



Automatic Assessment of Chronic Wounds in Diabetic and Elderly Patients

KroniKare, a local start-up, is an award-winning AI-driven system that automates the assessment & management of chronic wounds.



“Collaboration with AISG helped us augment our AI capabilities quickly through the 100E and AI Apprenticeship Programmes, while ensuring that we work with qualified, trained talents in AI.”

Hossein Nejadi, Co-founder & CTO

BACKGROUND

- Current practice of wound assessment takes an average of 30 minutes per wound, and hence is time-consuming
- Quality of information gathered is also subjective (depends on nurse’s expertise)
- Only 2% of Singapore’s nurse population are qualified wound nurses - not possible to offer adequate care to chronic wound patients with current practices






BUSINESS CHALLENGE

How can KroniKare enable healthcare institutions to better triage patients and allocate resources for wound management in diabetic and elderly patients

AI SOLUTION DEPLOYED

An AI-driven Integrated Wound Scanner System comprising a mobile and web platform was developed. This system, which mimics wound analysis by a human specialist, uses computer vision, image processing and semantic segmentation to capture, analyse and diagnose chronic wound conditions.

OUTCOMES

 <p>Wound assessment time reduced between 50%-70% (from 30 min down to 30 sec) - Equivalent to >\$10,000</p>	 <p>Consistent, accurate monitoring of wound progression and improved early detection</p>	 <p>Faster interventions for major wound complications and abnormalities</p>	 <p>Scanner deployed in St Andrew’s Community Hospital and Kwong Wai Shiu Hospital</p>	 <p>Completed operational trials at Changi General Hospital with promising results</p>
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