Increasing Safety Net Antibiotic Prescriptions for Acute Otitis Media Treatment in Pediatric Urgent Care Clinics

Jennifer McKinsey MD, Amanda Nedved MD, Donna Wyly MSN RN CPNP-AC PPCNP-BC, Brian Lee PhD MPH, Holly Austin MD, Dinah Dosdos MD, Emily Murdock MSN APRN NP-C CPEN, Aimy Patel MD, Rana El Feghaly MD MSCI

Children's Mercy Kansas City; UMKC School of Medicine; University of Kansas School of Medicine

Introduction/Objective

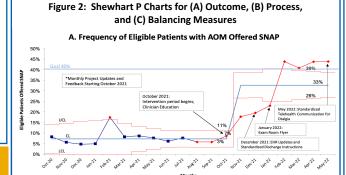
- Acute otitis media (AOM) is the most common diagnosis for which antibiotics are prescribed in pediatrics.
- · Most cases of AOM will resolve without antibiotic treatment.
- Children who meet safety net antibiotic prescription (SNAP) eligibility criteria can be safely monitored for 48-72 hours to see if symptoms resolve before starting antibiotics.
- SNAP is a convenient method for offering delayed antibiotic treatment and has been associated with lower antibiotic fill rates for children with AOM.
- We aimed to increase the percentage of eligible patients with AOM offered SNAP from an average frequency of 7.2% at baseline to 40% within 8 months in 3 pediatric urgent cares.

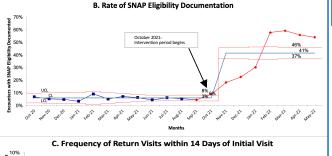
Methods

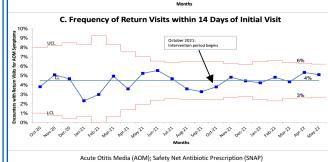
Figure 1: Exam room flyer used as a provider & family education tool



- **Setting:** 3 freestanding pediatric urgent care clinics (PUCs) within a large health care organization
- **Inclusion Criteria:** All patients > 6 months of age with a diagnosis of AOM from October 2020 through May 2022
- Providers were asked to document SNAP eligibility of all patients with a diagnosis of AOM
 - SNAP Eligibility Criteria:
 - Pain present for < 48 hours
 - Fever < 102.2°F (39°C)
 - No otorrhea
 - No chronic ear conditions or AOM within last 30 days
 - Children 6-24 months old: unilateral infection only
- Interventions included provider education and monthly feedback, family education tools (Figure 1), and standardized discharge instructions







Results

- 14,858 encounters reviewed over 20 months
 - Baseline: October 2020 September 2021
 - Intervention Period: October 2021 May 2022
- Encounters eligible for SNAP by chart review ranged from 9.6% to 45.5% of AOM patients/month.
- Center line shifts observed (Fig 2):
 - Frequency of eligible AOM patients offered SNAP increased: 7.2% to 32.6%
 - Provider documentation of SNAP eligibility increased: 5.7% to 41.3%
 - Rate of return visits for ear symptoms **remained unchanged: 4.4%**

Discussion/Conclusion

- As PUC clinicians increased documentation of SNAP eligibility, their frequency of offering SNAP increased.
- We met our aim the last 4 months of the project with ≥ 40% of eligible patients with AOM offered SNAP.
- The percent of eligible patients offered SNAP increased 4-fold during our study, reducing potential antibiotic exposure in children seen in the PUC setting.
- We did not see an increase in return visits for ear symptoms as SNAP acceptance increased.
- Next steps include a virtual education module for PUC clinicians, spreading our interventions to other care settings, and evaluating the fill rate of SNAPs accepted by our AOM patients.





