Background

- Emergency department (ED) overcrowding is a growing problem nationwide with increased utilization.
- Nonurgent visits have contributed to ED overutilization and overcrowding, leading to the following:
  - Increased medical costs and waiting times
  - Delay in medical treatment and pain control
  - Loss of continuity of care
- Previous interventions have shown little success in reducing non-urgent ED visits.
- An ED to primary care clinic (PCC) transfer protocol (Figure 1) was created with safeguards to ensure patient safety and Emergency Medical Treatment and Labor Act compliance.

Objectives

- To analyze the impact of an ED to PCC transfer protocol for non-urgent ED visits of established patients by examining cost, length of stay, and unintended consequences.

Methods

- Setting: Tertiary care children’s hospital emergency department (ED) and primary care clinic.
- Population: Retrospective cohort study reviewed primary patients of PCC who presented to ED and were transferred to PCC from 09/01/17–08/31/18.
- Transfer Eligibility: Stable condition and low acuity illness that is manageable in primary care.
- Primary Outcomes: Final diagnoses, length of stay (LOS) from arrival time to visit completion, and need for transfer back to ED.
- Secondary Outcomes: Cost and times savings and additional primary care services provided, including well child checks, vaccinations, long term medication refills, and/or referral of subspecialty services.
- Technical and professional financial data were obtained from an internal financial and accounting system (EPSi).

Primary Outcomes

- During study period, 374 patient encounters transferred from ED to PCC, including 19 patients multiple times (Figure 2).
- Average age was 4 years old, and 97.6% were Medicaid insured (Figure 3).
- Five most common diagnoses were viral upper respiratory infection (21.8%), dermatologic diagnoses (9.6%), acute otitis media (9.1%), pharyngitis (9.1%), and influenza (8.8%).
- No safety events or inappropriate transfers based on the protocol.
- One patient (0.26%) was transferred back to the ED for evaluation of intussusception.

Secondary Outcomes

- Overall, total cost savings were approximately $100,000.
- For top five diagnoses:
  - Costs per encounter were reduced by 54-64%.
  - Costs exceeded expected payments; however, evaluation in PCC vs. ED reduced loss of revenue by 23-68%.
  - Length of stay was reduced by a mean of 48 minutes per encounter.

Conclusions

- Transfer protocol provides a safe solution to reducing urgent care visits in real-time.
- Assuming standard of care, the transfer protocol reduces costs for evaluation and treatment of these diagnoses, providing high value care.

Future Implications

- Transfer protocol is reproducible in children’s hospitals with ED and PCC sharing same campus.
- Providing greater technological advances to triage system may further utilize onsite outpatient services and expedite care of patients at a reduced cost.