

ISQUA2023-ABS-2299

Reduce Readmission Rate of Patients with Cellulitis by Using Online Health Care System Built via All-pervading Communication APP

Tsai-Cheng Wu*, Shu-Ying Liao, Jhu-Han You, Yi-Ching Chen, Yen-Chun Chen, Hui-Chuan Cheng

Department of Nursing, Taipei Veteran General Hospital, Taipei, Taiwan

This project aims to improve the care and patients’ understanding to cellulitis risk factors, thus enable patients to accurately perform selfcare and risk factors control, leading to nursing quality improvement and re-admission rate reduction via continuous follow-up through remote medical technology.

Introduction

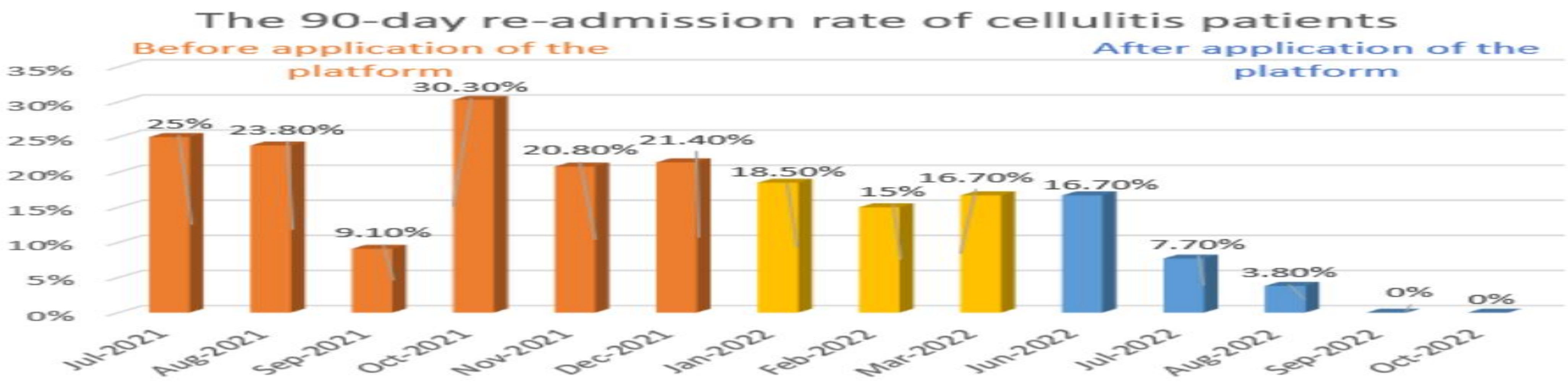
Using a cellulitis care platform of created official account in Line®, which includes 3 categories:

- 1.**Provide health education on risk factors:** Base on empirical literatures (cellulitis, obesity, limb edema, poor blood sugar control, skin defect) via computer animation, and provide calculator to calculate patients’ ideal body weight, BMI, daily calory need and energy consumption during exercise.
- 2.**Education via mobile game:** Using whack-a-mole, maze and basketball toss to improve patients’ understanding on disease risk factors and care, and importance of antibiotic application compliance; education by game playing makes them more interesting and easy to understand, thus improve compliance to health interventions.
- 3.**Follow up after discharge:** After discharge, the AI will automatically send message every week to remind the patients’ to send back photos of lesion for follow up, so that post treatment survey can be achieved via remote technology in addition to treatment and care. When patients bring up questions, the AI will detect key words and respond automatically.

Methods

- 1.**Nursing education completion rate:** Before application of the platform, the completion rate is only 40.09%,which later was elevated to 100% after applying it, along with 98% of the game’s use rate.
- 2.**Reduce re-admission rate:** The 90-day re-admission rate of cellulitis patients before application (From July 2021 to December 2021) of the platform is 22.3%, which later (From July 2022 to October 2022) was reduced to 2.88% after applying it.

Result



Conclusion

Application of cellulitis care platform can elevate nursing quality, increase understanding and reduce readmission rate among cellulitis patients.

