

Smile Proud: A Snapshot of Geriatric Oral Health in Texas

Rhonda Stokley, DDS; Brittany Akl, RDH, BSDH, MSHS; Debra Saxton, MS

Texas Department of State Health Services, Oral Health Improvement Program and Maternal and Child Health Epidemiology

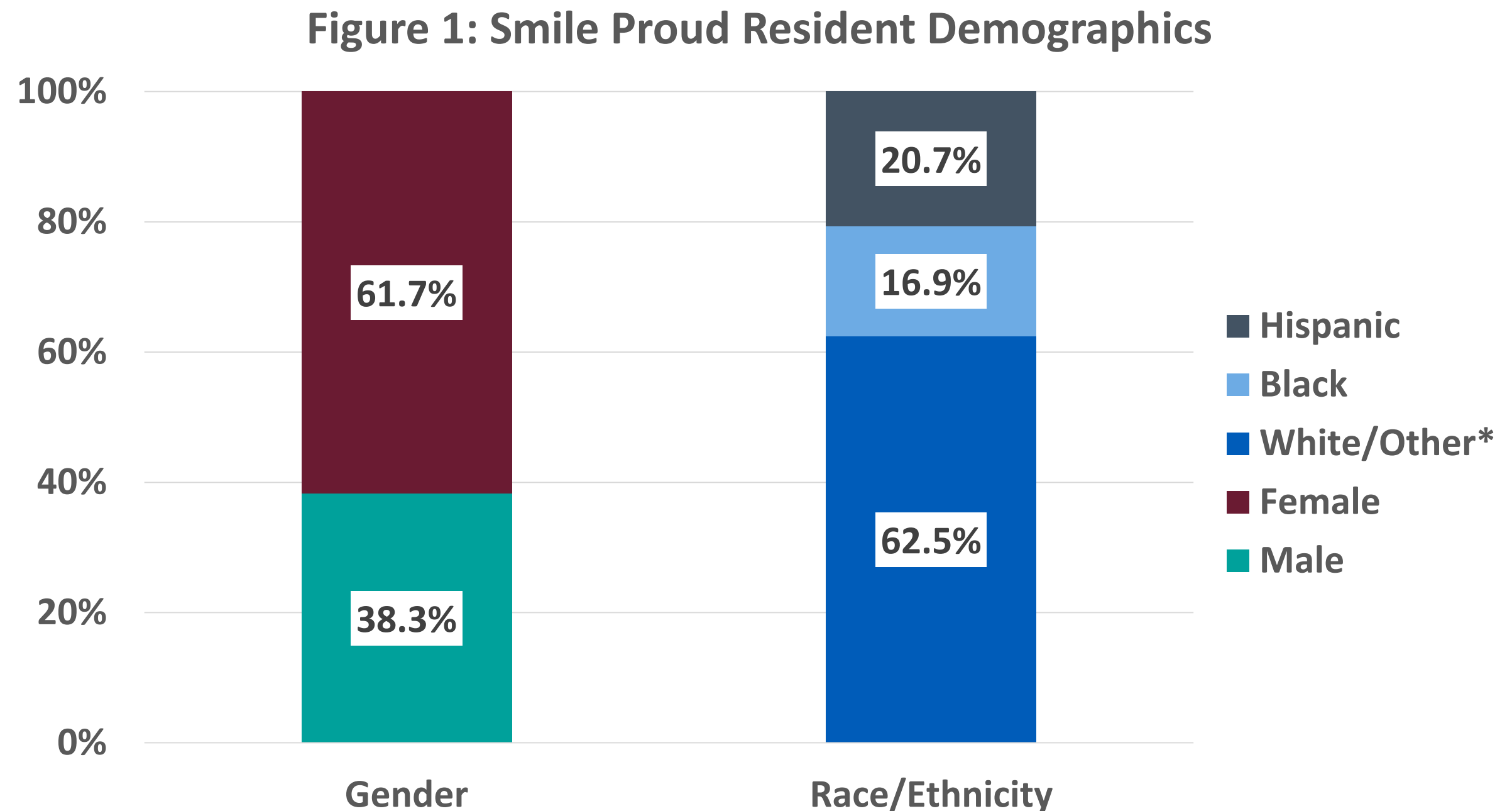


Background

According to the Centers for Disease Control and Prevention (CDC), there are an estimated 1.4 million older adults, age 65 or older, living in nursing homes at any given time in the U.S.¹ With age, proper oral hygiene can be difficult to maintain. This report includes a subset of the Smile Proud pilot data collected by the TMF Health Quality Institute (formerly the Texas Medical Foundation) and analyzed by the Department of State Health Services, Maternal and Child Health Epidemiology Unit. The intent of this report is to provide an analysis of oral health outcomes in a sample of elderly adults who reside in nursing homes in four major cities in Texas.

Methods

In 2017, TMF Health Quality Institute was awarded Civil Money Penalty funding through the Centers for Medicaid and Medicare Services for a project to improve daily oral hygiene while impacting oral health-related conditions among Texas nursing home residents. Nursing homes in four major Texas cities (Austin, Dallas, Houston, and San Antonio) and surrounding rural areas were recruited for the project. TMF Health Quality Institute performed a baseline oral health assessment to evaluate oral health practices on the elderly in the selected nursing homes. Data was collected by dental hygienists using the Association of State and Territorial Dental Directors Adult Basic Screening Survey (BSS) methodology.² Samples were selected from each nursing home by the nursing home leadership and included elderly adults, 65 and older, who were able to provide their own consent. Consent was verified prior to screening. Data was collected from March 2017 through March 31, 2019. Results in this report are representative only of the individuals screened.



All data are unweighted and missing data was not included. *Other includes American Indian, Alaskan Native, Asian, and multi-racial (1.4%, n=17).

Results

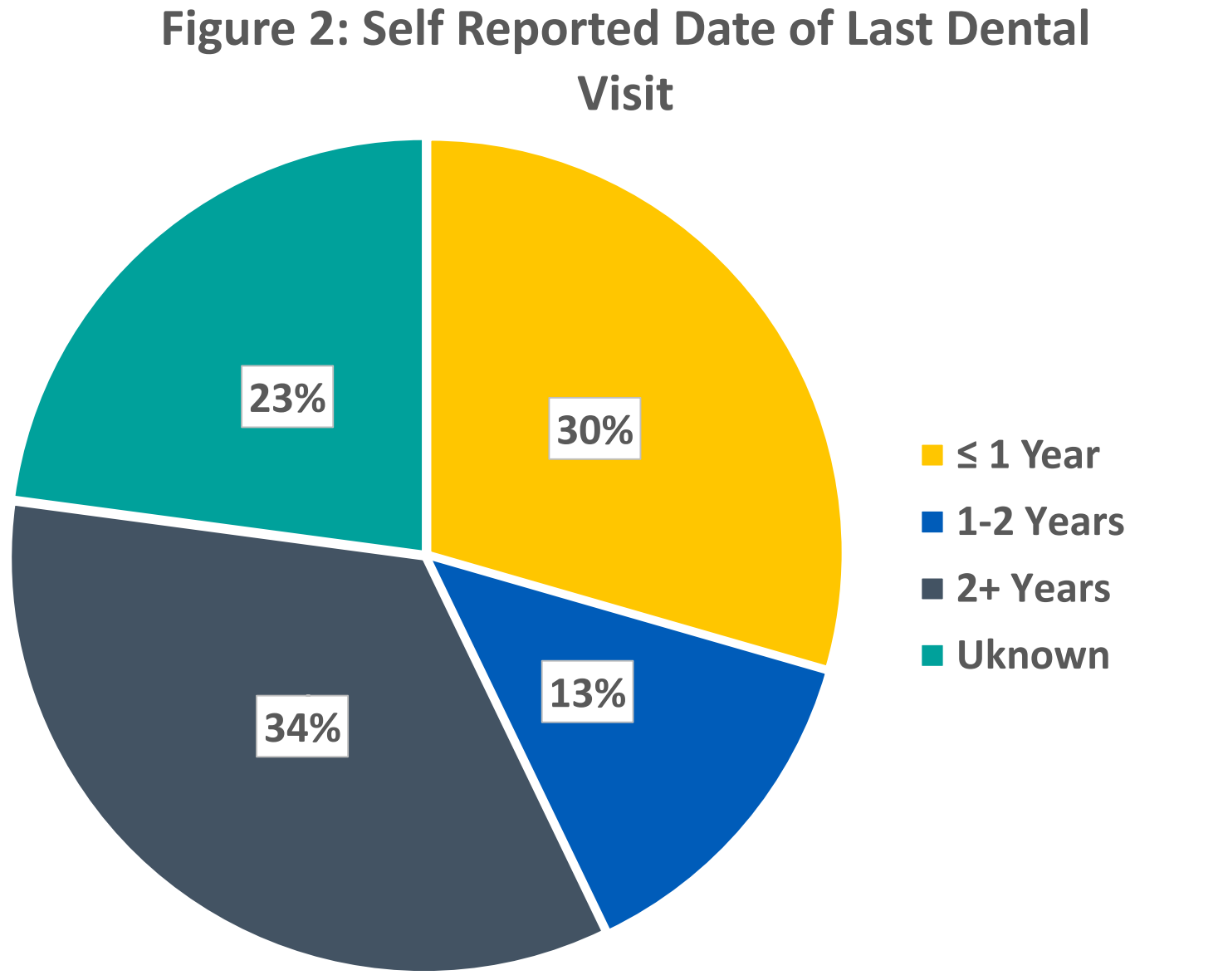
Throughout the pilot project, 126 nursing homes were recruited and retained. Of these, 1,200 nursing home residents were screened in 24 counties across Texas. As shown in Figure 1, most of the residents screened were female (61.7%), and of White or Other (62.5%) race ethnicity. Additionally, 97.5% of participating residents live in a metropolitan area as defined by the U.S. Office of Budget and Management (OMB) bulletin no. 19-04, dated September 14, 2018. All residents lived in areas classified as non-border according to Article 4 of the La Paz Agreement of 1983.³

Data was collected on access to dental care, tooth status, denture use, the presence of soft tissue lesions, the need for periodontal care, and dental treatment needs. Residents with teeth were also screened for the presence of untreated tooth decay and root fragments. For this protocol, the need for periodontal care means the resident needs a cleaning before their next routine visit. This is based on signs of obvious severe periodontal disease and/or heavy plaque, calculus or stain. Treatment needs are defined as no treatment need, meaning no obvious dental problems; early treatment need, meaning there is a need for them to see a dentist for dental care within the next several weeks; or urgent treatment need, meaning the client needs to see a dentist within the next week due to pain or infection.

Figure 2 represents the resident reported prevalence of access to dental care. The prevalence of access to dental care did not differ significantly by gender (data not shown). Results from the survey with gender comparisons can be found in Table 1. There was a significant association between the use of removable dentures and gender ($p \leq 0.05$) using the chi-square test for proportions. Male residents were significantly more likely to have untreated tooth decay, root fragments, a need for periodontal care, and early and urgent treatment needs compared to female residents ($p \leq 0.05$).

Conclusions

Results using BSS protocols are conservative and not indicative of a comprehensive exam. It can be assumed that a comprehensive exam would result in higher incidences of dental findings. Receiving dental care is often difficult for nursing home residents. Resources should be allocated to assist with providing oral health education to nursing home staff and increasing access to dental care among nursing home residents.



Acknowledgments

The Texas Department of State Health Services would like to thank TMF Health Quality Institute for the opportunity to analyze and disseminate the data they collected.

For more information contact the Oral Health Improvement Program at dental@dshs.texas.gov.

Table 1: Dental Outcomes with Gender Comparison

Outcome	Male	Female	All
Edentulous	17.1%	21%	19.5%
Soft tissue lesion	4.5%	3.9%	4.1%
Untreated decay ¹	47.0%	32.3%	38.1%
Root Fragment ¹	42.6%	32.6%	36.6%
Need Periodontal Care ^{1,2}	23.5%	14.0%	17.7%
No Treatment Need	52.0%	68.8%	62.4%
Early Treatment Need	38.3%	24.6%	29.8%
Urgent Treatment Need	9.6%	6.6%	7.8%
Removable Upper Dentures	24.4%	34.5%	30.7%
Removable Lower Dentures	17.6%	25.8%	22.6%
Usually Wear Upper Denture While Eating	83.3%	80.0%	81%
Usually Wear Lower Denture While Eating	80.5%	70.6%	73.5%

All data are unweighted. ¹ Edentulous residents were excluded for untreated tooth decay, root fragments and periodontal care need data ² The need for periodontal care was determined based on a need for a dental cleaning, meaning heavy plaque, calculus, or stain, or signs of obvious severe periodontal disease were present. This is not a comprehensive diagnosis of periodontal disease.

References

- U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention: Long-Term Care Providers and Services Users in the United States: Data from the National Study of Long-Term Care Providers, 2013–2014
- Association of State and Territorial Dental Directors. (2017). Basic screening surveys: an approach to monitoring community oral health. <http://www.astdd.org/basic-screening-survey-tool/>
- Counties in the border/non-border subgroup were designated as Border or Non-Border according to Article 4 of the La Paz Agreement of 1983. <https://www.utexas.edu/law/centers/humanrights/borderwall/communities/mexico-La-Paz-Environmental-Agreement.pdf>.