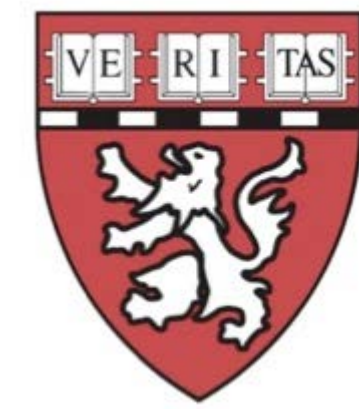


Increasing the Utilization Rate of Clinic Food Challenges

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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

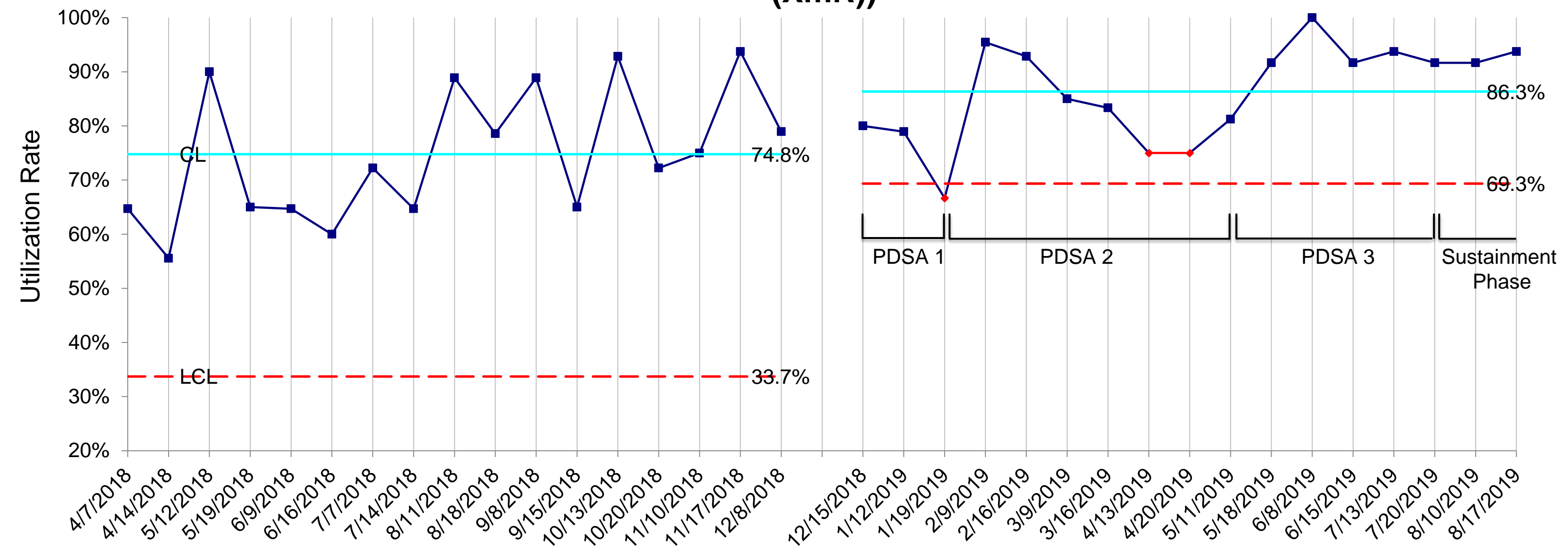
- The utilization rate of Saturday clinic food challenges significantly improved following this quality improvement intervention.
- Statistical process control (SPC) chart demonstrated special cause variation post intervention with improved utilization rate.
- Pre-post data demonstrated increase from 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

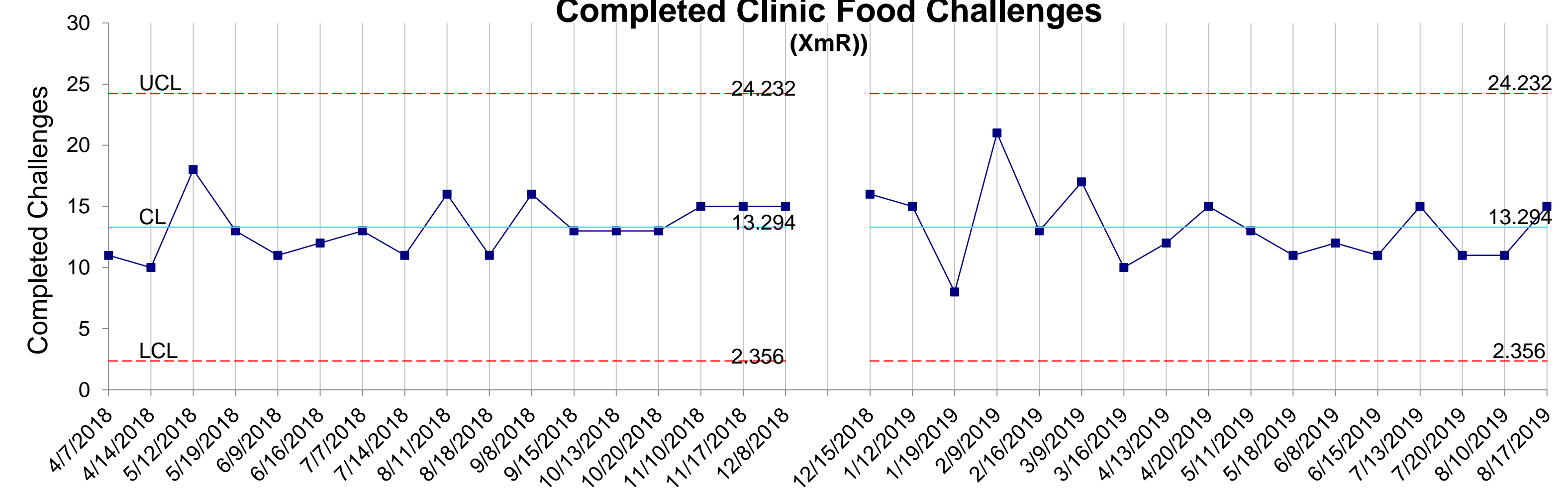
- Project spread from Saturday challenge to include all OFCs performed in clinic.
- Have seen improvement in all food challenge utilization in clinic post intervention.
- Spreading ideas and principles for our high risk food challenges in the infusion center.
- *Maintaining utilization immediately before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

Results

Improving Utilization Rates for Saturday Food Challenges (XmR)



Completed Clinic Food Challenges (XmR)



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 cancellations.

References

- MacGinnitie, A, Kamalia, R, Alvernaz, L, Timmons, K, Hamel, V, Lafreniere, A, Minsk, B, Platt, C, Lee, P, Burke-Roberts, E, Dilley, M. (2018). A Quality Improvement Initiative to Increase Access to Food Challenges. *Pediatric Allergy and Immunology*.