Results. Of 1203 patients with a primary diagnosis of ABSSSI, only 219 (18%) were admitted, of whom only 11 (5%) were classified as potential candidates for dalbavancin. The most common reasons admitted patients were excluded as potential candidates were not meeting signs and symptoms criteria (n = 147), age <18 years (n = 13), being admitted to the hospital for >14 days (n = 11), periorbital or joint cellulitis (n = 9), deep seated infection (n = 5), required admission for another reason (n = 5), and diabetic foot ulcer (n = 4). Of the 11 potential candidates, one qualified for dalbavancin based on our criteria.

Conclusion. At our hospital only a minority of patients with a primary diagnosis of ABSSSI were admitted and one ultimately met our criteria for dalbavancin use. Adding dalbavancin to our formulary would not have resulted in fewer admissions for patients with ABSSSI.

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

1106. Is There a Significant Difference in Acute Kidney Injury Incidence Among Patients Treated with Vancomycin Combined with Cefepime or Meropenem?

W. Cliff Rutter, PharmD, MS1 and David S. Burgess, PharmD, FCCP[2]; [1]University of Kentucky HealthCare, Lexington, Kentucky, [2]University of Kentucky, College of Pharmacy, Lexington, Kentucky

Session: 141. Clinical Practice Issues
Friday, October 6, 2017: 12:30 PM

Background. Acute kidney injuries (AKIs) are common among patients receiving concomitant vancomycin (VAN) and piperacillin-tazobactam, especially compared with cefepime (FEP) with vancomycin. It is unknown if there is a significant difference between therapeutic alternatives to piperacillin-tazobactam. We hypothesized that AKI rates would be similar in patients treated with FEP+VAN and meropenem (MEM)+VAN.

Methods. Demographic and clinical data were abstracted from the University of Kentucky Center for Clinical and Translational Sciences Enterprise Data Trust from 2008 through 2015. Patients were included if they received VAN and FEP or MEM in combination for ≥48 hours. Patients with baseline CKD and creatinine clearance <30 mL/minute were excluded. AKI was defined as meeting any of the Risk, Injury, Failure, Loss, End-stage (RIFLE) criteria. Basic descriptive statistics were performed in addition to bivariable and multivariable logistic regression for AKI.

Results. In total, 3662 patients were included in this study with 3366 patients receiving FEP+VAN and 296 receiving MEM+VAN. Demographic characteristics were evenly distributed among both groups, with the exception of Charlson comorbidity index (MEM+VAN 4 [2–6] vs. 3 [1–6], P = 0.0002), and exposure to aminoglycosides (MEM+VAN 18.2% vs. 13.2%, P = 0.02) and calcineurin inhibitors (MEM+VAN 6.1% vs. 2.7%, P = 0.002). AKI incidence was similar between group (MEM+VAN 12.8% vs. FEP+VAN 10.8%, P = 0.33). After multivariable logistic regression, there was no significant increase in AKI odds with MEM+VAN compared with FEP+VAN (adjusted odds ratio = 1.02; 95% CI 0.67–1.50). Factors associated with increased AKI odds included: male gender, increased baseline comorbidity, age >80, increased duration of antimicrobial therapy, hypotension, increased baseline renal function, and exposure to aminoglycosides, amphotericin B, non-steroidal anti-inflammatory drugs, loop diuretics, or vasopressors.

Conclusion. No difference in AKI incidence was found between patients treated with MEM+VAN or FEP+VAN. Other clinical factors, aside from AKI potential, should be considered when choosing between alternatives to piperacillin-tazobactam combined with vancomycin.

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

1107. Pharmacist-Directed Use of Dalbavancin in Acute Bacterial Skin and Skin Structure Infections to Reduce Hospital Length of Stay

Bruce Jones, PharmD, BCPS[1]; Roby Hersey, PharmD[2]; Joseph Crosby, PhD, RPh[2] and Christopher Bland, PharmD, BCPS, FIDSA[3]; [1]Pharmacy, St. Joseph's/Candler Health System, Savannah, Georgia, [2]St. Joseph's/Candler Health System, Savannah, Georgia, [3]Clinical Associate Professor Clinical and Administrative Pharmacy, University of Georgia College of Pharmacy, Savannah, Georgia

Session: 141. Clinical Practice Issues
Friday, October 6, 2017: 12:30 PM

Background. Acute bacterial skin and skin structure infections (ABSSSI) are a rapidly increasing cause of hospitalization. Prolonged length of stay (LOS) increases the cost burden to health systems due to administration of parenteral antimicrobials. Dalbavancin is a lipoglycopeptide providing a full course of therapy with one dose and is indicated for the treatment of patients with ABSSSI and presents a unique opportunity for cost avoidance by decreasing inpatient LOS and shifting care to the outpatient setting. This study evaluated the practice of a pharmacist-directed model for discharging hospitalized patients with ABSSSI to receive intravenous dalbavancin at a hospital outpatient infusion center.

Methods. A quasi-experimental investigation of an ongoing, prospective process with open enrollment for patients discharged to receive single-dose dalbavancin therapy between March 2016 and March 2017. To be eligible, adult patients must have been admitted with an ABSSSI based upon inclusion and exclusion via International Classification of Diseases codes. Subjects were compared with a cohort of patients from March 2015 through March 2016 (comparator group) meeting the same criteria for inclusion and exclusion. The primary outcome is hospital LOS and secondary outcomes are cost-savings associated with a reduced LOS and hospital readmission within 30 days of discharge.

Results. Fifty-three patients were identified who received dalbavancin during the enrollment period, and 44 were included in the study. In the comparator group 1191 patients were identified of which 945 were included in the study. Hospital LOS (4.3 vs. 8.0, P < 0.001) and total direct cost per case ($7,863 vs. $2,989, P < 0.001) were statistically significantly decreased for the dalbavancin group compared with the comparator group. Readmission rates at 30 days were similar between the dalbavancin and comparator groups (11.4% vs. 8.6%, P = 0.34).

Conclusion. Patients discharged to an outpatient infusion center to receive dalbavancin had a decreased LOS and total direct cost per case in relation to the comparator group of standard of care. No statistically significant difference in readmission rates was observed. Early goal-directed discharge for the treatment of patients with ABSSSI is a safe and effective way to decrease LOS.

Disclosures. **B. Jones**, Allergan: Speaker's Bureau, Speaker honorarium

1108. Experience with High Dose Once-daily Vancomycin for Patients with Skin and Soft-tissue infections in an Ambulatory Setting

Maggie Wong, PharmD[1]; Michael G. Chapman, MD[1,2,3]; Sangita Malhotra, MD[1,2,4]; Yazdan Mirzanejad, MD[1,2,3] and Gregory D. Deans, MD, MHSc[1,2,3]; [1]Jim Pattison Outpatient Care and Surgery Centre, Surrey, BC, Canada, [2]University of British Columbia, Vancouver, BC, Canada, [3]Surrey Memorial Hospital, Surrey, BC, Canada, [4]Royal Columbian Hospital, New Westminster, BC, Canada

Session: 141. Clinical Practice Issues
Friday, October 6, 2017: 12:30 PM

Background. Intravenous (IV) vancomycin is commonly used to treat MRSA (methicillin-resistant *Staphylococcus aureus*) infections and is typically dosed at 15 mg/kg every 12 hours. Pharmacokinetic studies, animal models, and limited human study suggest that once-daily high dose (30 mg/kg) vancomycin is similar in efficacy for certain types of infection in the hospital setting, but there is little evidence for its use in outpatient antibiotic therapy (OPAT).

We have used a high dose vancomycin regimen for MRSA skin and soft-tissue infections (SSTI) since 2011. We describe our experience with this regimen in an ambulatory setting supervised by Infectious Diseases (ID) physicians and evaluate its efficacy and safety.

Methods. This retrospective observational study included patients treated with vancomycin for SSTI from Jan 1, 2014 to July 31, 2015. Exclusion criteria included noncompliance with treatment. Patients with initial renal impairment were also excluded as they would be given 15 mg/kg vancomycin daily. Patient demographics, response to vancomycin, duration of therapy, readmission to emergency department (ER), and side effects experienced by patients were collected. A successful outcome was defined as no further requirement for IV vancomycin on the last day of therapy with either oral step down therapy or no further antibiotic.

Results. 407 charts were reviewed and 208 patients qualified for inclusion. The mean age of included patients was 38 years. Of the 208 patients, 31% were people who inject drugs, 39% had preceding SSTI in the 12 months prior, and 48% had been on antibiotics in the previous 8 weeks. Incision and drainage was done in 50% of the patients. There were 135 positive wound cultures, of which 58% grew MRSA. The average duration of treatment was 4.7 days.

A successful outcome was achieved in 162 patients (79%). Side effects including red man syndrome and phlebitis were seen in 19 patients (9.3%). 42 patients (20.5%) were readmitted to ER within 30 days of initial referral, and 18 of those were related to the original infections.

Conclusion. High dose (30 mg/kg) once-daily vancomycin for SSTI was effective and safe when used for select patients under the supervision of ID physicians in an ambulatory setting.

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

1109. Using Group-Based Trajectory Temperature Modeling to Predict Postoperative Infections after Total Knee Arthroplasty

Jennifer Grant, MD[1]; Moira C. Mcnulty, MD[2]; Krista Kinnard, MS[3]; Daniel Nagin, PhD[4]; Ari Robicsek, MD[5]; Ravi Bashyal, MD[6]; Rema Padman, PhD[7] and Nirav Shah, MD, MPH[8]; [1]Infectious Diseases, NorthShore University Health Systems, Evanston, Illinois, [2]Section of Infectious Diseases and Global Health, University of Chicago Medicine, Chicago, Illinois, [3]Public Policy and Management, Carnegie Mellon University, Pittsburgh, PA, [4]Carnegie Mellon University, Pittsburgh, Pennsylvania, [5]Providence Health and Services, Seattle, Washington, [6]NorthShore University HealthSystem, Evanston, Illinois, [7]Healthcare Informatics, Carnegie Mellon University, Pittsburgh, Pennsylvania, [8]NorthShore University Health Systems, Evanston, Illinois

Session: 141. Clinical Practice Issues
Friday, October 6, 2017: 12:30 PM

Background. Fever is common in the postoperative setting and frequently physiologic. Despite this, roughly half of febrile patients undergo testing for infectious complications, of which only a few reveal infection. We analyzed whether temperature trajectories could help optimize postoperative (post-op) risk assessment in total knee arthroplasty (TKA) patients.

Methods. We included adult patients who underwent primary TKA between January 1, 2007–December 31, 2013 within NorthShore University HealthSystem. Patients were excluded if infection was suspected before/during surgery. Patient data were extracted from the Database Warehouse. A physician verified post-op complications by chart review. We performed group-based trajectory modeling

(GBTM) with covariates: age, BMI, gender, co-morbid conditions and procedure time (STATA). We compared complications per group by χ^2 test and evaluated associations with any post-op complication by multivariable (MV) logistic regression (SPSS).

Results. We identified 5495 independent patients, following three distinct temperature trajectories (**Figure 1**) – low (group 1), medium (group 2), high (group 3). Noninfectious complications were more likely than infectious complications, and complications were 5x more common in group 3 vs. group 1 (Table 1). In MV logistic regression, membership in group 3 was independently associated with developing a post-op complication, adjusting for age, presence of renal failure and presence of a cardiac arrhythmia (OR 4.4, 95% CI 3.2–6.0, $P < 0.01$).

Conclusion. GBTM may help identify TKA patients at increased risk of a post-op complication in real-time, thus helping clinicians avoid unnecessary testing and antibiotics in the post-op setting.

Figure 1. Results of GBTM showing mean maximum temperature, in 4-hour increments, in 3 trajectories. Shading indicates 95% confidence intervals

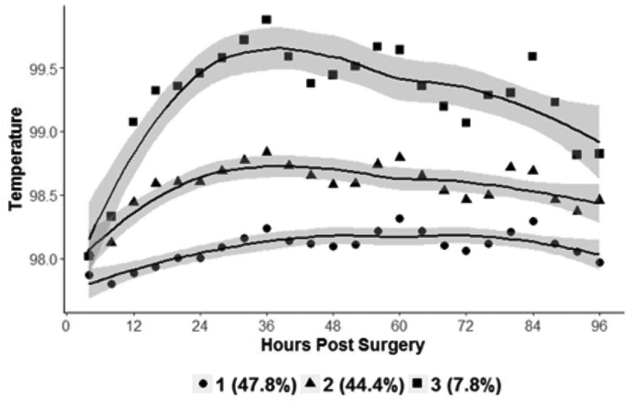

Table 1: Post-op Complications by Trajectory.

Complications N (%)	Group 1 *N* = 2610	Group 2 *N* = 2472	Group 3 *N* = 412
Overall	76 (2.9)	140 (5.7)	64 (15.5)
Venous Thromboembolism	35 (1.3)	78 (3.2)	36 (8.7)
Urinary Tract Infection	19 (0.7)	27 (1.1)	12 (2.9)
Pneumonia	13 (0.5)	17 (0.7)	13 (3.2)
Skin/Soft-tissue infection	1 (<0.01)	3 (0.1)	3 (0.7)

All p-values <0.01
*Includes surgical site infection

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

1110. Weighing in: Effect of BMI on Postoperative Fever and Complications in Patients Undergoing Three Distinct Surgeries

Eric Bhaimia, D.O.[1]; Moira C. McNulty, MD[2]; Frances Lahrman, D.O.[3]; Ronak Parikh, D.O.[1]; Huma Saeed, MD[4]; Ari Robicsek, MD[5]; Rema Padman, PhD[6]; Nirav Shah, MD, MPH[7] and Jennifer Grant, MD[8]; [1]NorthShore University HealthSystem, Evanston, Illinois, [2]Section of Infectious Diseases and Global Health, University of Chicago Medicine, Chicago, Illinois, [3]University of Chicago (NorthShore), Evanston, Illinois, [4]Internal Medicine, University of Chicago (NorthShore), Evanston, Illinois, [5]Providence Health and Services, Seattle, Washington, [6]Healthcare Informatics, Carnegie Mellon University, Pittsburgh, Pennsylvania, [7]NorthShore University Health Systems, Evanston, Illinois, [8]Infectious Diseases, NorthShore University Health Systems, Evanston, Illinois

Session: 141. Clinical Practice Issues
Friday, October 6, 2017: 12:30 PM

Background. Current trends estimate a 33% increase in obesity and 130% increase in severe obesity by the year 2030. It is unclear what the effect of obesity is on postoperative fevers, postoperative complications, and diagnostic workup rates.

Methods. We evaluated 5,330 patients undergoing knee arthroplasty, colectomy, or craniectomy from October 2009 to December 2014 at NorthShore University HealthSystem, in Illinois. Clinical data were extracted from the Enterprise Data Warehouse, including diagnostic testing and complications. Complications were also verified by physician chart review. X^2 and Mann–Whitney U tests were used to analyze categorical and continuous variables.

Results. Obesity (BMI ≥ 35) was present in 1081 (23.4%) of knee arthroplasty, 38 (16.9%) of colectomy and 55 (12.6%) of craniectomy patients. There was no increase in complications by BMI in each individual surgery except for increased 30-day readmissions in craniectomy patients with BMI ≥ 35 ($P = 0.032$). Collectively, there was no difference in the relationship between BMI and rate of post-op complications (Table 1). However, patients with BMI ≥ 35 experienced more fevers ($P = 0.002$), underwent additional workup (0.011), and had higher workup costs ($P < 0.001$).

Conclusion. Patients with BMI ≥ 35 had more fevers, more workups and higher cost, but not higher complication rates during the index hospitalization after surgery. Awareness of the predisposition towards post-op fever in obese patients in the absence of complication may prevent costly and unnecessary testing. More work is still needed to understand the effect of obesity on more distant complication rates.

Table 1: Post-Surgical Characteristics, Stratified by BMI.

	BMI < 35 kg/m^2, *N* = 4,156	BMI ≥ 35 kg/m^2, *N* = 1,174	*P*-value
Surgery			
Knee arthroplasty	3533 (85%)	1081 (92.1%)	<0.001
Colectomy	187 (4.5%)	38 (3.2%)	
Craniectomy	436 (10.5%)	55 (4.7%)	
Fever ≥100.4	696 (16.7%)	242 (20.6%)	0.002
Fever ≥ 101	329 (7.9%)	125 (10.6%)	0.003
Any Work-Up	2409 (58%)	729 (62.1%)	0.011
Any in-hospital complication	341 (8.2%)	86 (7.3%)	0.327
Median work-up costs, dollars (IQR)	51,038 (46656–57436)	52,697 (48644–58517)	<0.001
Median length of stay, days (IQR)	3.0 (2.0–3.0)	3 (2.0–3.0)	0.524
30 days Readmission	184 (4.4%)	53 (4.5%)	0.898
Death w/in 30 days	12 (0.3%)	3 (0.3%)	0.754

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

1111. Current Use of Intravenous (IV) Long Acting Antibiotic (LAA) Therapy in the Aetna Health Plan among Patients with Acute Bacterial Skin and Skin Structure Infection (ABSSSI)

Rajesh Mehta, RPh, MS[1]; Alison Edwards, MStat[1]; Katelyn R. Keyloun, PharmD, MS[2]; Nicole Bonine, PhD, MPH[2] and Iver Juster, MD[1]; [1]Aetna, Inc., New York, New York, [2]Allergan, plc, Irvine, California

Session: 141. Clinical Practice Issues
Friday, October 6, 2017: 12:30 PM

Background. In an effort to lower costs and improve quality of care, there is potential to change the treatment landscape for low-risk (i.e., less severe) ABSSSI patients who historically required inpatient management, a costly option. Outpatient IV treatment pathways have been shown to be a cost-saving option for hospitals and insurers. The objective was to quantify the potential opportunity for reducing cost of ABSSSI treatment in an insured Commercial and Medicare Aetna population.

Methods. Adult patients between January 2013 and July 2016 were identified with a primary ABSSSI claim (Table 1) in the Aetna fully-insured Commercial and Medicare insurance claims database. ABSSSI encounters were identified with insurance eligibility for the 7 months prior to and no evidence of ABSSSI in the 30 days prior to the ABSSSI claim. Demographic and clinical data were described, including length of stay (LOS) and allowed cost for inpatient encounters with data. Inpatient encounters without evidence of severity (e.g., codes for major complications or comorbidities) were considered potential candidates for an outpatient LAA pathway. A sensitivity analysis for LOS and cost was run including all ABSSSI patients with LAA dispenses through 2016 (i.e., inclusion/exclusion criteria did not need to be met).

Results. 194,023 ABSSSI encounters were identified, most receiving non-IV treatment (90%). 18,603 received IV treatment, where 83% initially presented to the emergency room and the majority were admitted (97%). Of the 28 encounters with LAA use, 7 were inpatient. Of all current inpatient encounters ($N = 9,019$ after Jan 1, 2015), the majority ($N = 7,005$; 78%) where considered potential LAA pathway candidates. Comparing inpatient encounters with vs. without LAA use, mean LOS and cost differed (Table 2: 4.1 days and $14,295 vs. 9.0 days and $23,194, respectively). A sensitivity analysis supported similar mean LOS and cost for all inpatient LAA dispenses.

Conclusion. Current use of LAA in an inpatient population is limited but resulted in potential cost-savings. Most of the inpatient population was identified as potential candidates for an outpatient LAA pathway. Research on utilization and quality of care for outpatient IV treatment pathways with LAA is warranted.