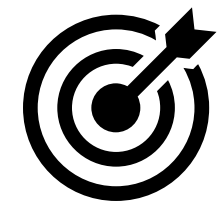


Improved Wound Healing Outcomes Following Implementation of a Standardized 0.057% Optimized Sodium Hypochlorite (NaOCl) Cleansing, Gel and Debridement Protocol

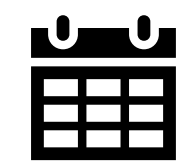
Tina Zettel, RN | Clinic Coordinator, Mercy Health Springfield & Urbana Wound Care Centers

PURPOSE

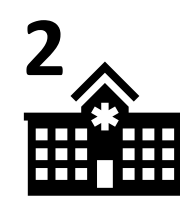


Evaluate whether a standardized wound care protocol using a 0.057% optimized sodium hypochlorite broad-spectrum antimicrobial wound cleanser and gel was associated with improved healing outcomes compared with six peer Mercy Health wound centers.

METHODS



Two-year retrospective quality improvement review (2024–2025). Approximately 8,500–9,000 total patients.



Springfield & Urbana used the **standardized protocol with 0.057% optimized NaOCl cleanser and gel** with ~ 3,600 – 4,200 patients.



Six comparison wound centers used the standardized protocol with **comparative wound cleanser and gel** including normal saline, surfactants and hypochlorous acid-based products with ~ 4,300 – 4,800 patients.



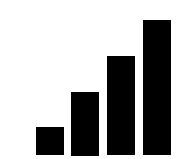
Wounds were present > 90 days with multiple etiologies.

Wound types included:



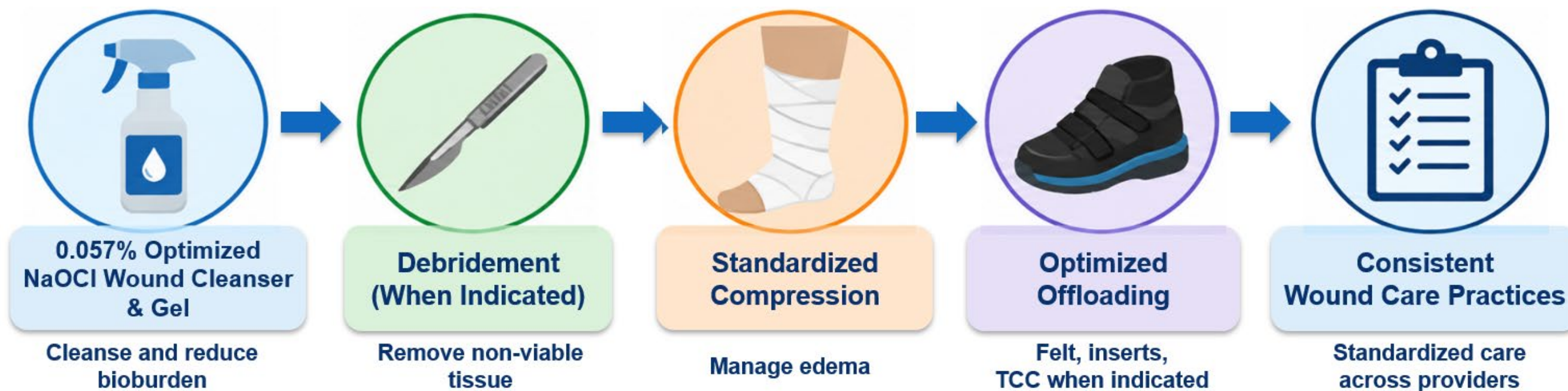
- Diabetic Foot Ulcers
- Venous Leg Ulcers
- Traumatic Wounds
- Pressure Injuries
- Neuropathic Wounds

Outcomes Compared:

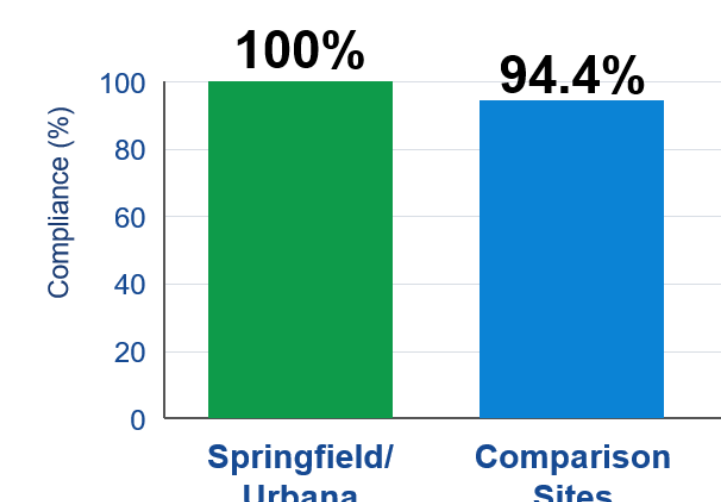


- Average days to heal wounds >90 days
- Offloading compliance
- Compression compliance

OUR STANDARDIZED WOUND CARE PROTOCOL

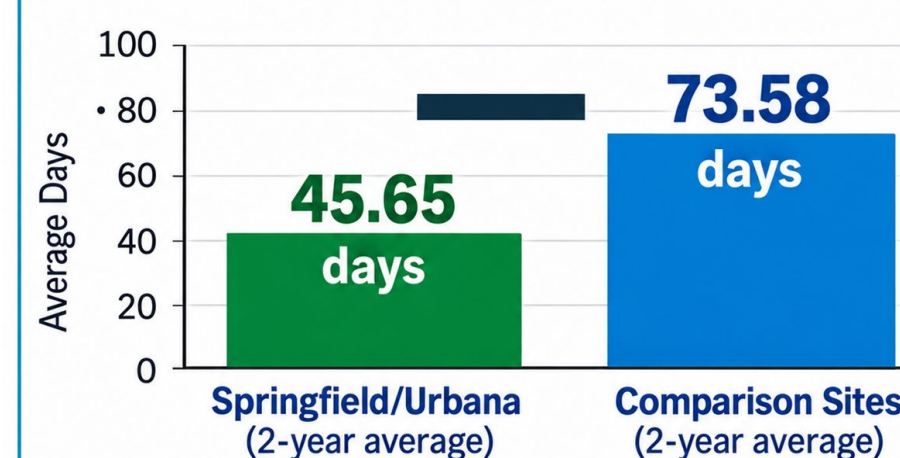


OFFLOADING COMPLIANCE



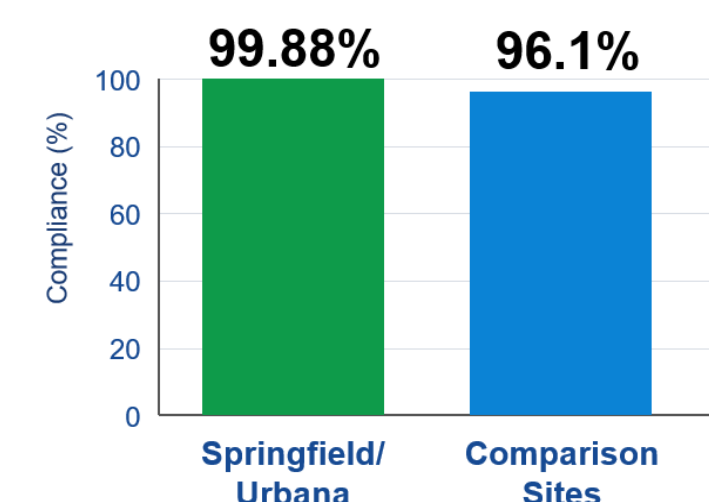
Both groups achieved >90% offloading compliance

AVERAGE DAYS TO HEAL (>90 DAY WOUNDS)



27.93 FEWER DAYS TO CLOSURE
38% FASTER HEALING

COMPRESSION COMPLIANCE



Both groups achieved >90% compression compliance

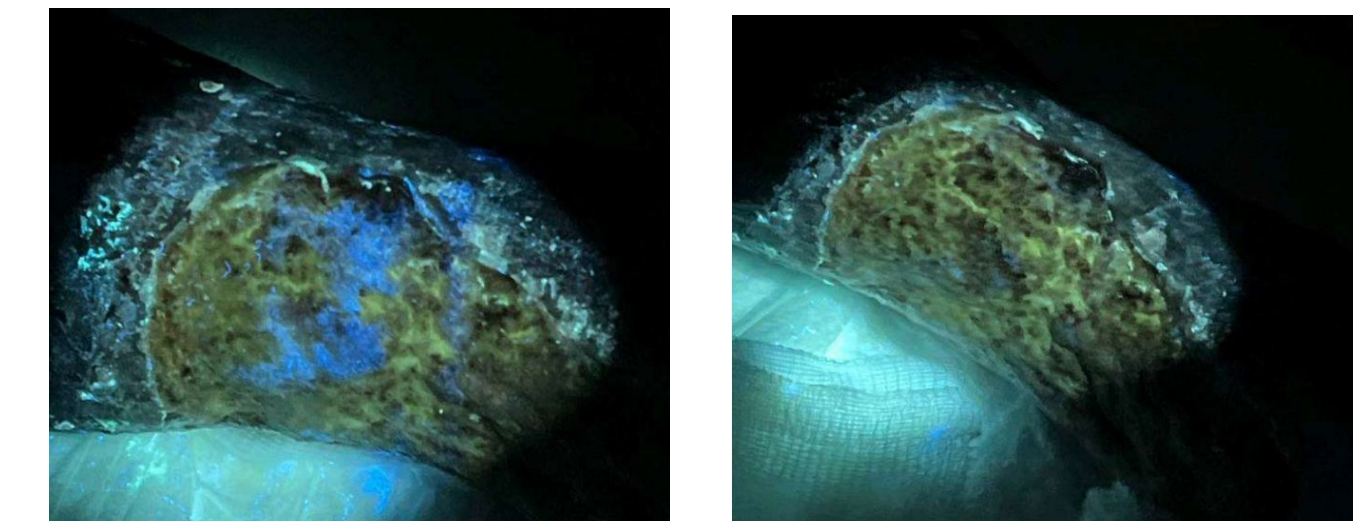
HEALING TIME BY YEAR



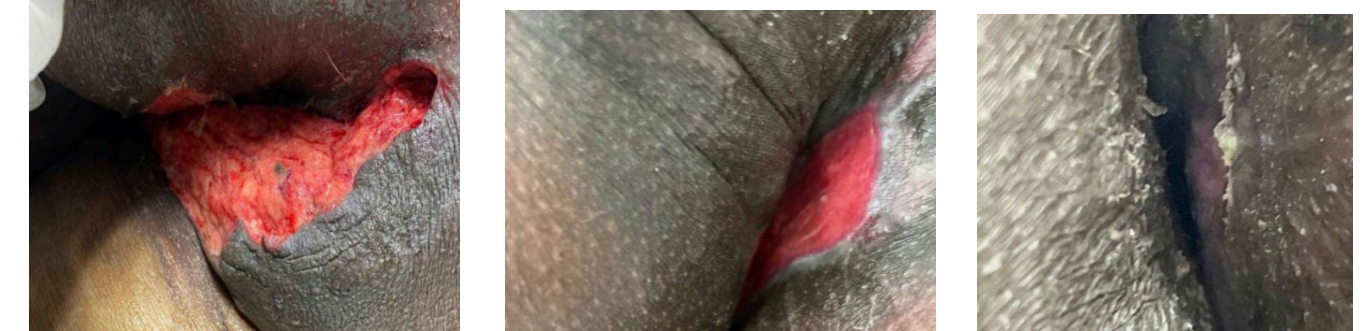
DISCUSSION & CONCLUSION

- A standardized **0.057% optimized sodium hypochlorite cleanser, gel and debridement protocol** was associated with **substantially faster healing** versus peer facilities.
- Consistent **wound bed preparation and management of bioburden and biofilm**, alongside evidence-based care practices, may have supported improved outcomes.
- Findings support the **value of standardized wound care protocols and the use of 0.057% optimized sodium hypochlorite solution and gel** and warrant further prospective evaluation.

WOUND HEALING EXAMPLES



Before and after single cleanser comparison with REVEAL FC fluorescence



Before and after comparison showing progression over 238 days



Before and after comparison showing progression over 207 days

REFERENCES

1. International Wound Infection Institute (IWII). *Therapeutic wound and skin cleansing: Clinical evidence and recommendations*. Wounds International. 2025.
2. Kramer A, Dissemmond J, Kim S, et al. Consensus on Wound Antisepsis: Update 2018. *Skin Pharmacol Physiol*. 2018;31(1):28-58. doi:10.1159/000481545.
3. Schultz G, Bjarnsholt T, James GA, et al. Consensus guidelines for the identification and treatment of biofilms in chronic nonhealing wounds. *Wound Repair Regen*. 2017;25(5):744-757. doi:10.1111/wrr.12590.
4. Bus SA, Armstrong DG, Crews RT, et al. Guidelines on offloading foot ulcers in persons with diabetes (IWGDF 2023 update). *Diabetes Metab Res Rev*. 2024;40(3):e3647. doi:10.1002/dmrr.3647.
5. O'Meara S, Cullum N, Nelson EA, Dumville JC. Compression for venous leg ulcers. *Cochrane Database Syst Rev*. 2012;11:CD000265.

CONTACT:

Tina Zettel, RN,
Clinic Coordinator

