

# Addressing Hard to Heal Wounds Using a Virtual Inter-Professional Wound Care Team

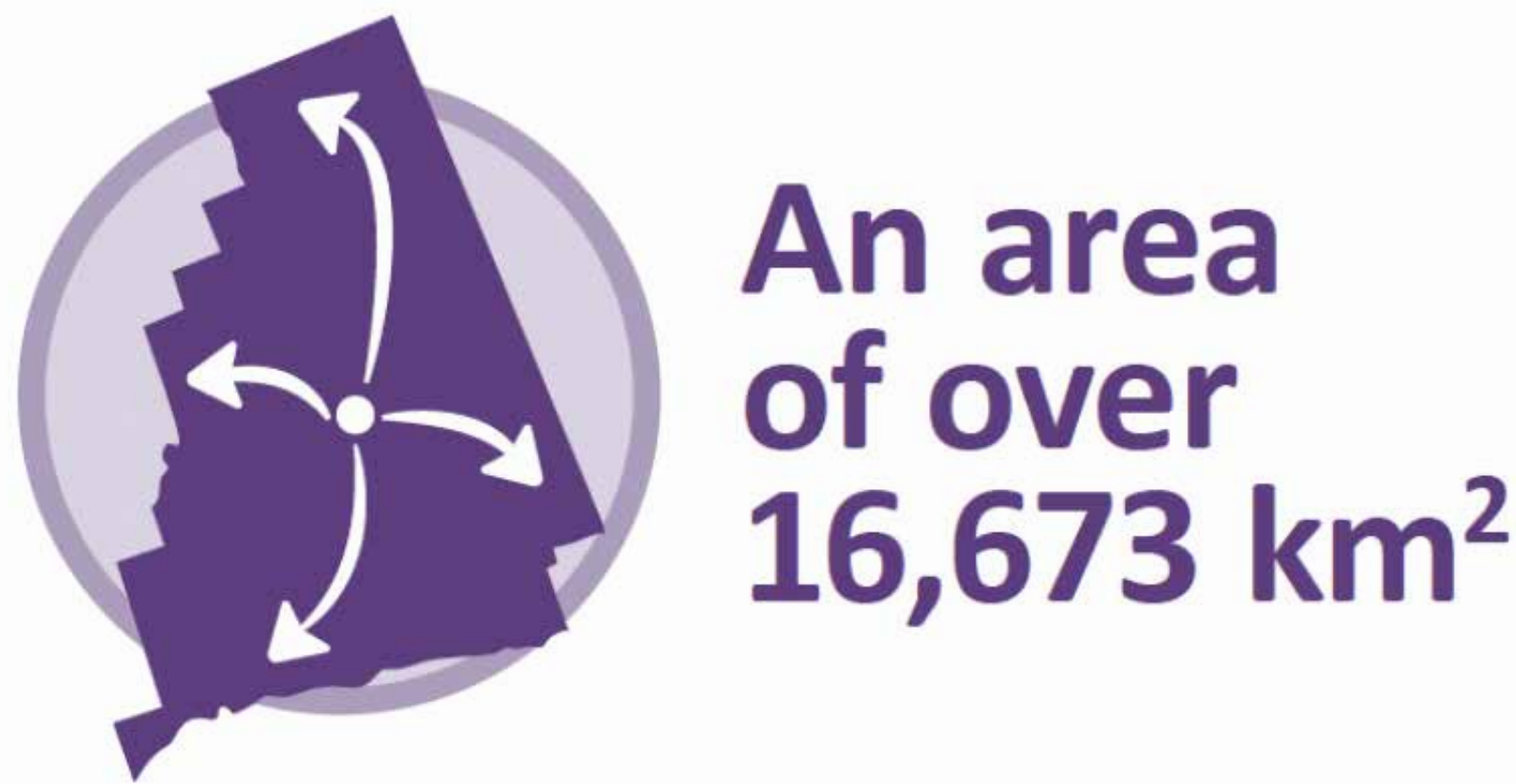
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HOME AND COMMUNITY CARE  
SUPPORT SERVICES  
Central East

## Introduction

Chronic wounds are a prevalent condition that significantly diminish patients' quality of life[1]. A novel wound care program that incorporated a Wound Care Inter-Professional Team (Wound Care IPT) and an Artificial Intelligence (AI)-powered wound management solution was implemented to improve chronic wound care within Home and Community Care Support Services Central East in Ontario, who care for over 15,000 wound patients annually. In this presentation, we will highlight the digital tools used to empower the Wound Care IPT that enabled positive clinical and financial outcomes for the healthcare system.



The Wound Care IPT is comprised of a dedicated team of wound care experts from Central East Ontario including hospital physicians, nurse practitioners, wound resource care coordinators, community nurse wound champions from over 10 contracted nursing service providers, home-less shelters and primary care paramedics – all connected to each other and their patients through a digital wound care solution. Referral criteria included non-healing chronic/complex wounds impacting quality of life with high nursing utilization.

## Methodology

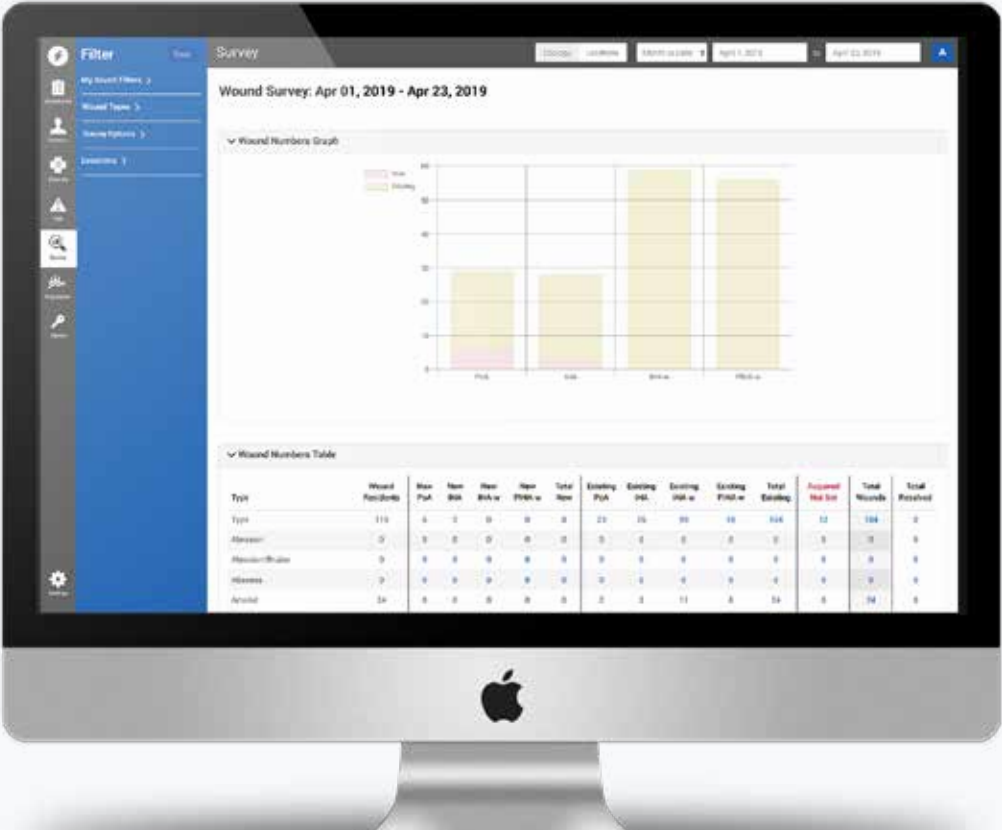
A quality improvement methodology approach was used which included regular project management meetings and patient and clinician satisfaction surveys. Monthly Wound Care IPT meetings were held to support the implementation and roll-out of new technology features. The Wound Care IPT utilizes Swift Medical's Skin & Wound App to conduct virtual wound consultations. High quality, scientifically calibrated wound images, paired with standardized assessments enables virtual wound collaboration and consultation among members of the Wound Care IPT through the model of care protocol.

## Enabling Technology



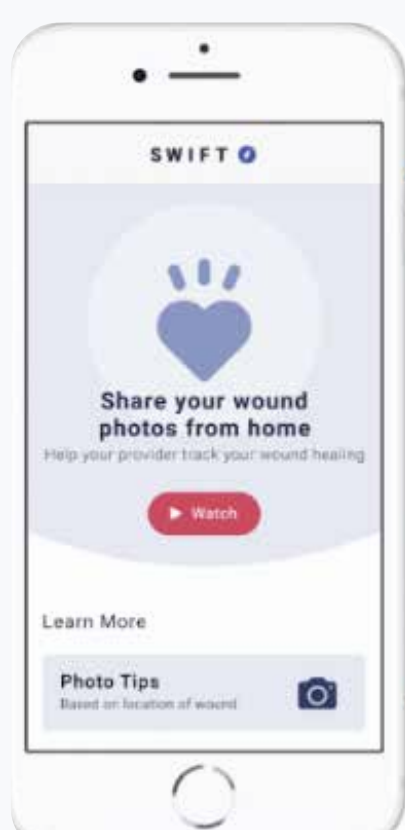
### Clinician App

Scientifically calibrated images. AI enabled wound measurement to help standardize data collection.



### Web Dashboard

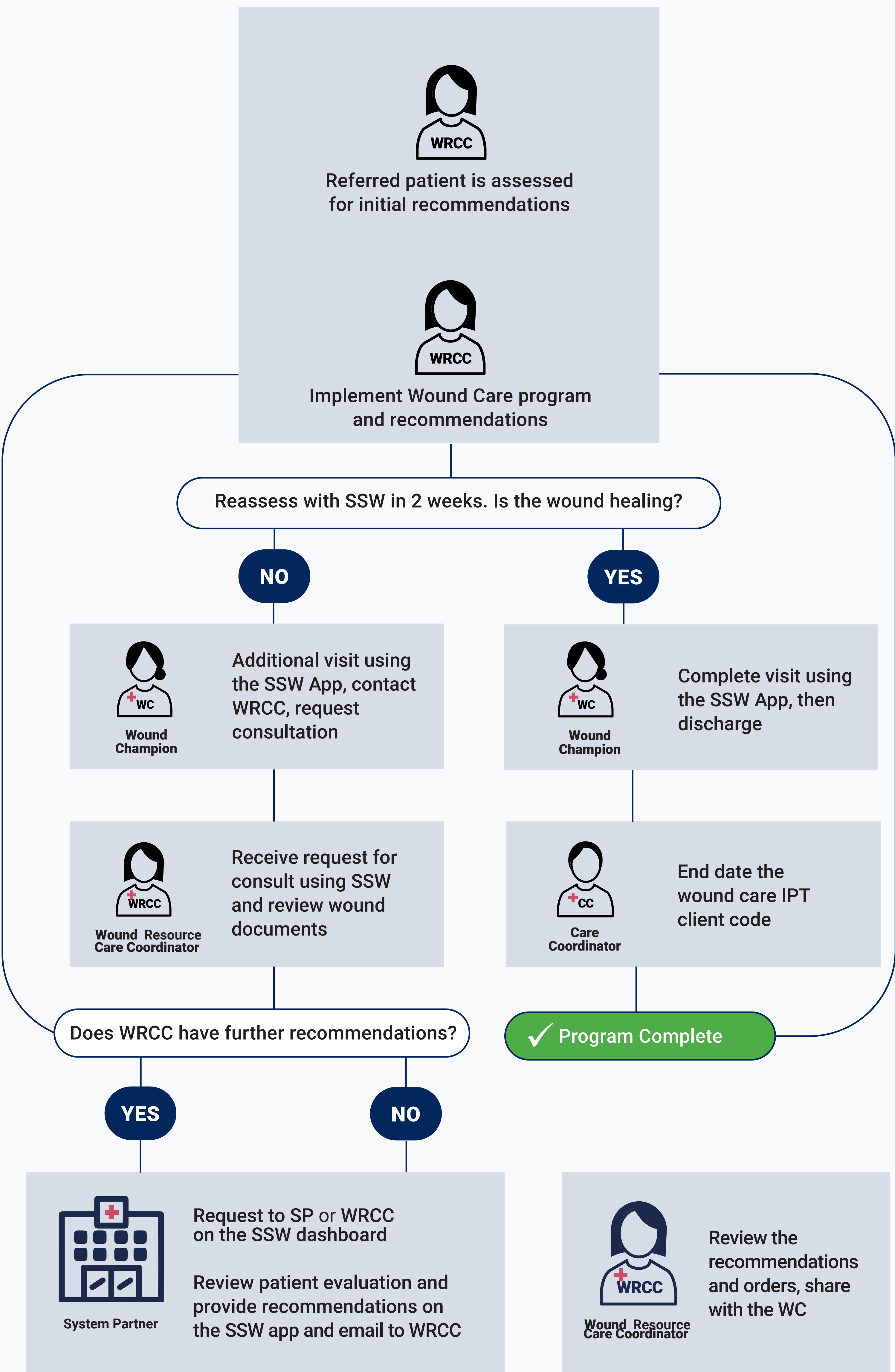
Enables program oversight and consultation from remote healthcare providers.



### Patient App

Empower patients to securely share images that AI can automatically measure.

## Model of Care Wound Care IPT Protocol



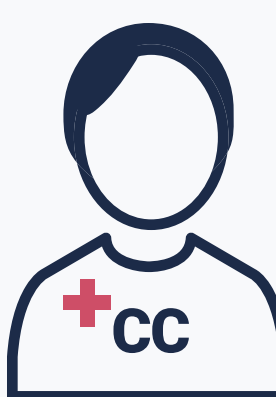
## Legend & location information



Wound Champion



Service Provider Organization



Care Coordinator



Wound Resource Care Coordinator (WRCC)



System Partners (SP)



Swift Skin and Wound App (SSW)

## Referral Criteria

One or more of the following:

- Chronic/Complex wound(s), non-healing and impacting quality of life
- Daily or Q2day dressing changes required for > 2 weeks
- Wounds not healing > 10% per week for > 4 weeks
- Wounds with drainage, risk of infection, or increased pain

Referral could be initiated by Home and Community Care Support Services Central East, Service Provider Organization or System Partners.

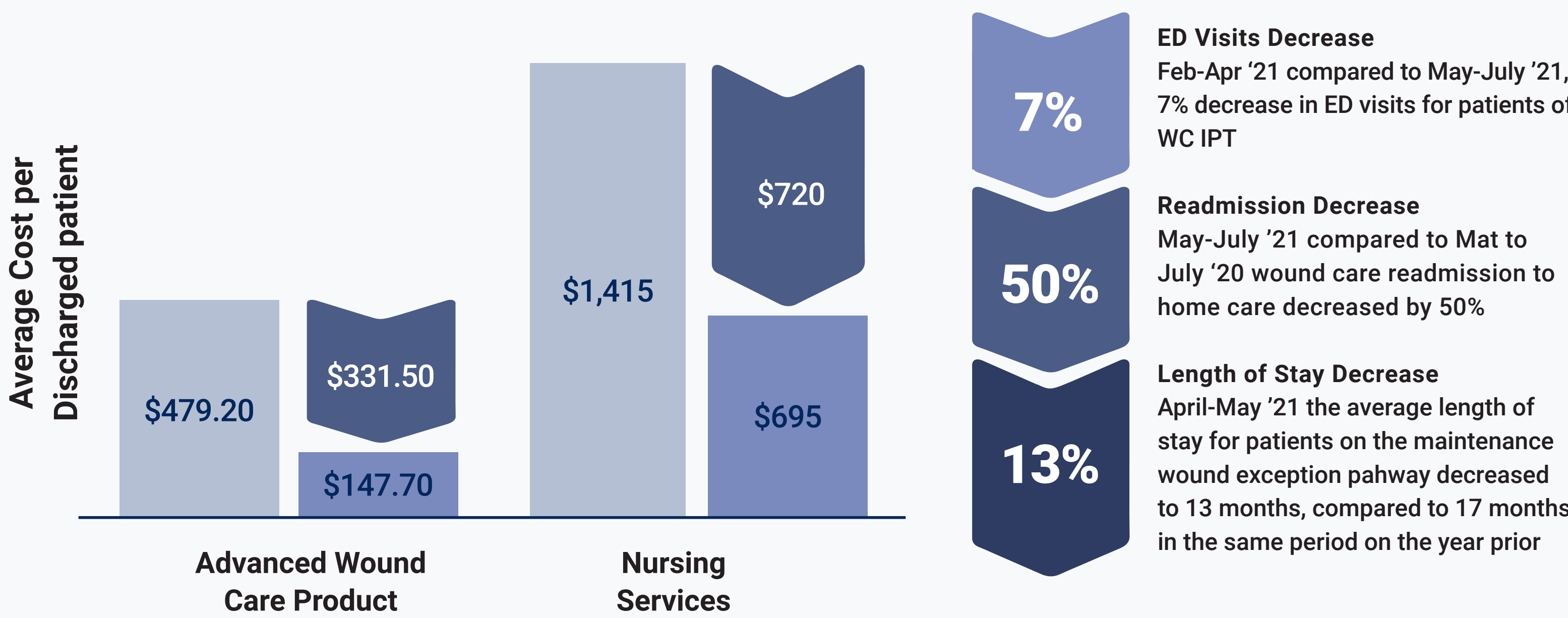
## Findings

The program has consulted on 428 patients, and assessed 617 unique wounds. There have been 1,838 wound evaluations through the program by Wound Champions. Wound Resource Care Coordinators have provided 333 wound consultations. An additional 19 wounds were further escalated to the System Partners for consultation.

Twenty clinicians responded to the survey, and all (100%) were satisfied with the technology and agreed it captures accurate wound information, making it easier to track wound changes and progress. 94% of users believed it facilitates effective collaboration between wound care teams, preferred it over manual methods. 83% thought the Swift App saved time measuring wounds, and 88% of users agreed it helped them monitor at-risk patients and make better management decisions[2].

Additionally, significant savings have been realized by the health system, including average billed nursing costs decreased by 49%, and average usage costs of advanced wound care products decreasing by 31%[3]. These savings have been achieved while maintaining high-quality care, such as a 7% reduction in ED visits, a 50% reduction in readmissions and a 25% reduction in time on service.

Fifteen patients responded to the survey. Most patients (92%) were satisfied with the quality of wound care and felt included in decisions. Most patients (89%) noted they can now understand their wounds better and track the healing process using the wound images. One patient noted, "It's like a miracle."



Patients' and clinicians' responses support the positive impact of the technology in facilitating patient-centred wound care and engagement in health care decisions. The positive experience with digital wound care is linked to easily tracking wounds and healing progress over time, supporting better clinical and financial outcomes.

## References

- <sup>1</sup> Las Heras, K., Igartua, M., Santos-Vizcaino, E., & Hernandez, R. M. (2020). Chronic wounds: Current status, available strategies and emerging therapeutic solutions. Journal of Controlled Release, 328, 532–550. <https://doi.org/10.1016/j.jconrel.2020.09.039>
- <sup>2</sup> Fraser, R. D. J., Parrott, W., Nurse, M., Spice, T., Scales, L. A., Mohammed, H. T., & Cassata, A. (2022). Supporting Patient-Centred Wound Care with a Digital Wound Evaluation Model: Exploration into Chronic Wounds and perception of use of technology in wound care. <https://doi.org/10.13140/RG.2.2.23946.54724>
- <sup>3</sup> Barker, M., Perron, M., Parrott, W., & Fraser, R. D. J. (2021). Inter-professional Virtual Wound Care Impact in an Integrated Health Care System during COVID-19. <https://doi.org/10.13140/RG.2.2.34715.18728>