Providers at the Children's Medical Practice (CMP) at Bayview noticed that children with asthma often did not receive the influenza vaccine. Low reliability of vaccination in this population is particularly problematic due to the increased risk of influenza virus to children with asthma.4 The mechanism for flagging patients in this population was not being used due to alert fatigue and lack of a standard procedure, and there was not a primary reminder system. The system relied on providers advising influenza vaccination during all appointments for children with asthma, regardless of the reason for the appointment. The CDC reports an 8.6% asthma prevalence within the pediatric population.8 Literature review revealed that influenza vaccination rates peak at 30% in this population6 and 69-92% of opportunities to vaccinate during office visits are missed each fall.2 Parents cite lack of physician recommendation and perceived low susceptibility to influenza as reasons why they do not vaccinate their children who have asthma.2

Without a feasible way to ensure all patients with asthma or their providers would receive a reminder in the office, and without guarantee that patients would come to the office for an appointment, other quality improvement measures were explored. All reminder/recall systems (including phone, text, postcard with follow up call, verbal, mailed, electronically-generated reminders, and year-round vaccine scheduling) are shown to have at least a moderately positive impact on influenza vaccination rates, with some studies showing vaccination rates as high as 92.8% within vulnerable pediatric populations who had the interventions.3,5,6,7 Videos for asthma education are shown to improve caregiver knowledge and satisfaction.2

The objective of this Quality Improvement (QI) project was to:

1. Learn about prevalence of asthma within the pediatric patient population at CMP;
2. Analyze current system for mechanisms to ensure vaccination in this vulnerable population;
3. Define and implement a QI intervention to increase the rate of vaccination

We queried Epic for a list of CMP patients in the 2014-2015 season to determine statistical significance. Ex: chart review for every 4th patient. Additionally, systematic review of patient charts can be repeated earlier in the influenza season next year. Future Directions

While there were barriers to maximizing the efficacy of this intervention, we successfully reached at least 11.5% of the pediatric population with asthma at CMPB, as evidenced by responses. One guardian/family scheduled an appointment on a follow up phone call to their “No” text response; two guardians/families who responded “No” via text verbally stated that they would plan to have their children vaccinated at existing upcoming appointments. The text message intervention had at least a moderately positive impact on guardians’ education and intent to vaccinate.

The overall response rate to the text messages was 11.5% (44 unique responses from 381 unique phone numbers).

5 Conclusions

6 Future Directions

7 References