

# WoundAide

## A hand-held solution for the healthcare industry

IMPROVING ACCURACY AND CONSISTENCY OF WOUND MEASUREMENT



### ▶ Background

Management of wounds can be very challenging in the clinical area. Patients with chronic wounds could be treated by multiple healthcare professionals even within the same institution. Without a standardised measurement tool, wound assessment may lack accuracy as they are highly dependent on users. Having objective measurements with photo documentation using a validated instrument would enhance accuracy in the assessment and monitoring of the wounds.

### ▶ Challenges

The lack of accuracy and consistency during the wound measurement and assessment process can lead to delayed healing and treatment. Current practice in the clinical area requires manual measurements, and are user-dependant. Wound care is important to reduce infections and requires trained specialists to do the wound measurements. It is pertinent to identify delayed wound healing process to avoid complications.

## ➔ Solutions

Konica Minolta has prototyped an automated non-contact handheld wound measurement device. WoundAide from Konica Minolta can measure wound dimensions including length, width and surface area. Measurements were propagated through automatic and semi-automatic algorithms, a software assisted segmentation with manual user input.

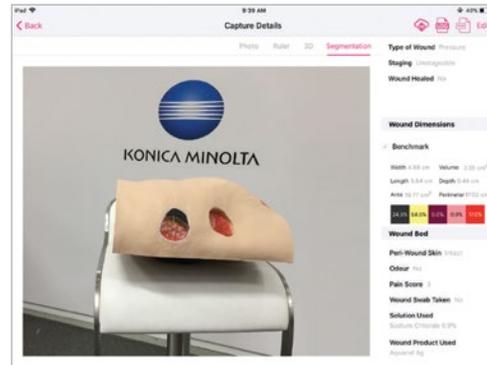


## ➔ Conclusion on the Study and User Benefits

In this collaborative study, a total of 10 wounds of various dimensions were evaluated. Each wound was measured with WoundAide for a total of 5 repeated captures and compared against digital planimetry.

200 measurements with length, width and surface area were obtained in 50 wound image samples. Aggregated data from automatic and semi-automatic algorithms shows an accuracy of > 93% comparing with digital planimetry wound trace.

Coefficient of variation between repeated measures from the WoundAide were an average of 4.83%, 3.13% and 3.03% in small, medium and large wounds respectively. The idea of using non-contact handheld wound measurement device in wound assessment for care continuum between health settings remains feasible.



## WOUNDAIDE KEY FEATURES & BENEFITS

- ⊕ Precise and consistent wound assessment and documentation
- ⊕ Timely intervention from accurate trends to facilitate the best wound healing outcome
- ⊕ Continuous standardised monitoring enhance patient comfort, compliance and improve quality of life



Review, Alert & Trending



Capture Wound in 3D



Store & Share Data



Automate Measurement

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