was designed to provide users with access to the most up-to-date information and research in the field of acute care physiotherapy.

# Results



The Tools section is a database of the most useful mobile applications that can be used in acute care physiotherapy. This section is designed to provide users with easy access to a variety of useful Apps that can help them in their context. Overall, the app was created to provide a convenient and user-friendly resource for acute care physiotherapists.

# Results

At the end of the development process of the mobile app, students were asked to provide feedback by completing an anonymous online questionnaire. The data collected from these surveys provided valuable insight into the students' perceptions of the development process and the effectiveness of the app in achieving the objectives of the minor program.

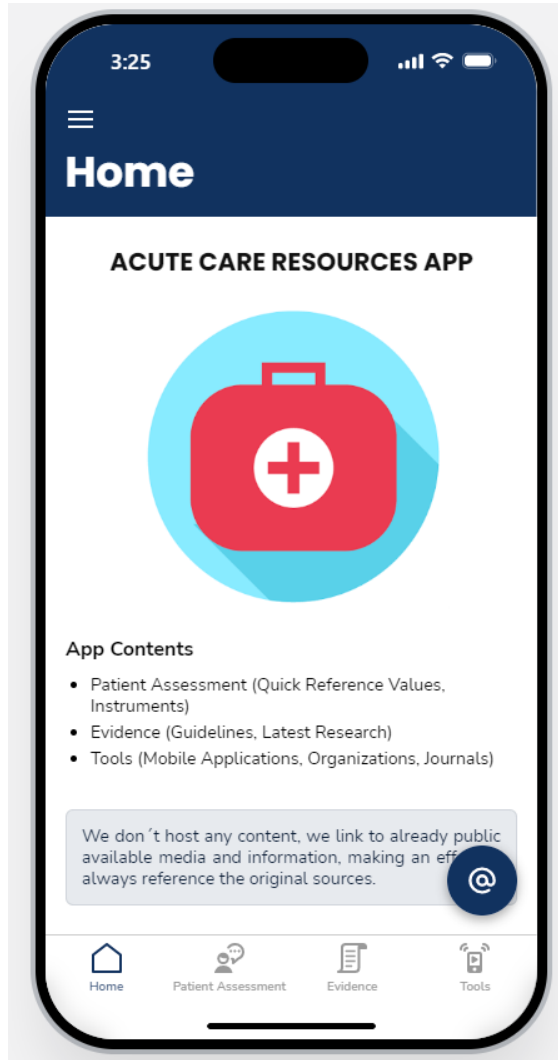
**90%**

**Agree / Totally Agree**

students agreed or strongly agreed that the activities involved in the development of the app contributed to the overall objectives of the minor program

The students found the development process to be engaging and beneficial to their learning experience.

# Conclusions



- Based on the positive feedback received from the students, the development of the mobile app in question was important. This is evident from the students' engagement and positive feedback on the ease of use, convenience, and effectiveness of the app in facilitating their learning experience.
- Considering this, the next steps will involve updating the content and resources available within the app to ensure that it is always providing the most current and accurate information. This will be done by regularly reviewing the literature, incorporating new research findings, as well as incorporating feedback from students and physiotherapists. This will help to keep the app relevant and useful for the final users.
- Furthermore, this experience has reinforced the potential benefits of using mobile apps in education, not only in terms of student engagement and learning but also in terms of convenience and accessibility.

# INTERNATIONAL PHYSIOTHERAPY MINOR

20 ECTS

