

Access to Dental Care for 16- to 20-Year-Old Patients with Special Health Care Needs: A Quality Improvement Project

Ava Arshadi, DDS, Mark Macaoay, DDS, MBA, MAS, David M. Okuji, DDS, MBA, MS, Ruth W. BoI, DDS, MPH, FICD
NYU Langone Hospitals-Advanced Education in Pediatric Dentistry, San Diego, CA



NYU Langone Dental Postdoctoral
Residency Programs

INTRODUCTION

- According to the National Survey of Children’s Health in 2017-2018, approximately 13.6 million children had a special health care need (SHCN)².
- Barriers to care for children with SHCN may range from limitations in access to a dentist willing to provide care, access to a professional with experience and expertise, a child’s cooperation, and transportation issues.
- When patients with SHCN reach adulthood, their oral health care needs may extend beyond the scope of the pediatric dentist’s practice¹.
- However, patients with SHCN aged 16-20 years at Children’s Dental Clinic at San Ysidro Health – El Cajon often remain with pediatric dental providers as there is an inadequate list of adult dental homes who are willing to accept referrals.

PURPOSE

- The purpose of this quality improvement project is to address the barriers of access to dental care for our patients with special health care needs (SHCN) between the ages of 16 to 20 years through the development of a referral road map for pediatric dental residents at Children’s Dental Clinic at San Ysidro Health – El Cajon.
- The rationale for this project is to ensure patients with SHCN who are 16 years and older can be appropriately referred to an adult dental home that is equipped with addressing their specific dental needs.

FIGURES

Figure 1: Pre-intervention and Post-intervention Control Charts

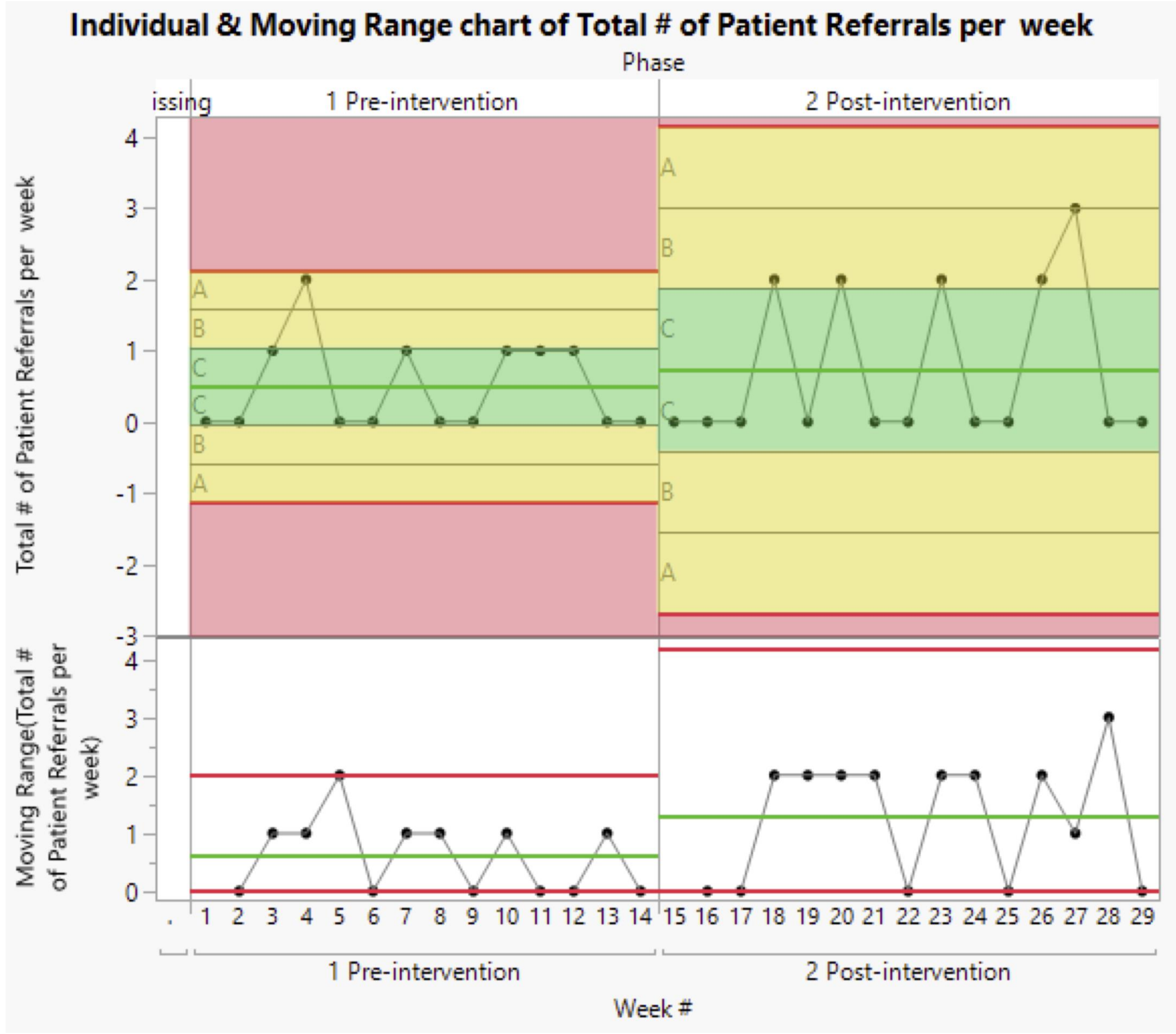
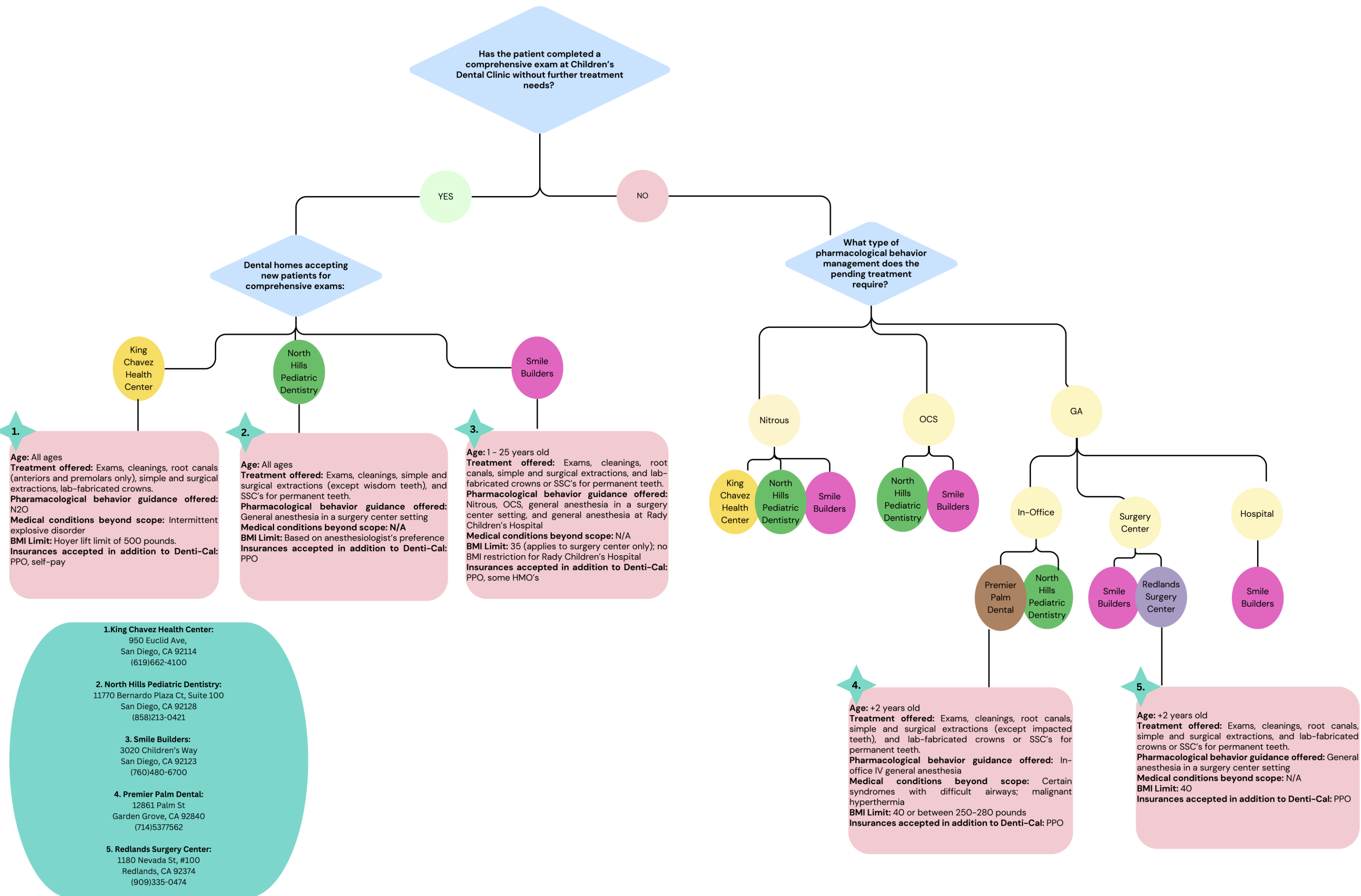


Figure 2: Control Chart Data Table

Limit Summaries of Total # of Patient Referrals per Week				
Points Plotted	Phase	LCL	Average	UCL
Individual	Pre-intervention	-1.13611	0.5	2.136111
Individual	Post-intervention	-2.68497	0.733	4.151637
Moving Range	Pre-intervention	0	0.615385	2.010173
Moving Range	Post-intervention	0	1.285714	4.199827

Figure 3: Referral Roadmap



METHODS

- The research design follows the Institute for Healthcare Improvement (IHI) QI methodology. A referral road map was created to guide pediatric dental residents in referring patients of Children’s Dental Clinic at San Ysidro Health – El Cajon to adult dental homes.
- A report was generated through the electronic health record, Epic, to track dispensed referrals from June 1 to December 1, 2024. The inclusion criteria consisted of patients aged 16–20 years who were seen at the Children’s Dental Clinic at San Ysidro Health – El Cajon by pediatric dental residents.
- The data was analyzed using pre-intervention and post-intervention control charts.

RESULTS

- The control charts reveal points that are within the control limits. Thus, the process is in statistical control.
- The pre-intervention control chart had an upper control limit (UCL) of 2.136 and lower control limit (LCL) of -1.136, while the post-intervention control chart had an UCL of 4.151 and LCL of -2.684.
- The average number of weekly referrals increased by 46% in the post-intervention phase.
- The results indicate that the intervention increased the number of dispensed referrals since its implementation and thus is a useful tool for expanding access to dental care for patients with SHCN.

CONCLUSIONS

- The American Academy of Pediatric Dentistry recommends planning and coordinating the successful transition of children with SHCN to an adult dental home to avoid any disruption in the continuity of oral health care¹.
- The implementation of the referral roadmap at the Children’s Dental Clinic at San Ysidro Health – El Cajon increased the number of dispensed referrals, thus providing patients with SHCN an adult dental home once they graduate from pediatric dental services at age 16.
- Future efforts should include another PDSA cycle to identify other interventions on how to increase the number of weekly referrals.

REFERENCES

1. American Academy of Pediatric Dentistry. Management of dental patients with special health care needs. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2023:337-44.
2. National Survey of Children’s Health Data Briefs [Internet]. Rockville (MD): Health Resources and Services Administration; 2018-. National Survey of Children’s Health, 2017-2018. 2020 Jul. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK603019/>