

# Improving Dental Sealant Literacy in Spanish and Chinese-Speaking Parents and Children



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## INTRODUCTION

Children at moderate to high risk for caries (cavities) are less likely to experience decay if they are provided sealants on their first permanent molars. One of the many barriers of access to dental care includes literacy discrepancies such as language barriers. The NYU Family Health Center has families of multiple demographics, and we believe it is crucial to provide access to education regarding sealants. To reduce disparities between English- and non-English-speaking patients, physical posters with images were created in Spanish and Chinese to highlight the importance of the many benefits of sealants. Parents were presented the posters at the time of recall/comprehensive exam and sealant/restorative visits. They were encouraged to have sealants completed on the same day as the recall/comprehensive exam. Posters were presented to all Chinese and Spanish speaking patients at Sunset Park and Seventh Avenue FHC Sites starting November 1st 2023. Sealant placement data was collected from September 1st 2023 to December 31<sup>st</sup> 2023 for the scope of this project.

## PURPOSE

The aim of this project was to build upon earlier FHC success and reduce disparities between English- and non-English-speaking parents and pediatric patients with 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”) so all groups meet the benchmark of 78%.

## METHOD

Under the auspices of the FHC Healthcare Equities Task Force, a multilevel approach is being used to reduce disparities in sealant placement between English and non-English speaking parents and children. Since Spanish and Chinese are the two major language groups other than English spoken by FHC patients, health literacy materials were developed and translated in these languages first. This initiative (posters) was implemented starting November 1, 2023 – December 31, 2023.

Additionally, the Task Force is implementing a single visit initiative (where the hygienist conducts the dental prophylaxis and places sealants in the same initial or recall visit as the dentist conducts the examination for children age 6-9 years) to FHC sites with high percentages of non-English language speaking patients. At those times, posters are provided in every room for parents to reference as sealants are discussed.

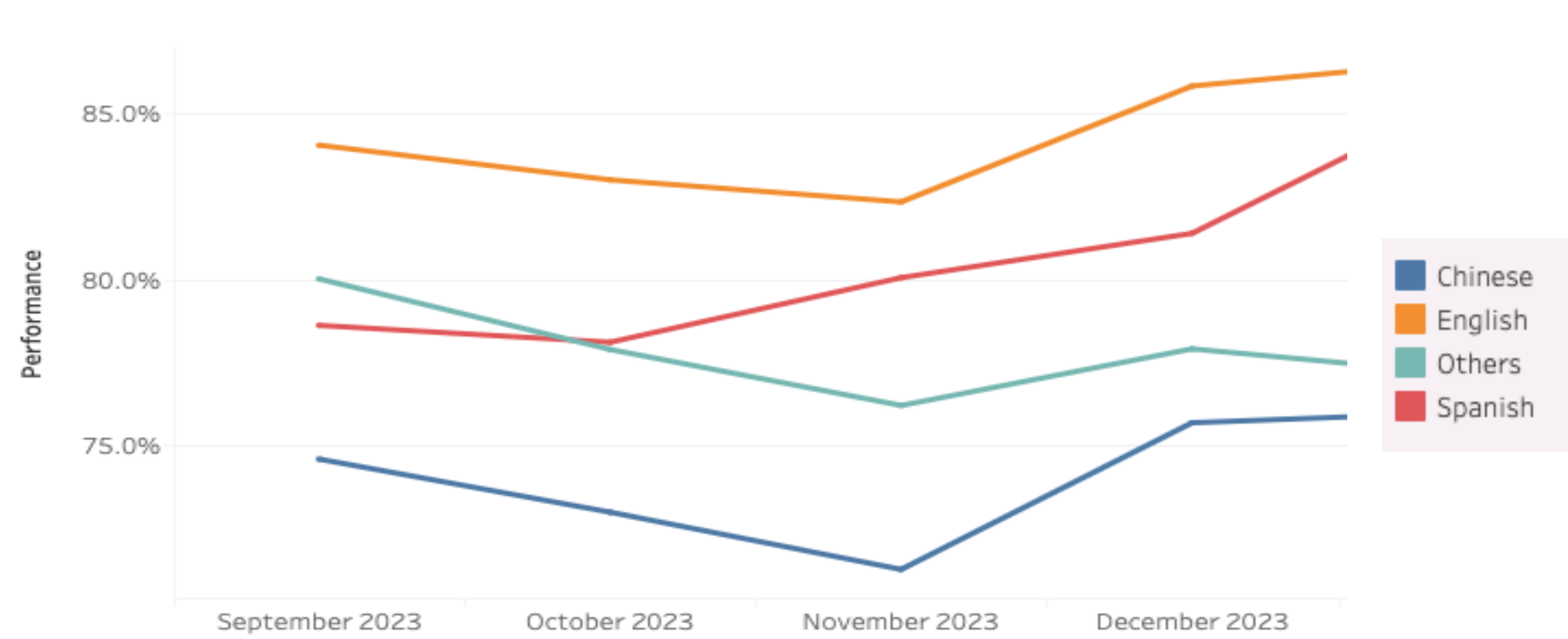
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## FIGURE 1. POSTERS TRANSLATED



## FIGURE 2. Sealant Data 09/2023-12/2024

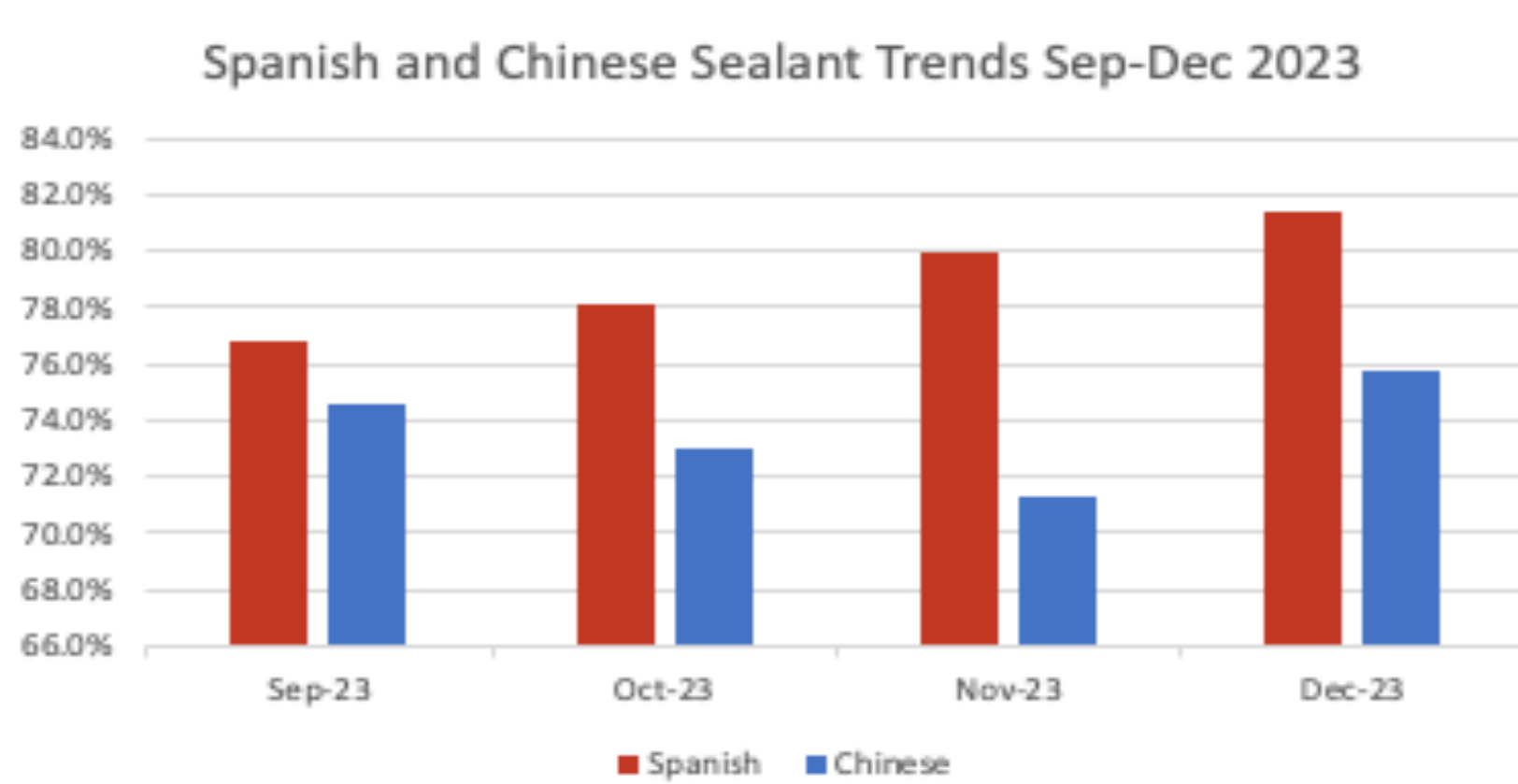


## RESULTS

According to our data, the implementation of sealant educational posters has greatly benefitted both Spanish and Chinese speaking population of patients.

- Spanish % sealants has increased from 76.8% (Sep) to 81.4% (Dec).
- Chinese % sealants has increased from 74.6% (Sep) to 75.7% (Dec).

	Sep-23	Oct-23	Nov-23	Dec-23
Spanish	76.8%	78.1%	80%	81.4%
Chinese	74.6%	73%	71.3%	75.7%



## DISCUSSION

Sealant acceptance has increased in 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.

Educating Chinese-speaking parents on oral-hygiene and disease prevention prior to initial dental visits, such as outreaches, could increase awareness and prevent restorative needs. Additionally presenting physical posters and palm cards can also increase sealant awareness for parents. The posters have shown significant improvement and will be implemented in other clinical sites. The initiative will continue for 2024. We predict that the percentages will gradually increase to meet our new benchmark of 80%.

## CONCLUSION

Culturally relevant and direct messages and graphics are effective in reaching low health literacy populations. Placing sealants at the initial or recall visit may further improve oral health equity measures since it eliminates the need for an additional appointment.

## REFERENCES

1. Mohadjeri-Franck N, Gargano L, Kaur R, Grewal M, Budhu P, Buck L, Gargano S, Mason MK. Success in applying sealants through systems change and teamwork. Improving the Quality of Patient Care Series. 2021;1(2):1.
2. Scherrer C, Naavaal S, Lin M, Griffin SO. COVID-19 pandemic impact on US childhood caries and potential mitigation. J Dent Res. 2022;101(10):1147-54.
3. Ruff RR, Barry-Godin T, Niederman R. Effect of silver diamine fluoride on caries arrest and prevention: The CariedAway School-Based Randomized Clinical Trial. JAMA Netw Open. 2023;6(2):e2255458