

# Jackson County Senior Smiles Survey: Michigan Oral Health Pilot Project Focused on the Aging

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## Introduction

Each year the number of Michigan residents ages 65 years and older is rising. In 2010 this age group, comprised 14% of the population and it is projected to increase to 19% by 2030.<sup>1</sup> Aging populations have an elevated risk of poor oral health compared to younger populations due to additional challenges, such as physical impairments preventing proper daily homecare, dry mouth due to prescription medications, and access to care stemming from financial and transportation barriers.

In 2010, 22.0% of Michigan residents 65-74 years and 27.3% of residents 75 years and older had not been to a dentist within the past year.<sup>2</sup>

As this population continues to benefit from their natural dentition, there may possibly be an increased cost associated with their oral health healthcare delivery. It is important for Michigan to have a clear understanding of the current oral health status of those 65 years of age and older to best tailor public health programs, workforce, and available funds to the healthcare system to appropriately provide the necessary care.

**Purpose**  
Identify best practices for collecting oral screening data from an aging population.

## Methods

Jackson County was selected as the pilot site for this 18-month project and Smiles on Wheels (SOW), a mobile dental hygiene program, was selected to coordinate the events and perform the screenings. The Association of State and Territorial Dental Directors (ASTDD) *Basic Screening for Older Adults* toolkit was used to develop the pilot program. Five paper-based surveys were administered:

### Surveys

- *Jackson County Senior Smile Survey (JCSSS)*: 19 questions on current and past oral health. Answered by the senior.
- *Sample Oral Health Screening Form #2 Recommended and Optional Indicators*: Data collection tool for the open-mouth screenings. Completed by the registered dental hygienist.
- *JCSSS Unscreened Patient Evaluation*: Completed by seniors who chose not to participate in the screenings.
- *JCSSS Site Administrator Evaluation*: Feedback by the site supervisor on the event.
- *JCSSS Smiles on Wheels Survey*: Feedback by the SOW staff on each site event.

Screenings took place at varying congregate meal site locations including senior centers, faith-based centers, and township halls. Each screening was staffed by the same three staff (two registered dental hygienists and one assistant). Screenings were set up before their arrival and were open until each senior had an opportunity to be screened. JCSSS was completed by the senior before their open mouth screening. Survey Monkey was utilized for data entry along with SPSS for data cleaning and statistical analysis.

## References

1. Gibson, Mary Jo, Fox-Grage, Wendy, Houser, Ari. *Across the States 2009: Profiles of Long-Term Care and Independent Living- Michigan*. Eighth Edition. AARP Public Policy Institute. Washington, DC.
2. Michigan Department of Community Health. *Michigan Behavioral Risk Factor Survey*, 2010.

## Results

Between August 2011 and October 2012, 192 Michigan seniors ages 65 years and older received an oral health screening at 13 different sites in Jackson County, Michigan. Each site screened between 7-30 seniors.

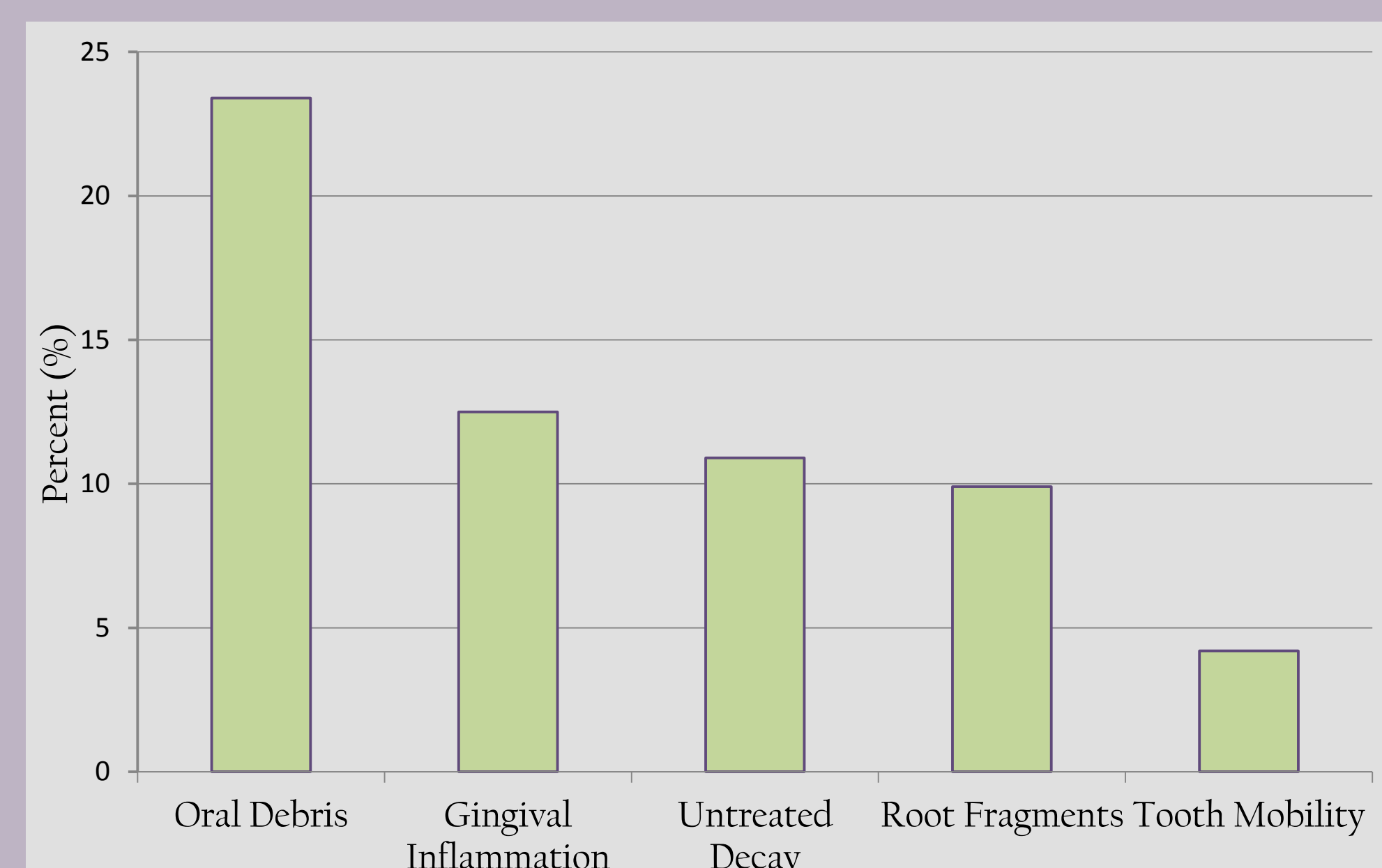
Of the 192 seniors screened, 50 (26.0%) were male and 142 (74.0%) were female. They ranged in age from 65-99 years. The majority of the adults screened were white (90.1%) or black (8.3%) which was representative of the county, Table 1.

Table 1. Demographics of the screened population

Demographics	Number	Percent
<b>Sex</b>		
Male	50	26.0%
Female	142	74.0%
<b>Age Group</b>		
65-69	46	24.0%
70-74	41	21.4%
75-79	32	16.7%
80-84	26	13.5%
85-89	18	9.4%
90+	15	7.8%
<b>Race</b>		
White	173	90.1%
Black	16	8.3%
Other	3	1.5%

Almost one-quarter (22.9%) of the screened population had severe dry mouth and 18 (9.4%) had at least one suspicious soft tissue lesion. Several other poor oral health conditions were seen among the screened population including 45 (23.4%) with substantial oral debris, 24 (12.5%) with severe gingival inflammation, 21 (10.9%) with untreated decay, 19 (9.9%) with root fragments and 8 (4.2%) with obvious tooth mobility, Figure 1.

Figure 1. Prevalence of poor oral health conditions in the screened seniors.



Almost three-quarters (71.9%) of these adults thought their oral health was excellent, very good or good. An additional 17.3% thought their oral health was fair and 10.8% thought it was poor.

Of the 185 respondents, 81 (43.8%) reported they had some kind of insurance coverage that paid for some or all of their routine dental care including dental insurance, prepaid plans, or government plans. However, 90 (48.6%) reported they had no dental coverage.

## Results, continued

Reasons why respondents did not go to a dentist in the past year included not going to a dentist due to cost (43.8%) followed by not having a reason to go (20.0%) among 105 responses, Table 2.

Table 2. Reported reasons respondents have not been to a dentist in the past year

Reason	Number	Percent
Cost	46	43.8%
No reason to go (no problems, no teeth)	21	20.0%
Fear, apprehension, nervousness, pain	8	7.6%
Other priorities	8	7.6%
Cannot get to the office/clinic (too far away, no transportation)	6	5.7%
Do not have/know a dentist	4	3.8%
Have not thought of it	3	2.9%

The Smiles on Wheels staff thought the 13 event days ran excellent (n=8) or good (n=5).

## Discussion

The JCSSS helped reach 192 Michigan seniors and provided them with a significant amount of individualized oral health aids, oral health screening and, oral cancer screening. Of these, 17 (8.9%) were in need of periodontal care or urgent treatment that they may not have received otherwise. Almost half (48.6%) of the seniors that were screened reported that they did not have insurance that covered dental care and one-third (33.0%) did not receive dental care because of cost in the past year. This demonstrates a need in Jackson County for senior dental care. It will be a priority to see if this need is consistent throughout the state and to determine a way to improve access to care for this age group.

The JCSSS was able to obtain a racially representative sample from Jackson County. However, Jackson County is less racially diverse than Michigan as a whole (Jackson County 8.2% black vs Michigan 14.3% black). The screening population was also heavily female (74.0%). In the future efforts will focus on reaching a more diverse population.

The screened population had several poor oral conditions including severe dry mouth (22.9%), suspicious soft tissue lesions (9.4%), substantial oral debris (23.4%), severe gingival inflammation (12.5%), and untreated decay (10.9%). These oral health conditions do not represent a healthy oral cavity that is necessary for all people of all ages to achieve total health. Seniors are at a higher risk of a healthcare emergency resulting from poor oral health, such as aspiration pneumonia and choking.

This pilot explored a wide variety of techniques to help Michigan launch a successful statewide oral health survey for the aging population. It proved to be difficult to achieve an ample amount of seniors to consent to an open mouth screen. Lessons learned include using privacy screens during the open mouth screen, to seek a highly supportive site coordinator, to market the project with posters and advertisements, and to offer a wide variety of high quality incentives in exchange for an open mouth screen.

A complete statewide survey is needed to provide additional data on the oral health status of the aging population in Michigan to lead legislative action that can provide additional and necessary oral health care resources to seniors. In the future Michigan plans on applying for funds to help screen seniors region by region until the entire state has been screened. Lessons learned from this pilot will be used to help increase the number of seniors reached and to improve future screening programs.

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