 **National Council on Disability**

An independent federal agency making recommendations to the President and Congress to enhance the quality of life for all Americans with disabilities and their families.

# Letter of Transmittal

April 5, 2023

President Joseph R. Biden Jr.

The White House

Washington, DC 20500

Dear Mr. President:

Our country is failing to adequately care for the oral health needs of the over 9.4 million people with intellectual and developmental disabilities (IDD) in the United States who rely upon Medicaid and its limited network of oral healthcare providers for their oral health needs. Poor oral health contributes to the decay of physical health as it has been linked to respiratory, cardiovascular and endocrine disease.[[1]](#footnote-1) The significant health disparities existing between those with IDD and their nondisabled counterparts can be greatly attributed to poor oral health. On behalf of the National Council on Disability (NCD), I submit this report for your consideration entitled *Incentivizing Oral Healthcare Providers to Treat Patients with Intellectual and Developmental Disabilities Through Medicaid*.

This report supplements our January 2022 report, *Medicaid Oral Health Coverage for Adults with Intellectual and Developmental Disabilities – A Fiscal Analysis,* which contained NCD’s recommendations for the expansion of Medicaid to provide comprehensive oral healthcare for persons with IDD, setting forth an evidentiary base of its cost effectiveness and how the provision of those services can address the chronic health disparities existing between people with IDD and their nondisabled counterparts. This report documents our findings that existing Medicaid policies hinder oral healthcare providers’ ability to safely render cost effective oral healthcare in the dental office. Absent their ability to obtain oral healthcare in dental offices, hospital emergency rooms serve as *defacto* dental clinics for people with IDD or they do without that care to the detriment of their overall health and well-being.

Addressing the oral healthcare needs of people with IDD is complex, requiring foremost dental healthcare professionals who have been educated and trained in caring for this vulnerable population; and often requiring specially trained staff, such as dental hygienists and certified registered nurse anesthesiologists to better prepare these patients for receipt of dental care. It also requires the development of compensation strategies under the Medicaid program to incentivize oral heathcare professionals to treat this population and that support an integrated delivery of oral healthcare.

Among the recommendations included in this report, the following three should be prioritized: foremost, Congress should be encouraged to update the definition of Medically Underserved Populations to include people with IDD; second, coverage for medically necessary oral healthcare services in Medicaid programs should be mandated for eligible adults with IDD; and finally, the U.S. Department of Health and Human Services must explore a new integrated, preventive, value-based healthcare program for adults with IDD under Medicare that covers medically necessary medical and dental services for adults with IDD.

NCD looks forward to briefing your Administration on the specific findings and recommendations in this report and stands ready to work with federal agencies, state governments, the disability community, and other stakeholders to facilitate better access to oral healthcare for people with IDD through Medicaid.

Respectfully Submitted,

Andrés J. Gallegos  
Andrés J. Gallegos, J.D.  
Chairman

National Council on Disability Members and Staff

**Members**

Andrés J. Gallegos, *Chairman*

Claudia Gordon, *Vice Chair*

Hoskie Benally, Jr.

Sascha Bittner

Theo Braddy

Shawn Kennemer

Risa Rifkin

Neil Romano

Emily Voorde

**Staff**

Anne C. Sommers McIntosh, Executive Director

Joan M. Durocher, General Counsel & Director of Policy

Lisa Grubb, Director of Administration, Finance, and Operations

Stacey S. Brown, Staff Assistant

Kimie Eacobacci, Legislative Affairs Specialist

Netterie Lewis, Administrative Support Specialist

Amy Nicholas, Senior Attorney Advisor

Nick Sabula, Public Affairs Specialist

Amged Soliman, Senior Attorney Advisor

Ana Torres-Davis, Senior Attorney Advisor

Keith Woods, Financial Management Analyst

Incentivizing Oral Health Care Providers to Treat Patients with Intellectual and Developmental Disabilities

September 25, 2022

# Table of Contents

[Acknowledgments 11](#_Toc129609227)

[Executive Summary 13](#_Toc129609228)

[Acronyms 17](#_Toc129609229)

[Introduction 19](#_Toc129609230)

[Chapter 1: Research Questions 23](#_Toc129609231)

[Chapter 2: Input from the Population 25](#_Toc129609232)

[Purpose of Each Focus Group 25](#_Toc129609233)

[Size of the Focus Groups 26](#_Toc129609234)

[Question Development 26](#_Toc129609235)

[Focus Group 1: Self-Advocates 26](#_Toc129609236)

[Focus Group 2: Parents and Caregivers 28](#_Toc129609237)

[Focus Group 3: Key Stakeholders 29](#_Toc129609238)

[Chapter 3: Input from the Providers 33](#_Toc129609239)

[Literature Review and Draft Questions 34](#_Toc129609240)

[Modified Delphi Questionnaire Methodology 34](#_Toc129609241)

[Sampling 35](#_Toc129609242)

[Sample Size 35](#_Toc129609243)

[Limitations of Sample 35](#_Toc129609244)

[Timeline 36](#_Toc129609245)

[Summary of the Provider Questionnaire: Round 1 36](#_Toc129609246)

[Round 1 37](#_Toc129609247)

[Discussion 45](#_Toc129609248)

[Second Provider Questionnaire: Round 2 45](#_Toc129609249)

[Discussion 47](#_Toc129609250)

[Third Provider Questionnaire: Round 3 48](#_Toc129609251)

[Round Three: Section One—Medicaid Participation 48](#_Toc129609252)

[Discussion 52](#_Toc129609253)

[Chapter 4: Demonstrating a Return on Investment 53](#_Toc129609254)

[Chapter 1: Context 59](#_Toc129609255)

[Chapter 2: Inputs 59](#_Toc129609256)

[Chapter 3: Policy Change 60](#_Toc129609257)

[Chapter 4: Calculations 60](#_Toc129609258)

[Chapter 5: Appendices 61](#_Toc129609259)

[Chapter 6: Supplements 61](#_Toc129609260)

[Value-Based Care and Shared Savings 61](#_Toc129609261)

[Reimbursement Rates 66](#_Toc129609262)

[Chapter 5: Promising Practices 69](#_Toc129609263)

[Policy Advancement 69](#_Toc129609264)

[Maryland 69](#_Toc129609265)

[Louisiana 70](#_Toc129609266)

[New Hampshire 70](#_Toc129609267)

[Medicaid|Medicare|CHIP Services Dental Association Oral Health Policy Academy 71](#_Toc129609268)

[Dental Provider Training 72](#_Toc129609269)

[Centers for Inclusive Dentistry Immersion Program at New York University 72](#_Toc129609270)

[University of Pennsylvania, School of Dental Medicine 72](#_Toc129609271)

[Financing 74](#_Toc129609272)

[Chapter 6: Findings and Recommendations 75](#_Toc129609273)

[Recommendations to Congress 77](#_Toc129609274)

[Chapter 7: Conclusion 81](#_Toc129609275)

[Appendices 85](#_Toc129609276)

[Appendix A: Participating Organizations 85](#_Toc129609277)

[Appendix B: Project Organizational Chart 87](#_Toc129609278)

[Appendix C: Focus Group 1: Self-Advocates Script 89](#_Toc129609279)

[Welcome 89](#_Toc129609280)

[Purpose 89](#_Toc129609281)

[Thank You 89](#_Toc129609282)

[Introductions 89](#_Toc129609283)

[Focus Group Rules 90](#_Toc129609284)

[Icebreaker 90](#_Toc129609285)

[Begin the Session 91](#_Toc129609286)

[Dentist 91](#_Toc129609287)

[Dental Offices—*Dental Office Experiences* 92](#_Toc129609288)

[Dental Care—Now we are going to talk a little bit about your experiences  
when getting dental care either from your dentist or your   
dental hygienist. 92](#_Toc129609289)

[Paying for Dental Care—Let’s talk now about paying for dental care. 93](#_Toc129609290)

[Appendix D: Oral Health Care Provider Questionnaires 95](#_Toc129609291)

[Round 1 95](#_Toc129609292)

[Example of Round 2 Questions 100](#_Toc129609293)

[Example of Round 3 Questions 102](#_Toc129609294)

[Appendix E: Provider Demographics 105](#_Toc129609295)

[Appendix F: CDT Codes and Labels 107](#_Toc129609296)

[Endnotes 109](#_Toc129609297)

# Acknowledgments

The National Council on Disability (NCD) wishes to acknowledge the Medicaid|Medicare|CHIP Services Dental Association, the Special Care Dentistry Association, and the American Academy of Developmental Medicine and Dentistry, which conducted the research and writing of this report. NCD wishes to thank Mary E. Foley, M.P.H.; Martha M. Dellapenna, M.E.d.; Roxanne Parkins, M.A.; David Fray, D.D.S.; Steven Perlman, D.M.D., M.P.H.; and Allen Wong, D.D.S. NCD also wishes to acknowledge the support of the states and managed care plans that partnered with the Medicaid/Medicare/CHIP Services Dental Association to develop and implement this project. See Appendix A.

# Executive Summary

People with intellectual and developmental disabilities (I/DD) experience significant issues accessing quality, appropriate, and timely oral health care (OHC) services. Despite efforts by federal, state, and local agencies, legislatures, and key advocates, adults with I/DD remain the largest minority population with unmet OHC needs. There are several systemic and environmental reasons for this; however, three major factors exist. These include (1) the insufficient number of OHC providers rendering care to people with I/DD, (2) the lack of government policies that support dental benefits for people with I/DD, and (3) the insufficient funding to support essential OHC services for people with I/DD.

In early 2022, on behalf of the National Council on Disability (NCD), the Medicaid|Medicare|CHIP Services Dental Association, in collaboration with the American Academy of Developmental Medicine and Dentistry (AADMD) and the Special Care Dentistry Association, undertook a study of OHC providers across the United States to explore the factors and policy incentives that influence their decisions to treat individuals with I/DD and to participate in government programs that provide coverage for dental care for individuals with I/DD. In this report, the legislative, environmental, and system factors that provide the backdrop for this project are described. The key to expanding access to OHC services for adults with I/DD is understanding these points, as they dictate how policy, programs, and services under Medicaid are currently operationalized and the system within which innovative solutions may be realized.

This effort included three focus groups targeting self-advocates with I/DD, their families, and stakeholders; a Project Advisory Committee; several Medicaid managed care plans (MCPs) contracting with state Medicaid dental programs; and a large group practice (provider organization). NCD developed a modified Delphi questionnaire to assess OHC providers’ interest and behaviors in participating in Medicaid programs that support dental care for individuals with I/DD; and to identify factors that drive participation in Medicaid oral health programs for adults with I/DD. The first round of questions was open ended and asked OHC providers to share their knowledge, experience, ideas, concerns, and challenges related to participating in Medicaid and in treating adult patients with I/DD. It also asked OHC providers for suggestions for program improvements and ideas for policy and/or program reform that might incentivize more providers to participate in Medicaid programs that cover dental services for adults with I/DD.

Among the 900 OHC providers who responded to the first-round questionnaire, nearly all reported to have participated in and were familiar with Medicaid dental program policy and administration. Analysis of Round 1 responses revealed a broad consensus of recommendations for improvement and bias among some, in the perception of the patient base served by Medicaid.

A second round of closed-ended questions was implemented to learn which factors had the greatest influence over providers’ behavior to participate in Medicaid programs covering dental care for adults with I/DD. Of the 14 factors identified in Round 1, two factors rose to the top as having the greatest influence: (1) *Medicaid dental reimbursement rates* and (2) *helping people in need*.

Providers were also asked to share experiences in treating adults with I/DD. Regarding the types of support and accommodations most often needed to treat patients with I/DD, dental providers indicated that *financial support to cover costs associated with increased time and staffing needs* would be most helpful. For those who responded that they no longer treat patients with I/DD, most indicated that *time* and *reimbursement rates* were the two major factors that influenced their decisions.

Round 3 provided the opportunity to prioritize responses and establish consensus. In Round 3, OHC providers were asked to rank items in the order of importance to them. Six key questions were asked. In this round, 109 OHC providers responded. Providers reported that the top three supports or accommodations needed to treat adult patients with I/DD easily and effectively are (1) *availability of financial support to cover costs associated with increased time and staffing needs*,(2) *increased reimbursement to support longer dental visits*, and (3) *specialized training.*

In addition to the OHC provider study, NCD explored existing Medicaid dental reimbursement rates, current state budget expenditures, and the potential return on investment toward sufficiently funding a Medicaid dental benefit for adults with I/DD. This report details the process undertaken by NCD researchers, including a three-state analysis demonstrating a value-based[[2]](#endnote-2) preventive OHC model with shared savings based on performance by providers who prioritize value over volume.

In a third study, researchers investigated dental reimbursement rates implemented by several MCPs. This report demonstrates how variability in Medicaid managed care reimbursement rates may adversely affect the dental workforce and ultimately impact access to care.

The consensus statements from the OHC provider questionnaire along with the outcome analysis of the return-on-investment study form the basis for recommendations in this report. These recommendations provide the framework for systems change and redesign, namely, a *new government program* in Medicare that supports better care at a lower cost for an aging population of adults with I/DD living in noninstitutionalized settings across *all* states. The proposed integrated health care program will demonstrate significant savings by linking adults with I/DD living in the community to existing social support systems, integrating their dental and medical health care services *and coverage*, and incentivizing providers to deliver value-based preventive health care services.

# Acronyms

|  |  |
| --- | --- |
| AADMD | American Academy of Developmental Medicine and Dentistry |
| ADA | American Dental Association |
| BCH | Boston Children’s Hospital |
| CDT Code | Code on Dental Procedures and Nomenclature |
| CHIP | Children’s Health Insurance Program |
| CMS | Centers for Medicare and Medicaid Services |
| DD | Developmental Disability/Disabilities |
| ECC | Early Childhood Caries |
| EPSDT | Early and Periodic Screening, Diagnostic, and Treatment |
| FFS | Fee for Service |
| FMAP | Federal Medical Assistance Percentage |
| FQHC | Federally Qualified Health Center |
| HCBS | Home- and Community-Based Services |
| HHS | US Department of Health and Human Services |
| ICD | International Classification of Diseases |
| IDD or I/DD | Intellectual and Developmental Disabilities |
| IHI | Institute for Healthcare Improvement |
| MCP | Managed Care Plans |
| MSDA | Medicaid|Medicare|CHIP Services Dental Association |
| NCD | National Council on Disability |
| OHC | Oral Health Care |
| OR | Operating Room |
| PAC | Project Advisory Committee |
| ROI | Return on Investment |
| SCDA | Special Care Dentistry Association |

# Introduction

Over the last two decades, legislative changes in Medicare and Medicaid have taken place resulting in improvements in government policy, program administration, and services. These changes allow for more flexibility of services for beneficiaries, alternative payment schedules for providers, and various administrative models for state Medicaid programs.[[3]](#endnote-3) Despite this flexibility, gaps in federal and state policies continue to exist as people with I/DD are not recognized as medically underserved. In addition, dentists’ participation in Medicare and Medicaid remains far too low to effectively provide access to care for most Americans who depend on these government programs. Further, many persons with disabilities report significant barriers from dental providers in both physical environment and capacity to understand their disability and accommodate care.[[4]](#endnote-4) Oral health care (OHC) equity for persons with disabilities is an elusive ideal that requires the dental profession to understand the nexus of health policy, redesign of health delivery, reimbursement for healthy outcomes, and incentives for the health provider.

In this project, the National Council on Disability (NCD) explored three issues impacting access and use of dental care services by adults with intellectual and developmental disabilities (I/DD): (1) OHC provider participation in Medicaid programs that cover dental services for adults with I/DD; (2) return on investment (ROI) to states for sufficiently funding a comprehensive Medicaid dental benefit for adults with I/DD; and (3) comparison of Medicaid managed care dental provider reimbursement rates to Medicaid fee-for-service (FFS) dental provider reimbursement rates. This project addressed the following three goals:

**Goal A:** Gain knowledge and understanding of issues affecting the ability of individuals with I/DD to access and use dental care services from self-advocates with I/DD, parents/caregivers, and advocates and other key stakeholders to inform on process, the questionnaire, and the ROI, and provide evaluation in a report.

**Goal B:** Establish a consensus among OHC providers regarding approaches that programs may take toward policy changes that incentivize OHC providers to treat patients with I/DD.

**Goal C:** Establish a methodology/tool for use by states to calculate an ROI to state departments and programs for funding/enhancing a Medicaid dental benefit for individuals with I/DD.

To achieve these goals, NCD established a research team to design and implement three studies. A Project Advisory Committee (PAC) was formed, made up of a group of 20 individuals with representation from the target population as well as partnering dental organizations. PAC members were primarily responsible for providing technical assistance and support in the development and dissemination of the OHC provider questionnaire to OHC providers within their respective networks. See Appendix A and Appendix B.

To address Goal A, the research team conducted three focus groups. The first focus group convened people with I/DD or self-advocates. The second group was made up of parents and caregivers of people with I/DD. The third focus group consisted of other key stakeholders. The purpose of the focus groups was to gain insight from the population to inform the work of the project, including the development of questions for the OHC Provider Questionnaire. Chapter 2 provides an overview of the focus groups and the takeaway messages from key informants.

To accomplish Goal B, the research team solicited support from state Medicaid dental program administrators as well as health plan partners to disseminate an OHC Provider Questionnaire to enrolled dentists across Medicaid and commercial networks. Chapter 3 presents a description and purpose of the OHC Provider Questionnaire, targets, methods, and results.

To address Goal C and demonstrate an ROI to funding an adult dental benefit for individuals with I/DD, researchers created a tool for use by states. The tool illustrates how a state may strategically develop or enhance a benefit and overlay the costs to demonstrate an ROI or cost-shifting from other state department and program expenditures. Researchers modified a previous methodology developed by the Medicaid|Medicare|CHIP Services Dental Association in collaboration with researchers at Brandeis University, Massachusetts. Variables were adjusted to account for unique considerations of the population with I/DD. A full description of the ROI tool and its methodology are featured in Chapter 4.

Medicaid dental programs are required under federal law to produce and publish provider reimbursement fee schedules. The FFS provider reimbursement schedule is the actual amount to be paid to providers under an FFS program. Medicaid managed care plans (MCPs) that contract with Medicaid agencies to administer the dental benefits often reimburse dental providers at rates below the FFS reimbursement schedule.

In Medicaid managed care, states may delegate the delivery of dental care to Medicaid beneficiaries to MCPs. States pay MCPs risk-based capitation payments, and the plans typically negotiate with its network providers the reimbursement rates it pays for dental care services. Given this negotiation process, there may be different fee schedules or payment methodologies utilized by different plans. States have the option to direct how MCPs pay their network providers, but that is not a Medicaid requirement.

OHC providers participating in more than one Medicaid managed care dental plan may be faced with several different fee schedules, any of which may fall below the state’s Medicaid FFS reimbursement schedule.

This practice has generated much confusion among OHC providers and, as such, has resulted in a decrease in the number of dental providers in some Medicaid managed care dental plan networks. As discussed in Chapter 4, researchers have applied MCP fee schedules from three states to the ROI model. The results of this study contribute to the recommendations included in this report.

Presented in Chapter 5 are three categories of promising practices that demonstrate innovative models to advance dental care for people with I/DD.

Chapter 6 lists recommendations for key stakeholders including and not limited to the Centers for Medicare and Medicaid Services, Health Resources and Services Administration, Medicaid|Medicare|CHIP Services Dental Association, American Academy of Developmental Medicine and Dentistry, Special Care Dentistry Association, state policymakers, state Medicaid administrators, Medicaid MCPs, dental provider organizations, people with I/DD, their parents and caregivers, and advocacy groups for people with I/DD.

Chapter 7 provides a road map for the development and implementation of an innovative, integrated, value-based, preventive-focused, government-sponsored health care program that supports inclusion and equity for all people with I/DD.

# Chapter 1: Research Questions

The National Council on Disability (NCD) gathered information from oral health care (OHC) providers regarding their current participation in any type of Medicaid program that allows for the treatment of people with intellectual and developmental disabilities (I/DD); current treatment of people with I/DD; reasons why they participate in Medicaid programs that allow for the treatment of people with I/DD; reasons why they *do not* participate in Medicaid programs that allow for the treatment of people with I/DD; reasons why they treat people with I/DD; reasons why they *do not* treat people with I/DD; ideas for policy incentives that would increase their participation in Medicaid programs that allow for the treatment of people with I/DD; and ideas for policy incentives to treat people with I/DD.

To complete this task and achieve Goal B (Establish a consensus among OHC providers regarding approaches that programs may take toward policy changes that incentivize OHC providers to treat people with I/DD), NCD conducted a review of the literature to identify and validate existing perceptions noted by focus group participants.

Based on the evidence and input from the focus groups, a questionnaire framework was developed, and a series of open-ended questions for inclusion in Round 1 of the modified Delphi questionnaire was drafted. The Delphi method was selected as it uses a systematic approach to deploy a series of anonymous questionnaires with controlled feedback to obtain opinions and consensus from respondents.

NCD implemented the study of OHC providers from 49 states across the United States using an electronic platform and email communication. Following is a list of the research questions included in Round 1:

* Please list and describe any factors that have influenced your decision (either to participate or not to participate) in your state’s Medicaid dental program or home- and community-based services (HCBS) program. (Please include a description of any individuals, institutions, organizations, employers, staff, programs, and/or policies and how they influenced your decision.)
* If you currently do not participate in your state Medicaid dental program and/or HCBS dental program, did you ever? If yes, why did you leave?
* Please share any ideas you may have that would change your decision to participate in Medicaid dental programs. In other words, what would it take to get you to participate?
* Please list and describe any factors that have influenced your decision to treat adults with I/DD. Please include a description of any individuals, institutions, organizations, employers, staff, programs, and/or policies and how they have influenced your decision.
* Tell us about your experiences in treating adult patients with I/DD. Please share your experiences in the various dental settings: (1) dental office,   
  (2) hospital/operating room, and/or (3) community-based settings.
* Please explain the types of supports or accommodations (physical, behavioral, pharmacological) you need to render dental care more easily and effectively to adult patients with I/DD.
* Please list and describe any factors that have influenced your decision to not treat, stop treating, or limit your practice of treating adults with I/DD. Please include any individuals, institutions, organizations, employers, staff, programs, and/or policies and how they influenced your decision.
* If you used to treat adults with I/DD and currently do not, why did you stop?
* What changes would be necessary for you to (1) begin to treat adults with I/DD again and/or (2) stop limiting your practice to only adults with I/DD who require no accommodations?

# Chapter 2: Input from the Population

Understanding the issues affecting access and use of dental care services for people with intellectual and developmental disabilities (I/DD) is essential to determining the best strategies for resolution. While the literature details many of the issues that have historically affected this population, the National Council on Disability (NCD) sought to update and validate findings. To effectively achieve this and meet the goals and expectations of the project, NCD convened three focus groups. The first focus group was composed of people with I/DDwho serve as self-advocates and champions for other people with I/DD. The second focus group was made up of parents and caregivers of people with I/DD. The third focus group consisted of advocates, payers, providers, and policymakers who have knowledge of federal and state policies and practices affecting people with I/DD.

Goal A details project goals regarding the focus groups**:** To gain knowledge and understanding of issues affecting the ability of individuals with I/DD to access and use dental care services from (1) self-advocates with I/DD, (2) parents/caregivers, and (3) advocates and other key stakeholders to inform on process, the survey questions, and the ROI, and provide the final findings.

## Purpose of Each Focus Group

The purpose of the Self-Advocates and Parent/Caregiver focus groups was to gain knowledge and understanding of the attitudes, beliefs, experiences, and reactions of people with I/DD and caregivers of people with I/DD who have sought and received or have been unable to receive dental care for themselves or a family member through the existing oral health care delivery system. The purpose of the Stakeholder focus group was to gain insight into how government programs currently address dental access and care for people with I/DD, and what federal and state authorities or policy pathways currently exist to potentially advance dental policy.

## Size of the Focus Groups

Based on the nature of research and information to be gathered, NCD estimated that five to eight participants should be selected for each focus group. NCD worked with project partners to create selection criteria or screens to ensure proposed participants had the level of knowledge, experience, and passion needed to effectively contribute during the sessions. Once a pool of names was identified, NCD randomly selected the final sample to reduce potential bias. When invited individuals declined participation, others were invited.

## Question Development

To ensure the effectiveness of the focus groups, the research team convened a planning committee. The planning committee consisted of representatives from Medicaid|Medicare|CHIP Services Dental Association (MSDA), American Academy of Developmental Medicine and Dentistry (AADMD), and Special Care Dentistry Association (SCDA) who held subject matter expertise necessary to develop questions that would solicit meaningful responses. The planning committee was charged with creating between five and eight questions for each particular focus group. Questions were uniquely developed to gain input and knowledge from self-advocates, parents and caregivers, and key stakeholders of people with I/DD, which would inform and guide methods for the other aspects of the project. Separate scripts were developed to guide each focus group discussion, making sure all participants understood the purpose of the focus group and how their comments would be used by NCD.

## Focus Group 1: Self-Advocates

A diverse group of five multiply marginalized men and women with I/DD, ranging in age from approximately 25 to 40 years, engaged in a thoughtful discussion about their experiences in attempting to access and use dental care services. Five themes regarding their dental experiences were discussed: *Dental Appointments*, *The Dentist*, *The Dental Office*, *Receiving Dental Care*, and *Paying for Dental Care*. These specific themes were selected because participants’ insights regarding accessing dental care and their dental experience (from making their appointment to the visit itself and then payment for services) were needed to inform other key aspects of the project. The script used for Focus Group 1 (Self-Advocates with I/DD) may be viewed in Appendix C.

Self-advocates with I/DD were asked a series of questions to gain perspective of their feelings and perceptions regarding dental appointment experiences. All agreed that some level of support was needed from a family member or another person to schedule and keep their dental appointments. Most reported to have had experiences either in accessing and/or receiving dental care that were not positive. This included issues they experienced in finding a dentist that would accept Medicaid or another dental insurance; finding a dental practice that had experience treating people with I/DD; and dental staff who seemed too busy to take the extra time to address their unique accessibility and/or dental care needs. One reported that she felt ignored.

Regarding dentists and dental office staff, focus group participants reported that by and large they liked their dentist. One participant said that she felt her dentist only cared about money and not about her as a person. She said she received a bill for services that were not performed. Another reported having had some dental work done, but it was not completed, leaving her still suffering in pain. Regarding receipt of dental care, participants said they found dental care generally to be anywhere from satisfactory to excellent. All agreed that having referrals from other health care professionals or social service agencies improved their dental office experience. For those who indicated that their dental, accessibility, and other special needs were being met, they reported that those dental offices offered accommodations such as headphones, flexible appointment times, and a relaxed, desensitized environment. When asked what recommendation they would offer to dental providers to improve dental care experiences and outcomes, they suggested that dentists should collaborate and coordinate more with medical professionals to better understand their patients’ disabilities and whole person needs.

When asked about paying for dental care, the consensus of the group was that the cost of dental care is too high, and that cost creates barriers to care. Despite having Medicaid coverage, limitations in benefits and in the availability of dentists exist, making it difficult to regularly access dental care. Each participant indicated that they are covered by Medicaid and are grateful to have it. When asked about what changes should be made to improve care, one participant commented that policymakers and government officials need to listen to people with I/DD and advocates, to ensure that policies and financing adequately support the clinical, behavioral, and structural modifications necessary to deliver and receive care.

## Focus Group 2: Parents and Caregivers

Focus Group 2 was made up of six adult men and women from six different states. Participants in Focus Group 2 discussed their roles and responsibilities as caregivers for their adolescent or young adult. NCD used the same themes developed for the first focus group—*Dental Appointments*, *The Dentist*, *The Dental Office*, *Receiving Dental Care*, and *Paying for Dental Care*—in the second focus group session. These specific themes were selected because participants’ insights regarding accessing dental care and their dental experience (from making their appointment to the visit and then payment for services) were considered essential to inform other key aspects of the project. Researchers used this opportunity to compare and contrast issues raised by the first focus group participants.

When asked about dental office challenges and the need for support in making and keeping dental appointments for the people with I/DD whom they cared for, all participants said that they had to provide some level of support when scheduling and keeping dental appointments. Two indicated that they had difficulty finding a dentist that accepts Medicaid. Another shared that having flexible appointment times, a desensitized atmosphere, and a calm, relaxing environment help make the experience much more positive.

Regarding patient care, one participant indicated that in her experience, many dentists did not appear to have understanding or compassion when treating people with I/DD—two essential elements of appropriate health care. Another said that some of the dental procedures performed were often confusing for their loved one who did not fully understand the purpose of the dental visit or what was happening. Two participants, who happened to be dental professionals, reported that they treat their own children and shared how difficult it can sometimes be to render care to people with I/DD, even though they may be a family member. Another discussed that he observed a lack of continuity and/or coordination of dental care with community agencies and medical providers—two important aspects of whole person health care for people with I/DD.

Paying for dental care was a key area of discussion with this focus group. Several in the group acknowledged that Medicaid is helpful to their family member, but because reimbursement to providers is so low, it generally does not fully cover the cost of care to providers. Further, payments must be made out-of-pocket to pay for services that are not covered. Despite these challenges and limitations in coverage, parents and caregivers felt strongly that if all dentists accepted and treated a small number of Medicaid-enrolled patients with I/DD, the access problem could be relieved. Participants further acknowledged that the dental health care delivery system for adults with I/DD is fractured; to realize oral health and oral health care equity for this population, a new government program, one that considers the social, behavioral, and physical needs of the population, is needed.

## Focus Group 3: Key Stakeholders

This group included eight professional adult men and women aged 30 years and older representing a nonprofit organization, a social service agency, a community advocacy group, organized dentistry, a health insurance organization, and a state agency. This diverse group provided rich and varied responses that helped researchers gain insight into their unique perspectives about dental care for people with I/DD. Because the focus group was held virtually, participants from across the United States, as far as Hawaii, were able to join the session.

While the themes discussed in the third focus group were similar to those in the first two focus groups (*Dental Appointments, The Dentist, The Dental Office, “Receiving” Dental Care*, and *Paying for Dental Care*), the questions for this focus group were slightly different and were geared more toward policy, systems change, equity, and advocacy. Participants offered potential solutions to some of the issues and provided suggestions for policy change. When asked what questions should be included in the oral health care (OHC) provider questionnaire regarding dental care for people with I/DD, participants offered suggestions specifically related to patient physical and behavioral supports. These themes were subsequently included in the OHC provider questionnaire.

Focus Group 3 was designed to gain information from key stakeholders regarding ideas they may have about policies and programs that promote and support dental care for people with I/DD, and to learn what issues currently exist at the systems level that could be improved upon by federal and/or state legislation, regulation, policy development, and/or program redesign. The following statements highlight suggestions and comments from participants of Focus Group 3.

When asked about dental providers and the capacity of the dental workforce to provide dental care services to people with I/DD, focus group participants agreed that the current dental workforce does not sufficiently meet the OHC needs of the population. One participant commented that lack of dental school training has created a void in the dental workforce and continues to contribute to gaps in the number of dental providers available and willing to accept and treat patients with I/DD. Another suggested that low Medicaid dental program reimbursement rates, credentialing issues, and a cumbersome prior approval process discourage dentists from participating in state Medicaid dental programs. Others suggested that staffing limitations make it difficult for small dental practices to treat people with I/DD as desensitization and behavior modification techniques require more provider time and assistance.

When asked about other challenges and/or barriers to dental care, one participant said that transportation is a significant problem for many adults with I/DD. Another suggested that dental providers could potentially benefit by learning strategies from peers to enhance their physical environment and behavioral and clinical approaches to treating people with I/DD. Examples include giving providers a place to talk about making physical changes to the office, how to improve appointment scheduling, and rendering care. One participant suggested the expansion of tele-dental coverage to include oral health education to patients with I/DD as well as their parents and caregivers, and coverage for tele-dental preventive services. Two additional topics suggested for policy advancement included expansion of policies that support semiconscious sedation in dental offices settings and advanced policy and support for complex dental care rendered either in the dental office or hospital setting. A final suggestion included an idea to create a new government health care program for people with I/DD. All of these topics were noted for inclusion in the OHC provider questionnaire.

# Chapter 3: Input from the Providers

Participation by oral health care (OHC) providers in Medicaid programs that serve people with intellectual and developmental disabilities (I/DD) is essential, yet historically these participation rates have been low when compared to commercial insurance rates.[[5]](#endnote-5)

There are two intrinsic issues related to this problem: (1) Medicaid program policies restrict benefits and have reduced provider reimbursements compared to commercial plans and (2) treatment of people with I/DD often requires greater provider competency, more time, and additional staffing to support the care needs of the patient.

In an effort to fully understand the reasons why OHC providers choose not to participate in Medicaid programs that serve people with I/DD, and to identify what changes would need to take place to reverse their decision, researchers queried a sample of OHC providers from across the United States to quantify and gain consensus of their current participation in Medicaid programs and waivers that allow for the treatment of patients with I/DD; current treatment of patients with I/DD; reasons why they participate in Medicaid programs and waivers that allow for the treatment of patients with I/DD; reasons why they do not participate in Medicaid programs and waivers that allow for the treatment of patients with I/DD; reasons why they treat patients with I/DD; reasons why they do not treat patients with I/DD; ideas for policy incentives that would increase their participation in Medicaid programs that allow for the treatment of patients with I/DD; and ideas for policy incentives to treat patients with I/DD.

The purpose of this chapter is to detail how NCD engaged OHC providers across the United States to establish consensus regarding the complex factors affecting OHC providers’ willingness to treat individuals with I/DD and participate in Medicaid programs that provide payment of dental care services for individuals with I/DD, and to provide results that may be used to form and advance Medicaid dental policy and other government programs serving this population.

## Literature Review and Draft Questions

NCD conducted a review of the literature to identify barriers and challenges that people with I/DD face when attempting to access and use dental care services. In addition, the research team explored the science base looking for any notable challenges OHC providers face when rendering care to people with I/DD. The information gained from these two reviews was used to validate existing perceptions and focus group comments made by I/DD self-advocates, parents and caregivers, and other key stakeholders. Collectively, this information was used to inform the development of the OHC questionnaires.

## Modified Delphi Questionnaire Methodology

NCD employed a modified Delphi questionnaire methodology to assist in establishing consensus among existing OHC providers regarding the reasons for their willingness to treat or not treat patients with I/DD, and participate or not participate in Medicaid programs and waivers that allow for the treatment of patients with I/DD. OHC providers were also asked about any ideas they may have that would motivate them to participate in such programs and treat people with I/DD.

The Delphi method uses a systematic approach to deploy a series of anonymous questionnaires with controlled feedback to obtain opinions and consensus from respondents.[[6]](#endnote-6) NCD developed the Round 1 open-ended questions based on information gained from the literature and focus groups. The questionnaire was disseminated to existing OHC providers from across the states who, in turn, provided responses that allowed the researchers to frame items for the subsequent closed-ended rounds of the questionnaire. Each questionnaire incorporated summaries of item responses from the previous version so that respondents were able to consider them when responding in the next round. Round 2 and Round 3 questions were closed-ended. Responses most frequently selected in Round 2 were used in Round 3 to gain consensus. This process was used so that a convergence of opinion toward consensus would take place systematically. NCD set a response rate for each item in Round 1 (30%), Round 2 (40%), and Round 3 (50%), meaning that only those items that garnered a 30 to 50 percent or more selection rate by providers were included in the next round.

## Sampling

NCD implemented a combination of *convenience* and *cluster* sampling to gather information from the OHC provider community. Researchers solicited support from state Medicaid dental programs as well as members of the Medicaid|Medicare|CHIP Services Dental Association (MSDA) Corporate Round Table to disseminate the three rounds of the electronic questionnaire to their respective network providers. MSDA’s Corporate Round Table is made up of dental managed care plans (MCPs) (and other corporations) operating in both commercial and Medicaid markets. Collectively, these dental organizations administer dental benefits across 49 states and reach over 86,000 OHC providers. Each dental plan served as a *cluster* to disseminate the questionnaire link to all dental providers in their respective commercial and Medicaid dental plan networks. Organizations that had both commercial and Medicaid dental plans were directed to disseminate the survey in the larger of their two networks to avoid duplication in provider responses.

## Sample Size

The research team, with the support of project partners, disseminated the questionnaire to dental provider networks in 49 states. It is estimated that over 86,000 OHC providers received the Round 1 questionnaire. This sample represents approximately 40 percent of the dentists practicing in the United States.

## Limitations of Sample

NCD attempted to query faculty and dental students from several US dental schools. Despite enthusiasm from all dental schools that were contacted, none were able to participate. This was due to the lengthy Institutional Review Board approval process, which did not fit within the timeline of the project.

## Timeline

All three rounds were disseminated, and data were collected between March 30 and May 30, 2022.

## Summary of the Provider Questionnaire: Round 1

A series of Round 1 open-ended questions was developed. (See Appendix D.) To quantify like responses and stratify them by provider characteristics to ultimately establish provider consensus, respondents were asked 21 questions in Round 1. These questions fell into four overarching categories: Section 1, General Provider Information; Section 2, Medicaid Participation; Section 3, Treatment of Adults with I/DD; and Section 4, Other Demographic Information.

Under the General Provider Information section, providers were asked to self-designate by provider type, primary practice model, number of dentists in practice setting, number of hours worked per week, and age category. To quantify OHC providers’ participation in Medicaid programs and/or in Medicaid home- and community-based services (HCBS) waiver programs, and to glean insight into factors that influence their decision to participate in such programs, providers were asked to report the number of Medicaid adults with I/DD they treat and bill for; factors that influence their decision to treat adults with I/DD; reasons for leaving and/or not participating in the Medicaid program; and finally, ideas that would change their decision to participate.

Researchers further asked providers about the supports and accommodations they need to treat adult patients with I/DD, and how treatment supports differed based on practice settings: (1) dental office, (2) hospital/operating room, and (3) community-based settings. These questions were complex and required greater clarity, so NCD framed the questions within the context of activities of daily living.[[7]](#endnote-7) To increase consistency among responses, providers were given specific definitions of *Intellectual Disability*, *Developmental Disability*, and *Activities of Daily Living* and were then asked to answer the questions regarding their experience based on these definitions.

Section 3 of the Round 1 survey explored OHC providers’ treatment of adults with I/DD. In this section, NCD attempted to gain understanding of the factors that influence OHC providers’ decision to treat people with I/DD or refer them to other providers. Additional questions were directed at OHC providers who indicated that they *do not* treat adults with I/DD. NCD wanted to learn the reasons why providers choose not to treat, stop treating, or limit their practices of people with I/DD.

In the final section, Other Demographic Information, providers were asked to provide gender, race, and ethnicity information. This information was also used to assess potential differences in OHC provider perspectives and practices.

RESULTS

## Round 1

The Round 1 questionnaire used an open-ended format to elicit varied responses and attitudes from OHC providers. Round 1 questions may be viewed in Appendix D. Responses were received from OHC providers across nearly all specialty groups. Of the 900 who responded, 649 (72.11%) were General Dentists, 76 (8.45%) Pediatric Dentists, 63 (7.00%) Oral and Maxillofacial Surgeons, 38 (4.22%) Dental Hygienists, and the remaining 74 (8.22%) were in other dental specialties. Appendix E lists the responders by dental specialty. Regarding age of respondents, 452 (50.22%) were between the ages of 25 and 49 years, 325 (36.11%) were between 50 and 64 years of age, and 123 (13.67%) were over age 65 years.

**Figure 1. Oral Health Care Providers Who Responded to Round 1 by Age Category**

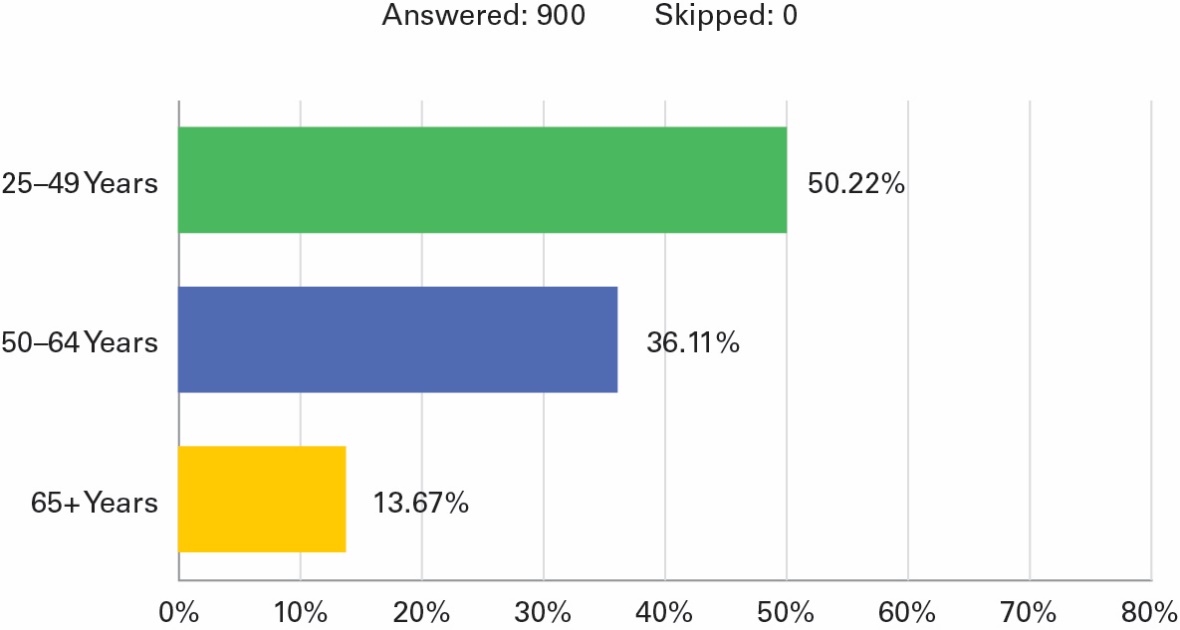


Figure 1 demonstrates the number of OHC providers who responded by age category. These data on age and specialty of dental provider compare closely to averages reported by the American Dental Association (ADA) Health Policy Institute. The Health Policy Institute reports that the average dentist’s age in 2020 was 49.3 years, and the average age of retirement was 68.6 years. Additionally, the ADA reports that in 2020, there were 201,117 practicing dentists in the United States, translating to 61 dentists per 100,000 population. [[8]](#endnote-8),[[9]](#endnote-9)

There are 10 types of dentists in the United States recognized by the ADA: general dentist, pediatric dentist, orthodontist, periodontist, endodontist, oral and maxillofacial surgeon, prosthodontist, dental anesthesiologist, dental radiologist, and oral pathologist. The response rate to the Round 1 questionnaire reflects the ratio of general dentists to the recognized specialties of pediatric dentists and orthodontists. The low response rate by dental hygienists compared to general dentists can be attributed to the fact that dental hygienists, while found in more than 90 percent of general dental practices, are almost always employees who do not bill directly to insurers. The lower percentage of specialists responding other than pediatric dentists is consistent with the ratio of specialists. The prototypical respondents to the questionnaire were general dentists (72.11%) under age 50 years in solo private practice (76.00%/50.22%) working more than 30 hours per week (78%). Of those who responded, 38.93 percent reported that they do not treat any Medicaid-enrolled adults.

Several themes were identified for each question. Regarding Question 7, factors that have influenced OHC providers’ decisions to participate in their state Medicaid dental program or HCBS program,713 OHC providers responded to the question. The themes most often mentioned were Medicaid policies (81%), adverse patient experiences (60%), low reimbursement (53%), and positive patient experiences (32%).

Regarding Question 8, for OHC who *currently do not participate* in their state Medicaid dental program and/or HCBS dental program, the researchers asked, “Why did you leave?” In this question, respondents were allowed to provide more than one reason for leaving Medicaid. Among the total respondents who answered this question (21%), 86 percent indicated they stopped participating in Medicaid because of reimbursement rates. Medicaid policies were also a factor for dropping out of the Medicaid network (35%), and 21 percent indicated that Medicaid patients were problematic.

When asked in Question 9 to share any ideas that would change their decision to participate in Medicaid dental programs, 91 percent of OHC providers responded by saying, “raise reimbursement”; 55 percent suggested improving Medicaid policies and program administration; and 22 percent suggested using incentives for either providers or patients*.*

Questions 10 through 12 looked at the number of OHC providers who treat people with I/DD and the number of patients with I/DD they treat in their practice, based on patient need, using established criteria set forth in activities of daily living. OHC providers were asked to quantify the number of patients with I/DD they treat in their practices by patient need: *No Assistance*, *Some Assistance*, or *Are Dependent upon Assistance*.

Figure 2 illustrates the *overall extent* to which OHC providers treat patients with I/DD. According to provider responses, 78 percent of OHC providers treat patients with I/DD; however, there is a significant difference in the number of patients they treat, with the vast majority (61%) treating between 1 and 49 patients in their practice. Only 7 percent of providers treat between 50 and 99 patients, and 10 percent treat 100 or more patients.

**Figure 2. Overall Percentage of Oral Health Care Providers Treating Patients with Intellectual and Developmental Disabilities (by Number in Practice)**

Table 1 details the percentage of providers who treat patients with I/DD based on the level of assistance their patients need.

**Table 1. Percentage of Providers Treating Patients with Intellectual and Developmental Disabilities by Need for Assistance**

|  |  |  |  |
| --- | --- | --- | --- |
| Number of Unduplicated Patients with Intellectual and Developmental Disabilities | No Assistance | Some Assistance | Dependent |
| None | 20.80% | 19.41% | 26.50% |
| 1–49 | 57.47% | 66.72% | 59.78% |
| 50–99 | 8.32% | 6.01% | 5.55% |
| 100+ | 13.14% | 7.86% | 8.17% |

Of the providers who treat between 1 and 49 patients with I/DD per year, there was no significant difference in treatment practices based on the level of need for assistance among their patients. Of the OHC providers who treat 100 or more patients with I/DD in their practices, fewer (8%) reported to treat patients who need full assistance compared to those who need no assistance (13%). Significance was not established.

In Question 13, providers were asked to list and describe any factors that have influenced their decision to treat adults with I/DD and to include a description of any individuals, institutions, organizations, employers, staff, programs, and/or policies and how they may have influenced their decision. To this question, 567 providers responded. Among the many comments, the following are examples of reasons why providers treat patients with I/DD: “I have hospital privileges.” “OR [operating room] is less stressful.” “Moral and ethical obligation.” and “The right thing to do.” The most common reason could be summed by this statement, “Trying to meet the patients’ needs.” Examples of comments some OHC providers gave as to why they *do not* treat patients with I/DD included the following: “Lack of equipment.” “Lack of expertise.” “Transportation issues.” “Time factors.” “Operatory limitations and room logistics.” “Lack of available sedation.” “Insufficient staffing.” and “Poor Medicaid reimbursement.”

In Question 14, OHC providers were asked to share their experience(s) in treating adult patients with I/DD. Among the 580 who responded to this question, most comments were favorable. The following comments were captured: “It’s the right thing to do.” “It’s my responsibility.” “It’s an opportunity to give back.” “My faith calls for it.” “Inclusiveness.” “I enjoy working with the population.” “It’s challenging but very rewarding.” “I am happy to treat anyone.” and “Everyone deserves dental care.”

Among those responses less favorable toward treating adults with I/DD, the following comments were noted: “It’s challenging.” “It takes more time.” “Inadequate compensation.” “Very challenging.” “Beyond our patient management systems.” “As long as they are calm, cooperative, and non-combative, I can treat them.” “Time and money.” “Collecting consent forms are challenging when patients come in on their own.” “You will be exposed to odors and oral conditions in much worse condition than normal. You risk being bitten or hit.” and “Treating adults with disabilities takes a lot more patience, more time to accomplish less, being willing to put yourself in physically uncomfortable positions to see and treat them.”

When asked in Question 15 to explain the types of supports or accommodations (physical, behavioral, other) OHC providers need to render dental care more easily and effectively to adult patients with I/DD, responders commented that they needed several kinds of supports. See Table 2 for some physical, behavioral, and treatment supports needed to render dental care.

**Table 2. Supports Needed to Render Dental Care**

| Physical Infrastructure | Behavioral | Treatment/Other |
| --- | --- | --- |
| Wheelchairs with a head rest | Use of IV sedation | Additional education and training |
| Bariatric dental chairs | Access to anesthesiologist | Policy that supports general practitioner use of IV sedation |
| Larger operatories with open floor plans | Sedation via Certified Registered Nurse Anesthetist (CRNA) | Sedation support staff |
| Quiet spaces without lots of noise and distraction | Oral conscious sedation | Compensation for increased treatment time |
| Wheelchair-accessible treatment rooms | Sedation | Ability to use oral sedatives |
| Panorex and three-dimensional scanning machines with wheelchair capability | Outreach facilitator | More staff to support patient care and safety |
| Portable x-rays |  | Better reimbursement |
| Regular access to the operating room |  | Initial consultation with parent/caregiver |
| Papoose boards |  | Medical consultation prior to treatment |
|  |  | Policy approval for the use of papoose board |

Question 16 asked OHC providers to list and describe any factors that have influenced their decision not to treat, to stop treating, or to limit their practice of adults with I/DD. Among those who answered, reasons for treating or limiting practice included “No wheelchair accessibility.” “Sedation not permitted.” “Too much time to treat.” “Insufficient staffing to support safe delivery of care.” “Facility not equipped to deliver specialized care.” “Patients unable to transfer to dental chair.” and “Patients unable to complete a medical history.”

When asked in Question 17 why OHC providers who used to treat adults with I/DD stopped, responses provided were like ones already mentioned: “Staffing.” “Behavioral issues with patients.” “Lengthy appointments with poor reimbursement impact the bottom line.” “Patient behavior was disrespectful to staff.” “Patients cause problems.” “Treatment of patients in wheelchair or on gurneys difficult.” “Caretakers unable to provide sufficient assistance.” and “Minimal medical histories provided.”

Last, Question 18 asked providers to provide suggestions for changes that would be necessary for them to (1) begin to treat adults with I/DD again and/or (2) stop limiting their practice to only adults with I/DD who require no accommodations. Table 3 includes the recommendations offered by providers. *Note:* The authors included direct quotes received from dental providers in the questionnaire. Language and terms used by providers in Table 3 may not be technically correct.

Table 3. Provider Recommendations

|  |
| --- |
| * Mandate states to assess, adjust, and reset reimbursement rates annually |
| * Mandate states set dental reimbursement rates to 90 to 95 percent of the federal/state’s employee dental benefit |
| * Mandate MCPs to mirror state fee-for-service dental provider reimbursement rates |
| * Establish tele-dental coverage for oral health education and preventive services |
| * Consider stand-alone state Medicaid managed care dental plan for adults with I/DD) |
| * Consider an integrated, medical-dental, preventive-focused, value-based program under Medicare for adults (ages 21+ years) with I/DD. |
| * Establish state-based shared savings in Medicaid dental programs to incentivize providers to reduce operating room (OR) visits and increase preventive service utilization |
| * Implement shared savings with MCPs to incentivize providers to reduce OR visits and increase preventive service utilization |
| * Implement tax-credit program for dental providers who treat a “significant” number of adults with I/DD |
| * Implement tax credit for dental providers who meet specified goals for delivering adult preventive dental services, treating a specified number of adults with I/DD, or treating adults with I/DD outside of the OR |
| * Design and implement a provider practice protection program with wraparound financial support and/or funding to support additional staffing for oral health care providers who treat 100 or more adult patients with I/DD per year |
| * Design and implement an oral health care provider loan forgiveness program for providers who treat 100 or more adult Medicaid patients per year |
| * Expand provider eligibility to include a case/care manager in dental offices |

## Discussion

The modified Delphi Round 1 questionnaire provided the opportunity to gain insight regarding OHC providers’ motivation, concerns, and challenges in participating in Medicaid and waiver programs serving adults with I/DD, and in treating patients with I/DD. Close to 25 percent of OHC providers do not treat patients with I/DD. For those who do, the majority treat between 1 and 49 per year. Despite challenges in rendering care to adults with I/DD, most OHC providers who responded said they feel a sense of responsibility, want to give back, and find it rewarding.

Low Medicaid reimbursement rates, the need for extended appointment times with no additional compensation, policies prohibiting sedation and restraints, and limited access to the operating room were the most common reasons why OHC providers stopped treating adults with I/DD and/or limited their practice.

One dentist commented, “I participate as an adult Medicaid provider because there is a huge need in the community! What limits us from doing treatment is they only allow $275 worth of treatment when these patients are the ones that tend to have poor OH [oral hygiene] and need extensive treatment.”

Another dentist shared, “I have not left, but let’s speak very honestly here. Medicaid pays overwhelmingly poorly, particularly in Kentucky where the managed care plans cut fees by an average of 10 percent from the existing KY Medicaid rates, approximately eight years ago. … There exists minimal incentive to take Medicaid when you break down the overall cost per patient, the administrative issues/difficulties/burdens imparted by filing for state and federal dollars, and the high occurrence of sociocultural issues with patients that further complicate the process. People who take Medicaid don’t really do it for the money, but when you stop and look at how little you make relative to the overall cost, it quickly looks like a place to exit the Medicaid game.”

## Second Provider Questionnaire: Round 2

Comments gathered from just under nine hundred OHC providers across the United States in Round 1 were analyzed and grouped by like-themes for the development of the Round 2 questionnaire. The purpose of the Round 2 questionnaire was to narrow the field of responses from OHC providers moving toward consensus. One hundred and sixty-six OHC providers responded to the Round 2 questionnaire. One hundred and fifty-three providers answered the question regarding whether they participated in Round 1. Thirteen skipped this question. Of these respondents, 92 (60.13%) participated in Round 1 and the remaining 61 OHC providers (39.87%) indicated they had not. Among the 166 respondents to Round 2, 128 responded to the question regarding age. 51.56 percent indicated they were between ages 25 and 49 years, compared with 31.25 percent between ages 50 and 64 years, and 17.19 percent ages 65 years and older. Regarding the question of primary practice model, of the 128 OHC providers who answered this question, 74.22 percent indicated they were from private traditional practice settings, 11.72 percent were from federally qualified health centers, 5.47 percent were from corporate (dental service organizations); 3.9 percent were from community or mobile clinics; 3.13 percent were from hospital clinics; and 1.56 percent were from academia.

In Round 2, the researchers limited the questions to only those in which 30 percent or more of the providers agreed on the importance of a theme in Round 1. Researchers drafted statements based on information gathered in Round 1 and then asked OHC providers to specify their level of agreement using a five-point Likert scale: “I disagree very strongly.” “I disagree.” “Neither disagree nor agree.” “I agree.” “I agree very strongly.” Round 2 questions may be viewed in Appendix D.

Based on the Round 2 provider responses, the number one item selected to influence an OHC provider’s decision to participate in Medicaid programs that serve adults with I/DD was *supportive* of patients with I/DD—“helping people in need.” Following this were several items that *dissuade* providers from participating in Medicaid. These included “missed appointments;” “low reimbursement rates;” “cost;” “inadequate dental benefits and coverage;” and “Medicaid prior approval policies.”

Regarding suggestions to increase participation in Medicaid dental programs, the items that ranked highest were “adjusting reimbursement rates annually;” “implementing provider incentives;” “delivering patient incentives;” and “permitting billing for missed appointments.”

Finally, the factor that most influenced the OHC providers’ decisions to treat adults with I/DD were “filling a critical unmet need;” After this, “time;” “feeling competent;” “staffing;” and “having the appropriate equipment” were selected.

## Discussion

Round 2 provided an opportunity for researchers to narrow the field of items that OHC providers perceive to be important factors when considering Medicaid participation and treatment of adults with I/DD. In Round 2, the researchers were successful at collecting data that strengthened the level of importance of such items. The outcome of Round 2 questions portrays a spectrum of dentistry that seeks to serve patients with I/DD and even challenging behavior but is concerned about the reimbursement. For those 80 of 166 providers who were concerned about behavior, further analysis is needed to determine the correlation with reimbursement. It is obvious that behavior lengthens and prevents appointments that in turn increases the cost factor of treatment.

Eight factors to increase participation in Medicaid were proposed in this questionnaire. More than 72 percent of dentists responded that they agreed or agreed strongly that annual reimbursement rate adjustments would cause them to participate.

Other incentives such as the number of patients and preventive services were less influential. This response indicates that dental providers are focused on the completion of a treatment plan as the indicator of success. The emphasis on prevention is perceived as less profitable.

Of the eight factors, only the reimbursement annual adjustment had broad consensus support. Sixty percent of responding providers stated they agreed or strongly agreed that specialized training would help render care to adults with I/DD. Other supports to patients did not garner broad consensus. These included case/care management, incentives, or billing for missed appointments and reimbursement for behavioral support (only 30% agreed). Consensus was evident on some issues: “Treating adult patients with IDD requires more time.” (88%) and “Dental providers should have real time access to medical histories of patients with I/DD.” (74%). Sixty-eight percent of questionnaire respondents stated that “Treating patients with I/DD is rewarding.”

## Third Provider Questionnaire: Round 3

Responses from the first two questionnaires helped to shape the third questionnaire. In Rounds 1 and 2, the research team attempted to understand factors and strategies that influence an OHC provider’s decision to participate in their state’s Medicaid dental program. In Round 3, OHC providers were asked to rank order by importance a list of factors and strategies that had been identified in the previous rounds. In response to Round 3, 109 providers ranked the items based on their perceived level of importance.

## Round Three: Section One—Medicaid Participation

In Round 3, Question 2, providers ranked (1–10) factors from Rounds 1 and 2 that influenced their decision to participate in the state Medicaid dental program. These included: cost, provider reimbursement rates, participation in Medicaid managed care, helping people in need, behavior of Medicaid patients with I/DD, existing Medicaid dental benefit/covered services, Medicaid administrative policies, missed appointments, prior approval policies, and Medicaid audits.

More than half of responding providers ranked *helping people in need* (58.71%) and *reimbursement rates* (79.82%) as the factors that most influence their decision to participate in a Medicaid dental program. The factor of *cost* ranked behind as the most critical rated by 54 percent of providers. Next reported was *missed appointments*; 33 percent of providers ranked this item in the top three levels of importance. No other factor exceeded 3 percent of providers to rank as their most primary concern.

This reflects a common desire to help patients with I/DD, compounded by a consensus on problematic reimbursement rates. In fact, nearly 80 percent of providers ranked the issue of *reimbursement rates* as either first, second, or third in their priority of factor importance, while 59 percent ranked *helping people in need* as first, second, or third in priority.

In Question 3, providers were asked to rank strategies that they think Medicaid administrators should implement to increase OHC provider participation in Medicaid dental programs. The following eight strategies were captured from Round 2 for inclusion in this round: *annual adjustments of dental reimbursement rates*, *provider participation incentives*, *provider performance incentives*, *provider incentives based on number of patients seen per year*, *provider incentives based on preventive service delivery*, *coverage for case/care management services*, *policy permitting billing for missed appointments*, and *patient incentives to keep appointments*.

Of the eight strategies listed, 61 percent of respondents ranked *annual adjustments of dental reimbursement rates* as their first choice. The second closest strategy was *provider participation incentives* at 12 percent, followed by *policy permitting billing for missed appointments*.

Question 4 asked OHC providers to rank on a scale of 1 to 10 the factors in order of importance that would influence them to treat individuals with I/DD. The following factors were identified by providers in Rounds 1 and 2 and were included in Round 3: *having hospital privileges*, *professional organization(s)*, *professional peers*, *treating adults with I/DD fulfills a critical unmet need*, *time*, *feeling competent*, *staff*, *specialized office equipment*, and *treating adults with I/DD fulfills a moral and ethical obligation*.

Providers rated *time* as the greatest factor (scoring 6.22 of 10) in their decision to treat persons with I/DD. Forty-seven percent of OHC providers ranked *time* as one of their top three priorities. This indicates that dental providers expressed difficulty in providing a procedure within the time considered profitable. *Staff* was stated by more than half of providers as a limiting factor to serving adults with I/DD. During the COVID-19 pandemic, staff shortages emerged as a significant issue for dental practices. It is unclear if this response is related to generalized staffing issues or if it reflects a lack of staff training or willingness to serve adults with I/DD. OHC providers also ranked *treating adults with I/DD fulfills a critical unmet need* (5.96 of 10) and *treating adults with I/DD fulfills a moral and ethical obligation* (5.16 of 10)as their second and third highest priorities, respectively.

In Question 5, OHC providers ranked (1–10) in the order of importance their experiences reported in the Round 2 questionnaire. The following rank order scores were captured: (1) more time required—average 6.47; (2) very challenging—5.80; (3) patients need to be desensitized and this takes knowledge, skill, and competency—5.09; (4) patients’ behavior requires support—4.57; (5) very rewarding—4.36; (6) need for four-handed dentistry—3.76; (7) limited training and experience—3.39; and (8) lack of real-time access to medical records—2.56.

The top four ranked experiences reveal a consensus that all relate to the challenge of behavior in treating adults with I/DD. It appears that most OHC providers desire to treat patients and complete a procedure; however, they view patient needs, such as desensitization, as challenges that require more time, knowledge, skill, and support. The experience factor of being very rewarding was listed as fifth out of the eight factors in order of importance. This would imply that while dentists were found in the previous question to recognize the moral and ethical need, they feel a dissonance in the ability to reconcile the delivery of that care for completion of procedures. The emphasis on collaborative care, wellness, health promotion, and prevention found in medical plans has not been integrated and incorporated into an effective reimbursement model that includes and incentivizes dental teams to treat patients with I/DD.

In Rounds 1 and 2, dental providers were asked to explain the types of supports or accommodations needed to render dental care more easily and effectively to adult patients with I/DD. Among the responses provided, eight themes were identified by providers as “needed support” for use in dental office, hospital, and community settings. The following eight supports or accommodations needed were included in Round 3, Question 6: *specialized training*, *availability of financial support to cover costs associated with increased time and staffing needs*, *use of care management facilitators to support dental care*, *use of outreach facilitators to link patients to specialized social services*, *increased reimbursement to support longer dental visits*, *increased frequencies for preventive dental benefits*, *coverage for oral health education and preventive tele-dentistry services*, and *financial support to cover specialized equipment*.

Of the 109 responding providers, 75 replied to this question with a consensus of these top three reasons: (1) availability of financial support to cover costs associated with increased time and staffing needs (80% of responders [60] ranked this reason as first, second, or third); (2) increased reimbursement to support longer dental visits (59% [44] ranked this as first, second, or third); and (3) specialized training (52% [39] ranked as first, second, or third).

It is revealing that most dentists responded that those solutions related to the challenges of reimbursement and training were important, yet they rated very low their belief in the proposed accommodations or support of care management (2), outreach facilitators to social services (2), coverage for oral health education and preventive tele-dentistry services (1), and financial support for specialized equipment (1). Further, it is significant that 11 respondents (15%) supported increased frequency of preventive dental visits.

In the final question, researchers attempted to understand why dental providers do not treat adults with I/DD, and the types of changes needed to begin treating them in their practices. Providers were asked to rank, in order of importance, the following actions that would impact them to participate in Medicaid dental programs. To achieve consensus on these actions, providers ranked the following in first, second, or third level of importance for the impetus to begin service for adults with I/DD: (1) mandate states to assess, adjust, and reset reimbursement rates annually (55 of 75, 73%); (2) mandate states to set dental reimbursement rates to 90 to 95 percent of the federal/state’s employee dental benefit (50 of 75, 67%); (3) mandate MCPs to implement provider reimbursement rates to 90 to 95 percent of commercial dental benefit plans offered to federal and state employees (37 of 75, 49%); (4) implement tax-credit program for OHC providers who treat a “significant” number of Medicaid patients (16 of 75, 21%); (5) establish a specialized Medicaid MCP unique for I/DD adult patients (13 of 75, 17%); (6) increase reimbursement for extended appointment times and behavior management of adults with I/DD (13 of 75, 17%); (7) implement reimbursement for tele-dental preventive services (10 of 75, 13%); (8) design and implement a Medicaid dental provider loan forgiveness program for treating Medicaid beneficiaries with I/DD   
(6 of 75, 8%); (8) implement value-based incentives for providers (5 out of 75, 7%); (9) implement tax credit for OHC providers who meet a specified goal for delivering adult preventive dental services, treating *x* number of adults with I/DD, or treating adults with I/DD outside of the operating room (5 of 75, 6%); (10) design and implement a provider practice protection program (wraparound money) for providers who treat 100 or more adult Medicaid patients with I/DD per year (4 of 75, 5%); (11) expand provider eligibility to include a case/care manager in dental offices (4 of 75, 5%); (12) provide training to support the treatment of individuals with I/DD (4 of 75, 5%); (13) develop policy to mandate care management services at the health plan level for Medicaid patients with I/DD (2 of 75, 3%); and (14) implement advanced policies that permit dental providers to render IV sedation and/or oral sedation in the dental office setting (1 of 75, 1%).

## Discussion

Consensus was reached on *reimbursement rates* as the *top three strategies* toward advancing OHC provider participation in Medicaid programs that support dental care services for adults with I/DD. It can be surmised that dentists propose solutions of which they have the most familiarity of a predictable impact. Thus, a consensus on those familiar solutions is apparent. Very few dental teams include the connections to social supports that drive the determinants of health, and less are convinced of the impact of these accommodations. These results give rise to the belief that dental attitudes may change when educated to the possibility of improving oral health outcomes rather than viewing completion of treatment plan. OHC providers focus on the immediate financial challenges to provide care and are less inclined to endorse supports to families until that existential fiscal challenge is addressed. Similarly, creative uses of Medicaid options to change the health outcomes through care managers or even loan forgiveness did not appeal to the majority of respondents. This reinforces the understanding that financial pressures drive the decision to provide care to adults with I/DD.

# Chapter 4: Demonstrating a Return on Investment

Adults with intellectual and developmental disabilities (I/DD) form an aging population living and contributing to communities across the United States. Accessing community-based social and health care services is essential for people with I/DD to maintain their independence, overall health, and well-being. This includes the ability to receive dental care close to home where transportation and other access barriers are minimized.

As mentioned in Chapter 3, many dental providers do not participate in Medicaid programs or waivers serving people with I/DD. In addition, many who *do* participate in the Medicaid programs *do not* treat people with I/DD. The reasons for this have been well documented in this report.

People with I/DD often experience complex medical conditions placing them at higher risk for disease and disability. When the number of available dental practices are reduced either because of existing Medicaid policies or lack of willingness by dental providers to treat people with I/DD, the prevalence of dental disease among the population living within the community increases along with significant pain and suffering for the individuals. Need for care is heightened, and people are forced to visit the emergency department for temporary relief of pain and suffering, only to return soon thereafter. This cycle of emergent care does not prevent, manage, or eliminate disease; and its cost to the person, the community, and government programs paying for such services is high.

Better care and improved health outcomes at lower costs may be realized through value-based, integrated, preventive health care programs. Such programs have been well designed and demonstrated in Medicare. These models have not been fully understood and recognized by the dental industry, or by Medicaid-funded dental programs.

For this report, NCD explored the potential return on investment (ROI) to funding a Medicaid dental benefit for adults with I/DD. Researchers proposed that the health care model must be integrated, preventive focused, and value based. The research team designed a framework with steps toward achieving an ROI for a traditional Medicaid dental program.Steps of the model include identifying the applicable Medicaid authority (legislation, regulation, federal or state program) under which the benefit will fall, determining eligibility (setting parameters), defining the population, designing the dental benefit (eligible services, frequencies, and limitations), determining the reimbursement rates, overlaying the financial model, and demonstrating an ROI. A brief description of these steps is listed next. These steps do not provide a technical description, as specifications may vary by Medicaid authority and program type. Such steps may also be adapted for Medicare,should an integrated program for people with I/DD be included under this government program.

***Step 1.* Explore existing state *Medicaid authority* to determine which policy pathway would best support an integrated health care model for adults with I/DD.** Review the state plan to see if a dental benefit for adults exists. If an adult dental benefit exists, consider if it can be modified for adults with I/DD through a state plan amendment. If one does not exist, consider whether one may be added via a state plan amendment, or explore the potential development of integrating a dental benefit into a Medicaid waiver. Several different kinds of state Medicaid waivers exist where dental benefits could potentially be integrated.

***Step 2****.* **Determine who would be eligible under the new program.** *Medicaid eligibility* is established under federal law, and states have the authority to expand that eligibility (individuals who qualify under § 435.217)**.[[10]](#endnote-10)** States may differ in eligibility, so understanding the unique legislative or regulatory language under any given state Medicaid program is essential. Investigate state Medicaid rules and other legislative language to determine Medicaid eligibility.

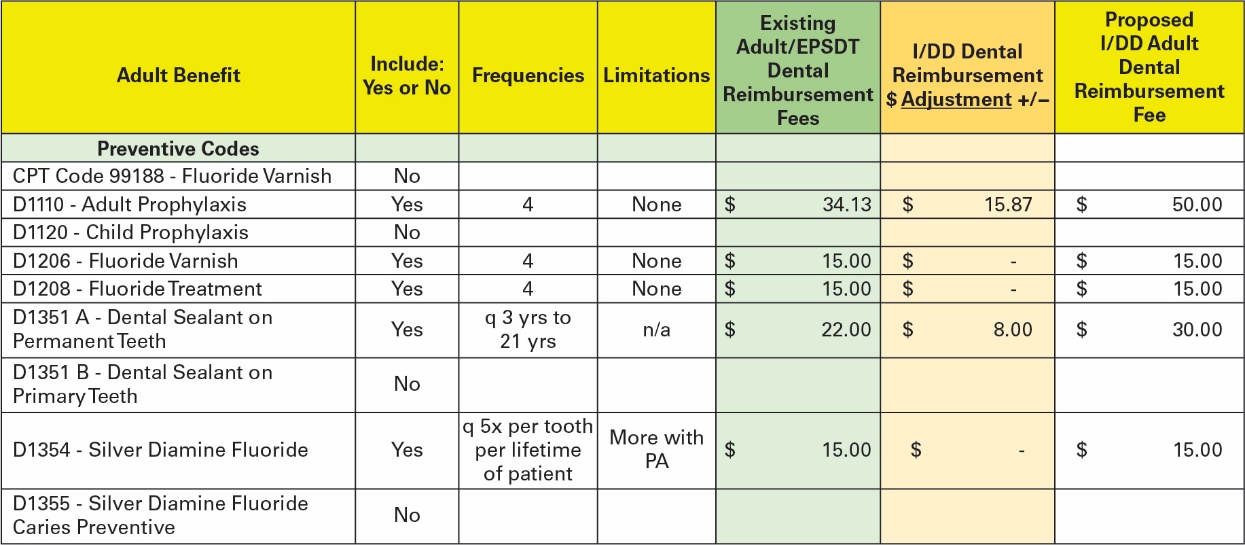
***Step 3. Define the I/DD population* to establish fiscal program parameters.** This step is challenging as definitions of I/DD vary by federal and state agencies and even by state programs. Some states cluster groups by their disability, and others separate them. Understanding who is eligible for a new program is dependent upon how the population is defined and/or how a population may already be defined under an existing waiver. For example, the Supplemental Security Income program, an important Medicaid eligibility pathway for people with I/DD, generally uses condition-specific definitions and does not recognize developmental disabilities.[[11]](#endnote-11)Other examples include alignment with the Developmental Disabilities Assistance and Bill of Rights Act of 2000[[12]](#endnote-12)—reliant upon three or more substantial functional limitations; intellectual disability—using an explicit IQ score combined with an assessment of adaptive deficits in the conceptual, social, and practical skills learned by people that help them function in their everyday lives; alignment with the broader construct described by the American Association on Intellectual and Developmental Disabilities; and inclusion of specific conditions such as autism, cerebral palsy, Down syndrome, epilepsy, and/or neurological impairment.[[13]](#endnote-13)

***Step 4.* Design an evidence-based dental benefit.** As part of this process, care should be taken to explore the professional literature to identify standards of care, professional guidelines, and evidence-based services that meet the specific needs of people with I/DD. Technical assistance from subject matter experts will help to provide clarity. Frame a basic dental fee-for-service benefit.[[14]](#endnote-14) Once the actual service codes are determined (based on the Code on Dental Procedures and Nomenclature [CDT Code]),[[15]](#endnote-15) set frequencies and limitations for each dental service.

***Step 5.* Set reimbursement rates.** This step can be very challenging, as it requires the strategic weighing of the impact of rates on provider satisfaction against the state Medicaid budget. Rates that are too low discourage provider participation in the Medicaid dental program network. Rates that are too high tax the state budget. States must balance their budgets annually—this means a finite budget with rules for cost accounting and containment.

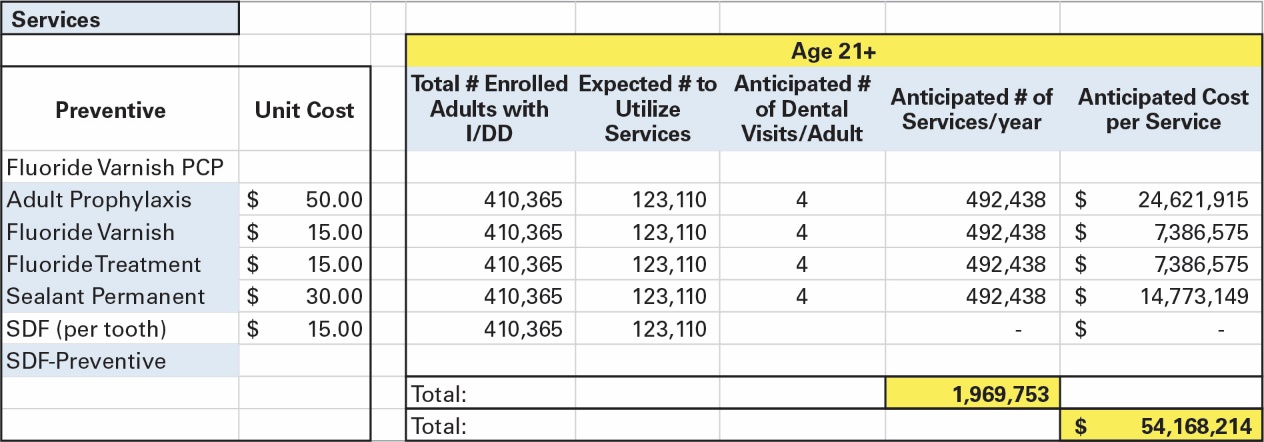
Figure 3 is an example of a tool used to design a dental benefit for adults with I/DD and estimate its costs. Columns three and four quantify the frequencies and limitations. Reimbursement fees from an existing state Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit program were used as a starting point to set the new program rates. The last two columns allow for rate adjustments. These are considered independently for each dental service to address the added time it may take a provider to perform a procedure, and any advanced treatment needs of the patient.

**Figure 3. Example of Preventive Dental Benefit Modeling**



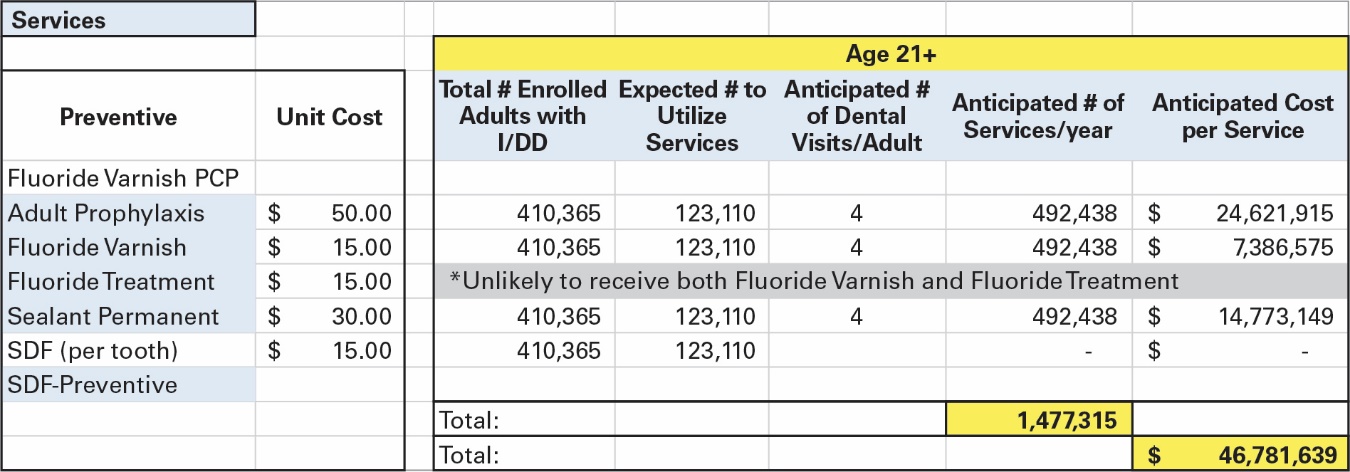
***Step 6.* Overlay the financial model to quantify the costs of the program** by inputting an estimated number of eligible enrollees, services, unit costs, and expected use of services. Figure 4 is an example of preventive services proposed for inclusion in a Medicaid dental benefit. On the left, the services are listed along with the proposed unit cost. On the right, the number of Medicaid-enrolled adults with I/DD is indicated in the first column. The number of enrollees to use the services is proposed and listed in the second column. The anticipated frequency for each service is listed in the third column. The total number of services for the year is calculated and listed in the fourth column with a total annual cost of all anticipated services ($54,168,214) computed in the last column.

**Figure 4. Example of the Financial Model for a Preventive Dental Benefit for People with Intellectual and Developmental Disabilities**



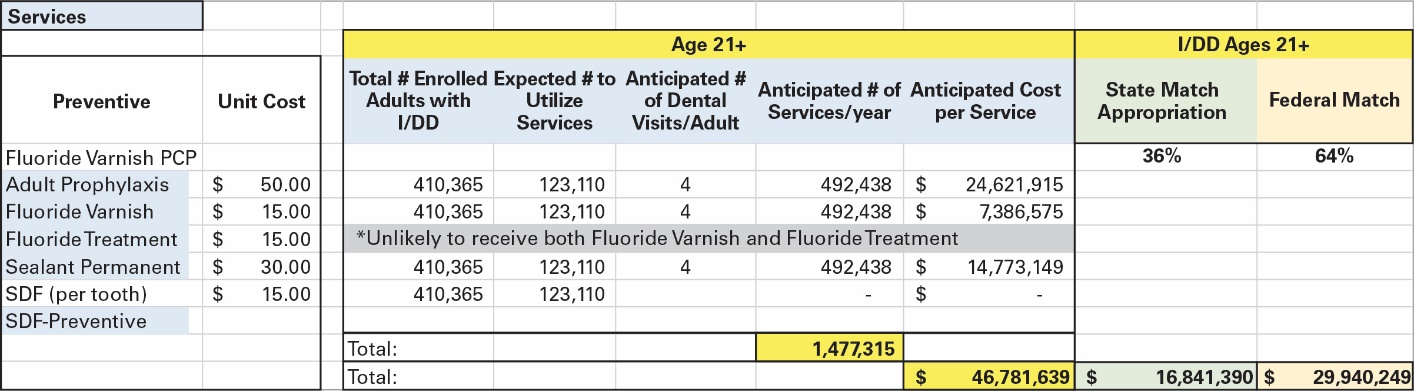
The second half of this step is to assess the total costs listed in the last column and determine if any cost adjustments need to take place. Administrators may use any of the financial levers listed in the model below to adjust the annual costs of services. In this case, Figure 5. demonstrates the elimination of fluoride treatment from the list of services. All costs associated with that service were deleted from the model. As a result, the total annual costs were reduced to $46,781,639.

**Figure 5. Example of Potential Cost Adjustments Using Financial Levers**



A final piece to this step is applying the Federal Medical Assistance Percentage (FMAP), also referred to as the *federal match*. This percentage differs by state and by programs. In this example, the FMAP was 64 percent. Applying the FMAP to the model reduced the state cost of the proposed dental benefit to $16,841,390. Figure 6 shows the state costs after applying the FMAP to the model.

**Figure 6. State Costs After Applying the Federal Medical Assistance Percentage**



***Step 7.* The final step in building the model is demonstrating a cost-neutral dental benefit and ROI.** Cost-neutrality means that aggregate costs do not increase. To achieve this, costs may be shifted from one state program to another. ROI is a financial calculation that demonstrates costs invested in one area result in savings in another. It is used to identify past and future financial returns. If a state is going to invest in a dental benefit for adults with I/DD, the questions state accounting officials consider are as follows: *Where in the state budget could dollars be shifted to support a dental benefit? Where in the state budget might savings be realized?*

To determine this, the research team adopted a process previously developed by the Medicaid|Medicare|CHIP Services Dental Association (MSDA) in collaboration with researchers from Brandeis University, Massachusetts.[[16]](#endnote-16) Researchers investigated state general fund expenditures by function to identify those state departments and programs that support and help to maintain health, social, and other services for people with I/DD. These included Medicaid, the largest state budget expenditure, education, transportation, unemployment, public assistance, and other related social service programs as described in the *2021 State Expenditure Report* by the National Association of State Budget Officers.[[17]](#endnote-17) From this information, the researchers considered other state programs where dollars could potentially be shifted to realize cost-neutrality and/or ROI.

In 2016, MSDA in collaboration with researchers at Brandeis University developed a tool to demonstrate the potential ROI to funding a Medicaid adult dental benefit. The tool illustrates how a state may strategically develop or enhance an existing benefit and overlay the costs to demonstrate an ROI or cost-shifting from other state departments and programs. In the previous study, the researchers explored the literature to identify direct and indirect linkages between poor oral health and state-funded programs. Three economic pathways were identified. These included underemployment/unemployment, opioid misuse, and the medical costs associated with end-stage renal disease and liver transplants. The result of the original research demonstrated an ROI to the state for funding a Medicaid adult dental benefit. Since that time, several states have used the tool to calculate cost offsets in the overall state budget. The full methodology and results have been previously published.[[18]](#endnote-18) Further study will be needed to determine whether these cost-offset pathways apply to adults with I/DD and/or if additional direct or indirect linkages between poor oral health among people with I/DD and other government program costs can be identified and applied to the model.

For the purposes of this report, the research team explored the potential use of this tool and how it may be adapted to demonstrate an ROI on a dental benefit uniquely designed for adults with I/DD.[[19]](#endnote-19) Following is a description of the tool, its chapters or sections, and potential inputs for calculating an ROI for a dental benefit for adults with I/DD. This tool has been validated for use in estimating the ROI for an adult Medicaid dental benefit. Further study is needed to test inputs specifically designed to realize an ROI for a dental benefit for adults with I/DD.

## Chapter 1: Context

* *Table of Contents (TOC):* The TOC includes an interactive link to the contents of the chapter and the pages (tabs) included in the ROI tool.
* *Background and Objectives:* This section identifies a series of variables and data sets that have been incorporated into the tool to demonstrate state-specific impact in the final calculations and results.
* *Getting Started—The Basics:* This section includes a description of the step-by step process the user takes in each of the input’s tabs, including the use of drop-down choices, and how choices impact various formulas in the tool.

## Chapter 2: Inputs

* *State and Other Financial Characteristics:* This tab is used to input specific state-based programmatic information and data. Various financial drivers (expenditures and state tax revenue) that may impact the calculation of the ROI are included.
* *State Medicaid Characteristic:* This section focuses on key Medicaid program characteristics such as overall population, Medicaid program expenditures, and the proposed Medicaid dental program information.

## Chapter 3: Policy Change

* *Expansion of Dental Benefits:* This tab helps the user describe the proposed expansion in dental coverage. It includes estimates of the proposed new benefit or expanded dental benefit.
* *Explore Potential Costs of Dental Benefit:* The *Cost* tab is designed to help explore possible costs related to adult dental coverage. It allows the user to explore multiple possibilities in sequence and can be saved for multiple scenarios. This tab helps demonstrate a range of both costs and offsets for a given change in dental coverage.
* *Reduction in Dental Benefits:* The *Reduce* tab is designed to help states explore and estimate the impact of either a reduction or a total elimination of an adult dental benefit on the input variables.
* *Note:* This chapter includes two tabs that require state data be input.

## Chapter 4: Calculations

* *Oral Health Aesthetics Index Related Offsets:* This section quantifies the aesthetic-related cost offsets based on the *Dental Problem Index* that was developed as part of the research study. Both Medicaid and state general revenue savings and state and federal tax revenue totals are all calculated.
* *Cost Offsets Secondary to Chronic Dental Pain:* This tab calculates the aesthetic-related cost offsets based on the pain-related offsets that were identified as part of the research study.
* *Results Summary Table:* This summary tab shows the total overall state budget impact for both pathways used in the study. The analysis table includes a Costs Section, an Offsets Section, and a Benefit-Cost Ratio Section. The overall state budget impact also includes budgeted federal revenue.
* *Offsets Summary Table:* This final summary table includes a state total of the offsets for the specific areas of the study: employability, pain-related and direct Medicaid-related. This includes a value of the costs, percentage of coverage costs that are offset, and a net savings or loss from a reduction in coverage.

## Chapter 5: Appendices

* This series of tabs includes current data and information from various public sources that serve to pre-populate many of the worksheets within the ROI tool chapters. These pre-populated tabs include data in the following areas:

State socioeconomic statistics

Coverage statistics by state

Medicaid/CHIP income eligibility requirements by state

List of dental codes and rates

## Chapter 6: Supplements

* *References*
* *Glossary of terms*
* *Examples*
* *Acknowledgments*

## Value-Based Care and Shared Savings

Over the last two decades, several legislative changes in Medicaid and Medicare have taken place resulting in improvements in policy, program administration, and services.[[20]](#endnote-20) These changes have led to the development of innovative models that allow for more flexibility of services for beneficiaries, alternative payment schedules for providers, various administrative models for states, and lowered health care costs. These models, most of which have been implemented under the Medicare program, have demonstrated significant improvements in health and health care, while lowering costs.

Medicaid dental programs have been slow to follow suit. This is due to the lack of knowledge and understanding of how these models work and may be adapted to dentistry. Since its inception, the dental industry has operated under the traditional fee-for-service (FFS) model. Under this model, dental providers are paid for each service performed. All dental services or procedures are coded by CDT Code. The CDT Code Maintenance Committee of the ADA manages the set of codes.

Missing from dental practice are *diagnostic* codes, such as the International Classification of Diseases (ICD) codes, which medical providers and payers use to monitor health status, monitor disease prevalence, and assess for medical necessity—conditions that require health care services. Like dentistry, medicine uses a procedure coding system entitled the Current Procedural Terminology (CPT®). This set of codes provide the uniform language for coding medical services and procedures used to pay for services that are *medically necessary*.[[21]](#endnote-21),[[22]](#endnote-22) By using both coding systems, Medicaid, Medicare, and other payers can more effectively assess medical necessity against the appropriateness of the procedure(s) being billed. In other words, if diagnostic coding were used in dentistry, payers could better understand the health outcomes of dental care and more easily design value-based payment incentives.

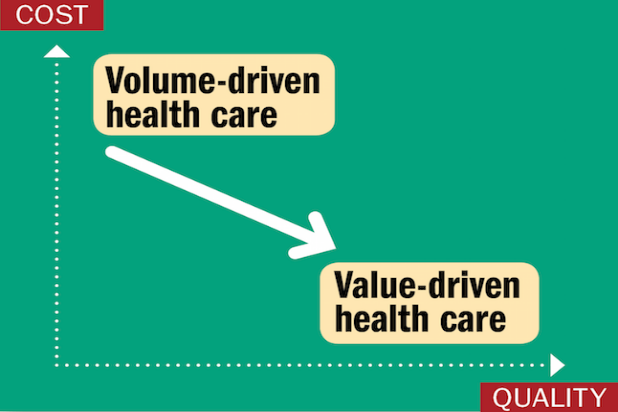
In addition, quality in program and provider performance can be measured against the health outcomes of the individual and populations served.

In 1991, the Institute for Healthcare Improvement (IHI) founded the *science of improvement* aimed at helping health systems, countries, and other organizations advance quality, safety, and value in health care.[[23]](#endnote-23) IHI has three goals for health care delivery systems:

* Optimally use their resources to deliver better outcomes for patients and achieve financial sustainability.
* Catalyze faster progress in the transformation of health care delivery to advance patient and population outcomes, leveraging improvement science methods that achieve better results per unit of cost.
* Reduce the burden of health care and allow reallocation to other societal needs.[[24]](#endnote-24)

The concept of value-based care is an evolution of this process that builds on these goals to transition systems of care from volume to value.

**Value Equation: Value = Quality/Cost**



The traditional dental model encourages volume *over* value, discourages preventive over surgical, and costs more. This means dental care is primarily focused on treatment *after disease occurs.* The cost of *treating disease* far exceeds the cost of *preventing it.*

Moving dental care to a value-based model will promote quality and prevention, improve health outcomes, and lower costs. Shared savings is a value-based payment model that rewards dental providers for delivering higher quality oral health care services to beneficiaries. The model that follows shows a shared savings model that was developed by Boston Children’s Hospital (BCH) in collaboration with MSDA in 2012. The model aims to reduce operating room treatment of early childhood caries (ECC) and reduce treatment costs to the MassHealth Dental Program.

In the BCH model, providers were incentivized to shift treatment approaches of ECC from the surgical treatment model to a preventive, disease management approach. Providers used topical fluoride varnish and/or silver diamine fluoride to *arres*t dental disease rather than treat caries with surgical restoration.

BCH demonstrated that by shifting the treatment modality to a preventive, caries disease management model, dental disease was arrested, young children were spared the risks associated with the operating room, significant savings were observed by the MassHealth Dental Program, and participating providers were remunerated through a shared savings model.

Table 6 demonstrates the reduced operating room costs, savings to the state, and how those savings may be shared with providers to incentivize preventive, risk-based oral health care in the BCH program.

Table 6. Boston Children’s Hospital Results of Early Childhood Caries Historical and Disease Management Protocols with Shared Savings

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Patient Count: | 129 | 401 | 401 |  |  | |
|  | **Hx Control** | **ECC DM Protocol** |  | **Reduction** |  | |
| **Referral to OR** | **20.90%** | **10.90%** | **20.90%** | **48%** |  | |
| **Patients** |  | 44 | **84** | **40** | **Fewer patients referred to OR** | |
| **OR MassHealth Payment** |  | **$5,000** | **$5,000** |  |  | |
|  |  | **$219,635** | **$419,045** | **$200,500** | **Reduction in MassHealth Payment** | |
|  |  | **Incentive:** | **10%** | **$20,050** | **$500** | **Per Patient kept out of OR** |
|  |  | **Net savings** |  | **$180,450** | **$50** | **Per ECC patient** |

*Note:* DM, disease management; ECC, early childhood caries; Hx, history; OR, operating room.

Table 6 shows the results of a record review at BCH that revealed that for the 129 patient records reviewed, 20.9 percent of the patients were referred to the operating room for treatment of ECC. A subsequent study of the 401 patients enrolled in the ECC disease management project who received disease management services demonstrated reduced referrals to the operating room of only 10.9 percent. Had the 401 patients been treated under the traditional surgical approach provided to the historical control patients, there would have been 84 (20.9%) referrals to the operating room. Assuming the Medicaid payment for the operating room facility charge plus the anesthesiology charge, plus the dental treatment charge equaled approximately $5,000, a figure consistent with the MassHealth fee schedule at the time,[[25]](#endnote-25) the traditional approach would have cost Medicaid $419,045 or $87.00 per member/per month (PM/PM). Of the 401 patients treated with the disease management service delivery model, only 44 patients (10.9%) were referred to the operating room. This 48 percent reduction in the number of patients to the operating room reduced Medicaid payments to $219,635, a savings to Medicaid of approximately $200,500.

With the shared savings model, providers were then paid a percentage of the savings. In the previous example, the total amount available to pay out provider incentives was 10 percent ($20,050) of the reduction in MassHealth payments. Shared savings payments to dental providers totaled $500/patient kept out of the operating room.

A similar shared savings model may be applied by Medicaid dental programs and other dental payers to incentivize dentists to deliver preventive, disease management dental care to patients with I/DD in their dental offices and not in the operating room.

## Reimbursement Rates

Medicaid dental provider reimbursement rates are an important consideration when attempting to estimate the ROI to funding a dental benefit. Except for payment of dental services rendered in Federally Qualified Health Centers (FQHCs), most Medicaid dental programs continue to use a FFS payment methodology to reimburse dental providers.

Medicaid dental programs are required under federal law to produce and publish provider reimbursement fee schedules. The FFS provider reimbursement schedule is the actual amount to be paid to providers under a FFS program. Medicaid managed care plans (MCPs) that contract with Medicaid agencies to administer the dental benefits typically negotiate dental reimbursement rates with their network providers. Given this negotiation process, there may be different fee schedules or payment methodologies utilized by different plans. In some cases, the MCP rates are lower than the FFS reimbursement rates. States have the option to direct how MCPs pay their network providers, but that is not a Medicaid requirement. This practice has generated much confusion among oral health care (OHC) providers and, as such, has resulted in a decrease in the number of dental providers in some Medicaid managed care dental plan networks.

Regarding differences between Medicaid and commercial dental reimbursement rates, Medicaid FFS reimbursement rates, on average, are only 61.8 percent of private dental insurance reimbursement for children and 46.1 percent for adults.[[26]](#endnote-26)

Shown in Figures 7, 8, 9, 10, and 11 are five charts illustrating a comparison between state Medicaid FFS and MCP reimbursement rate schedules. State and MCP names have been removed as plan information is considered proprietary. Each table compares specific dental service codes. The list of CDT service codes and labels depicted in each chart may be identified in Appendix F.

**Figure 7. Comparison of “State A” Medicaid Fee-for-Service Rates with Managed Care Plan Rates**

**Figure 8. Comparison of “State A” Medicaid Fee-for-Service Rates with Managed Care Plan Rates**

**Figure 9. Comparison of “State B” Medicaid Fee-for-Service Rates with Managed Care Plan Rates**

**Figure 10. Comparison of “State C” Medicaid Fee-for-Service Rates with Managed Care Plan Rates**

**Figure 11. Comparison of “State C” Medicaid Fee-for-Service Rates with Managed Care Plan Rates**

# Chapter 5: Promising Practices

State Medicaid dental program administrators, managed care plans (MCPs), providers, and people with intellectual and developmental disabilities (I/DD) continue to search for solutions to the dental care access issues people with I/DD face. Three overarching issues exist: (1) limited policy, coverage, and benefits to support oral health care services for people with I/DD; (2) limited oral health care provider availability and (3) limited financing to support essential oral health care services.

This report has discussed these issues in detail and has attempted to glean ideas from stakeholders for new and improved strategies to address these problems. Over the last several years, particularly due to the COVID-19 pandemic, these problems have intensified. Communities have come together to address the policy and program issues that create barriers and challenges for all stakeholders. Based on the recent collaborative efforts taking place across several states, it has become clear that a *multipronged approach* toward a solution is essential. Strategies that only address state policy or provider needs and fail to understand beneficiary needs will fall short of the goal to improve oral health for people with I/DD.

## Policy Advancement

### Maryland

In 2018, Senate Bill 284—*Maryland Medicaid Assistance Program—Dental Coverage for Adults—Pilot Program* (Chapter 621 of the Acts of 2018) was signed into law.[[27]](#endnote-27) The bill called for the development of an adult dental benefit for people ages 21 to 64 years who are dually eligible for both Medicare and Medicaid. Neither Medicaid nor Medicare cover general dental services for adults in Maryland. The bill required the Maryland Department of Public Health to amend its 1115 Medicaid waiver so that dental services could be covered for the estimated 38,510 dual eligibles. Maryland’s 1115 waiver program is a statewide mandatory managed care program for Medicaid enrollees. In 2019, the Adult Dental Pilot was implemented. This “carve-out” program covers diagnostic, preventive, and restorative services, as well as dental extractions. The annual benefit is capped at $800 per person.

In June 2022, the state of Maryland officially notified the Centers for Medicare and Medicaid Services (CMS) that the Adult Dental Pilot program will be phased out after January 1, 2023. Legislation passed in the State General Assembly requires the expansion of the benefits to *all* enrolled Medicaid adults. Dental coverage will also be expanded to include enhanced restorative services such as crowns, oral surgery, endodontics, and periodontal services. The benefit will not require cost sharing, and the $800 cap will be eliminated.

### Louisiana

Louisiana Medicaid is expanding its comprehensive dental care to adults ages 21 years and older with I/DD who are enrolled in the New Opportunities Waiver, Residential Options Waiver, or Supports Waiver. More than 12,000 people have access to the new dental coverage that began July 1, 2022. The coverage includes diagnostic services, preventive services, restorative services, endodontics, periodontics, prosthodontics, oral and maxillofacial surgery, orthodontics, and emergency care. The expansion was part of the Louisiana Department of Health’s Fiscal Year 2022 Business Plan, Together: Building a Stronger LDH and a Healthier Louisiana.[[28]](#endnote-28)

### New Hampshire

New Hampshire Medicaid will launch an adult dental benefit for people ages 21 years and over beginning April 1, 2023 after Governor Christopher Sununu signed into law HB103 and SB 422 on July 1, 2022. This signing culminates years of work by stakeholders across the state to close the gap in oral health care services for many disadvantaged adults living in New Hampshire. The benefit will cover medically necessary services including care coordination and transportation to dental appointments. A $1,500 annual per member cap will be implemented excluding the costs of preventive services. Cost sharing will be applied for non-preventive services for those members whose incomes fall above 100 percent of the federal poverty level. This amount is limited to 5 percent of household income. A settlement with a vendor created the funding source for this benefit.

### Medicaid|Medicare|CHIP Services Dental Association Oral Health Policy Academy

In September 2021, the Medicaid|Medicare|CHIP Services Dental Association (MSDA) launched a multistate Oral Health Policy Academy to advance Medicaid dental policy for adults with I/DD. Through funding provided by the Delta Dental Foundation, MSDA convened six state teams with representatives from state Medicaid agencies, organized dentistry, academia, philanthropy, and advocacy. The purpose of the learning academy was to assist states in finding policy solutions that would advance oral health and oral health care equity for adults with I/DD. Because Medicaid policy varies so much by state, the policy academy was structured to have full group learning sessions and then individual state breakouts. Discussions included content related to the three main problems (listed earlier) affecting access to dental care for people with I/DD and the following strategies to address them:

* Explore existing state Medicaid policy to identify traditional and nontraditional pathways for delivering and administering dental services to adults with I/DD.
* Explore Medicaid managed care authorities states may utilize to deliver dental care to people with I/DD through MCPs, such as managed care organizations and prepaid ambulatory health plans.
* Explore federal funding to support state efforts to fund an adult Medicaid dental benefit for people with I/DD.

In Chapter 4, the seven steps states are taking to develop a dental benefit for adults with I/DD are described. Through the policy academy, all states have learned how to design, develop, and implement a carve-out dental benefit for adults with I/DD. As part of this process, participants learned about Medicaid authorities such as state plans and Medicaid waivers as policy pathways for pursuing a new dental benefit. Michigan, Ohio, Indiana, North Carolina, New Hampshire, and Arkansas participated in the learning collaborative. All but one state has signed on for Year 2, which will focus on evolving a traditional dental benefit into a value-based program.

## Dental Provider Training

### Centers for Inclusive Dentistry Immersion Program at New York University

The Delta Dental Foundation Centers for Inclusive Dentistry Immersion Program is an intensive three-day continuing education course that offers hands-on experience for practicing dentists, dental hygienists, and dental assistants who are interested in expanding their skills and knowledge in providing dental care for patients with disabilities. Chair-side training and observed delivery of care are emphasized with the goals of advancing dental providers’ comfort and treatment of people with I/DD in their dental office. The program launched its first training at the New York University (NYU) Dentistry Oral Health Center for People with Disabilities in June 2022. Course topics include (1) *Learning to Become a Competent and Willing Provider for Patients with Differing Needs*; (2) *Observing the Patient Workflow*; (3) *Learning to Utilize Best Accommodations in Health Risk Assessment and Treatment Planning for Patients with Special Health Care Needs (SHCN*); (4) *Learning to Communicate Strategies for Patients and Families with SHCN*; (5) *Learning How to Work with Caregivers to Maintain Oral Health for Persons with Disabilities*; (6) *Learning Physical Ergonomics for Treating Patients with Disabilities*; and (7) *Learning Best Accommodations of the Physical Space Characteristics and Needs for Treating Persons with Disabilities.*

A prerequisite of the program is the completion of didactic curricula. These webinars may be accessed online via the NYU Dentistry series*,* [*New Treatment Paradigms for Managing the Oral Health Needs of Patients with Disabilities: Ethical Considerations in the COVID-19 Era*](https://dental.nyu.edu/content/nyudental/en/patientcare/ohcpd/disabilities-ce.html)*.*

### University of Pennsylvania, School of Dental Medicine

In 2018, the University of Pennsylvania, School of Dental Medicine recognized the inability to find oral health care as a growing problem among adults with I/DD. In response, the administration called on faculty to develop a curriculum in which every graduating student would achieve competence in treating patients with complex physical, medical, and behavioral needs. Not only would the students learn didactically, but they would also learn experientially in a new Personalized Care Suite designed to provide state-of-the-art care without general anesthesia.

The UPENN Personalized Care Suite opened in January 2021 as the clinical site for treating persons with disabilities. The clinic also serves as a site for the development of new products aimed at enhancing oral health care for people with I/DD.

Every Penn Dental Medicine student rotates through this new center, learning from interprofessional faculty serving patients with conditions that range from autism, Alzheimer’s, and paralysis to movement disorders, complex medical conditions, and much more. The UPENN Personalized Care Suite includes (1) a *Quiet Room* for patients who are sensitive to light and sound; (2) a six-chair open bay with capacity to supply nitrous oxide; (3) six closed operatories; (4) a *Wheelchair Lift Room*, allowing patients to remain in their wheelchair, where the dental provider can provide safer, more comfortable, and less stressful care; (5) *Hover Chair Rooms*, which provide glides for patients on a stretcher; and (6) a *Radiology Room* equipped with a cone-beam computed tomography that delivers improved precision in diagnosis and treatment planning.

The center also houses the Colgate-Palmolive Innovation Laboratory that allows for the development and refinement of new products that facilitate optimal dental care for patients with disabilities.

Penn Dental Medicine also houses a collection of resources and offers numerous online continuing education unit courses and training at no cost. A three- to five-day immersion program for dental teams was established in 2022. This program is designed to expand the dental professional’s capability to treat patients with disabilities and to foster equitable oral health care worldwide.

## Financing

The third consideration of the multipronged approach toward improving the oral health care and oral health of people with I/DD is financing. For dental programs designed under Medicaid,new state funding is often very limited. State budget officers look for budget neutrality or ways to shift dollars from another program to support a new dental program. This concept was explained in detail in Chapter 4.

Another approach is to demonstrate how new funding may demonstrate an ROI. This was also explained in Chapter 4. With either of these two approaches, program proposals should consider value-based models with provider incentives such as the shared savings model also demonstrated in Chapter 4.

A final approach offered here is the creation of a totally new *integrated, preventive*, *value-based* government program under Medicare*.* Because under federal law *Medicare* has traditionally covered health care services for many people with I/DD, this concept proposes to expand that coverage by establishing a broader definition of eligible people with I/DD and adding medically necessary dental services so that an integrated, preventive, value-based model may be implemented.

This approach demonstrates cost-shifting of dental expenditures for CMS (from Medicaid to Medicare) and reduces state expenditures for dental care under the Medicaid program. Because the model for the program would be *integrated* (medical and dental) for both services *and* coverage, it would promote better care at lower costs.

# Chapter 6: Findings and Recommendations

Access to quality, appropriate, and timely oral health care services is a significant issue faced by people with intellectual and developmental disabilities (I/DD). Despite efforts by federal, state, and local agencies, legislatures, and key advocates, adults with I/DD remain the largest minority population with unmet oral health care needs. There are several systemic and environmental reasons for this; however, three major factors include the insufficient number of oral health care (OHC) professionals rendering care to these individuals, lack of government policies that support dental benefits for individuals with I/DD, and inadequate financing.

As the health care system in the United States continues to evolve, care must be taken to ensure that government policies and programs serving people with I/DD advance within the system to deliver quality-driven, patient-centered, integrated health care services. Legislators, federal and state agencies, Medicaid managed care plans (MCPs), and providers must work together to ensure that a sufficient and competent integrated health care workforce is in place, and that policies support coverage of benefits that meet the special needs of people with I/DD. Financing to support the administration of programs and services must be sufficient and readily available. The following is a list of findings and recommendations for consideration by Congress, the Department of Health and Human Services (HHS), state Medicaid agencies, Medicaid MCPs, professional organizations, and dental providers. Collectively, these recommendations provide a framework to address the issues identified by people with I/DD, their parents and caregivers, as well as oral health care providers across the United States.

**FINDING #1: Adults with I/DD are an aging population with complex conditions that warrant integrated coordinated health care services between medical and dental providers. Conflicting definitions of the population exist, creating confusion and inconsistency across government programs. Medicare and Medicaid programs do not support dental care for adults with I/DD.**

**Recommendations to Congress:**

1. **I/DD Definition –** Congress should create one I/DD definition and require all HHS agencies to use it to determine eligibility or qualifying criteria for a unique program designed for adults with I/DD.
2. **Medicaid** – Congress should mandate medically necessary oral health care services in Medicaid programs for eligible adults with I/DD that include an “essential” dental benefit package and provider reimbursement rates set and maintained at 90 to 95 percent federal and state employee benefit.
3. **Medicare –** Congress should require that HHS explore a *new* integrated, preventive, value-based health care programfor adults with I/DD under *Medicare* that covers medically necessary medical and dental services, and assess the potential cost-effectiveness of this program against Medicaid expenditures. (Costs associated with coverage for adults with I/DD currently covered by Medicare or Medicaid would be shifted to this new program. Dental services would be included.)

**FINDING #2: Unlike the Medicaid medical program, Medicaid dental program claims data capture *services delivered* but do notcapture or link dental services to medical necessity. The absence of codes that document medical necessity inhibit the ability of Medicaid dental programs to establish medical necessity, assess beneficiary oral health outcomes, assess oral health care outcomes, and validate charges associated with service delivery. Such antiquated programs are unable to demonstrate better care, better health, and lower costs.**

**Recommendations to HHS:**

1. HHS/Centers for Medicare and Medicaid Services (CMS) should mandate dental providers use the same diagnostic coding system as medical providers, in addition to using CDT Code, so that Medicaid programs may establish medical necessity and ensure appropriate payment of dental services for people with I/DD.
2. HHS/CMS should incentivize Medicaid dental programs to implement value-based payment models that link reimbursement to provider incentives, provider performance, and patient outcomes for people with I/DD.
3. CMS should consider an opportunity for developing new and innovative value-based payment models for Medicare and/or Medicaid dental programs.
4. CMS should consider an opportunity for updating and validating the Medicaid|Medicare|CHIP Services Dental Association return-on-investment tool with customized data from state government programs that serve I/DD populations, for use by Medicaid dental programs serving people with I/DD.
5. HHS/Health Resources and Services Administration should create grant programs that demonstrate value-based workforce models that integrate and coordinate medical and dental services and payment models for children and adults with I/DD, outside of Federally Qualified Health Centers.
6. HHS/Administration for Community Living or the National Institutes of Health should create a research opportunity to assess the extent to which dental providers use the operating room to treat people with I/DD to determine comparative costs between dental care in operating rooms versus dental offices.

## Recommendations to Congress:

1. Congress should update the definition of Medically Underserved Populations to include people with I/DD and include the new definition in all applicable programs and services.

**FINDING #3. State Medicaid programs are not required under federal law to cover dental services for adults with I/DD. Existing Medicaid programs serving people with I/DD generally exclude dental services. Programs that exist struggle to find dentists to treat adults with I/DD. Because dental provider availability is limited, many adults with I/DD resort to accessing costly dental services in the emergency department.**

**Recommendations to State Medicaid Agencies and Programs:**

1. State Medicaid agencies should create unique dental programs through new or existing 1115 Demonstration, 1915 (c), and 1915 (k) authorities, specifically designed to meet the needs of adults with I/DD. Such programs should include coverage for oral health education services for I/DD members, parents, and caregivers; tele-dental oral health education; and preventive services. In addition, support care coordination between medical and dental providers as well as enable services to address the special needs of people with I/DD, and the social determinants of health.
2. Medicaid dental programs should implement value-based payment models that link reimbursement to provider incentives, provider performance, and patient outcomes for people with I/DD, and incentivize providers to reduce use of the operating room and shift to more cost-effective treatment settings.
3. Medicaid dental programs and Medicaid MCPs should collect and use risk factor data including and not limited to physical, oral, social, race/ethnicity, and gender identity to assess and improve oral health and oral health care equity for all Medicaid beneficiaries.
4. State Medicaid agencies should enhance Medicaid reimbursement to providers who participate in certified continuing education unit clinical dental training programs for people with I/DD.

**Recommendations to CMS:**

1. CMS should enhance Medicaid reimbursement to providers who participate in certified continuing education unit clinical dental training programs for people with I/DD.
2. CMS should implement use of a coding system to identify people with I/DD so that provider reimbursement may be enhanced to support increased time and staffing needed to adequately meet the needs of the patient.

**FINDING #4: Adults with I/DD form an aging population with complex conditions that warrant integrated coordinated health care services between medical and dental providers. Standards of care and professional guidelines to support integrated health care models for adults with I/DD are few and far between. Dental and medical systems of health care do not support integrated health care models for people with I/DD. Few professional dental education and continuing education programs incorporate integrated health care models.**

**Recommendations to Professional Associations and Dental Schools:**

1. The American Dental Association, American Academy of Developmental Medicine and Dentistry, Special Care Dentistry Association, American Academy of Pediatric Dentistry, and American Medical Association should collaborate to create and publish evidence-based standards of care and clinical guidelines to support the integration of oral and medical health care services for adults with I/DD.
2. The Commission on Dental Accreditation should expand dental and dental hygiene school competency requirements and curricula (didactic and clinical) to ensure competency in the delivery of comprehensive and integrated dental health care services to people with I/DD.
3. Dental schools and dental professional organizations should create and implement didactic and clinical continuing education courses to increase competency in the delivery of comprehensive and integrated dental health care services to people with I/DD.

**Recommendation to Dental Providers:**

1. Dental providers should collaborate, communicate, coordinate, and cooperate with medical providers, care management facilitators, and social support services in the provision of dental health care services for people with I/DD.

# Chapter 7: Conclusion

Despite the well-recognized health disparities that adults with I/DD experience, gaps in federal and state policies continue to exist as people with I/DD are not formally recognized as medically underserved. Existing federal mandates fail to ensure that people with I/DD ages 21 years and older have equitable access to oral health care services.

Adults with I/DD form an aging population with complex health conditions. Essential is their need for available, accessible, and reliable health care with community-based support services to achieve and maintain independence in their communities. When such services, including dental care, are not fully available, complications surface, disrupt, and give rise to emergent, preventable, and costly care.

Many believe that adults with I/DD must be treated in the operating room where costs of care have been growing exponentially. It is further argued that dental care for people with I/DD requires dental specialty services. Neither are essential to meeting the needs of a growing population. According to several experts, many people with I/DD may receive oral health care services by general dentists safely and effectively in the dental office. Preventive oral health care models that embrace new technologies, products, and services such as silver diamine fluoride to prevent and manage oral disease deliver better health at lower costs. By promoting a community-based model of care, access to oral health care services for people with I/DD will become more equitably available.

Over the last several years, there has been a growing issue with the availability of operating room time for dental providers. Hospital administrators have limited access to the operating room for many dental providers resulting in exceptionally long wait times for those people with I/DD who need the additional services that only an operating room can provide. Pain and suffering are not acceptable for anyone, much less an individual with I/DD who may not understand the reasons or be responsible for their circumstance. Policies, programs, services, and coverage must align to prevent these conditions.

Medicare and Medicaid are two government programs currently serving people with I/DD. Medicare covers medical services (expenses) and excludes dental care, while Medicaid covers dental care but only to age 20 years. (Dental coverage for adults ages 21 years and older is optional under federal law.) These two systems fail adults with I/DD, leaving a huge gap in oral health care for this population. Strong evidence clearly demonstrates the impact of oral diseases on health.[[29]](#endnote-29) The need for risk-based prevention for people with I/DD cannot be overemphasized. If chronic oral diseases are not prevented and/or mediated through preventive oral health care, other complex conditions *will* worsen. The outcome has been and will continue to be realized in exorbitant costs to the American taxpayer.

In this study, oral health care providers made a strong statement about their willingness to treat people with I/DD. They also reached consensus and affirmed the need for sufficient reimbursement to cover costs associated with the needs of the population. Adults with I/DD need longer appointment times so that care may be rendered slowly, gently, and compassionately. Often, they need to be sedated. Many people with I/DD get confused or do not have the capacity to understand what is happening to them during their dental care visit. Extended time is essential for explanation and settling. To render this type of care often takes additional time and specially trained staff such as certified registered nurse anesthesiologists. Covering the costs of these positions is essential to operationalizing the care delivery model people with I/DD need.

When oral health care providers do not have the support needed to render this type of care to people with I/DD, patients become distressed, providers become frustrated, safety consequences occur, and ultimately providers drop out of the system. This leaves the emergency department as the only viable option for oral health care for the population.

When sufficient means are well understood and embedded into an integrated, preventive-focused, value-based model of health care, both medical and dental providers may more optimally deliver collaborative, cooperative, and coordinated health care for people with I/DD. The Medicare program offers the best potential for success for such a program. Housed under one roof, with one budget, Medicare could develop a unique program for all adults with I/DD covering both medical and dental care validated and paid for with one coding system that documents medical necessity and covers both medical and dental provider payments via Current Procedural Terminology and Code on Dental Procedures and Nomenclature codes. To transition the adult I/DD population at age 21 years to a separate program would allow CMS to shift costs from one government program to another, where medical cost savings from oral health care coverage could be assessed and a return on investment realized.

During the last two decades, the health care delivery system has undergone major changes as a direct result of legislative policies beginning with theReauthorization of the Children’s Health Insurance Program followed by the Patient Protection and Affordable Care Act. Both provide provisions for this proposed model, delivering quality in health care and advancing equitable access. Value-based care builds on the initial concepts associated with these two laws, where improvements in health care, health outcomes, and costs continue to be important and are associated with quality, measurement, and performance, but now are more closely aligned with payment. The operational framework moves away from traditional fee-for-service models to one that incentivizes and rewards quality over quantity. For people with I/DD, the model proposed here will ensure better health care, better health outcomes, and lower costs for all involved.

# Appendices

## Appendix A: Participating Organizations

|  |
| --- |
| American Academy of Developmental Medicine and Dentistry |
| Delta Dental of Arkansas |
| Delta Dental of Indiana |
| Delta Dental of Michigan |
| Delta Dental of Ohio |
| Developmental Disabilities Nurses Association |
| Envolve Dental |
| Guardian Avesis |
| MCNA Dental |
| Medicaid|Medicare|CHIP Services Dental Association |
| New Hampshire Department of Health and Human Services, Division of Medicaid Services |
| New Jersey FamilyCare |
| North Carolina Department of Health and Human Services/Division of Health Benefits |
| Project Accessible Oral Health |
| Oral Health Center for People with Disabilities at NYU College of Dentistry |
| Special Care Dentistry Association |

# Appendix B: Project Organizational Chart

Diagram

Description automatically generated

# Appendix C: Focus Group 1: Self-Advocates Script

## Welcome

* Good evening and thank you all for being here tonight.
* My name is Barbie Vartanian, and I am going to be the leader of our Focus Group.
* Tonight’s Focus Group is the *first of three* that will be held this week.
* Focus Group #1 is for Self-Advocates of People with intellectual and developmental disabilities (I/DD)—that’s why all of you have been invited.
* Focus Group #2 is for Parents and Caregivers of people with I/DD.
* Focus Group #3 is for Stakeholders or other advocates, health care providers, or experts specialized in caring for persons with I/DD.

## Purpose

* These three Focus Groups are part of a bigger project aimed at improving dental care for individuals with I/DD. I am working with a couple of national organizations on this project for the National Council on Disability.
* The purpose of the Focus Groups is to have participants share ideas and experiences and provide important information for us to think about.
* The information that you provide will be used to

Develop questions for a questionnaire that will then be sent to dental providers such as dentists and dental hygienists

Develop recommendations for improving Medicaid and dental care

## Thank You

* We’re thrilled to have you and want you to know how much we appreciate your time and willingness to help us with this important project.

## Introductions

* Before we begin, I’d like to have each of you introduce yourself.
* Because this is a virtual Zoom call, I will call your name.
* When I do, I would like for you to please provide your name and tell us a little bit about yourself.

## Focus Group Rules

* One more important thing before we begin.
* We have a couple of important rules to go over with you:

We want YOU to do the talking.

We would like EVERYONE to participate.

I may call on you if I haven’t heard from you in a while.

* There are no right or wrong answers.
* Every person’s experience and opinion are important.
* Speak up whether you agree or disagree.
* We want to hear a wide range of opinions.
* We want folks to feel comfortable sharing when sensitive issues come up.
* We will be recording the group call:

We want to capture everything you have to say.

We don’t identify anyone by name in our report. You will remain anonymous.

* Please do not take notes.
* Keep your computer on mute when you are not talking.
* Raise your hand to speak.
* Because this is a Zoom call, I am going to ask you all to raise your hand before you speak. When I call your name, please be sure to unmute yourself.

## Icebreaker

* What is your favorite ice cream flavor?
* What is your favorite outside activity?

## Begin the Session

* I am going to say a word, or phrase, and I’d like you to respond by saying the “first word—single word—that comes to your mind.”
* Teeth—Can you tell me a little bit more about that?
* Smile—Can you tell me a little bit more about that?
* Chewing
* Toothbrushing
* Flossing
* Dentist

So now I am going to ask you some questions about going to the dentist:

Dental Appointments

* Do you make your own dental appointments?
* Do you make them by phone or online?
* What’s it like making your dental appointment?
* Tell me more about the conversation with the person on the phone.
* Is there anything else about making a dental appointment that you want to share with us?
* What would you recommend that would make it easier for you to make an appointment for yourself?
* *Note*: If they don’t offer any issues—then keep moving, don’t prompt.

## Dentist

* Do you have a dentist?

If **Yes:**

How long have you been going to your current dentist?

What do you like about your dentist?

Is there anything you don’t like about your dentist?

Can you explain further?

* Did you feel that your dentist meets your needs?
* Do you think that your dentist has experience in treating patients with I/DD?

If **No:**

For those who mentioned that you do not have a dentist. Can you tell me a little more about why you don’t have a dentist?

Have you ever been to the dentist? If yes, what did you like about that dentist?

Why did you leave that dentist?

Was there anything that you didn’t like about your dentist?

If you could tell that dentist something, what would it be?

## Dental Offices—*Dental Office Experiences*

* What do you like about your DENTAL OFFICE?
* Does the DENTAL OFFICE have ACCOMMODATIONS that meet your needs?
* What can you tell us about the people other than the dentist, like the dental assistants and the front desk receptionist?
* What do you like about them?
* What do you not like about your DENTAL OFFICE or the *staff* in the DENTAL OFFICE?
* What would you CHANGE if you could about your DENTAL OFFICE?
* What SUGGESTIONS would you offer to make the DENTAL OFFICE better for you?

## Dental Care—Now we are going to talk a little bit about your experiences when getting dental care either from your dentist or your dental hygienist.

* Overall, can you tell us how comfortable you are when you are getting dental care?

Examples of responses may include:

I was scared.

I felt disrespected.

It was easy. I was totally comfortable.

Dentist was nice/mean.

* Can you tell us about what it is like getting your *teeth cleaned*?

*If they describe superficially or with one word—ask them to explain further.*

* For those of you who have ever got a dental filling—What was that like?
* What about getting numb? How was that?
* Was your dentist able to complete your dental work in the office, or did you have to go to the *operating room?*
* For those who had to go to the *operating room*—What was that like?
* Have you ever had to go to the *emergency room for a dental problem*? If yes—can you tell us a little more about this experience for you.

## Paying for Dental Care—Let’s talk now about paying for dental care.

* What do you think about the cost of dental care?
* How do you pay your dentist for dental care?

Do you pay with cash or a check, or do you have dental insurance?

If you have dental insurance, do you know what kind of dental insurance you have?

Does the dental insurance help with the costs? Is it enough?

For those who use Medicaid to pay for dental care/visits, how do you like it?

Does Medicaid help pay for the cost of your dental care?

Why or what do you like about it?

Why or what don’t you like about it?

# Appendix D: Oral Health Care Provider Questionnaires

## Round 1

1. Please enter your primary dental specialty. Please select one.

Dental Hygiene

Dental Therapy

General Dentistry

Dental Anesthesiology

Dental Public Health

Endodontics

Oral and Maxillofacial Pathology

Oral and Maxillofacial Radiology

Oral and Maxillofacial Surgery

Oral Facial Pain

Oral Medicine

Orthodontics and Dentofacial Orthopedics

Pediatric Dentistry

Periodontics

Prosthodontics

1. Please enter your PRIMARY practice model. Please select one.

Private [Traditional]

Corporate or DSO

FQHC | Health Center

Hospital-based

Community-based

University-Faculty Practice

Mobile (Nonaffiliated)

1. Please enter the number of dentists in your primary practice setting.

Solo (1)

Small Group (2–4)

Large Group (5+)

1. Please select the response that best describes the number of hours you work per week.

<10 hours/week

–

>30 hours/week

1. Please select the category that best describes your age:

25–49 Years

50–64 Years

65+ Years

1. Please indicate the number of Medicaid-enrolled adults (ages 21+) in your practice that you regularly treat and for whom you bill. (Select 1).

None

1 to 49 Unduplicated Medicaid-enrolled adult patients

50 to 99 Unduplicated Medicaid-enrolled adult patients

100 + More Unduplicated Medicaid-enrolled adult patients

1. Please list and describe any factors that have influenced your decision (either to participate or not to participate) in your State’s Medicaid Dental Program or HCBS program. Please include a description of any individuals, institutions, organizations, employers, staff, programs, and/or policies and how they influenced your decision.
2. If you currently do not participate in your State Medicaid Dental Program and/or HCBS Dental Program, did you ever? If yes, why did you leave? If this question does not apply to you, please type in “NA” and move to Question 12.
3. Please share any ideas you may have that would change your decision to participate in Medicaid Dental Programs. In other words, what would it take to get you to participate? If this question does not apply to you, please type in “NA”.

|  |
| --- |
| In this section, we are attempting to understand (1) the extent to which dental providers treat adult patients with I/DD, and (2) the supports and accommodations needed to treat adult patients with I/DD, based on each patient’s required level of assistance as described in the Activities of Daily Living (ADL).  Please share your experiences in the various dental settings: (1) dental office, (2) hospital/operating room, and/or (3) community-based settings.  For the purposes of this questionnaire, the following definitions apply:  **Intellectual disability** is a condition characterized by significant limitations in both intellectual functioning and adaptive behavior that originates before the age of  22 years.  **Developmental disabilities** are a group of conditions due to an impairment in physical, learning, language, or behavior areas. These conditions begin during the developmental period, may impact day-to-day functioning, and usually last throughout a person’s lifetime.  **ADLs** are basic self-care activities that must be performed on a day-to-day basis for one to live independently. ADLs are typically limited to the five below:   1. Mobility (also called ambulating or transferring)—The ability to move about both inside and outside of one’s home. This includes walking, going up and down stairs, getting out of bed and into a wheelchair, and standing from a seated position to use a walker. 2. Dressing—Choosing appropriate clothing and putting it on. This includes fastening buttons and zipping zippers. 3. Eating—Utilizing a fork and other utensils to get food to the mouth and the physical act of eating. 4. Personal Hygiene—Safely getting in and out of the bathtub or shower and cleaning oneself. Also includes other grooming activities, such as shaving, nail care, and brushing teeth. 5. Toileting (also called continence)—Making it to the toilet in time by controlling one’s bladder. |

10. Please indicate below the number of adult patients (ages 21+) with I/DD in your practice that you regularly treat that require NO ASSISTANCE based on the Activities of Daily Living (ADL).

None

1 to 49 Unduplicated adult patients with I/DD

50 to 99 Unduplicated adult patients with I/DD

100 + More Unduplicated adult patients with I/DD

1. Please indicate below the number of adult patients (ages 21+) with I/DD in your practice that you regularly treat, that require SOME ASSISTANCE based on the Activities of Daily Living (ADL).

None

1 to 49 Unduplicated adult patients with I/DD

50 to 99 Unduplicated adult patients with I/DD

100 + More Unduplicated adult patients with I/DD

1. Please indicate below the number of adult patients (ages 21+) with I/DD in your practice that you regularly treat that ARE DEPENDENT ON ASSISTANCE based on the Activities of Daily Living (ADL).

None

1 to 49 Unduplicated adult patients with I/DD

50 to 99 Unduplicated adult patients with I/DD

100 + More Unduplicated adult patients with I/DD

1. Please list and describe any FACTORS that have influenced your decision to treat adult individuals with I/DD. Please include a description of any individuals, institutions, organizations, employers, staff, programs, and/or policies and how they have influenced your decision.
2. Tell us about your experience(s) in treating adult patients with I/DD?
3. Please explain the types of supports or accommodations (physical, behavioral, pharmacological) you need to render dental care more easily and effectively to adult patients with I/DD.

In Office

In Hospital

In Community-based

|  |
| --- |
| We are attempting to understand FACTORS that influence oral health care providers’ decision NOT TO TREAT adult individuals with I/DD or limit their practice. Please only complete Questions 16, 17, and 18 if you do not treat adults with I/DD, and/or limit your practice to only those adults with I/DD that require no special accommodations. |

1. Please list and describe any FACTORS that have influenced your decision to not treat, stop treating, or limit your practice of adults with I/DD. Please include any individuals, institutions, organizations, employers, staff, programs, and/or policies and how they influenced your decision. If this question does not apply to you, please enter NA.
2. If you used to treat adults with I/DD and currently do not, why did you stop? If this question does not apply to you, please enter NA.
3. What changes would be necessary for you to begin to treat adults with I/DD again, and/or stop limiting your practice to only adults with I/DD that require no accommodations?
4. Gender (Please select one)

Woman

Man

Transgender

Nonbinary/nonconforming

Prefer not to respond

1. Race (Please select one)

Native American Indian

Asian

Black or African American

Native Hawaiian or Other Pacific Islander

White

Two or more races

1. Ethnicity (Please select one)

Yes, Hispanic/Latino

No, not Hispanic/Latino

## Example of Round 2 Questions

1. I participated in Round I of the NCD/MSDA Oral Health Care Provider Questionnaire.

Yes

No

1. In Round 1, we attempted to understand FACTORS that influence an oral health care provider’s decision to participate in their state’s Medicaid Dental Program. We asked respondents to list and describe any factors that have influenced their decision to participate in their state’s Medicaid Dental Program. We further asked respondents to include a description of any individuals, institutions, organizations, employers, staff, programs, and/or policies and how they influenced their decision.

Results: Among the 695 providers who responded to this question, 14 items were identified as FACTORS that influence an oral health care provider’s decision to participate in their state’s Medicaid Dental Program.

Building Consensus: Please provide your level of agreement with the statements below. *I disagree very strongly; I disagree; I neither disagree nor agree; I agree; I agree very strongly.*

“Cost” influences my decision to participate in my state’s Medicaid dental program.

My “professional organization” influences my decision to participate in my state’s Medicaid dental program.

My “employer” influences my decision to participate in my state’s Medicaid dental program.

My “staff” influence my decision to participate in my state’s Medicaid dental program.

Medicaid dental “reimbursement rates” influence my decision to participate in my state’s Medicaid dental program.

“Participation in Medicaid Managed Care” negatively influences my decision to participate in my state’s Medicaid dental program.

“Helping people in need” influences my decision to participate in my state’s Medicaid dental program.

The “behavior of Medicaid patients” influences my decision to participate in my state’s Medicaid dental program.

Existing “Medicaid dental benefit/covered services” influences my decision to participate in my state’s Medicaid dental program.

Medicaid “administrative policies” influence my decision to participate in my state’s Medicaid dental program.

“Missed appointments” influence my decision to participate in my state’s Medicaid dental program.

“Prior approval policies” influence my decision to participate in my state’s Medicaid dental program.

“Medicaid audits” influence my decision to participate in my state’s Medicaid dental program.

“Policies prohibiting a dental provider’s ability to charge for no-shows” influence my decision.

1. In Round 1, we were interested in hearing what ideas oral health care providers may have about changes that could be made to Medicaid that might influence their decision to participate. We asked providers to share any ideas they may have that would change their decision to participate in Medicaid Dental Programs. In other words, [we asked] what would it take to get them to participate?

Results: Among the 682 providers who responded to this question, four themes were mentioned most often: (1) assessing and adjusting reimbursement rates annually, (2) implementing provider incentives, (3) incorporating support for care management, and (4) applying administrative policies to address no-shows.

Building Consensus: Please provide your level of agreement with the statements below. *I disagree very strongly; I disagree; I neither disagree nor agree; I agree; I agree very strongly.*

I would participate in the Medicaid dental program in my state if the program assessed and adjusted dental reimbursement rates annually.

I would participate in the Medicaid dental program in my state if the program implemented provider participation incentives.

I would participate in the Medicaid dental program in my state if the program implemented provider performance incentives.

I would participate in the Medicaid dental program in my state if the program implemented provider incentives based on the number of patients treated per year.

I would participate in the Medicaid dental program in my state if the program implemented provider incentives based on preventive service delivery.

I would participate in the Medicaid dental program in my state if the program covered case or care management for dental services.

I would participate in the Medicaid dental program in my state if the program allowed me to bill patients for missing appointments.

I would participate in the Medicaid dental program in my state if the program incentivized patients and /or assisted patients to keep their appointments.

## Example of Round 3 Questions

1. I participated in Round I and/or Round II of the NCD/MSDA Oral Health Care Provider Questionnaire.

Yes

No

1. In Rounds 1 and 2, we attempted to understand FACTORS that influence an oral health care provider’s decision to participate in their state’s Medicaid Dental Program. Among the providers who responded to this question, the following FACTORS were identified most often.

Building Consensus: Please rank the FACTORS listed below in the order of importance to you.

Cost

Reimbursement rates

Participation in Medicaid managed care

Helping people in need

Behavior of Medicaid patients

Existing Medicaid dental benefit/covered services

Medicaid administrative policies

Missed appointments

Prior approval policies

Medicaid audits

1. In Rounds 1 and 2, we asked providers to list what strategies they think Medicaid programs should implement to increase dental provider participation. Results: Among the providers who responded to this question, the following strategies were mentioned most often.

Building Consensus: Please rank the strategies listed below in the order of importance to you.

Annual adjustments of dental reimbursement rates

Provider participation incentives

Provider performance incentives

Provider incentives based on number of patients seen per year

Provider incentives based on preventive service delivery

Coverage for case/care management services

Policy permitting billing for missed appointments

1. In Rounds 1 and 2, we attempted to learn what FACTORS influence oral health care providers’ decisions to treat adults with I/DD. Among the providers who responded to this question, the following FACTORS were identified most often.

Building Consensus: Please rank the influencing FACTORS in the order of importance to you.

Having hospital privileges

Professional organization(s)

Professional peers

Treating adults with I/DD fulfills a critical unmet need

Time

Feeling competent

Staff

Specialized office equipment

Treating adults with I/DD fulfills a moral and ethical obligation

Patient incentives to keep appointments

# Appendix E: Provider Demographics

|  |  |  |  |
| --- | --- | --- | --- |
|  | Round 1 [900] | | |
| **Dental Specialty** | | | |
| Dental Hygiene | 4.22% | Oral and Maxillofacial Radiology | 0.00% |
| Dental Therapy | 0.11% | Oral and Maxillofacial Surgery | 7.0% |
| General Dentistry | 72.11% | Oral Facial Pain | 0.00% |
| Dental Anesthesiology | 0.11% | Oral Medicine | 0.33% |
| Dental Public Health | 2.22% | Orthodontics | 2.89% |
| Endodontics | 1.44% | Pediatric Dentistry | 0.78% |
| Oral and Maxillofacial Pathology |  | Prosthodontics | 0.33% |
| **Primary Practice Setting and Hours per Week** | | | |
| Solo Practice (1) | 50.11% | <10 hours per week | 1.78% |
| Small Group (2–4) | 36.44% | Between 11 and 30 hours per week | 20.00% |
| Large Group (5) | 13.44% | >30 hours per week | 78.22% |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Round 1 [900] | Round 2 [166] | Round 3 [75] |
| **Primary Practice Model** | | | |
| Private (Traditional) | 76.22% (686) | 74.22% (94) | 70.67% (53) |
| Corporate (Dental Service Organization) | 7.78% (70) | 5.47% (7) | 9.33% (7) |
| Federally Qualified Health Center | 6.22% (56) | 11.72% (15) | 6.67% (5) |
| Hospital | 2.22% (20) | 3.13% (4) | 0.00% |
| Community-Based | 3.78% (34) | 1.56% (2) | 8.00% (6) |
| University Faculty Practice | 2.78% (25) | 1.56% (2) | 1.33% (1) |
| Mobile (Nonaffiliated) | 1.00% (9) | 2.34 % (3) | 4.00% (3) |
| No Response |  |  |  |
| **Age Category** | | | |
| 25–49 Years | 50.22% (452) | 51.56% (66) | 53.33% (40) |
| 50–64 Years | 36.11% (325) | 31.25% (40) | 30.67% (23) |
| 65+ Years | 13.67% (123) | 17.19% (22) | 16.00% (12) |
| **Race/Ethnicity** | | | |
| Native American Indian | 1.00% (5) | 2.65% (3) | 0.00 |
| Asian | 9.09% (46) | 11.50% (13) | 16.00% (12) |
| African American | 6.91% (35) | 3.54% (4) | 9.33% (7) |
| Native Hawaiian/Pacific Islander | 0.39% (2) | 0.00 | 0.00 |
| Two or More Races | 5.37% (29) | 4.42% (5) | 4.00% (3) |
| White | 76.87% (389) | 80.53% (91) | 70.67% (53) |

# Appendix F: CDT Codes and Labels

|  |  |
| --- | --- |
| CDT Code | Label |
| D1110 | Prophylaxis-Ages 14+ |
| D0120 | Periodic Oral Evaluation on an Established Patient |
| D0140 | Limited Oral Evaluation |
| D0150 | Comprehensive Oral Evaluation |
| D0220 | Intraoral-Periapical-First Film |
| D0230 | Intraoral-Periapical-Each Additional Film |
| D0272 | Bitewing-Two Films |
| D0274 | Bitewing-Four Films |

# Endnotes

1. Rautemaa, R., et al., (2007). Oral Infetions and systemic disease – An emerging problem in medicine. *Clinical Microbiology and Infection: The Official Publication of the European Society of Clinical Microbiology and Infectious Diseases*, 13 (11) (2007), pp. 1041–1047 [↑](#footnote-ref-1)
2. Value-based care is a model of care that promotes quality and prevention, measures and improves outcomes, and lowers costs. [↑](#endnote-ref-2)
3. H.R. 3590, “Patient Protection and Affordable Care Act,” Congress.gov, <https://www.congress.gov/bill/111th-congress/house-bill/3590>. [↑](#endnote-ref-3)
4. National Council on Disability, *I/DD Self-Advocate Focus Group,* March 2022. [↑](#endnote-ref-4)
5. National Council on Disability, *Medicaid Oral Health Coverage for Adults with Intellectual and Developmental Disabilities—A Fiscal Analysis* (Washington, DC: NCD 2022), <https://ncd.gov/sites/default/files/NCD_Medicaid_Report_508.pdf>. [↑](#endnote-ref-5)
6. C.K. Cramer, G.D. Klasser, and J.B. Epstein, “The Delphi Process in Dental Research,” *Journal of Evidence-Based Dental Practice* 8 (2008): 211–220. [↑](#endnote-ref-6)
7. Centers for Medicare and Medicaid Services, *Activities of Daily Living*, <https://www.cms.gov/research-statistics-data-and-systems/research/mcbs/downloads/2008_appendix_b.pdf>. [↑](#endnote-ref-7)
8. ADA, “ADA Health Policy Institute,” <https://www.ADA.org/resources/research/health-policy-institute>. [↑](#endnote-ref-8)
9. ADA, “Supply of Dentists in the US: 2001-2021,” <https://www.ada.org/resources/research/health-policy-institute/dentist-workforce/the-changing-dentist-workforce>. [↑](#endnote-ref-9)
10. 42 C.F.R. 435.217, “Individuals Receiving Home and Community-Based Services,” Cornell Law School, <https://www.law.cornell.edu/cfr/text/42/435.217>. [↑](#endnote-ref-10)
11. Social Security Administration, *Disability Benefits: How You Qualify*, accessed August 3, 2022, <https://www.ssa.gov/benefits/disability/qualify.html>. [↑](#endnote-ref-11)
12. Administration for Community Living, “Developmental Disabilities Assistance and Bill of Rights Act of 2000,” <https://acl.gov/about-acl/authorizing-statutes/developmental-disabilities-assistance-and-bill-rights-act-2000>. [↑](#endnote-ref-12)
13. Social Security Administration, *“*Disability Benefits: How You Qualify,” accessed August 3, 2022, <https://www.ssa.gov/benefits/disability/qualify.html>. [↑](#endnote-ref-13)
14. Medicaid|Medicare|CHIP Services Dental Association,” Medicaid Oral Health Policy Academy for Adults with Intellectual and Developmental Disabilities, I/DD Medicaid Dental Policy Tool Kit (2022),” <https://www.medicaiddental.org/presentations>. [↑](#endnote-ref-14)
15. 11 Centers for Medicare and Medicaid Services, “Code Sets Overview,” accessed August 10, 2022, <https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/Code-Sets>. [↑](#endnote-ref-15)
16. Medicaid|Medicare|CHIP Services Dental Association, “Health Care Innovation Challenge Collaborative Proposal to CMS/CMMI” (unpublished 2012). [↑](#endnote-ref-16)
17. National Association of State Budget Officers, *“*Summary: 2021 State Expenditure Report (2021),” <https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/Issue%20Briefs%20/Summary_of_2021_State_Expenditure_Report.pdf>. [↑](#endnote-ref-17)
18. [Y. Halasa-Rappel](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Halasa-Rappel%2C+Yara+A), [C.A. Tschampl,](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Tschampl%2C+Cynthia+A) [M.E. Foley,](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Foley%2C+Mary) [M. Dellapenn,](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Dellapenna%2C+Martha) and [D. Shepard](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorRaw=Shepard%2C+Donald+S)*,* “Broken Smiles: The Impact of Untreated Dental Caries and Missing Anterior Teeth on Employment,” *Journal of Public Health Dentistry* 79, no. 3 (2019): 231–237, <https://doi.org/10.1111/jphd.12317>. [↑](#endnote-ref-18)
19. Medicaid|Medicare|CHIP Services Dental Association, “Medicaid Oral Health Policy Academy for Adults with Intellectual and Developmental Disabilities, I/DD Dental Policy Tool Kit,” 2022, <https://www.medicaiddental.org/presentations>. [↑](#endnote-ref-19)
20. Healthcare.gov, “Patient Protection and Affordable Care Act,” accessed August 3, 2022, <https://www.healthcare.gov/glossary/patient-protection-and-affordable-care-act/>. [↑](#endnote-ref-20)
21. American Medical Association, “CPT Overview and Code Approval,” accessed August 3, 2022, <https://www.ama-assn.org/practice-management/cpt/cpt-overview-and-code-approval>. [↑](#endnote-ref-21)
22. B. Caldwell, “ICD, and CPT Codes: The Language of Healthcare Billing,” Pollen, last modified September 7, 2021, <https://www.simplepractice.com/blog/icd-codes-and-cpt-codes/>. [↑](#endnote-ref-22)
23. Institute for Healthcare Improvement, “Science of Improvement,” assessed August 3, 2022, <https://www.ihi.org/about/Pages/ScienceofImprovement.aspx>. [↑](#endnote-ref-23)
24. Institute for Healthcare Improvement, “Value Management, Waste, and Flow,” assessed August 3, 2022, <https://www.ihi.org/Topics/QualityCostValue/Pages/default.aspx>. [↑](#endnote-ref-24)
25. M.G.L. c. 118G Division of Healthcare Finance and Policy; 114.3 CMR 14.00: Dental Services. [↑](#endnote-ref-25)
26. N. Gupta, C. Yarbrough, M. Vujicic, A. Blatz, and B. Harrison, *Medicaid Fee-for-Service Reimbursement Rates for Child and Adult Dental Care Services for All States, 2016*, Health Policy Institute Research Brief, American Dental Association, last modified April 2017, <https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/hpibrief_0417_1>. [↑](#endnote-ref-26)
27. Maryland Department of Health, “Maryland HealthChoice Program Section 1115 Waiver Amendment Application,” last modified June 30, 2022, <https://health.maryland.gov/mmcp/Documents/1115%20Waiver%20Medicaid/MDH%201115%20Waiver%20Amendment%20and%20Attachments%20June%202022%20final.pdf>. [↑](#endnote-ref-27)
28. Louisiana Department of Health, “FY2022 Together: Building a Stronger LDH and a Healthier Louisiana,” [https://ldh.la.gov/businessplan](https://ldh.la.gov/page/businessplan). [↑](#endnote-ref-28)
29. Ng MW, Torresyap G, White A, Melvin P, Graham D, Kane D, Scoville R, Ohiomoba H. Disease management of early childhood caries: results of a pilot quality improvement project. J Health Care Poor Underserved. 2012 Aug;23(3 Suppl):193–209. [doi: 10.1353/hpu.2012.0122](http://doi.org./doi:%2010.1353/hpu.2012.0122). PMID: 22864497. [↑](#endnote-ref-29)