Introduction

• Demand for oral food challenges (OFCs) continues to rise.
• Past efforts to increase access to OFC at Boston Children’s Hospital resulted in Saturday challenges in addition to weekday food challenges1.
• Despite improved access we continue to have issues with utilization of existing food challenge slots. Through quality improvement principles and methodology, we worked to improve processes prior to challenges to increase utilization rate for OFCs.

Intervention

• The intervention focused on improving utilization by increasing the fill rate of slots and decreasing the same day cancellation and no-shows of scheduled appointments for Saturday food challenges.
• PDSA 1: (12/15/2018 – 1/19/2019)
  • Patient families were called the week of their food challenge, 3 days before and 1 day before, and reminded of the appointment, what food to bring, and antihistamine restrictions.
• PDSA 2: (1/19/2019 – 5/11/2019)
  • The second call was adjusted to 2 days prior (instead of 1 day prior) to maximize the fill rate of slots that opened as patients cancelled.
• PDSA 3: (5/11/2019 – 7/20/2019)
  • Continued phone calls in PDSA 2.
  • Patients were sent a text message 1 day prior (on Friday PM) reminding them of the appointment and to bring their epinephrine auto-injector.
  • Created a waitlist, prioritizing motivated families and patients off antihistamines to fill cancellations.
• Sustainment phase: (7/20/2019 – ongoing)
  • Calls were adjusted to 5 days and 3 days prior to OFC reminding families of the appointment, what food to bring, and antihistamine restrictions.
  • A text reminder is sent out 1 day prior to OFC reminding to bring their epinephrine auto-injector.
  • The wait list is being actively utilized to fill last minute cancellations.

Results/Outcomes

• The utilization rate of Saturday clinic food challenges significantly improved following this quality improvement intervention.
• Statistical process control (SPC) chart demonstrated special cause variation post intervention with improved utilization rate.
• Pre-post data demonstrated increase from 74% to 86% following intervention.
• Special cause variation was found 1/19/19, 4/13/20, and 4/20/19 all coinciding with holidays and school vacations.

Scale and Spread

• Project spread from Saturday challenge to include all OFCs performed in clinic.
• Have seen improvement in all food challenge utilization in clinic post intervention.
• Spreading ideas and principles for our high risk food challenges in the infusion center.
• Maintaining utilization immediately before or after school vacation or holidays remains a challenge.

Conclusions

• Utilization rates improved and have been sustained post QI intervention.
• Ongoing intervention includes:
  1. Calls 5 and 3 days prior to OFC.
  2. Text message reminder 1 day prior to OFC.
  3. Management of wait list to fill last minute cancelations.

References