



Clinical
Wound
Support

DECISION-MAKING SUPPORT SYSTEM IN THE DIAGNOSIS AND TREATMENT OF PERSON WITH CHRONIC WOUNDS_CLINICALWOUNDSUPPORT (EP208)

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ClinicalWoundSupport: Wound Analysis to Support Clinical
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Consórcio:



Method

Aim: To investigate, develop and validate a management support and clinical decision support solution for the diagnosis, monitoring and treatment of wounds.



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Web platform

A qualitative study design with interviews to determine what information to include in dashboards and reports was developed.

Mobile Application (App)

A mixed approach of quantitative and qualitative studies, research in the current scientific literature, prospective observational studies, and focus groups with a panel of experts were carried out. For the image component, conventional computer vision and deep learning algorithms were established.

Stages



1st stage

- Collection of images by project partners;
- Annotation of images by experts;
- Collection of relevant clinical data;
- Construction of algorithms for image acquisition and processing and clinical algorithms;



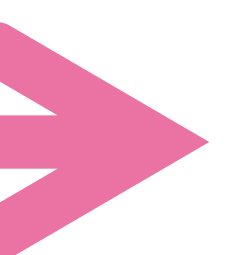
2nd stage

- Validate image algorithms;
- Repeat annotation of new; collected images;
- Validate algorithms:
Diagnosis of wound type;
Treatment recommendations;
Clinical alerts.



3rd stage

- Quality validation:
Algorithms image and clinical;
Usability of application
functionality;
Product satisfaction.



Results

Wound and dressing image capture tool to streamline the wound registration process

Algorithms for the semi-automatic determination of wound properties (different types of tissue and area)

Clinical algorithms to support wound diagnosis, monitoring and treatment

Alert creation systems based on previous information

These tools will be incorporated into an App and a platform will also be built to help manage resources

The project includes the development of tests and trials to validate the solution in a relevant environment

Dashboard and management reports with the minimum data based on result indicators



Conclusion

These tools combine knowledge of the different technical, scientific, and clinical aspects to develop an integrated solution capable of responding to the needs identified in current clinical practice in the healthcare of chronic wounds.

Final product

