

More Than 1,417,000 Seniors (including 568,700 with disabilities) Will Reside in Tennessee in 2030

H. Barry Waldman, D.D.S., M.P.H., Ph.D.; Mark Pancotto, D.D.S.
Steven P. Perlman, D.D.S., MSc.D.



Introduction

The 2010 Census reported that 829,023 Tennessee residents (13.3 percent of the total state population) were sixty-five years and over. Population estimates of senior residents of the state for 2010, 2020 and 2030 indicate a continuing increase in numbers, reaching more than 1,417,000 individuals.¹⁻³

By 2030, 71 million individuals (19.7 percent of the U.S. population, compared to 12.4 percent in 2000) will be sixty-five years or older, ranging from 13.2 percent in Utah to 27.1 in Florida. Tennessee will rank forty-third with 19.2 percent of its population sixty-five years and over. More than one-in-four residents in six states (Florida, Maine, Montana, New Mexico, North Dakota and Wyoming) will be sixty-five years and older.⁴

In 2000, 50,454 U.S. residents were one hundred or more years of age. By 2040, this number is projected to increase to 580,600 centenarians.⁵ In addition, for every 100,000 children born in 2004, more than 2,500 are projected to live one-hundred plus years. More than four million children were born in 2004. Thus, for this single year, more than 10,000 may reach the century mark and beyond.^{6,7}

“The nation’s healthcare spending is projected to increase (in 2030) by 25% due to these demographic shifts.”⁸

Seniors with Disabilities

In terms of physical, intellectual, maturity and any number of other functions, children are not just young adults. Similarly, seniors are not just older adults. Deterioration, debilitation, dependency, depression, loneliness, increasing use of health services and any number of other realities of senior age affect many who reach the advanced decades of life. The reality is that the dramatic increasing numbers of baby-boomers reaching their sixth and seventh decades and beyond brings with it the associated increasing proportion of

ABSTRACT

In the coming years, Tennessee and the rest of the country will experience a burgeoning number of senior residents, including those with disabilities. A review of these developments in one state and its counties, and the anticipated demand for dental services, is presented.

individuals with disabilities. Nationally, in 2008, 10.4 percent of persons 21 to 64 years of age were reported to have one or more disabilities; by age 65-74 years, this percentage increased to 26.6 percent and 51.5 percent for persons 75 years and over.⁹

While estimates of the numbers of seniors with disabilities in individual states during future decades may not be available, to some extent approximations of the number of senior Tennessee residents with disabilities may be developed to consider the magnitude of efforts needed to provide an appreciation of the potential need for services by this population. The number of individuals with varying disabilities in Tennessee in 2030 was estimated using Census Bureau age projections and Cornell University’s 2008 Disability Status Report, with the assumption that current age specific disabilities rates for Tennessee will continue in the future.^{9,10} In 2030, an estimated 234,700 65-74 year old Tennessee residents and almost one-and-a-half times the number (334,200) of 75 year and older residents will have one or more disabilities. Ambulatory, hearing and independent living (going-outside-home disabilities) will become the predominant reported limitations. (Tables 1 & 2)

If the 2008 rates of disabilities by gender and ethnicity in Tennessee continue into the next decades, then a greater proportion of older senior women than older senior men (greater numbers of women live to advanced years with associated increases in disabilities) will have disabilities in 2030. A smaller

percent of senior Hispanics than senior non-Hispanics will have disabilities in 2030. (Table 3) Note: The willingness of senior Hispanics to report disabilities may be affected by cultural values, language, economics and related factors.¹²

The magnitude of the developing needs for seniors in 2030 surely must stagger the imagination when considering the current numbers of seniors with disabilities in the counties in the state. Note: the Census Bureau reported the number of residents with disabilities by different senior ages in counties with a total population of sixty-five thousand or more residents, i.e., 20 of the 95 counties in Tennessee. Sixty percent of the 65-74 years population with disabilities in the state and 63 percent of the 75 years and over population with disabilities in the state were in these 20 counties. For example, in 2008, the estimated number of:

- Sixty-five to 74 year olds with disabilities was more than 7,000 in Hamilton and Knox counties, more than 8,900 in Davidson County and more than 14,800 in Shelby County.
- Seventy-five + year olds with disabilities was more than 12,300 in Hamilton and Knox counties, more than 18,600 in Davidson County and more than 22,500 in Shelby County. (Table 4).

Will seniors seek dental care?

The repeated commentaries that the dramatic increasing numbers of seniors will require unimaginable resources and healthcare services raise the question of the extent to which older individuals will

Table 1 - Prevalence and estimated number of non-institutionalized individuals with disabilities ages 65-74 years in Tennessee: 2008, 2030^{9,10}

	Proportion (2008)	Number (2008)	Number (2030)
All disabilities	31.5%	138,900	234,700
Visual	5.9	26,100	44,100
Hearing	11	48,500	82,000
Ambulatory	20.6	91,100	153,900
Cognitive	7.4	32,600	55,100
Self-care	5.9	25,900	43,800
Independent living*	10.9	48,300	81,600

Notes: Individuals may have one or more disabilities. Numbers have been rounded to the nearest 100.

* Going-outside-home disability

Table 2 - Prevalence and estimated number of non-institutionalized individuals with disabilities ages 75+ years in Tennessee: 2008, 2030^{9,10}

	Proportion (2008)	Number (2008)	Number (2030)
All disabilities	55.6%	188,800	334,200
Visual	13.0	44,000	77,900
Hearing	25.8	87,700	155,200
Ambulatory	37.5	127,400	225,500
Cognitive	16.7	56,800	100,500
Self-care	15.5	52,700	93,300
Independent living*	29.2	99,100	175,400

Notes: Individuals may have one or more disabilities. Numbers have been rounded to the nearest 100.

* Going-outside-home disability

Table 3 - The proportion of Tennessee residents ages 65-74 years and 75+ years with disabilities by gender and Hispanic origin: 2008⁹

	65-74 years	75+ years
Gender:		
Male	31.8%	52.0%
Female	31.2	57.7
Ethnicity:		
Hispanic	19.7	43.4
Non-Hispanic	31.6	55.7

Table 4 - Estimated number of individuals with disabilities in Tennessee counties by ages 65–74 years and 75+ years in Tennessee: 2008¹¹

County	65–74 years	75+ years	County	65–74 years	75+ years
Anderson	1,831	3,329	Putnam	1,347	2,535
Blount	3,623	3,616	Robertson	1,049	1,802
Bradley	2,576	2,785	Rutherford	3,391	3,977
Davidson	8,896	18,648	Sevier	2,019	2,904
Greene	2,501	2,923	Shelby	14,872	22,559
Hamilton	7,118	12,359	Sullivan	5,098	6,711
Knox	7,031	12,390	Sumner	2,737	3,854
Madison	2,476	2,541	Washington	2,989	4,886
Maury	1,855	2,658	Williamson	1,729	3,468
Montgomery	2,731	3,007	Wilson	1,969	3,084

actually seek dental care. Recent reports indicate that in the middle of the last decade, in a single year:

- Almost half (47 percent) had a dental visit; 23 percent if they were Hispanic, 18 percent if they were black, 60 percent if they were a college graduate and 43 percent if they had only graduated from high school.
- 70 percent had no dental insurance coverage, including 59 percent with higher incomes and 71 percent if they were poor. Among those who were poor, 18 percent had public dental insurance coverage, primarily Medicaid.
- 65 percent with private insurance and 16 percent with public dental coverage had a dental visit in the past year.
- Among those with a dental visit, if they had private insurance

coverage, they averaged \$824 in dental expenses, compared to \$535 by those with public coverage and \$528 by those with no insurance coverage.¹³

In 2005, 15 percent of the patients of general dental practitioners and almost 10 percent of the patients of dental specialists were 65 years and older.¹⁴ Just in case we think that they would avoid dental care, in 2004, 16 million older individuals visited a dentist in the past year and received about 74 million dental procedures not including denture adjustments. Of those who visited a dentist:

- 80 percent had a diagnostic procedure
- 75 percent had preventive care
- 30 percent had some prosthetic services
- 25 percent had restorative treatment
- 14 percent had oral surgery, and
- 12 percent had a variety of other

services, including: periodontics, endodontics, treatment of TMD problems, bonding, whitening or bleaching.¹³

In general, there has been an increasing use of dental services by older individuals, which is reflected in the decrease in the proportion of those with untreated dental caries between 1988-94 and 1999-2002.¹⁵

The reality is that dentists in Tennessee and throughout the country increasingly will be called upon to provide needed services to a burgeoning population of seniors, many of whom will have an extensive range of special needs. Are you and your practice ready for them?



Disclosure. The authors did not report any disclosures.

References

1. Census Bureau. Interim Projections: Ranking of Census 2000 and Projected 2030 State Projections and Change: 2000 to 2030. Web site: <http://www.census.gov/population/www/projections/statepyramid.htm> Accessed April 4, 2011.
2. Proximity. State Population Rankings 2000-2030. Web site: <http://proximityone.com/st003065.htm> Access April 5, 2011.
3. Census Bureau. News release. Baby Boom Brought Biggest Increases Among People 45-to-54 years old. Web site: <http://www.census.gov/Press-Release/www/2001/cb01cn184.html> Accessed April 5, 2011.
4. Census Bureau. Interim State Population Projections, 2005. Web site <http://www.census.gov/population/populations/PressTab3.xls> Accessed April 14, 2011.
5. Senior Journal. Current News for Seniors and Boomers. Web site: <http://seniorjournal.com/News.seniorstats/6-24-26>. Accessed March 4, 2011.
6. U.S. Census Bureau. Interim Population Projections, 2005. Web site: <http://www.census.gov/population/www/projections/projectionsagesex.htm> Accessed November 5, 2010.
7. Arias E. United States Life Tables, 2004. National Vital Statistics Report. 2006; 56(9):3. Web site: http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_09.pdf Accessed April 1, 2011.
8. Centers for Disease Control and Prevention and The Merck Company Foundation. The State of Aging and Health in America, 2007. Web site: <http://www.cdc.gov/aging> Accessed April 6, 2011.
9. Cornell University. 2008 Disability Report: US and Tennessee. Web site: <http://www.disabilitystatistics.org> Accessed April 15, 2011.
10. Census Bureau. Population Pyramid of Tennessee: 2000-2030. Web site: <http://www.census.gov/population/www/projections/statepyramid.html> Accessed April 11, 2011.
11. Census Bureau. American Factfinder Web site: http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=ACS_2009_1YR_G00_&_lang=en&_ts=321878420558 Accessed April 11, 2011.
12. Waldman HB, Perlman SP. Is It Possible That a Smaller Percent of Hispanic Children has Special Health Care Needs? Hispanic Dent Assoc News and Report 2010;162(Fall):8-9.
13. Department of Health and Human Services. MEPS Chartbook No. 17. Medical Expenditures Panel Survey. Washington, DC: Agency for Healthcare Research and Quality. 2007.
14. Survey Center. 2006 Survey of Dental Practice: Characteristic of Dentists in Private Practice and Their Patients. Chicago: American Dental Association, 2008.
15. Beltan-Agfuliar ED, Barker LK, Canto MT, et al. Surveillance for Dental Caries, Dental Sealants, Tooth Retention, Edentulism, and Enamel Fluorosis—United States, 1998-1994 and 1999-2002. MMRW 2005;54(03):1-44.

H. Barry Waldman, D.D.S., M.P.H., Ph.D., Distinguished Teaching Professor, Department of General Dentistry, School of Dental Medicine, Stony Brook University, NY. Contact Dr. Waldman at h.waldman@stonybrook.edu or 631-632-8883.

Mark Pancotto, D.D.S., Clinical Assistant Professor, Department of General Dentistry, School of Dental Medicine, Stony Brook University, NY.

Steven P. Perlman, D.D.S., MSc.D., Global Clinical Director, Special Olympics, Special Smiles; Clinical Professor of Pediatric Dentistry, The Boston University Goldman School of Dental Medicine; Private pediatric dentistry practice – Lynn MA.

Questions for Continuing Education Article - CE Exam #31

1. By the year 2030, how many Americans are projected to be sixty-five years, or older:
 - a. 13 million
 - b. 25 million
 - c. 71 million
 - d. 50 million
2. What percentile is Tennessee projected to rank with its over 65 year-old population in 2030:
 - a. 25th
 - b. 75th
 - c. 43rd
 - d. 10th
3. In 2030, in Tennessee, how many individuals who are projected to be 65–74 will have one or more disabilities:
 - a. 150,000
 - b. 234,700
 - c. Over 1 million
 - d. 500,000
4. Recent reports indicate in the middle of the last decade the percentage of seniors with college education who sought dental care was:
 - a. 47%
 - b. 60%
 - c. 18%
 - d. 43%
5. Among those who sought dental care, in this data from the middle of the last decade, the percentage having no dental coverage was:
 - a. 70%
 - b. 50%
 - c. 25%
 - d. 10%

Publication date: Fall 2011. Expiration date: Fall 2014.

ADA CERP Recognized Provider

The Tennessee Dental Association is an ADA CERP Recognized Provider.

ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by the boards of dentistry.

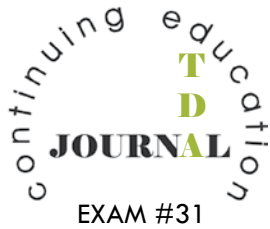
Concerns or complaints about a CE provider may be directed to the provider or to ADA CERP at www.ada.org/goto/cerp

ADA C·E·R·P® | Continuing Education
Recognition Program

Answer Form for TDA CE Credit Exam #31:

More Than 1,417,000 Seniors (568,700 with disabilities) Will Reside in Tennessee in 2030

Publication date: Fall 2011. Expiration date: Fall 2014.



Circle the correct letter answer for each CE Exam question:

- | | | | | |
|----|---|---|---|---|
| 1. | a | b | c | d |
| 2. | a | b | c | d |
| 3. | a | b | c | d |
| 4. | a | b | c | d |
| 5. | a | b | c | d |

Please complete the following course evaluation. These answers do not affect the grading process.

Assess your mastery of the material	<input type="checkbox"/> Full	<input type="checkbox"/> Partial	<input type="checkbox"/> No
Your comprehension of material	<input type="checkbox"/> Excellent	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Appropriateness of the material	<input type="checkbox"/> Excellent	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor
Was the material adequately in-depth?		<input type="checkbox"/> Yes	<input type="checkbox"/> No

Additional feedback should be emailed to the TDA at tda@tenndental.org

Cost per exam per person is \$15.00. If you correctly answer four of the five question, you will be granted one (1) continuing education credit. Credit may not apply toward license renewal in all licensing jurisdictions. It is the responsibility of each participant to verify the CE requirements of his or her licensing or regulatory agency. This page may be duplicated for multiple use. Please print or type.

ADA ID Number (Dentist Only): _____

License Number of RDH: _____

Registration Number if RDA: _____

Name (Last/First/Middle): _____

Office Address: _____

City/State/Zip: _____

Daytime Phone Number : () _____

Component Society (TDA Member Only): _____

Dr. _____

(Auxiliary Staff: Please provide name of Employer Dentist)

All checks should be made payable to the Tennessee Dental Association. Return the Exam Form and your check or credit card information to:

Tennessee Dental Association at 660 Bakers Bridge Ave., Suite 300 in Franklin, TN 37067

The form may be faxed to 615-628-0214 if using a credit card (use your TDA/Bank of America card, MasterCard or Visa ONLY):

Signature: _____

Card #: _____ Exp. Date: _____

Three-digit CVV2 Code (on back of the card following the card number): _____

Name as it appears on the card: _____

Do not write in this space - for TDA Administration purposes only

Check #: _____

CC

Paid w/doctor's CC