

# Practical Considerations for Caring for Individuals with Disabilities

CareQuest Institute Continuing Education Webinar

April 13, 2023

# Housekeeping

- We will keep all lines muted to avoid background noise.
- We will send a copy of the slides and a link to the recording via email after the live program.
- We'll also make the slides and recording available on [carequest.org](https://carequest.org).

## To receive CE Credits:

- Look for the evaluation form, which we'll send via email within 24 hours.
- Complete the evaluation by **Friday, April 21**.
- Eligible participants will receive a certificate soon after via email.

**We appreciate your feedback to help us improve future programs!**

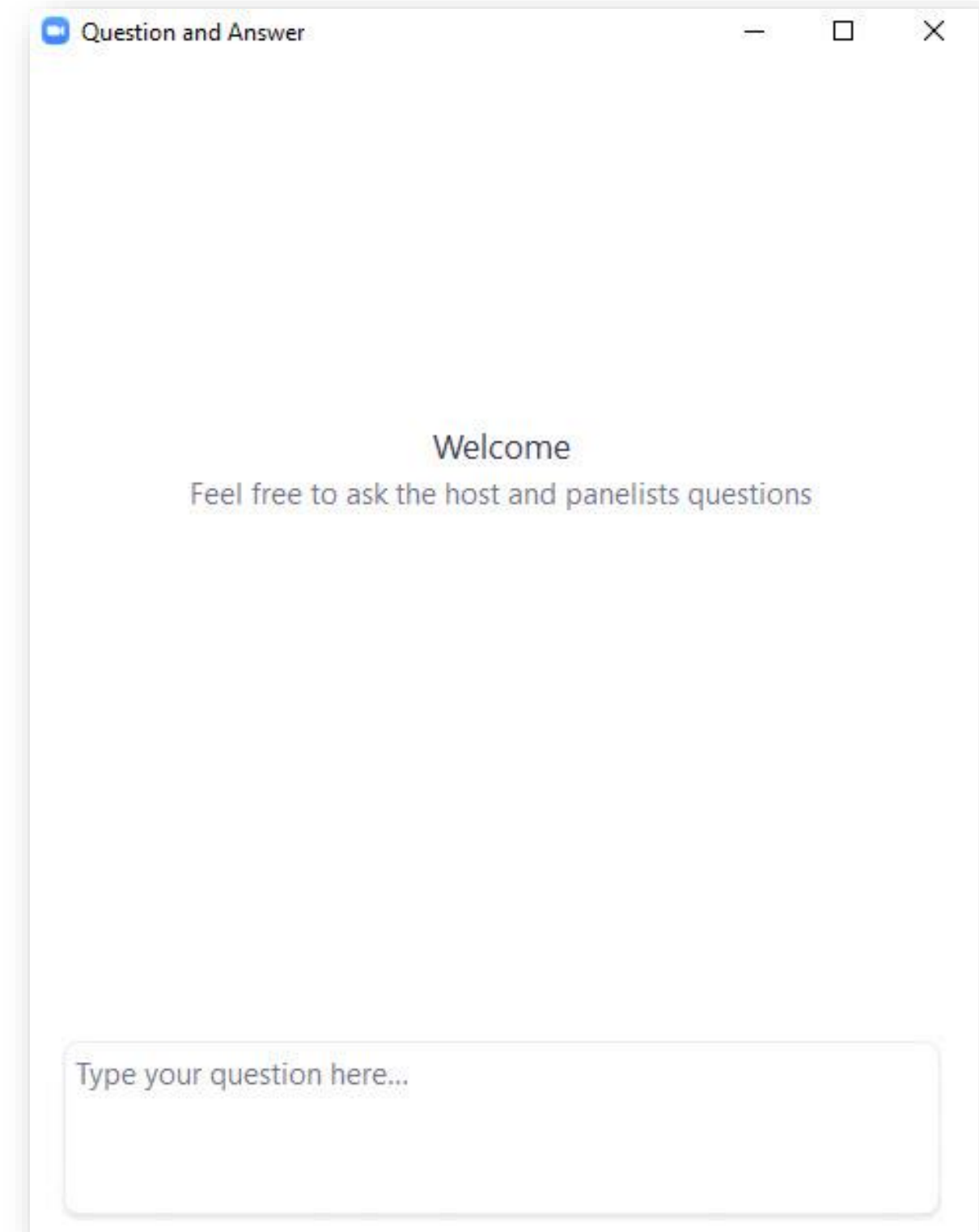


The CareQuest Institute for Oral Health is an ADA CER-P Recognized Provider. This presentation has been planned and implemented in accordance with the standards of the ADA CER-P.

\*Full disclosures available upon request

# Question & Answer Logistics

- Feel free to enter your questions into the **Question & Answer box** throughout the presentations.
- We will turn to your questions and comments toward the end of the hour.



Question and Answer

Welcome  
Feel free to ask the host and panelists questions

Type your question here...

A blue arrow points from the text 'Feel free to enter your questions into the Question & Answer box' in the list to the text input field in the screenshot.

# Learning Objectives

At the end of this webinar, you'll be able to:

- Recognize different types of disabilities with related considerations for general and oral health.
- Identify risk factors that increase the prevalence of oral and systemic disease in people with disabilities.
- Explain the progression of the signs and symptoms and oral manifestations of Duchenne muscular dystrophy.
- Implement oral care management procedures for patients with Duchenne muscular dystrophy in the dental office.
- Discuss health inequalities among those with disabilities and opportunities to address health disparities, including addressing the need for preventive dental care.

# Our Strategy

## Vision

A future where every person can reach their full potential through excellent health

## Mission

To improve the oral health of all

## Purpose

To catalyze the future of health through oral health





# Practical Considerations for Caring for Individuals with Disabilities



**WEBINAR | Thursday, April 13, 2023 | 7–8 p.m. ET | ADA CERP Credits: 1**

**MODERATOR & PRESENTER**



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RDH, PhD, FSCDH**

Professor and Assistant Dean for  
Research, Arizona School of Dentistry  
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**PRESENTER**



**An Chih Do,  
RDH, MEd, MAADH**

Dental Hygienist

**PRESENTER**



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# Special Care DENTISTRY ASSOCIATION





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# Understanding Disabilities and Related Health Disparities



Ann Eshenaur Spolarich, RDH, PhD, FSCDH

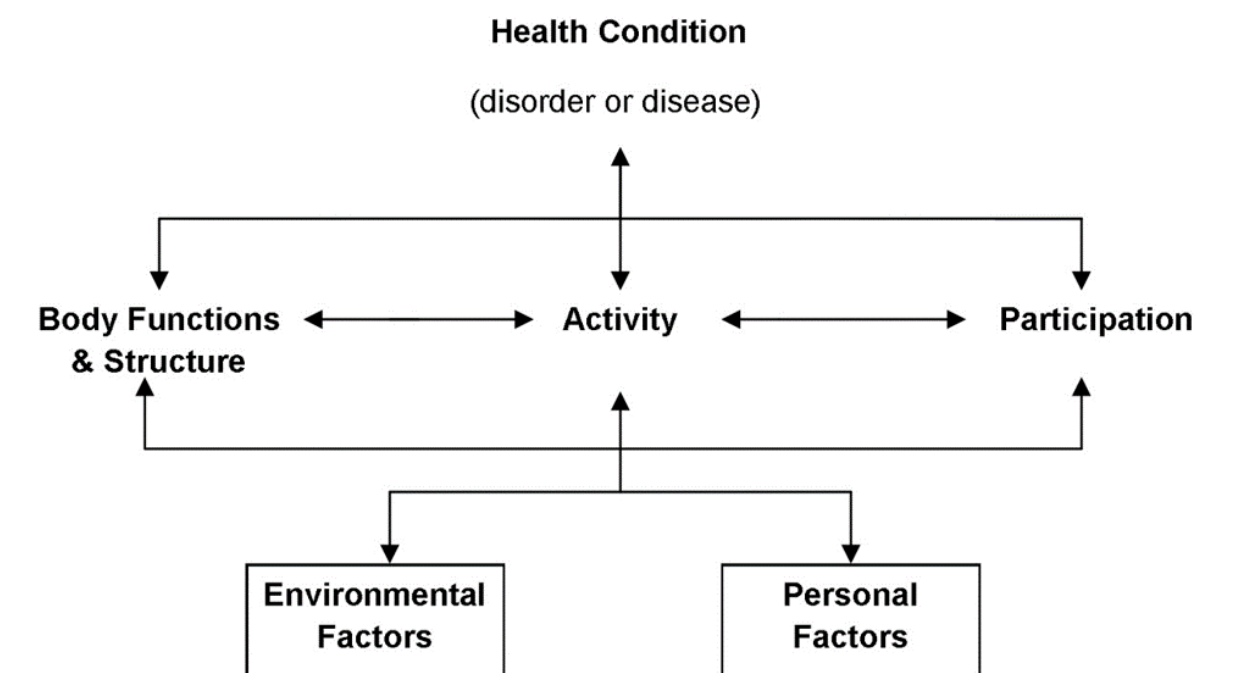
# Learning Objectives



1. Describe different types of disabilities with related considerations for general and oral health.
2. Identify risk factors that increase the prevalence of oral and systemic disease in people with disabilities.
3. Discuss health inequalities among those with disabilities and opportunities to address health disparities, including addressing the need for preventive dental care.

# According to WHO, Disability Has Three Dimensions

- 1. Impairment** in a person's body structure or function, or mental functioning
  - Loss of a limb, vision or memory
- 2. Activity limitation**, such as difficulty seeing, hearing, walking, or problem solving
- 3. Participation restrictions** in normal daily activities:
  - working
  - engaging in social and recreational activities
  - obtaining health care and preventive services



# A Disability Can Be . . .

- **Present at birth** and may **affect functions later in life:**
  - *cognition* (memory, learning, and understanding)
  - *mobility* (moving around in the environment)
  - *vision, hearing, behavior,* and other areas
    - Genetic
    - Maternal exposure
- **Developmental conditions** that become apparent during childhood (ASD, ADHD)
- **Related to an injury** (TBI, SCI)
- **Longstanding condition** which can cause a disability such as vision loss, nerve damage, or limb loss (diabetes)
- **Progressive** (muscular dystrophy), **static** (limb loss), or **intermittent** (multiple sclerosis)



# Categories of Activities and Participation

- **Learning and applying knowledge**
- **Managing tasks and demands**
- Mobility
  - Moving and maintaining body positions, handling and moving objects, moving around in the environment, moving around using transportation
- **Managing self-care tasks**
- Managing domestic life
- Establishing and managing interpersonal relationships and interactions
- Engaging in major life areas
  - Education, employment, managing money or finances
- Engaging in community, social, and civic life





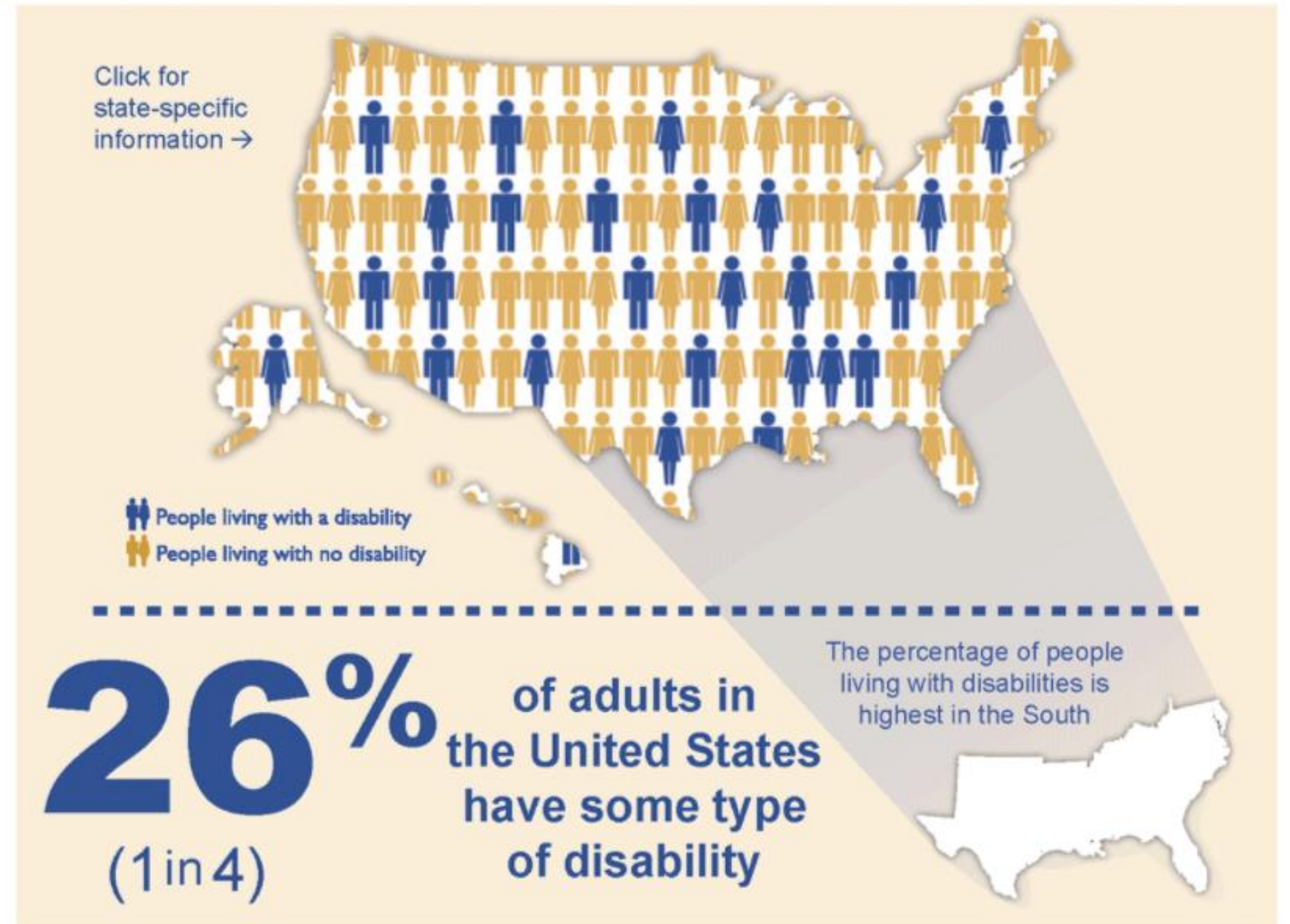
One in four American adults has a **disability**.\*

\*2016 Behavioral Risk Factor Surveillance System (BRFSS)

# Disability Impacts ALL of US

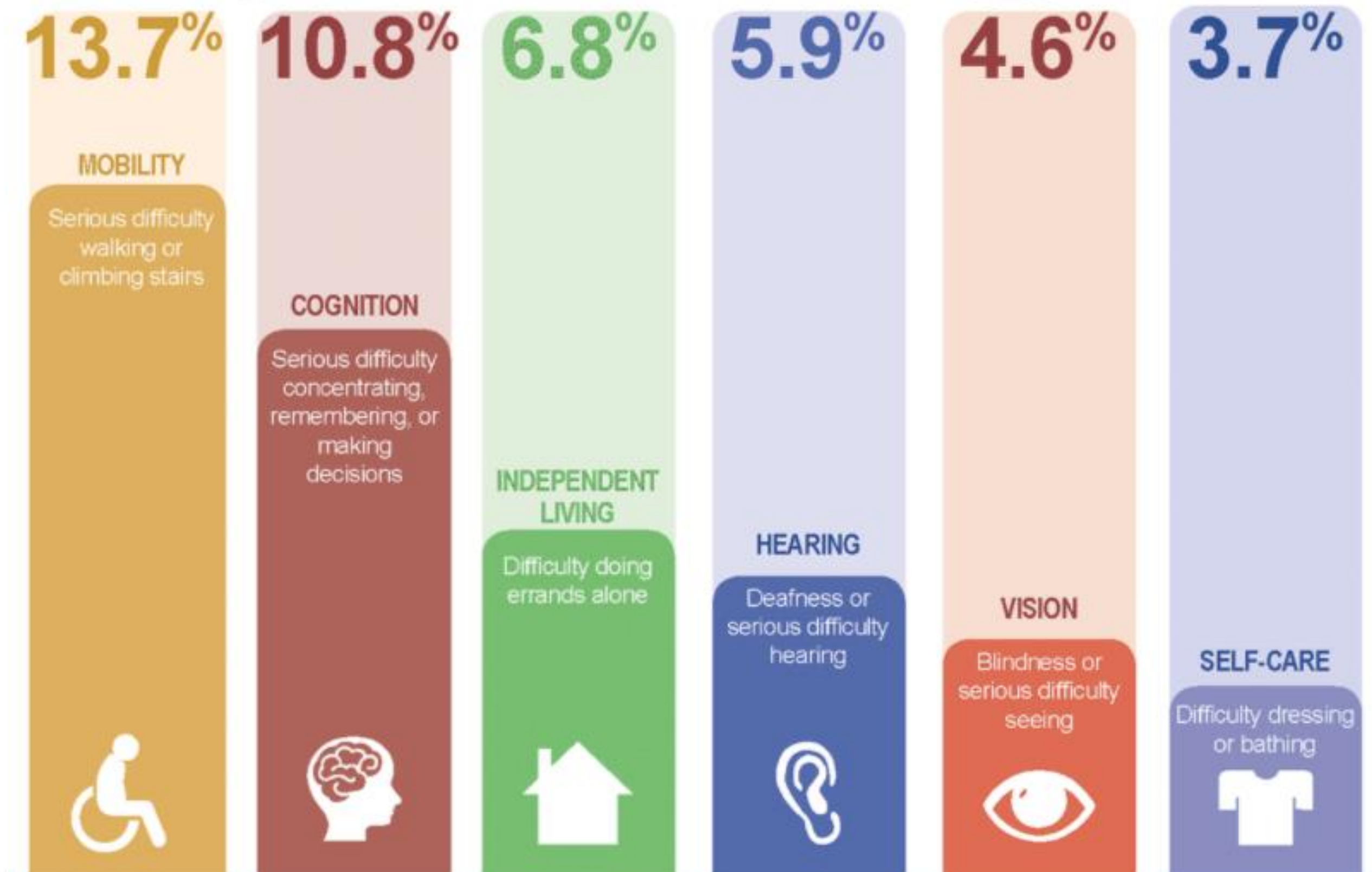


61 million adults in the United States live with a disability





## Percentage of adults with functional disability types



CDC. Disability and Health Healthy Living. <https://www.cdc.gov/ncbddd/disabilityandhealth/healthyliving.html>

## Disability is especially common in these groups:

**2** in **5**

adults age 65  
years and older  
have a disability



**1** in **4**

women have  
a disability



**2** in **5**

Non-Hispanic  
American Indians/  
Alaska Natives  
have a disability



CDC. Disability and Health Healthy Living. <https://www.cdc.gov/ncbddd/disabilityandhealth/healthyliving.html>



# Invisible Disabilities

- Chronic pain
  - Fibromyalgia, Arthritis
- Diabetes
- Hearing impairments
- Sleep disorders
- Gastrointestinal disorders
  - Crohn's disease
- Dyslexia
- PTSD
- Mental health disorders
  - Depression, Anxiety

When you see someone wearing this ID card,

please ask how you can help.

Making invisible disabilities  
*Invisible No More*®

NATIONAL  
**Disability.iD**™

Order online at:  
**[invisibledisabilities.org](https://invisibledisabilities.org)**

# CHRONIC DISEASES IN AMERICA

6 IN 10

Adults in the US  
have a chronic disease



4 IN 10

Adults in the US  
have two or more

THE LEADING CAUSES OF DEATH AND DISABILITY  
and Leading Drivers of the Nation's \$3.5 Trillion in Annual Health Care Costs



HEART DISEASE



CANCER



CHRONIC LUNG  
DISEASE



STROKE



ALZHEIMER'S  
DISEASE



DIABETES



CHRONIC  
KIDNEY DISEASE

<https://www.cdc.gov/chronicdisease/index.htm#:~:text=Six%20in%20ten%20Americans%20live,driver%20of%20health%20care%20costs.>





Original Investigation | Public Health

## Assessment of Prevention Research Measuring Leading Risk Factors and Causes of Mortality and Disability Supported by the US National Institutes of Health

Ashley J. Vargas, PhD, MPH, RDN; Sheri D. Schully, PhD; Jennifer Villani, PhD, MPH; Luis Ganoza Caballero, MD, MPH; David M. Murray, PhD

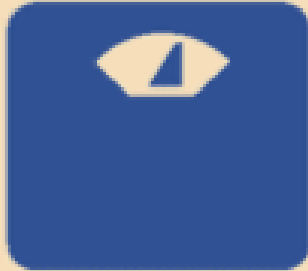



JAMA Network Open. 2019;2(11):e1914718. doi:10.1001/jamanetworkopen.2019.14718

**57.3%** of deaths and **42.1%** of Disability-Adjusted Life Years lost in the US are attributable to **10** well-known risk factors

Leading Risk Factors - DALYs Lost
Any Top 10 Risk Factor - DALYs
1) High body mass index
2) Tobacco
3) Dietary risk
4) High fasting plasma glucose
5) High systolic blood pressure
6) Drug use
7) Alcohol use
8) High LDL cholesterol
9) Impaired kidney function
10) Occupational risks

<sup>a</sup> The top 10 leading risk factors for Disability Adjusted Life Years (DALYs)

## Adults living with disabilities are more likely to

	With Disabilities	Without Disabilities
 <b>HAVE OBESITY</b>	<b>38.2%</b>	<b>26.2%</b>
 <b>SMOKE</b>	<b>28.2%</b>	<b>13.4%</b>
 <b>HAVE HEART DISEASE</b>	<b>11.5%</b>	<b>3.8%</b>
 <b>HAVE DIABETES</b>	<b>16.3%</b>	<b>7.2%</b>

CDC. Disability and Health Healthy Living. <https://www.cdc.gov/ncbddd/disabilityandhealth/healthyliving.html>



People with disabilities have the same general health care needs as others

But they are:

2x

more likely to find health care providers' skills and facilities inadequate

3x

more likely to be denied health care

4x

more likely to be treated badly in the health care system



World Health Organization. Disabilities. Available at: [https://apps.who.int/mediacentre/infographic/dar/infographic\\_en\\_rev1\\_510.jpg?ua=1](https://apps.who.int/mediacentre/infographic/dar/infographic_en_rev1_510.jpg?ua=1)

# Self-Reported Health by People with Disabilities

- **More likely to report poor general and poor mental health**
  - Disparities remain even after stratifying by level of education
- **Significant differences in risk factors and preventive behaviors:**
  - smoking
  - obesity
  - physical inactivity
- **Lower rates of preventive screening**
- **More difficulty accessing health care services**



# Health Inequity



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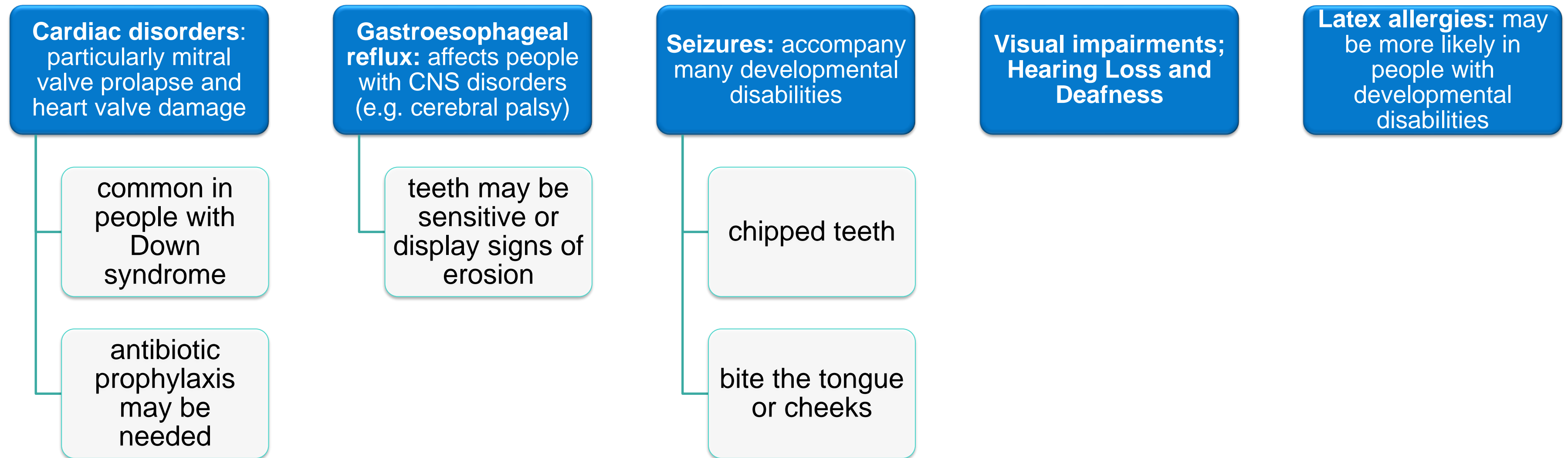
Health inequalities exist between people with intellectual and developmental disabilities (IDD) and people without IDD

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Disparities are greater among individuals with IDD



# Health Challenges in People with Developmental Disabilities





# Health Challenges in People with Developmental Disabilities

Mental  
Capabilities

Behavior  
Problems

Mobility  
Challenges

Neuromuscular  
Disorders

Uncontrolled  
Body  
Movement

## Healthcare access barriers for working-age adults include

**1 in 3**

adults with disabilities  
(18-44 years)

do not have a  
**usual healthcare  
provider**



**1 in 3**

adults with disabilities  
(18-44 years)

have an **unmet  
healthcare need  
because of cost**  
in the past year



**1 in 4**

adults with disabilities  
(45-64 years)

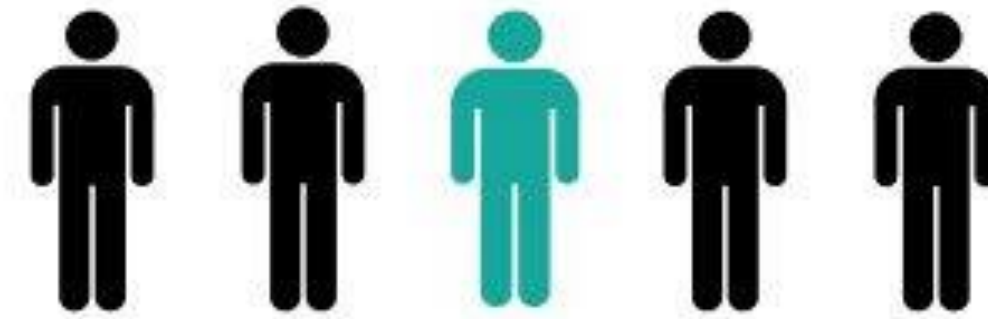
did not have a  
**routine check-up**  
in the past year



CDC. Disability and Health Healthy Living. <https://www.cdc.gov/ncbddd/disabilityandhealth/healthyliving.html>



Almost **1 in 5**  
Children Live with  
**Chronic Illness**



**IMPACTS**

including:

AIDS/HIV, Accidents, Amputations, Arthritis, Severe Asthma, Burns, Cancer, Cardiac Disease, Cerebral Palsy, Crohn's & Colitis, Cleft Lip/Palate, Cystic Fibrosis, Diabetes, Epilepsy, Gunshots, Heart Defects, Immunodeficiency, Kidney/Renal Disease, Lupus, Organ Transplants, Rare Genetic Disorders, Sickle Cell Anemia, Spina Bifida, Traumatic Brain Injury, **and countless others**



The Entire Family



Everyday Life



Finances

Bounce Children's Foundation. Available at: <https://bouncechildrensfoundation.org/about/>



# Oral and Systemic Health Facts

- **Having a chronic disease**, such as arthritis, heart disease or stroke, diabetes, emphysema, hepatitis C, a liver condition, or being obese may **increase an individual's risk of having missing teeth and poor oral health.**<sup>1</sup>
- Patients with **weakened immune systems**, such as those infected with HIV and other medical conditions (organ transplants) and who use some medications (e.g., steroids) are at **higher risk for some oral problems.**<sup>2</sup>
- **Chronic disabling diseases** such as jaw joint diseases (TMD), autoimmune conditions such as Sjögren's Syndrome, and osteoporosis affect millions of Americans and **compromise oral health and functioning**, more often among women.<sup>2</sup>

# Oral Health Problems in People with Developmental Disabilities

**Tooth decay**

**Periodontal disease:** occurs more often and at a younger age; difficulty performing effective brushing and flossing

**Malocclusion:** makes chewing and speaking difficult; increased risk for periodontal disease, caries, and oral trauma

**Damaging oral habits:** bruxism, food pouching, mouth breathing, and tongue thrusting

**Oral malformations:** enamel defects, high lip line, variations in the number/size/shape of teeth

**Delayed tooth eruption:** may occur in children with developmental disabilities such as Down Syndrome

- children may not get their first tooth until age 2

**Trauma and injuries:** falls or accidents may occur in people with seizure disorders or cerebral palsy

# Oral Health and Behavioral Health

Oral health also has an important influence on an individual's psychosocial health.



Poor oral health can lead to:

toothache

associated anxiety

difficulty performing daily activities

impaired social interactions

reduced nutritional intake



# Oral Health and IDD

- People with IDD are particularly vulnerable to poor oral health and have more complex oral health care needs than people without IDD
- Disparities are due to myriad risk factors that people with IDD may experience including:
  - barriers to accessing quality health care
  - need for assistance with core activities such as oral hygiene
  - behavioral challenges
  - communication challenges
  - a higher prevalence of enteral feeding
  - higher likelihood of having lower educational and income levels when compared to people without IDD

# Tips for Leading a Long and Healthy Life

- Be physically active every day
- Eat healthy foods in healthy portions
- Don't get too much sun
- Get regular checkups
- Don't smoke
- Use medicines wisely
- If you drink alcoholic beverages, drink in moderation
- Get help for substance abuse
- Stay in touch with family and friends
- If you need help, talk with your health care professional



# Treatment Planning Considerations for Prevention

## Large economic disparities:

- age
- geographic region
- residential setting
- sources of income

## What is the cost/benefit of prevention?

- Increase preventive visits to minimize future restorative/prosthetic/surgical care
- Invest in preventive tools
  - oral hygiene aids
  - power devices
  - antibacterial toothpastes and mouthrinses
  - fluorides and other non-fluoride caries remineralization products

## Accessibility to professional preventive care





# Preventive Choices

Regardless of age and degree of disability:

- Promote preventive options
- Discuss all options for care
- Introduce/recommend/prescribe appropriate products

Recognize patient's right to make personal care choices

Discuss:

- Basic care **needs**
- Other “**wants and desires**” eg: whiter teeth, prettier smile

Include a trusted family member, friend, guardian or power of attorney in consultations when appropriate



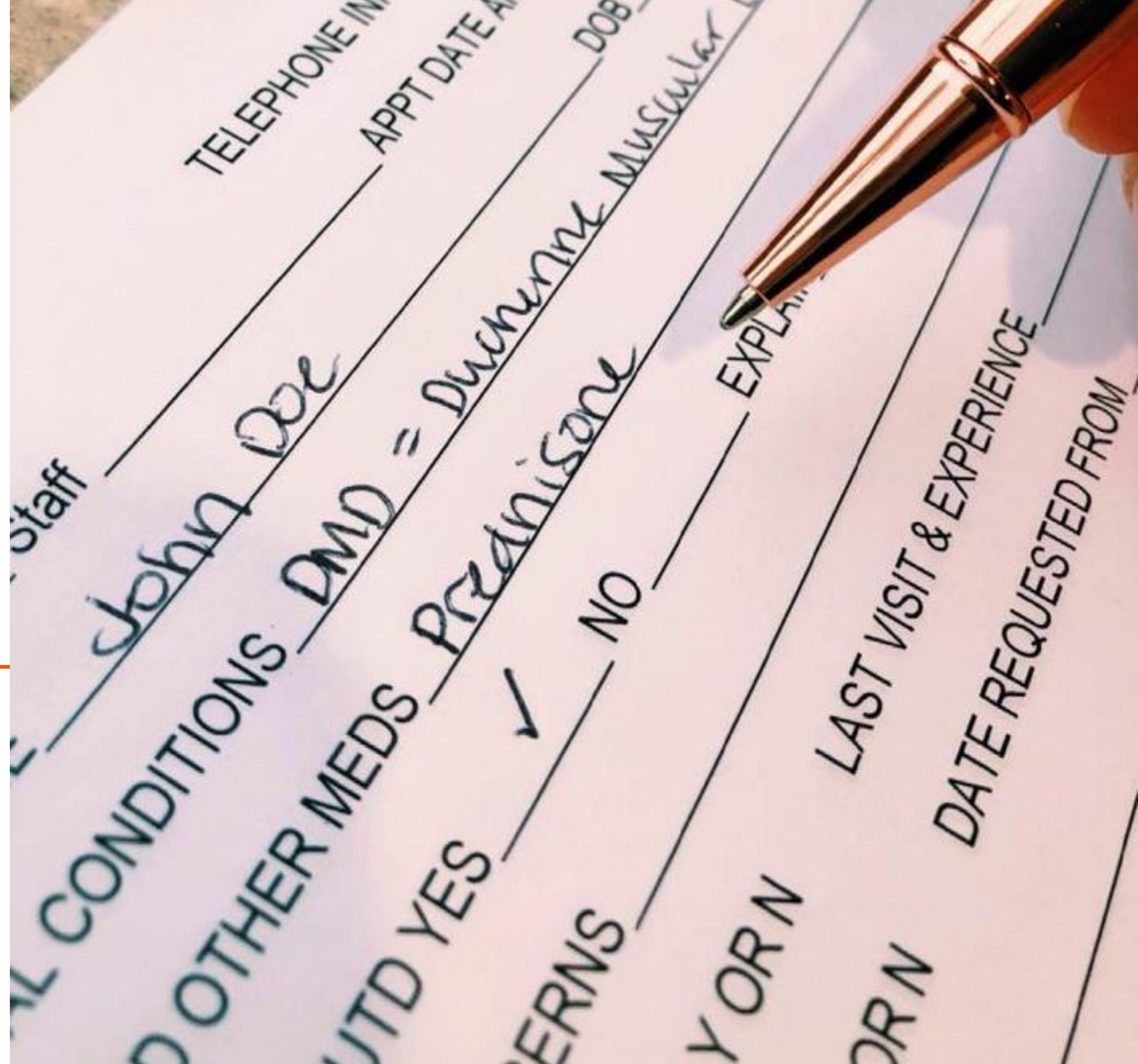
Ann Eshenaur Spolarich, RDH, PhD, FSCDH  
Professor and Assistant Dean for Research  
Arizona School of Dentistry & Oral Health, A.T. Still University  
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# DUCHENNE MUSCULAR DYSTROPHY

An Chih "Angela" Do, RDH, MEd, MAADH

📷 @ThePediatricRDH







## Muscular Dystrophy

A genetic disorder where the body does not make the proteins needed to develop and maintain healthy muscles.



## Duchenne Muscular Dystrophy

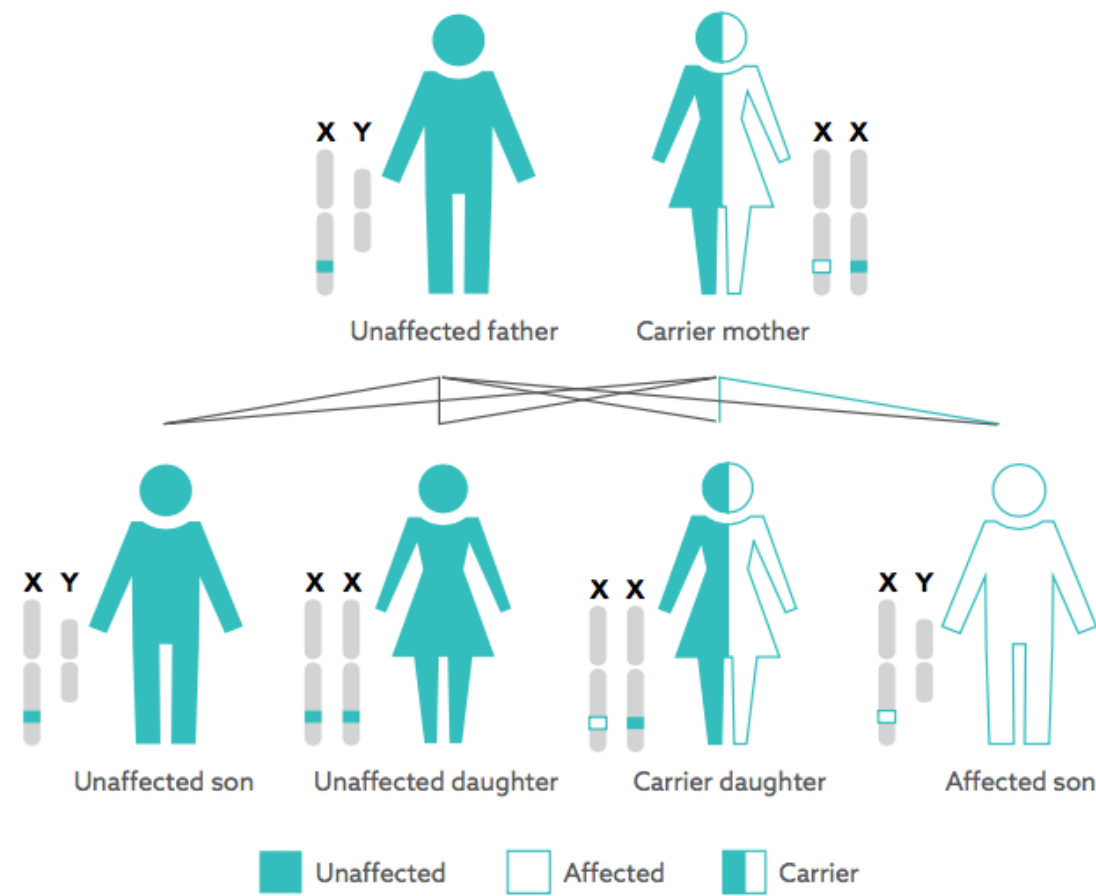
- Most common form in children
- Affects mainly males
- 1 in 3,500 males vs. 1 in 50 million females
- Appears between 2-6 years old
- Affects the shoulder, upper arms, hips, and thighs
- Average Life expectancy: 20s-30s



## Physical Signs

- Delay in learning to walk
- Enlarged calf muscles
- Clumsiness
- Falling often
- Walking on toes or balls of their feet
- Waddling gait
- Proximal muscle weakness
- Gower's maneuver

### X-LINKED RECESSIVE INHERITANCE



## Etiology

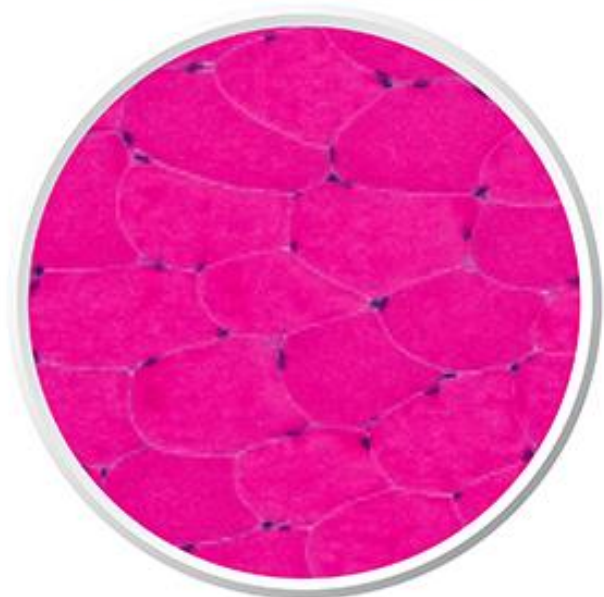
- Discovered by French neurologist: Guillaume Benjamin Amand Duchenne
- Mutation on X-chromosome
- Failure to produce functional dystrophin

## DMD & Dystrophin

- Dystrophin interacts with proteins to stabilize and protect the cell during activity such as muscle contraction and relaxation
- Produce little or no dystrophin in their muscle
- Fat and fibrotic tissue replaces the lack of dystrophin present

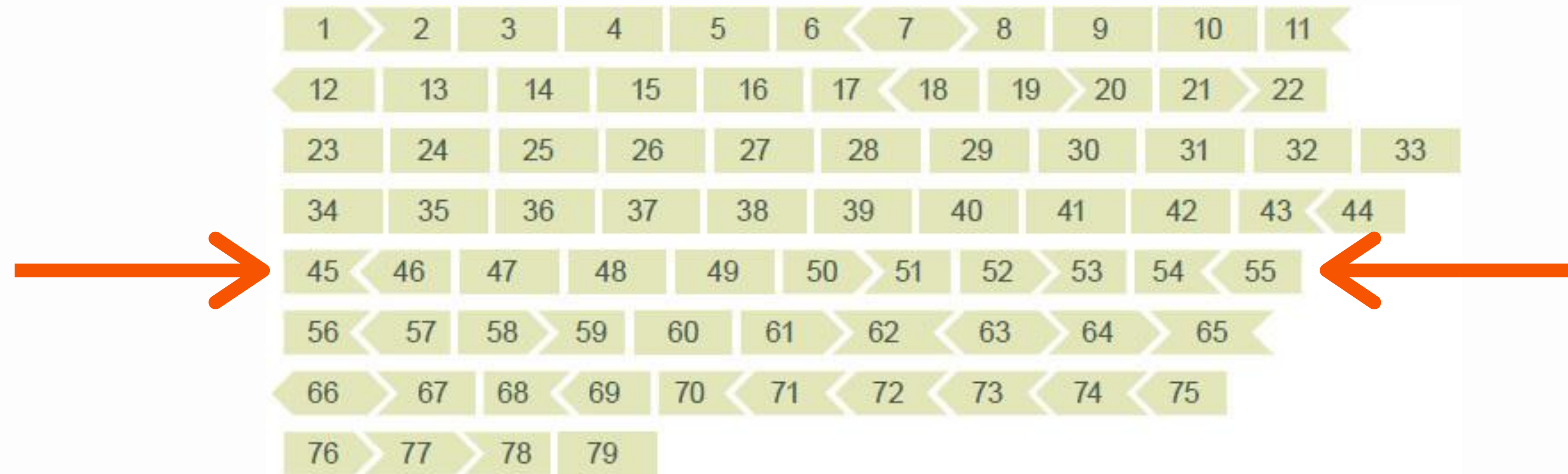
Healthy muscle tissue

Duchenne muscle tissue



Fat and fibrotic tissue

# DYSTROPHIN GENE = EXONS



DELETION  
60-70%

DUPLICATION  
10%

POINT MUTATIONS  
15-30%



# ORAL MANIFESTATIONS

- Weakening of masticatory and perioral muscles
- Enlarged hypotonic tongue
- Oropharyngeal and hypopharyngeal weakness
- Broad and shallow dental arches
- Skeletal changes
- Bite force
- Changes in occlusion
  - Class III tendency
  - Open bite
  - Cross bite





**Duchenne.**

**Making the simple, impossibly difficult.**

**ParentProjectMD.org**  
Photograph by Mitch Sevier

# APPOINTMENT CONSIDERATIONS

- AM appointment
- Minimize wait time
- Wheelchair accessible
- Adjustable arm rests
- Recline chair to their comfort
- Cordless handpiece
- Ultrasonic use - evaluate
- Caution using air/water syringe
- Tongue retractor
- Lip retractor



## **USE MINIMAL ANESTHESIA**

Generally local anesthetic and N2O are ok to use.

## **AVOID GENERAL ANESTHESIA**

Risk of developing rhabdomyolysis and hyperkalemia.



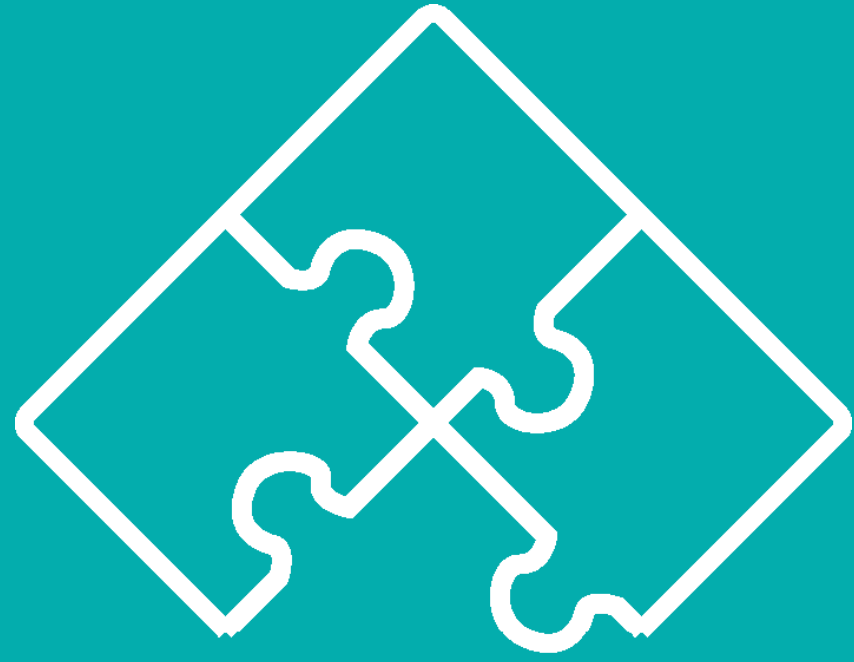
## **MONITOR CO2 LEVELS**

CO2 levels should be monitored in non-ambulatory patients when administering only oxygen to avoid hypercapnia.

## **ORTHO & WISDOM TEETH**

Complete care evaluation is needed to determine risk and necessity.





Clinical care coordination can help maintain a degree of independence in order to improve their quality of life.

Early intervention in oral care can prevent the need of invasive treatment which may compromise their health.



# Thank You



An Chih "Angela" Do, RDH, MEd, MAADH

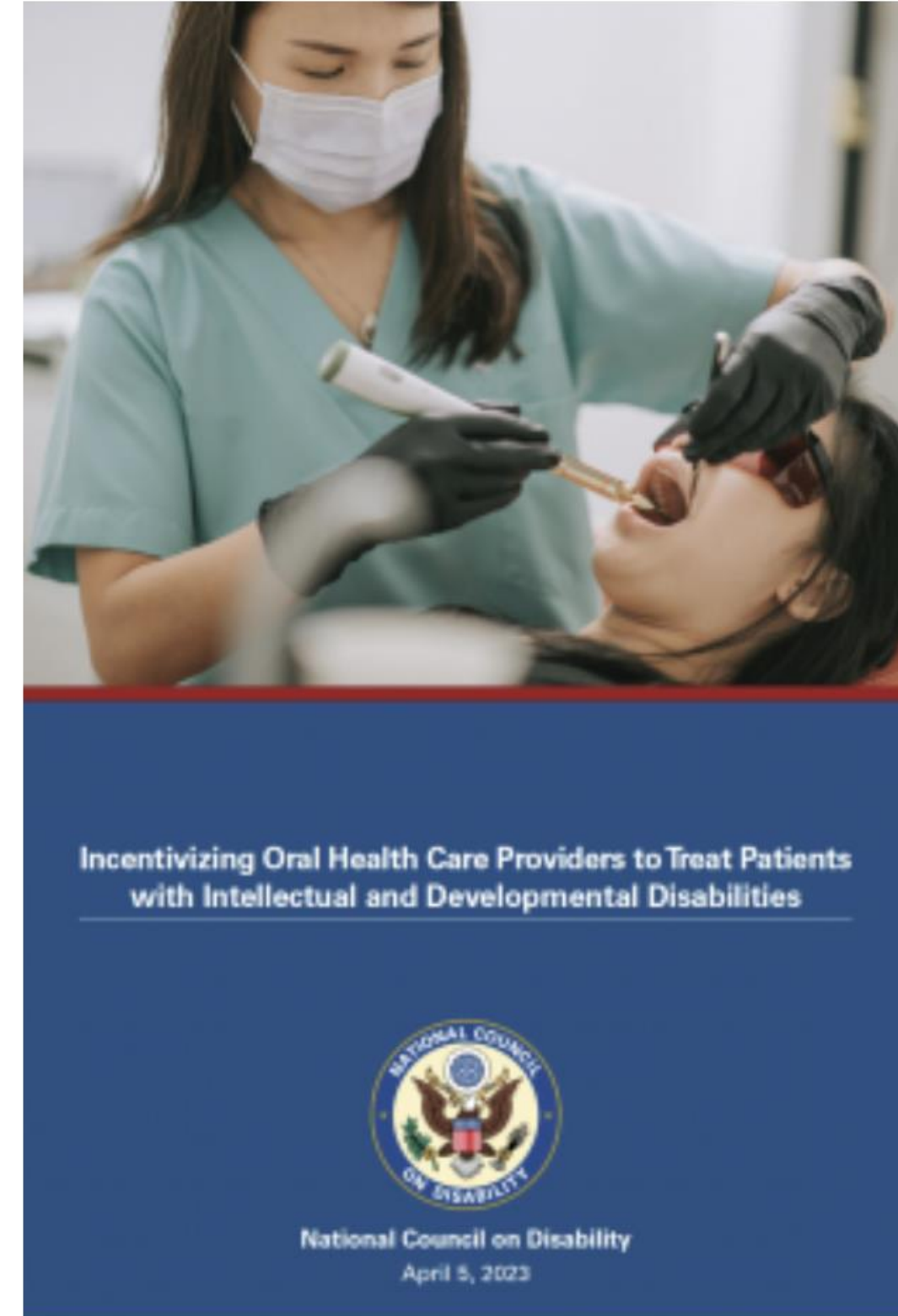
 @ThePediatricRDH

 anchihdo@gmail.com

# Question and Answer

# National Council of Disability Report

## Incentivizing Oral Healthcare Providers to Treat Patients with Intellectual and Developmental Disabilities





# To Explore More Industry-Leading Research

**Search by Keyword**

**Filter by Topic** - Any -

**Filter by Type** - Any - **Search**

Title	Topic	Type
<a href="#">Improving Care Coordination Between Oral and Medical Providers</a>	Care Coordination	Video
<a href="#">Veteran Oral Health: Expanding Access and Equity</a>	Expanding Access	White Paper
<a href="#">2021 Oral Health Information Technology Virtual Convening</a>	Care Coordination	Presentation
<a href="#">Dental Fear Is Real. Providers Can Help.</a>	Expanding Access, Health Equity	Visual Report
<a href="#">Why We (Still) Need to Add Dental to Medicare</a>	Adult Dental Benefit, Expanding Access, Health Equity	Report
<a href="#">A Cross-Sectional Analysis of Oral Health Care Spending over the Life Span in Commercial- and Medicaid-Insured Populations</a>	Expanding Access, Health Equity	Article
<a href="#">Time Is on the Side of Change in Dentistry</a>	COVID-19 and Oral Health, Health	Article

[www.carequest.org/resource-library](http://www.carequest.org/resource-library)

**Missed Connections**  
Providers and Consumers Want More Medical-Dental Integration

Oral health and overall health are inextricably linked. There is mounting evidence to suggest that poor oral health is related to a variety of chronic health conditions, such as high blood pressure, dementia, diabetes, and obesity. Despite this known connection, dental care is still largely siloed from medical care. The Centers for Disease Control and Prevention (CDC) estimates that integrating basic health screenings into a dental setting could save the health care system up to \$100 million every year.<sup>1</sup>

CareQuest Institute for Oral Health conducted a nationally representative survey in January and February 2021 to assess consumers' perspectives on oral and overall health (n=5,320). CareQuest Institute also conducted a nationwide survey of oral health providers to assess perspectives and current behaviors related to interprofessional practice (n=377). Consumers and oral health providers described a lack of integration between medical and oral health care, and a desire for increased interprofessional collaboration.

**Key Findings:**  
**Medical-dental collaboration is currently uncommon.**

- 63% of consumers report that their primary medical doctor "rarely" or "never" asks about their oral health.
- 33% of consumers report that their oral health provider "rarely" or "never" asks about their overall health.
- 45% of responding oral health providers report "rarely" integrating their care with clinicians outside of dentistry, with only 14% reporting it is part of their "daily" practice.
- Less than a third of consumers report receiving general health screenings from their oral health provider.
- A majority (89%) of adults report never receiving a referral from their oral health provider to a non-oral health professional.
- Almost a fourth (24%) of participating oral health providers report currently implementing interprofessional practice.

# Webinar Evaluation

Complete the **evaluation by Friday, April 21** to receive CE credit. You will receive a link to the survey within 24 hours.

## *Next Webinar:*

**April 27:** Strategies for Providing Care to Patients with Autism at 7–8 p.m. ET

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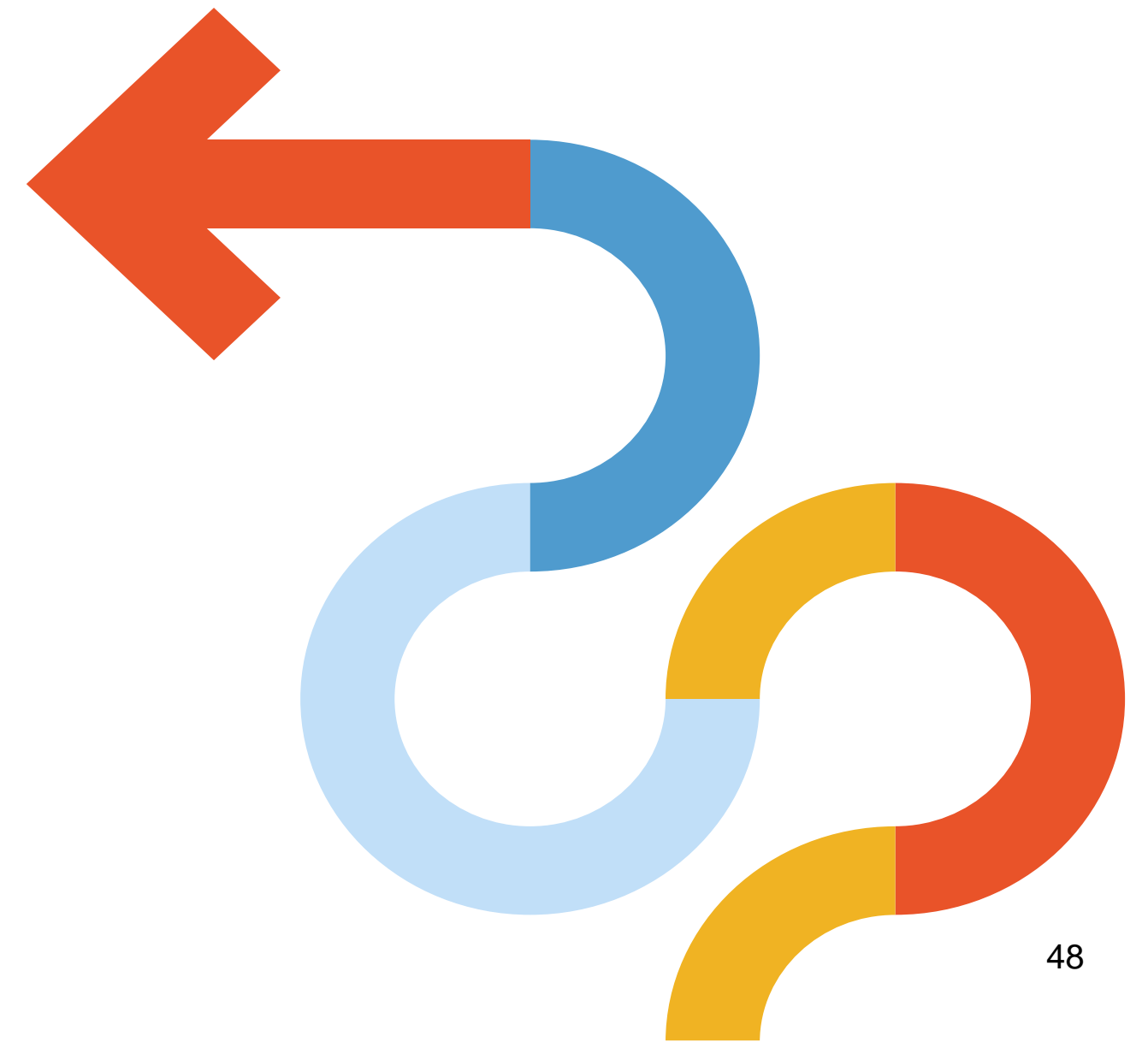
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