Introduction: Treatment of burn patients in the emergency department (ED) is challenging and often complicated by excruciating pain sparked by the burn injury. Unmanaged burn pain causes undue stress to the patient, both mentally and physically, and may result in physiologic manifestations. The physiologic impact of extreme burn pain may convolute a provider’s assessment and priorities of care. To facilitate appropriate treatment, RNs in the ED must perform timely pain reassessments. Our institutional benchmark for pain reassessment following medication administration is 90%. In 2021, we observed a drop in compliance in the ED to 73% and instituted a multidisciplinary, quality improvement (QI) approach to improve pain reassessment. The purposes of this project were to pinpoint education needs of nursing staff, improve compliance of pain reassessment, and to evaluate the efficacy of our interventions.

Methods: A survey was disseminated to Burn ED nursing staff to identify barriers to pain reassessment. QI interventions included a collaboration between Nursing, Informatics, and Quality Assurance to overcome barriers related to education, optimization of documentation in the electronic health record (EHR), and timely performance feedback. Education was disseminated via pre-shift nursing huddle, weekly newsletters, and educational posters. Modifications were made to the EHR software to alert nurses to reassessment needs and accounted for medication ‘indication.’ Quality Assurance increased report frequency to furnish reports weekly instead of monthly, enabling nursing leadership to expedite individualized feedback and education. Feedback was well-received by staff. Reassessment metrics were added to the quality board and posted in staff lounges. Top performers were acknowledged monthly in the department newsletter’s ‘Benchmark Brief.’ Performance was analyzed from April 2021 through June 2023, and was grouped quarterly.

Results: Following initiation of the QI project, pain reassessment increased by 18.8% to a 93.6% rate of timely reassessment.

Conclusions: Our multidisciplinary quality improvement project was successful, increasing complete and timely pain reassessment in the ED by 18.8%. Further, we discovered the need to reinforce education related to medication administration route, as PO medications had a higher incidence of pain reassessment non-compliance. To reduce the limitations of staff education, we continue to work with Informatics and the EHR vendor to refine the use of technology and better facilitate reassessment.

Applicability of Research to Practice: Further research is needed to evaluate efficacy of education related to pain reassessment following PO medication administration.
Nursing-Led Education and Interventions to Reduce Fungal Infections on a Burn Unit

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Introduction:
Fungal infections cause major complications in patients with significant burns who are also hospitalized for more than seven days. In this project, significant burns are defined as meeting this burn unit's Total Body Surface Area (TBSA) isolation precaution requirements: adult patients with TBSA greater than 20 percent and pediatric patients with TBSA greater than 15 percent. Complications of fungal infections include increased length of stay (LOS) and increased risk of mortality, sepsis, and graft loss (Herndon, 2018). Implementing effective strategies to reduce fungal infections is crucial to improving patient outcomes. At this time, there is limited research regarding how bedside nursing-led initiatives can decrease fungal infections in burn units. The purpose of this project is to determine if bedside nursing-led policy revision followed by nursing-generated education and implementation decreases the rate of fungal infections in burn patients that meet the TBSA isolation precaution requirements compared to infection rates prior to this initiative.

Methods:
In this quality improvement project, a group of bedside nurses revised an infection prevention protocol and delivered education to all burn nursing staff regarding the new and improved policies, including Burn TBSA Contact Precautions, Standard Burn Precautions, and Advanced Burn Precautions. Nursing staff were empowered to enforce these new precautions with all other hospital staff and visitors on the Burn Unit. Fungal infection rates were analyzed before and after the policy implementation, educational interventions, and staff empowerment.

Results:
Our final analysis will compare data from June 12, 2022 through Dec 12, 2022 to data from June 12, 2023 through December 12, 2023. Our preliminary findings demonstrate 2 out of 11 burn patients (eighteen percent) meeting project criteria developed a fungal infection in 2023 compared to 6 out of 18 eligible patients (thirty-three percent) in the 2022 timeframe. This demonstrates a fifteen percent decrease in the rate of infection of eligible burn patients. Confounding variables during the intervention period include a variety of environmental and supply chain adjustments that were also aimed at decreasing infection risk. These changes occurred in tandem with nursing-led initiatives.