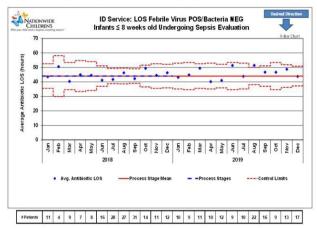
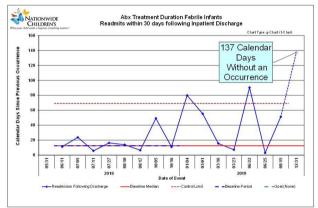
Figure 2. Length of Stay in Infants Underfoing Sepsis Evaluation



A new management guideline that defined "low-risk" infants, as well Methods: as inclusion and exclusion criteria, was created to monitor the accurate duration of parenteral treatment and length of hospitalization. Respiratory viruses were detected by a multiplex PCR assay. We created a QlikSense App for further clinical characterization of patients and follow-up. This management guideline was adapted as a quality improvement division initiative. Control charts were used to assess the impact of the interventions.





Results. The management guideline was developed and implemented by pediatric infectious disease faculty. Febrile infants < 8 weeks of age were included if they had both documented viral infections and sepsis evaluation. 178 infants were admitted with fevers in 2018 and 148 infants were admitted in 2019. The mean inpatient antibiotic treatment duration decreased from 27.7 hours in 2018 to 24.9 hours in 2019 (P > 0.05) (Figure 1). There was no significant difference in length of hospitalization or 30-day readmission rates (Figure 2 and 3). There was no reported readmission for SBI.

Conclusion: Antibiotic treatment could be discontinued in clinically stable infants with a documented viral infection after 24 hours of negative blood, CSF, and urine bacterial culture incubation so as not to receive unnecessary prolonged inpatient treatment that may increase side effects. In addition to possible decreased treatment side effects our protocol led to decreased patient care costs with no documented changes in readmission rates.

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1332. Single Dose Oral Amoxicillin Challenge is a Safe and Effective Strategy to Delabel Penicillin Allergies among Low Risk Hospitalized Children Justin B. Searns, MD1; Amy Stein, NP2; Christine MacBrayne, PharmD, MSCS2; Tara Sarin, MD³; Taylor Lin, MD³; Hannah Duffey, MD⁴; Allison Hicks, MD³; Kaylee Wickstrom, MSHS, BSN, RN, CPEN²; Lalit Bajaj, MD,MPH/MSPH⁵; Maureen Bauer, MD³; Kirstin Carel, MD³; ¹Children's Hospital Colorado, University of Colorado, Aurora, CO; ²Children's Hospital Colorado, Aurora, Colorado; ³University of Colorado, Children's Hospital Colorado, Aurora, Colorado; ⁴University of Utah, Salt Lake City, Utah; 5University of Colorado School of Medicine, Aurora, Colorado

Session: P-60. Pediatric Antimicrobial Stewardship (inpatient/outpatient pediatric focused)

Background. Over 90% of children with reported penicillin allergy can tolerate penicillin without incident. Developing effective and safe strategies to remove inappropriate penicillin allergies has the potential to improve care; however, guidance on how to identify, test, and delabel patients is limited.

Methods. In April 2019, Children's Hospital Colorado (CHCO) implemented a penicillin allergy clinical pathway (CP) alongside a risk assessment tool to stratify patients based on allergic history (Figure 1). Patients at "no increased risk" were educated and delabeled without testing. Low risk patients were offered an oral amoxicillin drug challenge with close observation. A single, non-graded, treatment dose of amoxicillin (45 mg/kg, max dose 1000mg) was used for low risk patients, and no preceding allergic skin testing was performed. Patients with no signs or symptoms of allergic response 60 minutes after amoxicillin administration were delabeled. Children delabeled of penicillin allergies on the CHCO hospital medicine service were compared between the pre-CP (1/1/17-3/31/19) and post-CP (4/1/19-3/31/20) cohorts.

Figure 1. Penicillin Allergy Risk Assessment Figure 1. Penicillin Allergy Risk Assessment

f	or oral amoxicillin challenge
٠	Penicillin
•	Amoxicillin
•	Ampicillin
•	Ampicillin-sulbactam
	Amoxicillin Clavulanic Acid

No Increased Risk

(Can simply de-label patient, no drug challenge needed)

- Avoidance based on family history alone
- Has tolerated PCN since concerning incident without reaction

Low Risk

ider oral amoxicillin challenge) • Delayed onset (greater than 24 hours after first dose) onset of isolated, non-progressive symptoms (such gastrointestinal symptoms or rash/hives alone)

Moderate Risk

(Allergy consult needed if PCN desired based on primary tear desensitization) NOT To be given without Allergy and Infectious Disease input • Unknown Clinical History needed if PCN desired based on primary team and ID consult for p

- Symptoms concerning for anaphylaxis
 Any symptoms requiring hospitalization
- Immediate symptoms (less than 24 hours after fist dose of PCN)
- Progressive/worsening symptoms (within 60 minutes of dose) · Reaction to intravenous/intramuscular formulation (within 60 minutes of dose)
- Primarily nasogastric tube (NG), gastric tube (GT), or jejunostomy tube (JT)

- High risk

 (PCN should be avoided. Skin prick testing and desensitization not recommended)

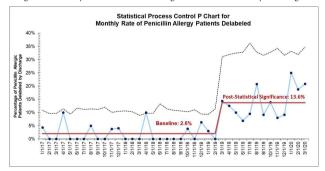
 • Serious Cutaneous or Systemic Adverse Reactions concerning for but not limited to:

 • Serious Cutaneous or Systemic Adverse Reactions concerning for but not limited to:
- Drug reaction with eosinophilia and systemic symptoms (DRESS)
- Acute Interstitial Nephritis (AIN)



Results. Pre-CP, 683/10624 (6.4%) patients reported a penicillin allergy and 18/683 (2.6%) were delabeled by discharge. Post-CP, 345/6559 (5.3%) patients reported a penicillin allergy and 47/345 (13.6%) were delabeled by discharge (\hat{P} -value < $\hat{0}.0001$, Figure 2). Among the 47 post-CP patients, 11 were delabeled by history alone, 19 underwent oral amoxicillin drug challenge per CP, and 17 received a different treatment dose penicillin per treatment team. Only one penicillin-exposed patients had a reaction. This patient developed a delayed, non-progressive rash and had penicillin allergy restored to their chart. No patient required emergency medical intervention, and none were "relabeled" penicillin allergic in the 6 months following discharge.

Figure 2. Monthly Rate of Penicillin Allergic Patients Delabeled by Discharge



Conclusion. A drug challenge using a single non-graded dose of oral amoxicillin is a safe and effective strategy to delabel low risk children of inappropriate penicillin allergies when implemented alongside a risk assessment tool. Further studies are needed to evaluate the long-term benefits of delabeling inappropriate penicillin allergies and to continue monitoring for adverse events.

Disclosures. All Authors: No reported disclosures