Implementing an Adult Brief-Free Protocol to Decrease Incontinence-Associated Dermatitis

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Background

Evidence suggests that unnecessary adult brief use is associated with adverse outcomes such as increased risk for incontinence-associated dermatitis (IAD), urinary tract infections, decreased mobility, loss of dignity, and development of urinary incontinence (Guerrero & Ariza, 2023). IAD describes the skin damage associated with prolonged exposure to urine or stool (Mugita et al., 2021). There are many contributing factors to the development of IAD, including length of time exposed to incontinence moisture, breathability of incontinence products utilized, friction, immobility, age, and nutrition status. The use of adult briefs creates an occlusive environment that increases skin temperature and humidity, which contribute to IAD development (Earlam & Woods, 2022). Their use on patients with indwelling urinary catheters may result in directing stool toward the catheter (Little, 2024), thus increasing the risk of catheter-associated urinary tract infection. Additionally, it may be more difficult to accurately assess incontinence in patients wearing incontinence products, potentially delaying recognition and increasing the duration of skin exposure to moisture. Literature supports an association between IAD and the development of pressure injuries (Chen et al., 2024), therefore, supporting the importance of IAD prevention through appropriate continence management.
In May 2025, a referral was placed to the Practice Council by a Wound Care registered nurse, requesting an evaluation of adult brief usage after identifying increased use on patients at Salinas Valley Health Medical Center. Discussion and a literature review identified that brief usage is a contributing factor to the development of hospital-acquired IAD.

Purpose Statement

The purpose of this quality improvement initiative is to reduce the number of cases of IAD among the adult inpatient population at the medical center through implementation of an adult brief-free protocol.

Methods

The PDSA (Plan-Do-Study-Act) cycle is being utilized to implement the adult brief-free protocol as it provides structure to support continuous improvement and evaluation (Institute for Healthcare Improvement, n.d.).

To explore the problem of excessive adult brief usage, we conducted a comprehensive assessment to understand current practices, contributing factors, and the potential impact on patient outcomes. An initial inquiry was posted to the Magnet Learning Community® forum and project leads had discussions at the Academy of Medical Surgical Nurses conference. Both inquiries found that other hospitals have successfully implemented an adult brief-free organization. A consultation with the Mayo Clinic provided insight on how much is spent on incontinence products. Utilizing a percentage of spend (the amount spent in a particular category versus dollar amounts) allowed comparison across organizations of various sizes. The Mayo Clinic indicated that adult briefs account for 16% of their total incontinence spend, compared to our spend of 22.4%. This comparison may identify potential differences in utilization patterns of adult briefs. Multiple data collection methods were used, starting with an electronic survey in June 2025. This survey was sent to nurses and nurse aides to gather input regarding the use of adult briefs in conjunction with external urinary devices. We received 54 responses, with results demonstrating that 90% of the respondents were aware that the external catheter device is not intended to be used with a brief, however, 67% reported using them simultaneously. Participants' rationales for using them concurrently included stabilization of the external catheter and being concerned about leakage. These data highlight the educational opportunities surrounding external catheter usage and misuse of adult briefs.

To evaluate overall brief usage and estimate its association with IAD, we evaluated the quantity of adult brief usage and the number of patients with IAD during June to August 2025. Figure 1 demonstrates the total number of briefs that were used monthly, which will provide a baseline for comparison after the implementation of the brief-free protocol. A retrospective chart review was completed to identify patients with IAD and to document cases with and without brief use (see Figure 2). Almost 80% of all of patients who came in with IAD or developed it during their hospitalization were placed in a brief. These data were further evaluated, demonstrating that 75% of the patients that acquired IAD during their stay were placed in a brief (see Figure 3).

Figure 1

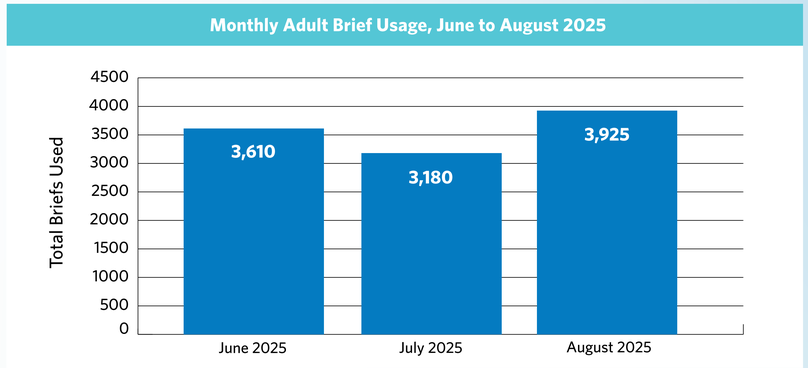
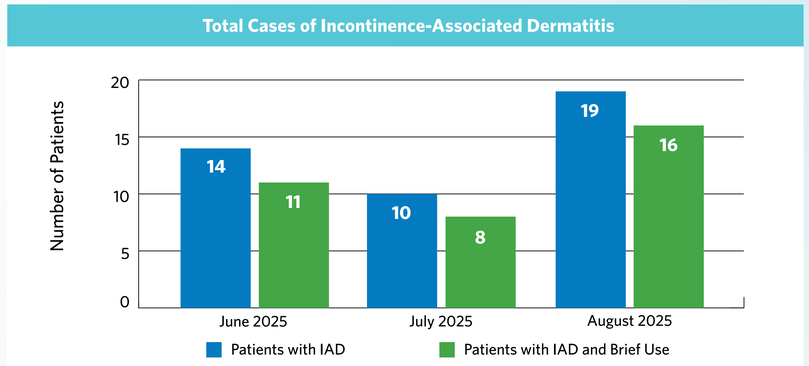
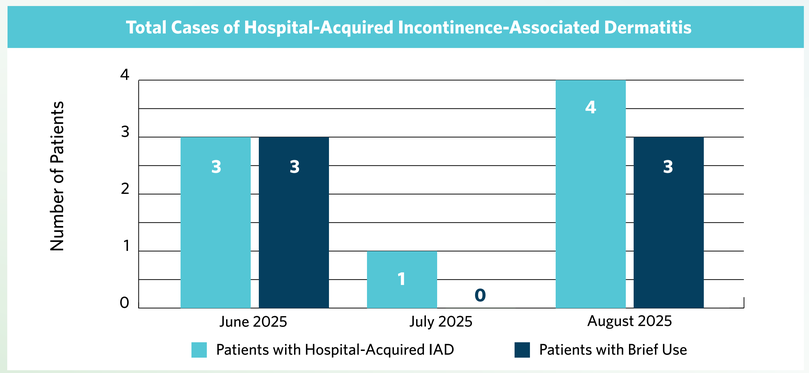


Figure 2



Note. Patients with IAD, with and without brief use. IAD = incontinence-associated dermatitis.

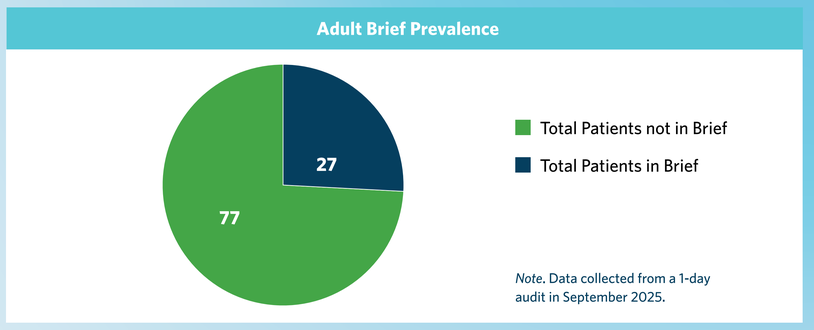
Figure 3



Note. Patients with hospital-acquired IAD, with and without brief use. IAD = incontinence-associated dermatitis.

A 1-day adult brief prevalence study was completed in September 2025 that included an assessment of all patients present on adult inpatient units, excluding perinatal units, and chart reviews. Information was gathered about the number of patients in briefs, why they were placed on the patient, as well as other mobility and skin risk factors. The goal was to understand the rationale for brief placement and prevalence of brief use. This audit included 104 patients, with 27 patients found to be wearing briefs (see Figure 4). Of those, four were patients that had requested them. Reasons for brief use were to hold the external catheter in place, stool incontinence, and in some continent patients, as a "precaution for leaks." One patient voiced they would prefer not to wear the brief.

Figure 4



A task force was developed that included nurses, nurse aides, the Wound Care Committee, and Practice Council members. The first meeting was held in September 2025, during which the group reviewed the data collected and developed a draft protocol. The protocol components were developed from a review of available evidence highlighting the importance of limiting brief use. Decreasing the number of layers under a patient can help reduce the temperature and humidity of the skin. Guidance from clinical product use standards, identifying that external catheters should not be used in conjunction with a brief as airflow is restricted, was incorporated. The proposed brief-free protocol was then posted for a 14-day open comment period, a process implemented as part of the professional governance structure to ensure that stakeholders affected by practice changes have a chance to provide feedback prior to implementation. In November 2025, task force members discussed feedback obtained from the open comment period. Overall, many of the comment period responses were positive with two staff members inquiring about possible exceptions to the protocol. Updates to the protocol from task force recommendations included consulting the charge nurse for protocol exceptions, the importance of skin care after each incontinence episode, and alternate products available for patient comfort.

Results

To ensure sustainability of and compliance with the new Brief-Free Protocol, we will use a structured and ongoing audit plan. The audit process will include a daily audit for the first week, then weekly for 4 weeks. Audits will involve direct observations of patients to determine the number of patients in briefs and the justification for use. Data will be collected using a standardized audit tool that captures unit census, the number of patients in briefs, and reason for placement. Results will be summarized and shared with unit leaders and staff to promote accountability and transparency. Additional data will be collected monthly on adult brief usage and incidence of IAD.

Conclusions

This quality improvement initiative emphasizes the importance of evidence-based practices to prevent IAD. Through staff education, increased awareness, and the implementation of a Brief-Free Protocol, we aim to reduce unnecessary diaper use and promote mobility, continence, and skin integrity. Evaluation of outcomes will allow the opportunity to strengthen the protocol foundation and determine its ability to be replicated in other organizations seeking similar improvements.

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