Evidence-based assessments significantly improve healing rates for CCDHB

Wound assessment within the Community Health Service has become noticeably advanced and evidence-based with regular, accurate wound measurement leading to best practice care and improved healing outcomes.

Silhouette enables the CCDHB Community Health Service to:

- Demonstrate improved wound healing rates and reduce the costs of wound healing.
- Improve their patient engagement through better information sharing and better experiences.
- Minimize patient pain and infection risks with non-contact assessments.
- Make better informed decisions with more timely and targeted escalation and intervention when required.

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- In 2018, the average VLU healing time was 9.70 weeks (prior to using Silhouette the average VLU average healing time was 33 weeks)
- In 2018, the average healing time for recurrent VLUs was 10 weeks (prior to using Silhouette the average recurrent VLU healing time was 45 weeks)
Background
The Capital and Coast District Health Board (CCDHB) Community Health Service (CHS) serves a population of around 318,000 in the lower part of the North Island of New Zealand. The CCDHB CHS is a nurse lead service with over 60 district nurses providing a range of care in the community setting with wound care making up approximately 70% of their referrals.

Since 2015, the Wound Care Team had noticed a steady increase in the numbers of patients with complex wounds and prolonged healing rates. The aging population and associated increases in diabetes and heart disease were contributing to these increases, which also meant more nursing time and increased costs to care for these patients.

Under the leadership of Wound Nurse, Natalie Scott and Service Manager, Matt Callahan at CCDHB, the community nursing team looked into their options for improving their wound care service and patient outcomes. Ms Scott says, “As a service, our aims were clear; to implement a mobile, clinically reliable, robust wound measuring system that would enable us to accurately track wound healing rates and decrease the risk of wound chronicity.”

Using Silhouette at the Patient’s Bedside
Following on from a successful trial of ARANZ Medical’s Silhouette 3D data and imaging system in their community clinics, the CHS looked to expand their community nurses’ capabilities by enabling them to care for patients in their own homes. After researching their options, the CCDHB purchased 44 of ARANZ Medical’s SilhouetteLite+ solution. The new SilhouetteLite+ solution includes a sensor that attaches to iPads and iPhones and an application that enables images and data from wound assessments to be easily recorded at a patient’s bedside.

SilhouetteLite+ enables the community based wound nurses to standardize their methods of measuring and recording clinical data at their patients’ homes. SilhouetteLite+ also eliminates the need for the nurses to spend additional time manually completing paperwork. Ms Scott said, “By introducing regular photographs and consistent wound measurements with Silhouette, we were able to keep the focus on the patient and how well their wound was healing. The Silhouette data also provides a written record of the patterns of treatment, and clearly demonstrates the standards of care that our patients have received.”

Better Healing Rates and Patient Engagement
International studies show that regular and consistent measurements of wound size at initial assessment, 4 weeks and 6 weeks, and then as per nurses clinical judgement can improve patient outcomes. Ms Scott says, “Silhouette gives us the ability to undertake regular, accurate, evidence-based assessments and to regularly assess wound healing progress even for patients who can’t leave their homes. So, if the wound healing is not optimal, we can act quickly to re-evaluate the treatment strategy for that particular wound.”

The nurses report that their patients are much more engaged with their healing now that they can see their wound photos and healing rates in Silhouette. Ms Scott says, “Silhouette really helps the patient’s buy into their own care now, whereas in the past we have struggled to get patients to stick to their care plans.” The Silhouette solution also enables a PDF report to be created documenting a patient’s healing progress that can then be shared with specialists.

Improving Overall Capability
Using Silhouette has reduced the amount of time that the nurses need to spend on completing documentation as well as improving the quality of data that they are collecting. As with any new way of working, implementing SilhouetteLite+ into the workflow of 60 district nurses was challenging, but the system has proved its worth and the nurses wouldn’t want to be without it. Ms Scott says, “We found that there is a tipping point where a nurse goes from unfamiliarity to being wedded to the system because of the productivity improvement, the motivational effect on patients, the ease of use, and the improvement in information management.”

The CHS team continue to partner with CCDHB and ARANZ Medical to improve their methodologies and make changes to their assessment flow as they trial and improve their systems.