

Best Practice Approach Report: Oral Health in the Older Adult Population (Age 65 and older)

COHA Presentation
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Background:

Best Practice Approach Reports

- The Association of State and Territorial Dental Directors (ASTDD) develops Best Practice Approach Reports (BPAR) around various public health topics (15 BPARs in collection)
- Fall under Assessment, Policy Development and Assurance
- Best Practices page:

<http://www.astdd.org/best-practices/>



Oral Health in the Older Adult Population (Age 65 and older)

- Posted to ASTDD Best Practices webpage in March 2017:
<http://www.astdd.org/bestpractices/bpar-oral-health-in-the-older-adult-population-age-65-and-older.pdf>
- Primary author: Dr. Sam Zwetchkenbaum
- State submissions known as “descriptive reports” are linked to BPAR
- ASTDD’s Healthy Aging Committee worked with Dr. Zwetchkenbaum and the Best Practices Committee



Timeline

- From initial development to posting took approximately two years
- First author unable to complete commitment and Dr. Zwetchkenbaum agreed to take over
- 6-8 months to get state submissions, review, revise and post
- Challenge as this is still an up and coming topic in public health

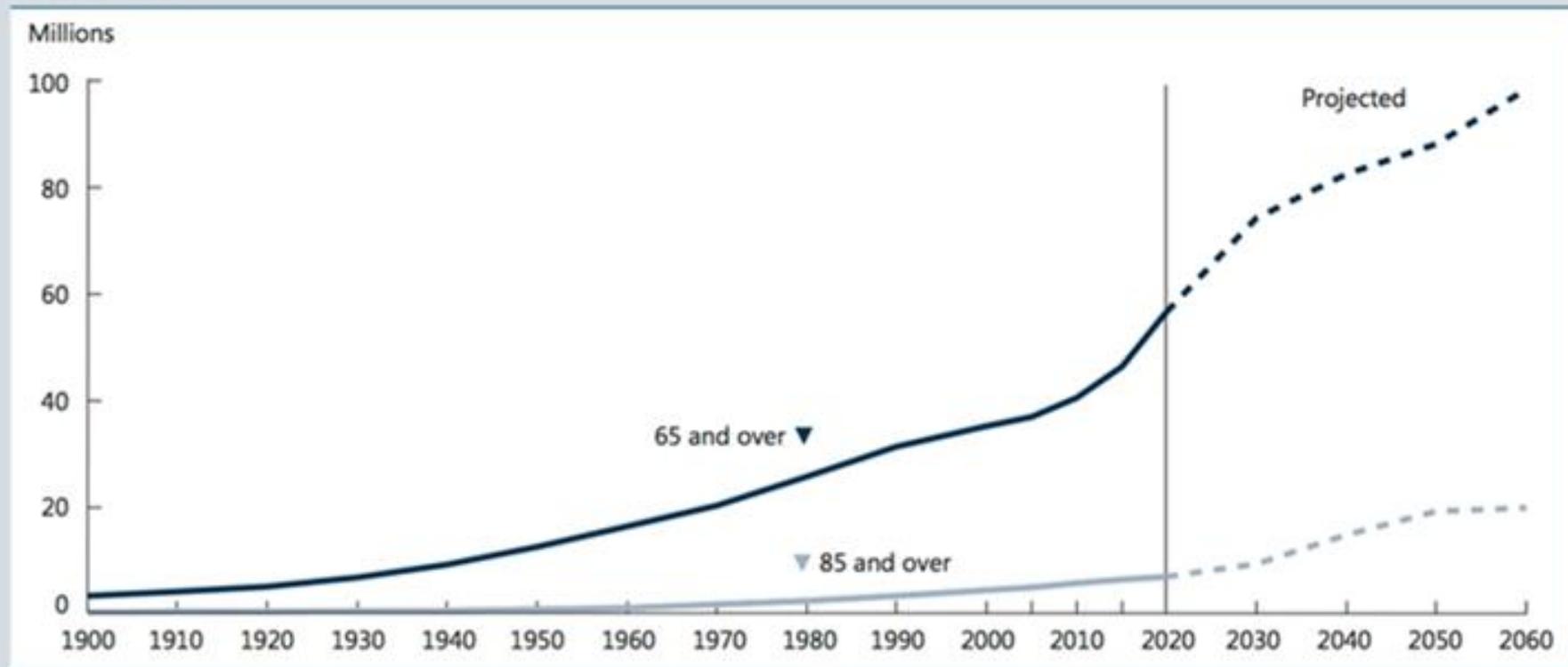
Best Practice Approach Reports Format

- BPARs all have a basic outline:
 - Description
 - Resources, Reports and Recommendations
 - Best Practice Criteria
 - State Practice Examples
 - Acknowledgements
 - References

Older Adults in the U.S.

- By 2030, 70 million people age 65 and older, or one in five in the U.S. population
- Baby boomers, born between 1946 and 1964, will be largest group
- In 2030 the oldest “boomers” will be 85 years old – that’s 12 years away!
- We’ve got a long way to go and a short time to get there (to quote a song that was popular on a show boomers watched.)

Population age 65 and over and age 85 and over, selected years, 1900–2014, and projected years, 2020–2060



NOTE: Some data for 2020–2050 have been revised and differ from previous editions of *Older Americans*.

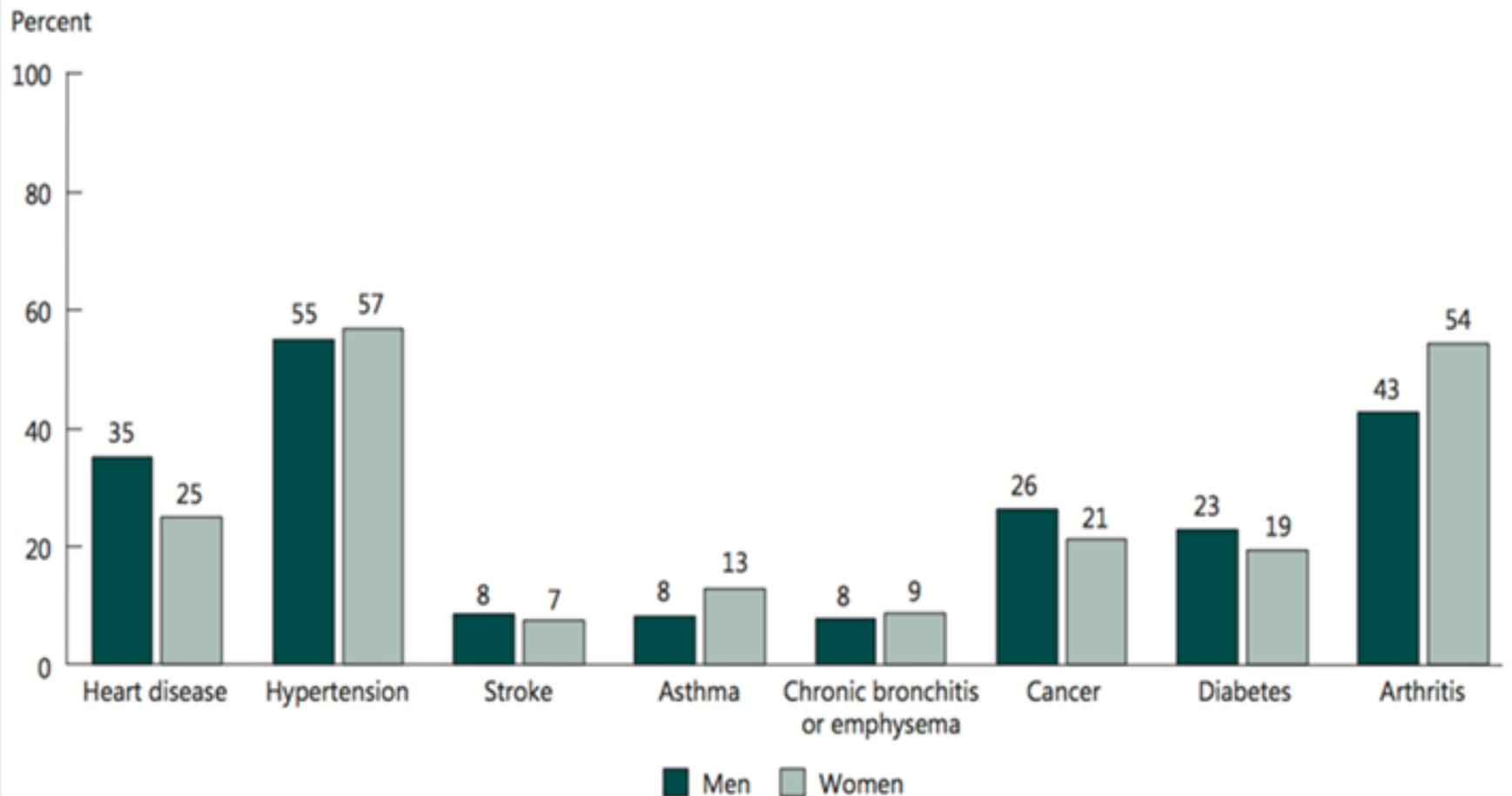
Reference population: These data refer to the resident population.

SOURCE: U.S. Census Bureau, 1900 to 1940, 1970, and 1980, U.S. Census Bureau, 1983, Table 42; 1950, U.S. Census Bureau, 1953, Table 38; 1960, U.S. Census Bureau, 1964, Table 155; 1990, U.S. Census Bureau, 1991, 1990 Summary Table File; 2000, U.S. Census Bureau, 2001, *Census 2000 Summary File 1*; U.S. Census Bureau, Table 1: Intercensal Estimates of the Resident Population by Sex and Age for the U.S.: April 1, 2000, to July 1, 2010 (US-EST00INT-01); U.S. Census Bureau, 2011, *2010 Census Summary File 1*; U.S. Census Bureau, Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipalities: April 1, 2010, to July 1, 2014 (PEPAGESEX); U.S. Census Bureau, Table 3: Projections of the Population by Sex and Selected Age Groups for the United States: 2015 to 2060 (NP2014-T3).

Health Conditions

- Most older adults have at least one chronic health condition
- Physiologic functions decline with age increasing risk of stress, infection and disease
- Activities of daily living (ADL) – bathing, feeding, dressing become a challenge
- Instrumental activities of daily living (IADL) – food preparation, housekeeping, using devices such as a phone are also a challenge

Percentage of people age 65 and over who reported having selected chronic health conditions, by sex, 2013–2014



NOTE: Data are based on a 2-year average from 2013–2014.

Reference population: These data refer to the civilian noninstitutionalized population.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

Living Arrangements

- In 2014, 1.2 million older adults lived in nursing homes
- In 2014, nearly 780,000 older adults lived in alternative setting such as assisted living facilities
- Number increases with age
- Women outnumbered men 2.5 to 1

Oral Health & Quality of Life

- Research indicates older adults with 20 or more teeth have significantly lower mortality rate than those with 19 and fewer teeth
- Associated with improved dietary intake and reduced risk of malnutrition
- Also report more socially interactive and more mobile

Public Health Success

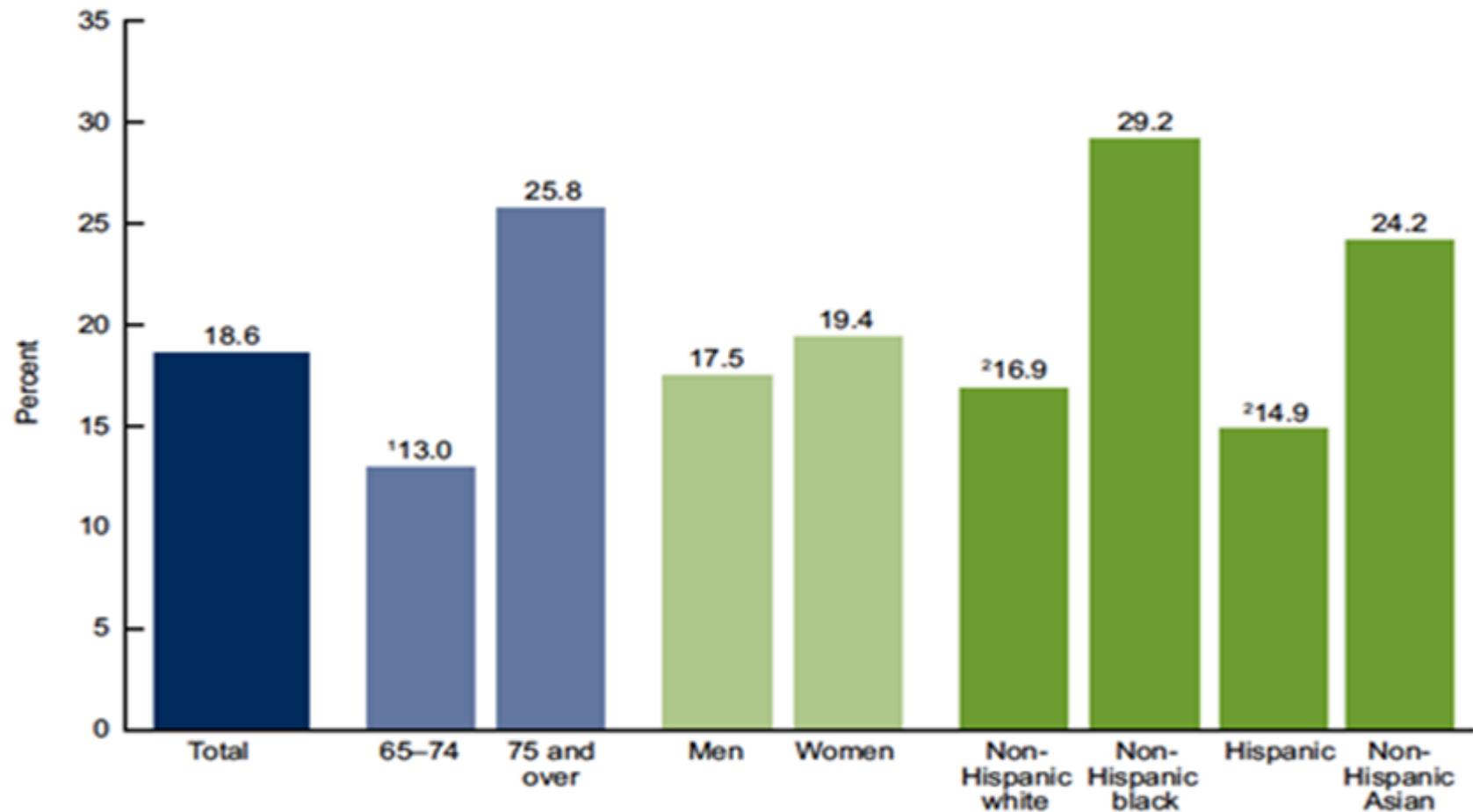
- Gains in prevention and treatment efforts over the past 50 years
- Community water fluoridation
- Fluoride products- toothpaste, gels, varnish
- Equates to more people keeping more teeth

Oral Health Issues

- More retained teeth equates to more tooth surfaces at risk for caries and more areas at risk for periodontal disease
- Medications may lead to dry mouth (xerostomia)
- Oral and pharyngeal cancer
- Tooth loss

Tooth Loss

- World Health Organization (WHO) recognizes 20 teeth as the minimum for adequate functional dentition
- Tooth loss varies greatly by socioeconomic status (SES)
- > 34% of older adults aged 65-74 living below the Federal Poverty Level (FPL) are edentulous
- Rate drops to 13% for those above FPL



¹Significantly different from ages 75 and over, $p < 0.05$.

²Significantly different from non-Hispanic black adults, $p < 0.05$.

NOTE: Access data table for Figure 4 at: http://www.cdc.gov/nchs/data/databriefs/db197_table.pdf#4.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey, 2011-2012.

Dental Caries

- > 96% of older adults have caries experience
- Varies by SES and FPL
- Root caries most significant risk for tooth loss in older adults
- Almost ½ of all individuals 75 years of age and older have experienced root caries
- Challenging to get comprehensive data on older adults

Older Adult Oral Health Data

- **U.S. National Health and Nutrition Examination Survey (NHANES)**- does not include institutionalized older adults
- **Behavioral Risk Factor Surveillance Survey (BRFSS)** – random digit-dialed phone survey, limited self-reported oral health status
- **ASTDD Basic Screening Survey (BSS)** – typically one population: nursing homes, assisted living facilities or congregate meal sites



Periodontal Disease

- Reports show 40% of ambulatory older adults have gingivitis and 68% have periodontitis
- Increases with age and low SES
- Bi-directional relationship between periodontal disease and diabetes
- Poor glycemic control associated with 3X increase in risk of periodontal disease
- Treatment of periodontal disease results in 10-20% improvement in glycemic control

Salivary Gland Hypofunction

- Saliva has antimicrobial components and minerals that help maintain and repair tooth enamel
- Decreased salivation most often due to medications
- Xerostomia = patient's perception of dry mouth
- Hyposalivation = professional assessment

Hyposalivation

- > risk of dental caries
- > risk of periodontal disease
- Oral soft tissue trauma
- Difficulty wearing prosthetic appliances (dentures, partials)
- Difficulty speaking
- Difficulty eating

Treatment Plan

- Communication between medical, dental, pharmacy, nursing and other professionals
- > number of medications = > reduction in salivary flow
- Daily oral care, tooth brushing, flossing, cleaning of appliances, and high-concentrated fluoride (rinse, gel or varnish)

Oral and Pharyngeal Cancer

- Most frequently diagnosed among those aged 55-64
- From 2009-2013 new cases in those 65 and older was 43%
- Risk factors: tobacco, alcohol, sunlight, advancing age and Human Papillomavirus (HPV)

Oral Pain

- Reduced sensitivity means older adults do not feel pain the same way they did when they were younger
- May not be aware of disease in their mouth
- May try to live with pain or view it as part of normal aging
- Need a regular comprehensive oral examination

Age-related Changes

- Mandibular ridge continues to resorb, precipitating poorly fitting dentures
- Difficulty keeping appliances clean may lead to yeast infections, giving rise to mucosal infections such as stomatitis
- Parkinson's, Alzheimer's and Huntington's, as well as stroke, may affect oral sensory and motor functions, thus limiting ability to express discomfort and/or care for mouth

Barriers to Optimal Oral Health

- Unable/unwilling to accomplish daily oral care
- Dementia:
 - Access to regular dental care by a suitably trained dental professional
 - Daily oral hygiene by a trained caretaker
 - Plan to minimize effects of xerostomia, caries, periodontal disease, and/or ulceration
 - Limited sugar in diet and as needed, fluoride product(s)

Barriers (cont.)

- Older adults twice as likely to have health literacy skills below the basic level of younger adults
- Studies indicate need for greater than high school education to effectively use the healthcare system
- Challenges recalling information provided by health professional

Barriers (cont.)

- Language and cultural beliefs that hinder health literacy
- Economics – low SES, lack of insurance, racial or ethnic minority
- Physical disability, homebound, socially isolated or institutionalized

Economics

- Most older adults lose dental benefit upon retirement
- In 2012, only 12% of Medicare beneficiaries reported having some dental insurance
- Use of dental services after retirement is highly tied to wealth
- Medicare does not provide routine dental care
- Affordable Care Act (ACA) does not have mandated provision for adults

Economics (cont.)

- Renewed interest in advocacy for dental benefit in Medicare
- Medicaid – adult benefits vary from state to state
- In 2016, only 34 states included an adult Medicaid dental benefit
- American Dental Association (ADA) Health Policy Institute – between 2000-2014 dental utilization by older adults increased by 38%

Workforce

- Dental providers need to be trained to care for older adults
- In 1987, the National Institute on Aging (NIA) predicted a need for 1,500 geriatric dental academicians and 7,500 dental practitioners with geriatric training by 2000
- These numbers were never achieved
- Focus now on assuring dental providers are trained in pre-doctoral programs

Workforce (cont.)

- Commission on Dental Accreditation (CODA):
“Graduates must be competent in providing oral health care within the scope of general dentistry to patients in all stages of life.”
- Clinical experience is lagging behind the didactic requirements
- Programs that increase exposure of students to older adults have been shown to impact attitudes and likelihood to provide care

Workforce (cont.)

- Dental hygienists are increasingly important in providing care to those in rural areas and long-term care settings
- Some states have extended scope of practice allowing dental hygienists to practice without supervision in alternative settings
- Dental hygienists are not able to obtain an advanced degree in geriatrics

Workforce (cont.)

- The University of Minnesota has a [Mini-residency in Nursing Home and Long-Term Care for the Dental Team](#)
- ADA developed an online education program on [oral health in long-term care settings](#)
- Other online courses for care of older adults are available on the [Special Care Dentistry Association](#) webpage

Access to Care

- General dental office
- Veterans Affairs Clinics
- Dental and Dental Hygiene Schools
- Long-term Care Facilities
- Omnibus Reconciliation Act of 1987 (OBRA `87) established specific requirements for dental services in more than 20,000 nursing homes

Public Health Strategies

- Assess and monitor oral health of older adults
- Enhance infrastructure and build partnerships
- Educate older adults and their caregivers to improve their oral health and empower them to advocate for the services they need
- Prepare all members of the dental workforce to better serve older adults, including frail elders

Public Health Strategies (cont.)

- Promote expanded private and public insurance coverage for dental services needed by older adults and frail elders
- Integrate dental and medical into comprehensive health homes
- Collaborate with State and Federal organizations involved with regulation of long-term care facilities to assure that oral health requirements are being addressed



Best Practice Criteria

The ASTDD Best Practices Project has selected five best practice criteria to guide state and community oral health programs in developing their best practices. For these criteria, initial review standards are provided to help evaluate the strengths of a program or practice to improve oral health in older adults.



Impact/Effectiveness

- ***A practice or program produces outcomes that improve the oral health status and/or improve access to dental care for older adults.***
- Example: fewer older adults who require emergency visits to the dentist or to the hospital emergency room for oral problems.
- • ***A practice or program enhances the processes to improve the oral health status and/or improve access to dental care for older adults.***
- Example: increased number of programs to train dental providers to treat older adults or increased number of providers being trained.

Efficiency

- ***A practice or program shows cost savings in preventing oral disease and reducing the extent of treatment needs for older adults.***
- Example: savings based on comparison of the cost for delivering early prevention services to the projected cost of dental treatment for averted tooth decay and having treatment in the OR for patients with advanced Alzheimer's disease.
- • ***A practice or program shows leveraging of federal, state and/or community resources to improve the oral health of older adults.***
- Example: partnerships between the public and private sectors to support an oral health program of outreach, case management, counseling, preventive services and dental care for older adults.

Demonstrated Sustainability

- ***A practice or program that demonstrates sustainability or a plan to maintain sustainability.***
- Example: a program that has served older adults for many years and receives agency line-item funding in addition to reimbursement from public and private insurers.

Collaboration/Integration

- ***A practice or program establishes partnerships or collaborations that integrate oral health efforts with other disciplines to improve the general health of older adults.***
- Example: the state oral health programs working collaboratively to improve systems of care (such as improved collaboration between medical and dental homes) and financing for oral health.
- Example: state oral health programs working collaboratively with chronic disease programs to develop and disseminate integrated messages pertaining to oral health and chronic diseases.

Objectives/Rationale

- ***A practice or program aligns its objectives with the national or state agenda to improve the health of older adults.***
- Example: As states mandate mouth care education for long-term care staff, programs that develop or make available effective training programs will be needed.

State Practice Examples

The following practice examples illustrate various elements or dimensions of the best practice approach **Oral Health in the Older Adult (Age 65 and older) Population**. These reported success stories should be viewed in the context of the particular state, as well as the program's environment, infrastructure and resources. Readers are encouraged to review the practice descriptions (click on the links of the practice names) and adapt ideas for a better fit to their states and programs.

State Practice Examples

Table 1. State Practice Examples Illustrating Strategies and Interventions for Oral Health for the Older Adult (Age 65 and older) Population

#	Practice Name	State	Practice
1	Overcoming Obstacles to Oral Health: A Training Program for Caregivers of People with Disabilities and Frail Elders	DE	09002
2	Iowa Lifelong Smiles Coalition	IA	18009
3	Maryland Pilot for the Older Adult Basic Screening Survey	MD	23013
4	Coalition for Oral Health for the Aging	MI	25010
5	Apple Tree Dental	MN	26006
6	North Carolina Special Care Dentistry	NC	36006
7	Oral Health for Caregivers	WA	54010

Link to Best Practice Approach Report

Best Practice Approach Report: Oral Health in the Older Adult Population (Age 65 and older)

<http://www.astdd.org/bestpractices/bpar-oral-health-in-the-older-adult-population-age-65-and-older.pdf>

Questions/ Discussion

Thank you!

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