

Improving Dental Sealant Acceptance in Spanish and Chinese-Speaking Parents and Children



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INTRODUCTION

Dental sealants are a key preventive measure that can reduce the risk of dental decay by 80%, as highlighted by the CDC. However, in our community of patients at NYU Langone Family Health center, one of the major barriers to sealant placement is dental literacy discrepancies, particularly language barriers in Chinese and Spanish speaking populations. We observed that sealant completion rates among these groups were lagging compared to those of their English-speaking counterparts. To address this, we focused on improving parental literacy around dental sealants. We recognized that sealant acceptance is greatly enhanced when dental education is provided in the patients'/parents preferred native language. In 2023, we responded to this need by creating educational posters in Spanish and Chinese, which significantly increased understanding and, ultimately, sealant acceptance. Additionally, another challenge we identified was the need for additional appointments for sealant placement, which often resulted in missed opportunities for care. To overcome this, in January 2024, we integrated sealant placement into the new patient exams and recall visits. This change allowed us to reduce the number of visits required and streamline the process, ensuring that sealants could be placed during the same appointment as the exam, thus removing a significant barrier to care.

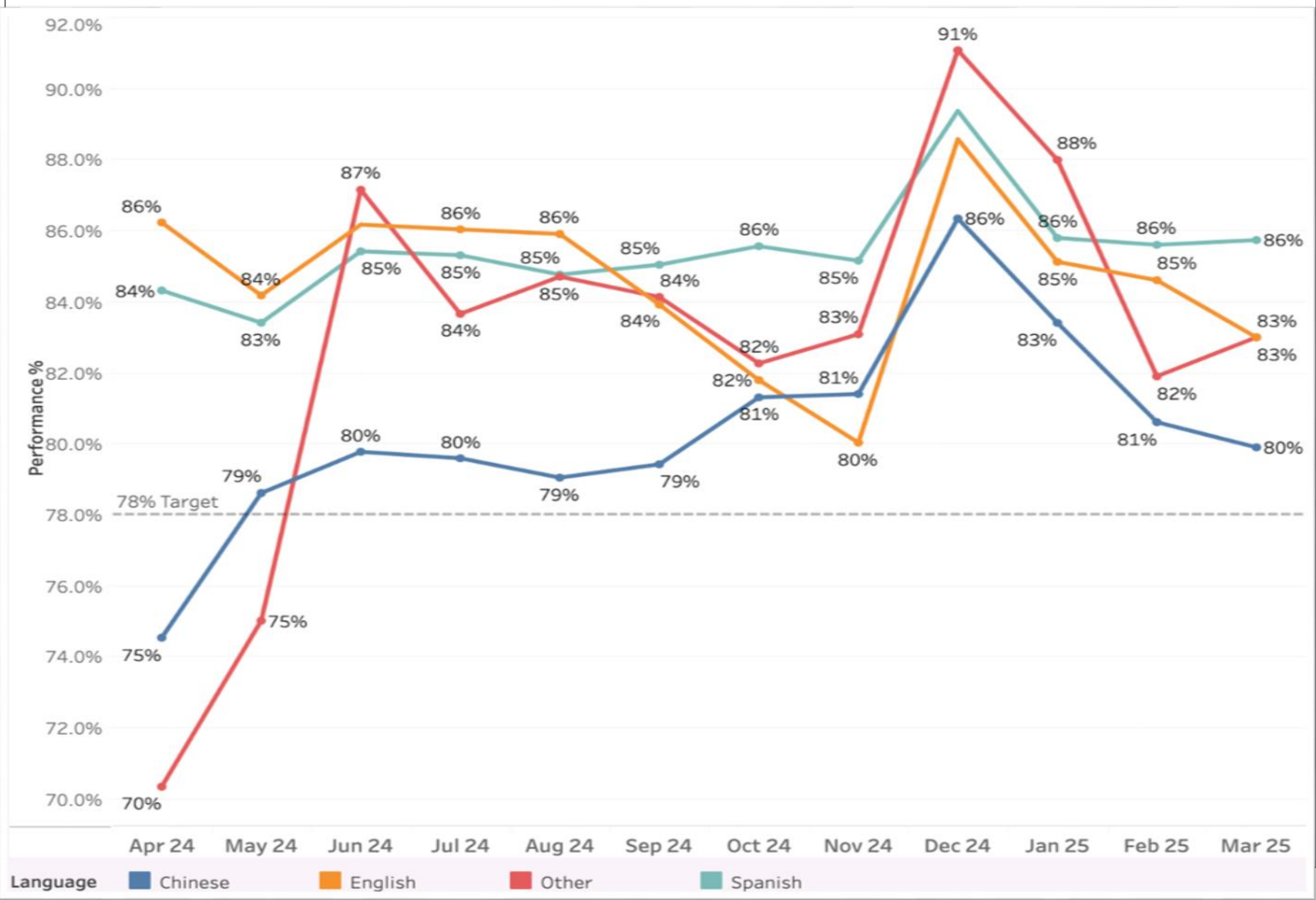
PURPOSE

This study aims to improve dental sealant literacy and placement for parents and children at the NYU Langone Family Health Center (FHC), to reduce disparities between English and Non-English-speaking parents and pediatric patients, and to follow the UDS dental sealants quality of care measure (Percentage of children, age 6-9 years, at moderate to high risk of caries who received a sealant on a first permanent molar during the reporting period). The goal is for Spanish and Chinese-speaking patients to meet the benchmark of 78% similar to that of the English-speaking patients.

METHOD

With the support of the FHC Healthcare Equities Task Force, a comprehensive, multilevel approach has been implemented to reduce disparities in sealant placement between English and non-English speaking populations (Chinese and Spanish). One significant barrier identified in 2023 was the difficulty many families faced in returning for a second appointment to complete sealant placement. To address this, educational posters in Spanish and Chinese were implement at NYU Langone FHC sites beginning in January 2024. Furthermore, we integrated sealant placement into new patient exams and recall visits as part of the procedural mix. This change reduced the need of required appointments and eliminated the barrier of scheduling a follow-up visit, ensuring that sealants could be placed during the same visit as the exam. Data from the 2024 Sealant Initiative, collected from April 2024 to the present, is being used to assess the effectiveness of these changes. To further address barriers related to patient literacy and understanding, the Family Health Center (FHC) implemented "Smartphrases" into new patient exams and recall visits. This tool helps measure the efficacy of educational posters, provider adherence to the sealant initiative and ensures that parents have a clearer understanding of sealants. It also provides an opportunity to identify any additional obstacles to sealant placement, such as patient refusal, facilitating continuous improvement in the initiative.

FIGURE 1. Sealant Data 04/2024-03/2025



RESULTS

Data from our project indicates a notable increase in sealant acceptance and completion within the Spanish- and Chinese-speaking populations. Over the course of the project, the benchmark for sealant data has risen from 78% in 2024 to 80% in 2025, reflecting steady progress in these communities.

- Spanish % sealants has increased from 84% (April 2024) to 86% (March 2025) .
- Chinese % sealants has increased from 75% (April 2024) to 80% (March 2025)

DISCUSSION

Sealant acceptance has increased from April 2024, maintaining rates above the target rate of 78%. For both, Spanish-speaking and Chinese-speaking patient populations at the FHC sites. However, sealant placement on the Chinese-speaking patient population is still lower compared to other populations.

Chart reviews suggested this finding could be due several reasons:

1. Permanent first molars needed restorative treatment and could not be sealed.
2. The patient was not able to cooperate and would need further behavior guidance modalities such as nitrous oxide/general anesthesia and hence additional appointments

To enhance oral health awareness and prevent restorative treatments, educating Chinese-speaking parents about oral hygiene and disease prevention prior to their child's first dental visit—through outreach initiatives—has proven effective. Additional outreach through school health programs has led to an increase in patient participation while simultaneously reducing the time between care. Furthermore, providing sealants during initial and recall exams has significantly reduced the number of follow-up appointments. This approach has yielded notable improvements and will be expanded to additional clinical sites. The initiative will continue into 2025, with expectations to consistently meet our new benchmark of 80%.

CONCLUSION

In 2023, it was determined that culturally relevant messaging and graphics were highly effective in reaching populations with low health literacy, with visual elements playing a critical role in engagement and understanding. Another significant barrier identified was the need for parents to return for a separate appointment to complete sealant placement. To address this challenge, starting in 2024 and continuing into 2025, sealants were integrated into new patient exams and recall visits. This approach has proven effective in improving oral health equity by eliminating the need for a follow-up appointment. It has also helped reduce no-show rates, as parents no longer have to miss school or work for a second visit due to a preventative procedure and further reduces dental waste. Furthermore, the integration of Smartphrases into new patient exams and recall visits has strengthened provider adherence to the sealant protocol. This tool helps measure the efficacy of educational posters, assesses provider adherence to the sealant initiative, identifies additional barriers to sealant refusal, ensures that parents have a clear understanding of sealants and assists other in identifying barriers to care. This initiative further enhances our ability to address disparities and improve access to care.

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