Abstract 1057 Figure 2

overall mortality or quality performance indicators. SPC analysis suggests that PDSA Cycle 2 was temporally related to the onset of improvement. Estimated cost savings calculated based on utilisation reductions is approximately \$7 million annually. **Conclusions** This initial pilot was feasible, achieved significant outcomes, and is an example of the use of improvement methods to iteratively develop and optimise an implementation approach. This approach has potential to significantly impact outcomes, utilisation and cost and is worthy of continued study.

Abstract 1057 Figure 3

1058 REDUCING EMERGENCY DEPARTMENT UTILISATION IN INFANTS: A QUALITY IMPROVEMENT STUDY

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Background Utilising the Emergency Department (ED) rather than the primary care medical home (PCMH) for non-emergent care results in decreased continuity and increased medical expense. Young, low-income children have the highest low-acuity ED visit rates. Few PCMH-based interventions have been shown to decrease unnecessary ED use.

Objectives Reduce rates of low-acuity ED utilisation in children under 12 months.

Methods This was a quality improvement study set in an academic primary care clinic serving 15,000 predominantly low-income families. Interventions focused on expanding urgent care (UC) and nursing-line access, improving parents' awareness of these ED-alternatives, and enhancing caregiver knowledge of infant care (Figure 1). Our primary outcome was the 12 month rolling rate of low-acuity ED visits; high-acuity ED visits acted as a balancing measure.

Abstract 1058 Figure 1 Driver diagram

Abstract 1058 Figure 2 ED utilisation by patients <1 year, 12 month rolling rate (low acuity visits)

Abstract 1058 Figure 3 High acuity ED utilisation by patients <1 year, 12 month rolling rate

Abstract 1058 Figure 5 Urgent care utilisation by patients <1 year, 12 month rolling rate

Abstract 1058 Figure 4 ED utilisation by patients <1 year, 12 month rolling rate (all visits)

Results Between January 2014 and April 2015, our infants visited the ED for low acuity visits a mean of 61 visits/1000 pts/month. Special cause variation emerged in May 2015 with the start of the newborn group visits, and subsequently with call centre improvements. After expansions in our nurse line access our final mean was 41 visits/1000 pts/month (Figure 2). High acuity ED visits demonstrated an initial rise (Figure 3) but have since decreased to the initial mean; overall ED rates declined (Figure 4); and UC utilisation remained stable.

Conclusions Clinic based enhancements to ED alternatives combined with educating parents on normal baby care were associated with decreases in low-acuity ED utilisation and all-acuity ED utilisation for children under 1 year.