Table 1. Characteristics and comorbidities of female catheterized patients admitted to a medical service before (PRE) and after (POST) PureWick implementation.

Characteristic	PRE (n=261)	POST (n=605)	p-value
Age, year, median (IQR)	70 (53, 81)	72.0 (59, 82)	0.294
BMI, median (IQR)	24.8 (21.4, 29.1)	24.9 (21.3, 30.5)	0.831
Hospital LOS, days, median (IQR)	5 (3, 8.5)	7 (4, 12)	0.001
Indwelling catheter days, median (IQR)	2 (1, 5)	3 (1, 7)	<0.001
PureWick catheter days, median (IQR)	N/A	2 (1, 5)	N/A
Indwelling urinary catheter, n (%)	261 (100%)	412 (68.1%)	<0.001
PureWick, n (%)	N/A	296 (48.9%)	N/A
Medical comorbidities, n (%)			
Diabetes	95 (36.4%)	205 (33.9%)	0.476
CHF	51 (19.5%)	131 (21.7%)	0.484
ESRD	19 (7.3%)	36 (6.0%)	0.462
Dementia	29 (11.1%)	65 (10.7%)	0.873
Current malignancy	60 (23.0%)	126 (20.8%)	0.477
HIV infection	1 (0.4%)	2 (0.3%)	0.904

BMI = body mass index, LOS = length of stay, IQR = interquartile range, CHF = congestive heart failure, ESRD = end stage renal disease, HIV = human immunodeficiency virus

Table 2. Urinary tract infection rates of female catheterized patients PRE and POST PureWick implementation.

Characteristic	PRE (n=261)	POST (n=605)	p-value
Urine culture, n (%)	114 (43.7%)	354 (58.5%)	<0.001
CAUTI, n (*)	4 (4.1)	38 (11.8)	0.003
PAUTI, n (*)	N/A	15 (11.3)	N/A
UTI, n (**)	36 (19.1)	97 (14.12)	0.410

CAUTI = catheter-associated urinary tract infection, PAUTI = PureWick-associated UTI, UTI = urinary tract infection
* CAUTI and PAUTI rate are presented as number of infections per 1,000 catheter days.
** UTI rate is presented as number of infections per 1,000 patient days.

Table 3. Characteristics of hospitalized female patients admitted to a medical service who received a PureWick catheter.

Characteristic	POST (n=296)
Age, year, median (IQR)	75.0 (63, 85)
BMI, median (IQR)	24.6 (21.5, 30.0)
Hospital LOS, days, median (IQR)	6 (3, 11)
Indwelling catheter days, median (IQR)	2 (1, 5)
PureWick catheter days, median (IQR)	2 (1, 5)
Indwelling urinary catheter, n (%)	107 (36.1%)
PureWick, n (%)	296 (100%)
Indication for catheterization, n (%)	
Urinary retention	41 (13.9%)
Strict ins/outs	168 (56.8%)
Incontinence	64 (21.6%)
Surgery	1 (0.3%)
Management of immobilized patient	12 (4.1%)
Comfort	10 (3.4%)
Provider service ordering catheter, n (%)	
Emergency medicine	2 (0.7%)
Family medicine	14 (4.7%)
Medicine	236 (79.7%)
Neurology	44 (14.9%)

IQR = interquartile range, BMI = body mass index, LOS = length of stay

Conclusion. While EUCDs might appear to be a promising alternative to IUCs for female patients, this single center pre/post analysis found that both the median number of IUC days and the CAUTI rate increased after introduction of a single EUCD. This may be related to selection bias, with EUCDs being ordered for patients who would not have otherwise received an IUC. Further research is needed to clarify if female EUCDs can be effective in decreasing IUC days and/or CAUTI rates prior to any widespread adoption.

Disclosures. **All Authors**: No reported disclosures

806. Decreasing Central Line-associated Bloodstream Infections Through Quality Improvement Initiative on a High Acuity Transplant Unit

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Session: P-33. HAI: Device-Associated (CLABSI, CAUTI, VAP)

Background. Central line-associated blood stream infections (CLABSI) have a significant impact on mortality, morbidity and length of stay. Data collected by the Infection Prevention Department revealed progressive increases in the rate of CLABSI on an Abdominal Transplant Unit. Recognizing a drift from best practice, front line staff, the IP team and vascular access specialists, collaborated to identify opportunities for improving care of patients with vascular access devices.

Methods. An increase in CLABSI rate was observed on the Abdominal Transplant Unit beginning in 2016. An initiative began in 2017 to evaluate whether CLABSI rate reduction was sustainable for at least 1 year and to identify key determinants of this sustainability. Interventions were aimed at infection prevention best practices, care standardization, and team-based monitoring. Interventions included (1) re-education on CLABSI reduction, (2) two RN dressing changes to validate practice during central line dressing change, (3) blood draws from central lines (during non-emergent situations) had to be approved by nurse manager, physician lead and transplant quality physician, (4) CLABSI prevention nurses were chosen as designated phlebotomists for patients with prior approval, (5) daily line review was performed to address line days, indication of line (remove latent lines) and plan of care (transition to permanent access) and this information was shared with the unit physician lead and transplant quality team. Assuring compliance with audits and timely feedback with clinician accountability were vital with compliance with best practices.

Results.

Year	Number of Infections	Infection Rate
2017 (Interventions started 4th quarter)	11	4.825
2018	9	3.294
2019	4	1.533
2020 (Quarter 1-2)	0	0

Conclusion: During the intervention, CLABSI infection rates dropped from 4.825 to 1.533 in 1,000 CVC days. The sustainability plan for this program is to continue line audits, assessing line necessity and review the effectiveness of the initiatives, review all new CLABSI data with staff and implement new changes as necessary. Joint, ongoing multidisciplinary collaboration is essential to reduce CLABSIs and optimize quality in a challenging, high-acuity patient population.

Disclosures. **All Authors**: No reported disclosures

807. Effect of Inter-Hospital Transfer on Nosocomial Infection Rates in Patients Receiving Extracorporeal Membrane Oxygenation

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Session: P-33. HAI: Device-Associated (CLABSI, CAUTI, VAP)

Background. Extracorporeal Oxygenation (ECMO) has been increasingly used as a life support modality for cardiac and pulmonary failure. Due to improved survival in patients treated in high volume ECMO centers, inter-hospital transport of these critically ill patients is on the rise. These patients may be transported via ambulance locally, or by aircraft over long distances. However, potential risks of nosocomial infectious complications associated with transfers has not been reported. We evaluated the impact of transfers on nosocomial infections for patients who received ECMO at Brooke Army Medical Center (BAMC).

Methods. All patients who received ECMO for ≥48 hours at BAMC between May 2012 and October 2019 were included. Chart review was performed to determine transport status, infectious complications while on ECMO, and antimicrobial susceptibility of isolated organisms. Statistical analyses were performed using Chi-squared, Fisher's exact, or Mann-Whitney U tests as appropriate. Factors associated with nosocomial infections were evaluated by multivariate logistic regression.

Results. Compared to patients who were cannulated locally (n=33), patients who underwent cannulation at referral facility and inter-hospital transfer (n=76) had no difference in infections per 1000 ECMO days (33.1 vs. 30.5, p=0.74) or in infections with multidrug resistant organisms (MDRO) (50% vs. 55%, p=1). Of transferred patients, those transferred by aircraft (n=11) had no difference in infection rate (22.4 vs. 31.8 per 1000 ECMO days, p= 0.39) or MDRO incidence (52% vs 75%, p=0.61) compared to those only transferred by ambulance (n=65). Multivariate analysis showed the greatest risk factor for nosocomial infection was time on ECMO (OR 12.2 for longest tertile time on ECMO vs. shortest tertile, p=0.0001); transport was not significantly associated with infection (OR 2.1, p=0.06).