Funding for the survey to identify providers of special needs patients is provided by the Department of Health and Human Services Health Resources and Services Administration Grants to Support Oral Health Workforce Activities (T12HP10742). The contents of the training are solely the responsibility of the authors and do not necessarily represent the official view of HRSA.
**Introduction:**

In the United States there are an estimated 35-43 million people with physical and mental disabilities\(^1\). Approximately 11.9% of the population between the age group of 15-59 and 38.2% of the population which is 65 years and older years has at least one form of disability\(^2\). Health care access for this special needs population has always been a challenging issue, especially for adults and children coming from low-income families and those without health insurance. In order to develop a workforce competent to care for this population, it is vital to understand how many providers currently provide medical and dental care to this group.

The Oral Health Needs survey has been a collaborative effort between the Michigan Department of Community Health and the Michigan Oral Health Coalition funded by the Department of Health and Human Services Health Resources and Services Administration Grants to Support Oral Health Workforce Activities.

The principle objective of this survey was to identify dental health providers in Michigan who treat people with special needs and disabilities. The secondary objective was to understand the barriers that prevent dental health professionals from caring for this population. This will give an insight into developing new policies that will enable dentists with the training and resources needed to provide these services. Lastly the department hopes to provide the information to the public compiled in a resource to enable patients to effectively seek these services.

**Methods:**

The data was obtained from the Oral Health Needs survey. In total 9500 surveys were sent. The surveys were mailed to 6500 licensed dentists with current mailing addresses in Michigan. The list was obtained by the Bureau of Health Professions Licensing for Health Care Professionals of the Michigan Department of Community Health. The higher number of surveys was due to fact that the
survey was mailed in two batches separated by four weeks time; 6500 surveys in the first batch and 3000 resent in the second batch. The survey packet consisted of the main survey, a cover letter giving details of the survey and a stamped return mail envelope addressed to MDCH Oral health Program. Returned surveys were considered as consent to be part of the project and all information was confidential and delinked from any identifiers.

Microsoft Access 2000 was used to enter and maintain data. Statistical analysis was carried out using SAS version 9.1 (SAS Institute, Inc., Cary, NC). The focus of the analysis was to determine the total number of dentists providing services to people with special needs and also identify barriers that may discourage them from providing services to these patients. Univariate analysis was used to obtain the overall numbers of dentists providing these services, evaluate any special training they possess, types of insurances and disabilities they accommodate in their clinics and the methods used for managing these patients. The survey also focuses on the dental services provided in hospital setting and if current changes in insurance schemes affect dental care for special need populations.

**Results:**

In response to the questionnaire, 1312 (13.8%) surveys were returned. The surveys were returned by 1219 (93.12%) dentists with active licenses and 19 (1.45%) retired dentists. About 70 (5.35%) dentists did not specify their license status. Of the 1312 dentists, only 229 (17.45%) work in additional dental offices other than their primary clinics. The largest response rate was received from Oakland county (185) followed by Wayne county (155) where most dentists operated from their primary offices. Wayne county reported the largest number of dentists (26) working in additional clinics.

When evaluating the type of clinic that dentists operated from, it was found that 1140 (92.68%) dentists had a privately operated clinic. This included individual or group practice. 30 (2.44%) dentists operated from hospital-based or other institutionally based clinics. Only 31 (2.52%) dentists operated
from Community Health centers and 10 (0.81%) operated from Health Department dental clinics. 19 (1.54%) dentists operated from other types of clinics like military dental centers, charity funded centers etc.

Out of the 229 dentists working in additional clinics, only 214 provided the description of clinic they rendered services from. Among them, 116 (54.21%) worked in private clinics, 54 (25.23%) worked in hospital based clinics, 37 (17.29%) dentists worked in community health clinics and 5 dentists (2.34%) worked in Health Department dental clinics.

One of the objectives of the survey was to highlight the proportion of dentists who accepted low-income insurance programs like Medicaid, Healthy Kids Dental, MI Child and Sliding Scale payments. 475 (36.20%) dentists did not provide information about this question. Among the remaining 837 respondents, only 51 (3.89%) dentists said that they accepted all four programs. The number of dentists accepting each individual program are described in the table 1.1.

<table>
<thead>
<tr>
<th>Accepted Insurance</th>
<th>Number (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>245</td>
</tr>
<tr>
<td>Healthy Kids Dental</td>
<td>563</td>
</tr>
<tr>
<td>MI Child</td>
<td>734</td>
</tr>
<tr>
<td>Sliding Scale</td>
<td>116</td>
</tr>
</tbody>
</table>

Table 1.1

For information regarding private insurance, 756 (57.6%) dentists responded to this question saying that they accepted most forms of private insurance. 556 (42.4%) dentists did not respond to this question.

Among the 1312 respondents, only 444 provided information about their practicing specialty. There were 225 (17.5%) general dentists and 36 (2.7%) who mentioned that they practiced two or more specialties. There were 183 dentists who practiced only one specialty exclusively. Of these, 13 (0.99%) were Endodontists, 33 (2.52%) were Pediatric dentists, 26 (1.98%) were Oral surgeons, 23 (1.75%) were Periodontists, 62 (4.73%) were Orthodontists, 20 (1.52%) were Prosthodontists and 6 (0.46%) were Public Health dentists.

To evaluate the current status of dental services provided to persons with disabilities, dentists were asked if they had any special training to treat these patients. They were also asked to estimate how many children and adults with disabilities they treat in a year. 247 (18.83%) dentists were specially trained to treat this population. Of the 1248 dentists who answered the question, the majority
of dentists (507, 40.62%) said that they treated less than 5 children with disabilities in a year. Only 126 (10.09%) dentists reported treating more than 30 children with disabilities in a year (Fig 1.1). For adults with disabilities (1251 responded), the majority of the dentists (356, 28.45%) treated 5-10 adults in a year. Only 173 dentists (13.82%) treated more than 30 adults in a year (Fig 1.2).

Fig 1.1

There was an overwhelming response to the questions that dealt with the dentists’ experience and willingness to accommodate patients with disabilities. 1140 (86.89%) dentists said that they had experience with two or more types of
disabilities mentioned ex. ADHD, Cerebral Palsy, Down Syndrome etc. 841 (64.1%) dentists showed definite willingness to accommodate patients with different disabilities. However it is important to note that the question referred to patients with disabilities in general and did not include those with specific types of insurance.

The survey also aimed at getting information about hospital based dentistry, if practiced by the dentists. 419 (31.94%) dentists said that they had treated at least one patient in a hospital setting. Fig 1.3 shows the individual numbers of dentists who have treated patients in each age group. Keep in mind that many dentists have treated multiple age groups.

![Fig 1.3](image)

Among these, most dentists (118, 32.69%) said that hospital facilities are available immediately with no waiting time for treating a patient. The survey also focused on issues like on-site services provided by dentists. 206 (15.70%) of dentists said that they provided on-site services in nursing homes and only 90 (6.86%) said that they provided on-site services in homes.

Information regarding facilities and dental clinic set-up revealed that all 1312 dentists had four or more accessibility features mentioned in the survey (wheelchair accessibility, parking, designated hours, easy transfer dental chair, mobile equipment, sign language etc) to help patients with disabilities. 157 (11.9%) clinics also have translator services available in several languages, mainly Spanish, Arabic, Indian, Vietnamese, etc. 366 (27.90%) dentists operating through Primary clinics and 88 (6.7%) of those with additional clinics said that they have
specially trained hygienist or assistants to manage patients with disabilities. Almost all dentists (1248) reported using four or more anxiety management techniques (relaxation management, oral sedation, desensitization, nitrous oxide inhalation sedation, etc.) for these patients as well.

In view of the recent changes in Medicaid reimbursements, the survey tried to evaluate the impact this might have had in treating patients with disabilities especially in hospital settings. Although 804 (61.28%) dentists agreed that there is a lack of dentists who treat patients with disabilities in hospital settings, 1105 (84.22%) disagreed that changes in Medicaid changed their willingness to treat these patients in hospitals. Among all the respondents only 272 (20.73%) were interested in furthering their education on treating patients with special needs. The final goal of the survey was to compile a resource book of dental clinics which provide dental services for special needs patients. However 1060 (80.79%) dentists refused to be part of this endeavor.

**Discussion:**

The survey indicates that while the majority of dentists accept most forms of private insurance, they seem to be very selective of accepting low-income insurance programs like Medicaid, MI Child, Healthy Kids Dental and Sliding Scale Programs. While most accept two or more in combination, only 51 of the responding dentists accept all of these programs. This variation is indicative that reimbursement policies can affect a patient’s ability for access to care.

The survey also shows that 88.26% dentists have experience with treating children with disabilities and 90.7% have experience with adults with special needs as well. However since this was a generalized question which did not specify the kind of insurance these patients have, the number of these patients using low-income insurance programs that were treated cannot be concluded. It is also important to note that only 247 responding dentists have specialized training for working with this population and 419 dentists have experience with treating a patient in a hospital setting.

Other facts concluded from the survey show that only 272 dentists expressed interest in furthering their education interest in furthering treating
patients with special needs and only 238 dentists wished to be included in a resource book for patients with disabilities. This marked low response shows that most dentists would not want to cater to this population due to potentially low reimbursement rates since most patients with special needs may use low-income insurance programs. Since treating these patients is time-consuming many dentists prefer not to be a resource for them as well.

The primary limitation of this study was the low response rate. Only 13.8% (1312) of the surveys were returned therefore our results may be impacted by missing or inaccurate data. Also, the first batch of surveys was sent without a cover letter. This error was subsequently corrected with the second batch. This may also be a contributing factor to the low response rate that was received. However it is important to note that the response rate in the batch of surveys that were mailed with a cover letter did not exceed those in the batch without.

Conclusion:
This survey has brought to light the need for encouraging and training more dental professionals across the state to undertake treatments for persons with disabilities. Reimbursement policies need to be revisited in an attempt to allow dental professionals to dedicate time and resources for treating children and adults with special needs. Opportunities need to be created for training dental hygienists and assistants to help dentists manage these patients. Hospital dentistry still remains mainly as an un-ventured avenue. Enabling resources for dentists to utilize these facilities may be a turning point in facilitating dental care for this group of patients.

References: