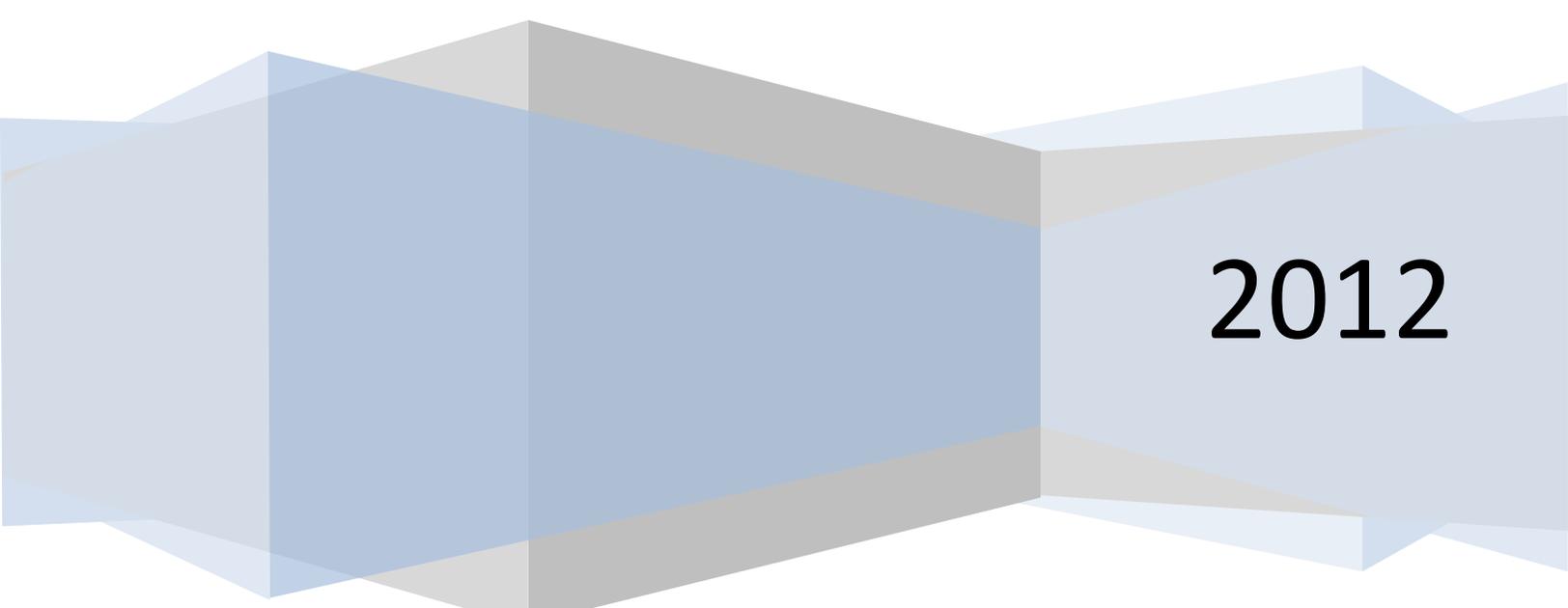


State of Tennessee

2012 Update to the Tennessee State Health Plan

Department of Health

Division of Health Planning



2012

TEXT COMMISSIONING OFF USE

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BILL HASLAM
GOVERNOR
STATE OF TENNESSEE

May 23, 2013

Commissioner John J. Dreyzehner, MD, MPH
Tennessee Department of Health
425 5th Avenue, N.
Nashville, TN, 37243

Dear Dr. Dreyzehner:

I have received and reviewed the 2012 update to the State Health Plan, submitted by you to my office on March 11, 2013. Pursuant to Tennessee Code Annotated, Section [68-11-1625\(d\)\(3\)](#), this letter shall serve as notice of my approval and adoption of the 2012 update to the State Health Plan.

Thank you for your work on this important project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bill Haslam", written over the word "Sincerely,".

Bill Haslam

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Executive Summary

Status of the State Health Plan

This report is the fourth annual update to Tennessee's State Health Plan. The initial State Health Plan was approved and adopted in 2009, creating the framework of Five Principles for Achieving Better Health drawn from the policy statement set forth in TCA § 68-11-1625(b) (Appendix A). The 2010 update to the State Health Plan focused on proposed goals and strategies. The 2011 update to the State Health Plan focused on specific Certificate of Need (CON) standards and criteria. Reference is made to these documents for additional background information, the rationale behind developing a State Health Plan, and the public processes involved in developing the State Health Plan and its updates.

This 2012 Update reports on the health status of Tennesseans, including the Administration's efforts to reduce obesity and substance abuse and the Tennessee Department of Health (TDH)'s additional emphasis on primary prevention; specific state initiatives that relate to the Five Principles for Achieving Better Health framework of the State Health Plan; and specific revised CON standards and criteria.

Summary of Health Status of Tennesseans

Last year, Tennessee improved its ranking from 41st to 39th in the nation in health status, continuing its steady progress upwards in the rankings and suggesting the prospect of further improvement. This improvement is supported by Tennessee's improving trends over time in 13 areas (see the chart on page 15). Tennessee's separate health determinants ranking, which can be considered a likely forecast of future health outcomes, is 37th. However, despite our improvements, Tennessee's ranking at 39th still means Tennesseans compare poorly on many important indicators of quality of life and life expectancy.¹ This year is the first that Tennessee has risen into the 4th quintile for overall health status. The TDH's vision is for the state to rise into the 1st quintile – the top 10. Governor Bill Haslam's administration's programs and legislation intended to

reduce obesity and substance abuse in Tennessee are detailed in this document, as is the TDH's emphasis on primary prevention activities.

Summary of the Five Principles for Achieving Better Health

This update includes information on a wide variety of state initiatives set out within the framework of the State Health Plan's Five Principles for Achieving Better Health, taken from the statutory policy statement.

1. The purpose of the State Health Plan is to improve the health of Tennesseans.

Our health is affected by many factors such as what we do, where we live, the people that live around us, our income, our education, and the genes we received from our parents. This chapter reports on the health status of Tennesseans and provides data on Tennessee's improving health trends, cancer rates, and death rates, and information specific programs and initiatives, including those regarding the state's efforts to reduce obesity, reduce substance abuse, and improve primary prevention activities. The Children's Cabinet, the Public Safety Plan, the Tennessee Department of Mental Health and Substance Abuse Services' (TDMHSAS) Three Year Plan, and the TDH Community Health Assessment Program are highlighted.

2. Every citizen should have reasonable access to health care.

In Tennessee, the availability or use of prevention services has received significantly less attention than has the delivery of health care in Tennessee and the access Tennesseans have to it. Investment in prevention activities should reduce dependence on the health care delivery system in the long run. Different strategies have been employed in Tennessee to improve access to health care, including the expansion of the TDH and its safety net activities under the previous administration, the inclusion of health care access issues in the Certificate of Need program, the provision of health insurance to qualifying Tennesseans under the state's Medicaid program, TennCare, and the expansion of children's dental services under TennCare.

3. The State's health care resources should be developed to address the needs of Tennesseans while encouraging competitive markets, economic efficiencies, and the continued development of the State's health care system.

The health of Tennesseans is also an economic issue. The TDH recognizes this connection in its mission statement: The mission of the Department of Health is to protect, promote, and improve the health and prosperity of persons living in, working in, or visiting the State of Tennessee. The health care sector is an economic engine and job creator in many parts of Tennessee. Health care costs are also an influential part of the financial picture of Tennessee's businesses. Tennessee's ability to improve the health of Tennesseans and the health care system is influenced by federal policies whose impact is not fully known or yet felt. Foremost among these is the Patient Protection and Affordable Care Act, which places pressure on health systems to grow and sustain patient volumes while dealing with a new emphasis on, among other things, integrated services and management of chronic conditions. The Governor's Three Star Program, the impact of potential Medicare spending reductions, and the Certificate of Need Program are discussed.

4. Every citizen should have confidence that the quality of health care is continually monitored and standards are adhered to by health care providers.

The issue of the quality of health care provided in the United States has received increased attention in recent years. Providing quality care is a complex issue involving many facets of the health care system. Tennessee's hospital discharge rate among its Medicare population for preventable hospitalizations has improved significantly from 97.8% in 2008 to 83.4% in 2012; however, this rate still compares unfavorably with the rest of the nation, as the state's ranking has remained at 46 over this period of time. Health care quality is also reflected in adherence to evidence-based procedures. For example, Tennessee's the proportion of Tennessee diabetics over age 40 who received important screenings such as HbA1C and foot exams has improved since 2009 when its proportion was 82%, but at 85% in 2011 it remains worse than the national average. The Hospital Readmission Reduction Program, Patient Satisfaction Measures, the Partnership to Improve Dementia Care, and the Certificate of Need Program are discussed.

5. The state should support the development, recruitment, and retention of a sufficient and quality health care workforce.

This State Health Plan recommends that the state consider developing a comprehensive approach to ensuring the existence of a sufficient, qualified health care workforce. Data on the numbers of and projected need for various healthcare professionals is discussed, and it is noted that additional data are needed on this issue. Workforce Investment Act, workforce training efforts in Tennessee provided over 16,000 new health care workers over the past 4 years, representing

approximately 18% of all of the Workforce Investment Act training conducted in the state at an investment of over 60 million dollars. The TEAM Act, the THA Health Workforce Advisory Committee, the TDH Update on Oral Health Services, the Tennessee Rural Partnership (TRP) and TDH Office of Rural Health (ORH), and the Certificate of Need Program are discussed.

Summary of Certificate of Need Standards and Criteria

Tennessee's Certificate of Need (CON) program seeks to deliver improvements in access, quality, and cost savings through orderly growth management of the state's health care system, in line with the "Economic Efficiencies" Principle to Achieving Better Health. Approving and adopting revisions to the standards and criteria for the CON program is one of the purposes of the State Health Plan. The CON program area standards and criteria that were revised in the 2009 State Health Plan and its 2010 and 2011 updates are found at <http://tn.gov/hsda/>. This 2012 Update to the State Health Plan contains revisions to the standards and criteria for Ambulatory Surgical Treatment Centers and Hospice Services. The standards and criteria are tied to the State Health Plan's overarching goals and priorities as set forth under the Five Principles for Achieving Better Health.

Introduction to the 2012 Update to the State Health Plan

Health and wellness not only impact an individual's quality of life but also have a direct effect on state budgets, the allocation of limited resources, and the attraction of new businesses to Tennessee. This 2012 Update to the State Health Plan reflects the state's primary health objectives of reducing obesity (and its related diseases), reducing substance abuse, and encouraging primary prevention activities in Tennessee. It includes specific strategies undertaken by Governor Bill Haslam, his Administration, and others to effect related change. It also updates standards and criteria for two Certificate of Need program areas. Future updates to the State Health Plan will strive to address the economic impact of specific initiatives and programs.

Health Status of Tennesseans

This chapter reports on the Health Status of Tennesseans and provides information on specific programs and initiatives, broken out by the State Health Plan's Five Principles for Achieving Better Health.

Rising in 2012 to 39th in one ranking among the states from a low of 49th in 2005, and thus reflecting an improvement in health in comparison to its sister states, Tennessee continued its steady progress upwards in the rankings, suggesting the prospect of further health status improvement. This improvement is supported by Tennessee's improving trends over time in 13 areas (see the chart on page 10). Tennessee's separate health determinants ranking, which can be considered a likely forecast of future health outcomes, is 37. This year is the first that Tennessee has risen into the 4th quintile for overall health status. The TDH has set a vision for rising into the 1st quintile—the top 10. Despite our improvements, Tennessee's ranking at 39th still means Tennesseans compare poorly on many important indicators of quality of life and life expectancy.¹

To address the goal of improving the health of Tennesseans, identification of specific outcomes and determinants that negatively impact these rankings is essential. An improved understanding of the underlying personal behaviors, place-based conditions, and service issues that affect these outcomes will identify differences and disparities needed to be changed to improve these rankings. These actions, taken across state departments, will address the remaining Four Principles of access, economic efficiencies, quality, and workforce.

Though rankings may be considered to be relative, the state's health status is also reflected in the below average life expectancy of our population, as Tennesseans live three years less than the average U.S. citizen.² Numerous factors contribute to the health status of Tennesseans including individual behaviors, culture, the environment, economic and social determinants, and genetics. Tennessee's lack of an integrated system of health care also contributes to poor health outcomes.

Principle 1. Healthy Lives

“The purpose of the State Health Plan is to improve the health of Tennesseans.”

Background

Our health is affected by many factors such as what we do, where we live, the people that live around us, our income, our education, and the genes we received from our parents. According to the US government’s Healthy People 2020 plan, some of the leading indicators that affect individual health are: physical activity, obesity, tobacco and substance use, mental health, environmental quality, and immunizations.³ The description of the current health status of Tennesseans is intended to provide an overview of how the citizens of Tennessee fare in these areas and to initiate dialogue as to how we may improve.

Status of Tennesseans

In *America’s Health Rankings*, an annual report published by the United Health Foundation, in 2012 Tennessee ranked as the 39th healthiest state out of the 50 states,⁴ reflecting improvement from its previous ranks of 41st in 2011, 42nd in 2010, and 48th in 2009. Though rankings may be considered to be relative, it does appear that Tennessee’s overall health is improving as it relates to the rest of the United States. However, the state’s poor health status is also reflected in the below average life expectancy of our population. Tennesseans are expected to live on average 3 years less than the average US citizen (76.2 years, the 9th worst state, as compared to the US average of 78.6 years) and 2 more infants die per every 1,000 infants born (approximately 8 deaths per 1,000 live births as compared to the US average of 6 deaths per 1,000 live births).⁵ Tennessee improved from its previous year’s experience, when its infant mortality rate per 1,000 live births was 9.

How we “live, learn, work, and play” affects our physical and mental health.⁶ As a population, Tennesseans are not physically healthy. The lifestyles of Tennesseans are a major determinant of our below-average health, especially in areas such as physical activity, obesity, and smoking. While in 2011 51.7% of Americans reported they participated in 150 minutes or more of Aerobic Physical Activity per week, only 39% of Tennesseans did. Approximately 66.5%, a reduction from nearly 68% in 2010, of Tennesseans report being overweight or obese compared to the national average of 63.5% (down from 65) and 11.2% of Tennesseans have been diagnosed with diabetes, versus a national average of 9.5%.⁷ Though our rates of smoking have decreased slightly since 1999, in 2011 23% of Tennesseans still classified themselves as smokers, versus 21.2% of all Americans.⁸

Not only is our physical health suffering, our mental health also is suffering. Though the number of Tennesseans who are considered binge drinkers is 1 in 20 people, significantly less than the national average of nearly 1 in 10 people, the mental health of Tennesseans is poorer than that of the national average.⁷ From 2009-2010, almost 7.3% of Tennesseans experienced an episode of depression compared to 6.5% of Americans.⁹ Tennesseans on average report 3.8 days of poor mental health in a previous 30-day period, placing the state in the middle of the national rankings at number 25. This ranking is not good news, however. Tennessee’s five-year trend for this outcome is worsening, having been 3.3 days in 2008.¹⁰

Substance abuse remains an area of high concern in the state—deaths from drug overdoses increased from 422 in 2001 to 1,059 in 2010,¹¹ representing an increase of 250% over the 10-year time period. In fact, the number of drug overdose deaths in Tennessee in 2010 was greater than the motor vehicle traffic death number of 1,000. The issue is directly related to prescription drug abuse. Tennessee has one of the highest rates of prescription drug abuse in the nation with a total of 17.9 million prescriptions for controlled substances having been entered into Tennessee’s database in 2011.¹² In 2009, almost 250,000 Tennesseans older than the age of 12 reported abusing prescription opioids.¹³

Many Tennesseans are aware of their lack of good health. In a 2009 survey, over 20% of Tennesseans said that their health was fair or poor, as compared to the national average of almost 15%.¹⁴

Tennessee Substance Use Prevalence Estimates – Adults, 2009-2010¹⁵

8.27% (or 391,000) of Tennessee adults over age 18 abused or were dependent on alcohol or illicit drugs in the past year.

An estimated 304,000 Tennessee adults (about 6.42%) over age 18 with alcohol problems needed, but did not receive, treatment in the past year.

An estimated 106,000 Tennessee adults over age 18 (about 2.23%) with illicit¹⁶ drug problems needed, but did not receive, treatment in the past year.

4.25% (or 201,000) of Tennessee adults over age 18 used pain relievers non-medically in the past year.

A much higher percentage (11.90% or about 77,000) of young adults ages 18 to 25 used pain relievers non-medically than adults age 26 and older (3.05% or about 125,000).

18.33% of Tennessee young adults (or about 118,000 young adults) abused or were dependent on alcohol or illicit drugs in the past year, compared to 6.69% (or about 273,000) of adults ages 26 and over.

Top 10 Leading Causes of Death for Tennessee Residents per 100,000 people, 2010 and 2011, with Rates and 2011 US Comparison

Leading Cause	2010 No.	2011 No.	2010 Rate	2011 Rate	US 2011 Rate
Total Resident Deaths	59,201	60,104	932.9	872.6	806.6
1. Heart Diseases	14,489	14,154	228.3	204.3	191.4 (1)
2. Cancer	13,514	13,461	212.9	187.6	184.6 (2)
3. Chronic Lower Respiratory Diseases*	3,525	3,647	55.5	52.5	46.0 (3)
4. Accidents and Adverse Effects	3,472	3,400	54.7	52.0	39.4 (5)
5. Stroke and Cerebrovascular Disease	3,178	3,206	50.1	47.3	41.1 (4)
6. Alzheimer's Disease	2,428	2,578	38.3	39.3	27.2 (6)
7. Diabetes	1,678	1,737	26.4	24.8	23.5 (7)
8. Pneumonia and Influenza	1,347	1,469	21.2	21.8	17.2 (9)
9. Kidney Disease (prev. No. 10)	974	814	15.3	11.8	10.8 (8)
10. Suicide (prev. No. 9)	932	938	14.7	14.1	12.3 (10)

*Note that Tennessee that Chronic Lower Respiratory Disease is ahead of Stroke and Cerebrovascular Disease as a leading cause of death in Tennessee, suggesting that our higher rates of tobacco use impact this outcome.

Suicide and Kidney Disease are notable for having shifted rankings in Tennessee in 2010 and 2011.

Tennessee's Improving Trends

Shown in the following chart are twelve health determinants and outcomes in which Tennessee has shown gradual improvement over the past five years. However, even with these improvements, Tennessee still lags behind most of the rest of the country in many of these areas, as well as others (source: America's Health Rankings 2012). It is important to note that Tennessee's health status is not primarily determined by health care but by behaviors, education, and economic opportunities.

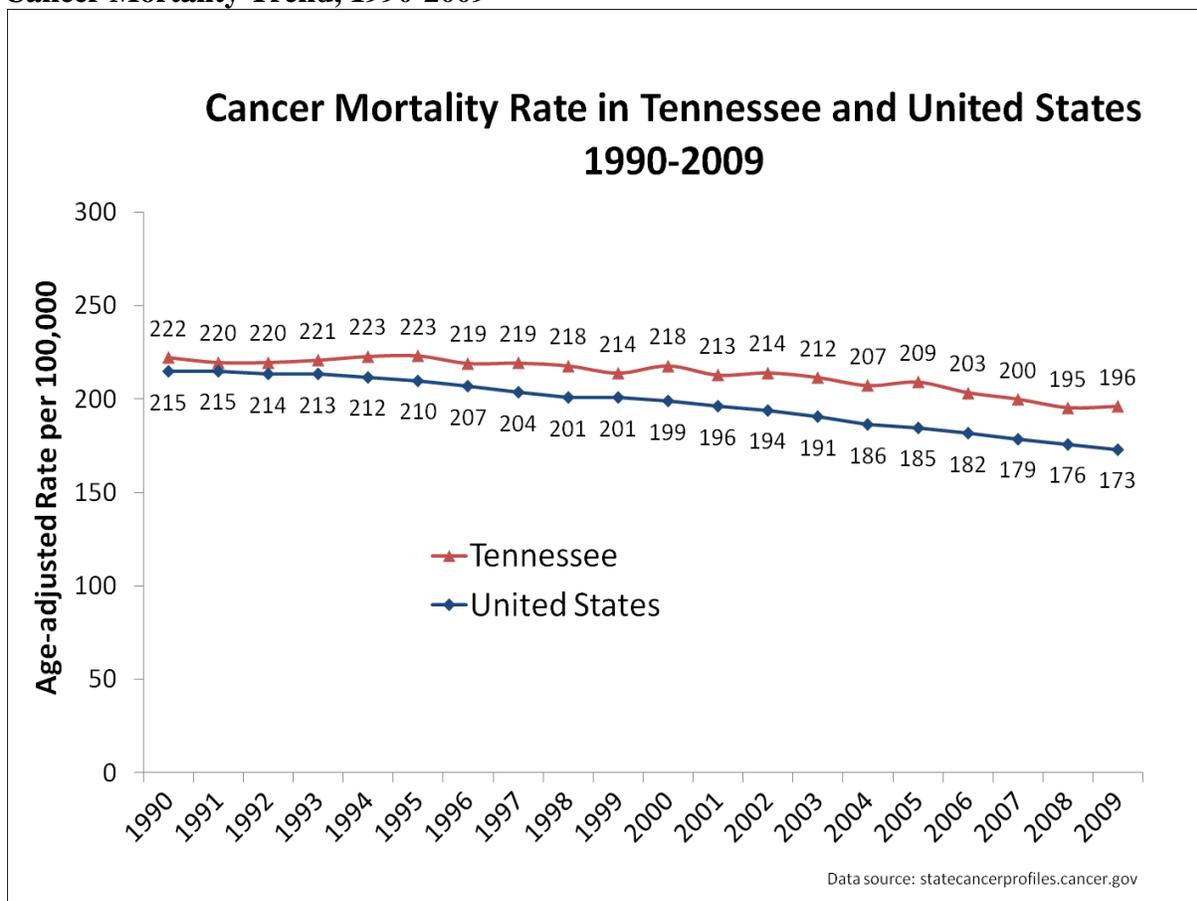
Determinant/Outcome	2008	2009	2010	2011	2012	US 2011
Obesity	30.7%	31.2%	32.9%	31.7%	29.2%	28.2%
High School Graduation	68.5%	70.6%	72.6%	74.9%	77.4%	75.5%
Violent Crime (offenses per 100,000)	753	722	668	613	613	403.6
Occupational Fatalities (deaths per 100,000 workers)	6.1	5.8	5.4	5.3	5.4	4.1
Infectious Disease (per 100,000, 2-year avg.)	20.7	18	17.3	9.5	9.1	12.4
Air Pollution (per cubic meter)	13.6	13	12	11.1	10.4	10.5
Lack of Health Insurance (% w/o insurance, two year avg)	27.0%	14.7%	15.2%	14.9%	13.9%	16%
Low Birth Weight (% of live births)	9.5%	9.6%	9.4%	9.2%	9.0%	8.1%
Preventable Hospitalizations (Medicare pop. discharge rate)	97.8	91.9	87.7	85.8	83.4	66.6
Cardiovascular Deaths (per 100,000)	353.8	338.1	326.4	315.7	310.4	264.9
Diabetes (Adult population)	11.9%	10.3%	10.2%	11.3%	11.2%	9.5%
Infant Mortality (deaths per 1,000 live births)	9.5	8.8	8.5	8.2	8.1	6.5
Cancer Deaths (per 100,000)	216	215	215.3	212.5	204	182.5

Cancer Trends¹⁷

Nationally, Tennessee has the 16th highest cancer incidence and the 6th highest cancer mortality rate, all races and sexes combined. Among blacks nationally, TN has the 17th highest cancer incidence and the 4th highest cancer mortality rate in the U.S. Among whites nationally, TN has the 16th highest cancer incidence and the 4th highest cancer mortality rate in the U.S. TN residents account for a disproportionate share of the national cancer burden.

Cancer incidence and mortality rates were significantly higher in males compared to females and were generally significantly higher in black compared to white individuals. Cancer incidence rates remained stable, whereas cancer mortality rates decreased significantly during 2005-2009.

Cancer Mortality Trend, 1990-2009



Of note:

- The age-adjusted cancer mortality in Tennessee and the U.S. decreased over time, by 12% and 20%, respectively, from 1990 to 2009
- Cancer mortality in Tennessee was consistently higher than that in the U.S.
- The gap between Tennessee and the U.S. widened over time: TN was 3% higher than U.S. in 1990 and 13% higher than U.S. in 2009

Infant Mortality Trends

Tennessee's infant mortality rate has been improving consistently over the past 5 years, from 9.5 deaths per 1,000 live births to 8.1. The state's ranking nationally has also improved, from 48 in 2008 to 45 in 2012.¹⁸

Specific Objectives to Improve the Health of Tennesseans

Reducing Obesity

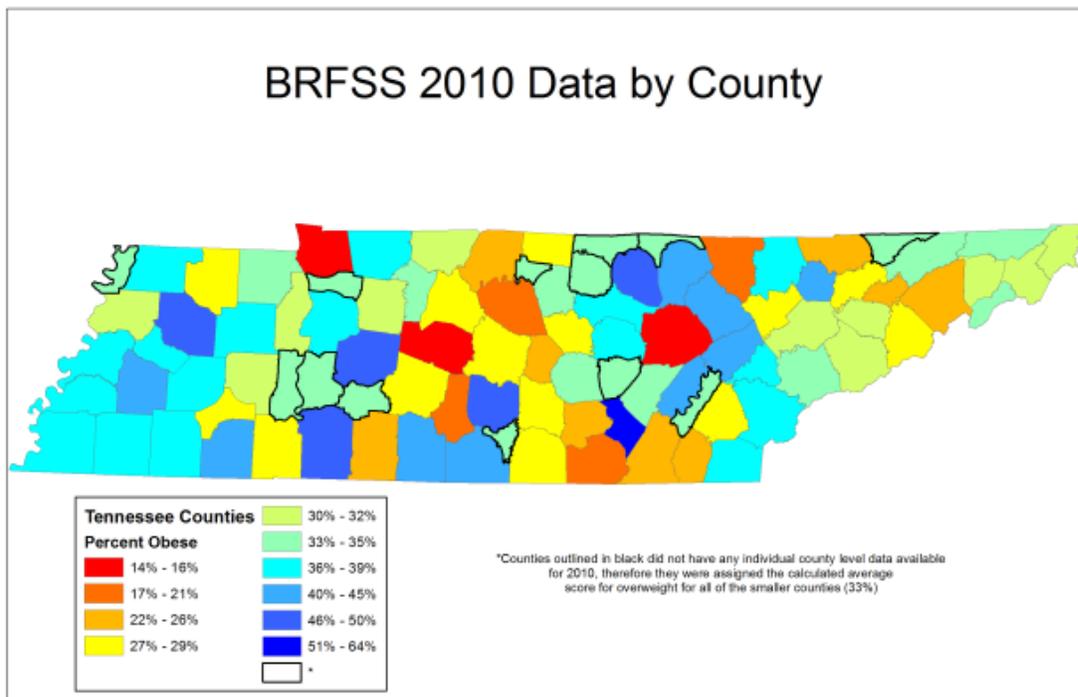
On March 8, 2012, Governor Bill Haslam announced that the Health and Wellness Task Force, co-chaired by John W. Lacey, III, MD, chief medical officer and senior vice president of University of Tennessee Medical Center, and Commissioner of Health John J. Dreyzehner, MD, MPH, had identified the reduction of obesity in Tennessee as its primary focus (the members of the Task Force appear in Appendix B). According to the [Centers for Disease Control and Prevention](#), complications from obesity cause significantly higher direct medical costs, numbers of days absent from work and loss of productivity at work. Obesity adversely affects health, contributing to high blood pressure, heart attacks and strokes, and it is a leading risk factor for Type II diabetes. Evidence also points to obesity as a risk factor for arthritis and some cancers such as breast, esophagus, and colon.

According to a study conducted by the Trust for America’s Health and the Robert Wood Johnson Foundation, March 2012, about two-thirds of adults in Tennessee will be obese by 2030 if obesity rates continue to climb as they are now. The levels of obesity, defined as being roughly 30 or more pounds over a healthy weight, will be highest in these five states: Mississippi with 66.7%; Oklahoma, 66.4%; Delaware, 64.7%; **Tennessee, 63.4%**; and South Carolina, 62.9%. Mississippi currently has the USA's highest obesity rate at 34.9%. Tennessee currently ties with Virginia with having the 15th highest obesity rate in the nation at 29.2% of all adults.

There is some good news: Analysis of Youth Risk Behavioral Survey¹⁹ data from 2008-2011 shows a slight decrease in obesity in high school students for both males (from 22.9% to 20.10%) and females (14% to 13.70%).

Estimates on the cost of obesity-related illnesses vary from \$147 billion a year to \$210 billion a year. Those costs would increase by \$48 billion to \$66 billion in 2030 if the obesity rate climbs at the projected rate.

As seen in the following map, the rate of obesity varies from county to county in Tennessee, with the highest rates occurring in rural counties (based on the 2010 Behavioral Risk Factor Surveillance System data; source of map: Tennessee Obesity Task Force 2012 Progress Report).



SPECIFIC STRATEGIES TO REDUCE OBESITY

Tennessee Obesity Task Force (TOT)

TOT is a broad-based, statewide coalition linking over 700 scientists, clinicians, city planners, school officials, state agencies, policymakers, transportation experts, nutritionists, parents, and representatives of our most vulnerable populations. TOT works closely with the TDH's Nutrition, Physical Activity and Obesity Program. Its mission is to strengthen partnerships and enhance collaboration in order to reduce the burden of obesity in Tennessee using systematic, multidisciplinary, evidence-based strategies. “Eat Well, Play More Tennessee” is TOT’s five year (2010-2015) plan to reduce obesity and chronic disease in Tennessee, funded by an agreement with the TDH through a cooperative agreement with the Centers for Disease Control and Prevention. More information on TOT and its initiatives is available at http://healthpsych.psy.vanderbilt.edu/TOT/Documents/Progress_Report_2011.pdf.

Tennessee State Parks Initiatives

In June, 2012, Tennessee State Parks’ eight restaurants began posting calorie content information, allowing visitors and staff members to make informed decisions about their food choices. This partnership initiative of the Tennessee Department of Health and the Department of Environment and Conservation complements ongoing efforts to encourage personal fitness among Tennessee residents and visitors. Tennessee State Parks have introduced a Healthy Eating and Healthy Hikes Program, encouraging park visitors to combine a good diet with physical activity.

NFLPLAY60

In the spring of 2012, Tennessee State Parks and the Tennessee Titans partnered in a number of unique ways as part of the NFL Play60 effort, encouraging kids to stay active, eat healthy and become more physically fit – all while enjoying one of Tennessee’s 53 state parks. Tennessee is the first state park system to participate in the NFL Play60 campaign, which features outreach into local schools and communities to engage children with messages and activities that promote outdoor experiences, the natural world, healthy lifestyles and fun. Support for Tennessee State Parks’ ongoing efforts to encourage healthy lifestyles among the state’s youth is due, in part, to a Project Diabetes grant awarded by the TDH.

TDH Health Policy Adviser

Former State Senator Rosalind Kurita, RN was hired by the state as the TDH Health Policy Adviser in December 2011 and charged with developing policies that incorporate health into state government. TDH is to lead by example in the effort to reduce obesity and encourage good health habits. She is creating workplace wellness initiatives and removing barriers to good health for our employees throughout TDH across the state.

Walking the Talk

One such wellness initiative is “Walking the Talk,” an overall TDH program promoting employee wellness in the work environment. Three examples of “Walking the Talk” in action are: The West Regional Office in Jackson, where every Tuesday and Thursday at 2:30 p.m. employees get together during a 15-minute break to stretch and do light exercise; The Southeast Region, where members of the Bledsoe County Health Department staff utilize their workout room and equipment and engage in a weight loss program; and The McMinn County Health Department, where staff members have calculated how many laps they can walk in the clinic hallways to make one mile so they can measure the distances they walk.

Diabetes Reduction Initiatives

Having diabetes can carry many health consequences, but a new study by Yale University states that adolescents and young adults with diabetes are six times more likely to drop out of high school and face worse job prospects and lower wages than their peers without diabetes. People with diabetes can expect to lose more than \$160,000 in wages over their working life.²⁰ **Project Diabetes** is a grant-funding program intended to reduce the rate of diabetes among Tennesseans, with specific attention to its relationship to obesity. One grant recipient is Tennessee State Parks’ Junior Ranger programs, which work to help children find their own connection with nature, emphasizing fun, interactive exploration – while becoming more active and developing healthier lifestyle habits. In 2011, the program was piloted at 12 state parks. In 2012, more than 400 Junior Ranger programs were held from May to September at all 53 state parks, attracting nearly 10,000 participants. An adventure guide that details Tennessee State Parks’ various Junior Ranger programs can be found at www.tnjuniorranger.com. **GetFitTN.com** is a state-sponsored website that provides information on Tennessee’s rising epidemic of Type 2 diabetes and risk factors that lead to diabetes. This program is aimed at educating both adults and children that Type 2 diabetes can be delayed or even

prevented with modest lifestyle changes like increasing physical activity and a healthier diet. This site includes easy-to-use tools designed to keep track of one's health and fitness progress and can be accessed here: <https://www.getfit.tn.gov/>. Specific GetFit programs designed to encourage citizens to take steps to make their communities healthier and more active have been put in place across the state.

TENNderCARE

TENNderCARE is a full program of checkups and health care services for children who in the TennCare program. These services make sure babies, children, teenagers and young adults receive the health care they need. Furthering the work of TENNderCare, TENNderCare staff members have established a variety of programs in their regions, including healthy recipe contests for fourth through 12th grade students, awareness activities for improving health and healthy food choices through partnerships with the University of Tennessee Extension, Coordinated School Health, and local health educators, and activities that encourage students to get their annual checkups.

Reducing Substance Abuse

SPECIFIC STRATEGIES TO REDUCE SUBSTANCE ABUSE

Pain Management Clinic Registration

Effective January 1, 2012, Public Chapter 340 (2011) requires that all pain management clinic owners and operators in Tennessee register with the state. As defined by the law, a pain management clinic is a privately-owned facility with a medical doctor, osteopathic physician, advanced practice nurse, or physician assistant, who provides certain pain management services to patients. A separate application is required for each individual clinic, regardless of the facility's name, owner or operator. Once the department determines that the pain management clinic meets the requirements, a certificate will be issued, which must be posted at the facility so it is visible to patients. Thereafter, the facility certificate must be renewed every two years.

Tennessee Prescription Safety Act of 2012

The Tennessee Prescription Safety Act of 2012 (Public Acts 2012, Chapter 880, Section 21) was passed in 2012 and took effect on January 1, 2013. Implementation of the Act is part of a broader effort that brought together commissioners across

multiple state departments through the Governor's Safety Subcabinet (another multi-departmental group has begun to address the growing state issue of substance-exposed newborns through the Neonatal Abstinence Syndrome Work Group, discussed below on page 23). On April 1, 2013, all impacted prescribers must check the Controlled Substance Monitoring Database (CSMD) prior to prescribing certain controlled substances at the beginning of a new episode of treatment and must check it again at least annually when that prescribed controlled substance remains part of the treatment. Pharmacies within the state of Tennessee are required to upload all schedule II-V prescriptions at least twice monthly. The legislation is a most important strategy for prescribers and dispensers to check that no more controlled substances are obtained by a patient than is needed and that drugs interact safely, addressing serious concerns for patient safety, preventing long term dependency, and preventing drug diversion.²¹ A record 4.02 billion prescriptions were written in the United States in 2011;²² Tennessee has one of the highest rates of prescription drug abuse in the nation with a total of 17.9 million prescriptions for controlled substances having been entered into Tennessee's database in 2011.²³ Registering to become a user on the CSMD webcenter can be accomplished at www.TNCSMD.com.

Smoking Reduction Efforts

Smoking is a significant public health issue in Tennessee, contributing to life-threatening health problems including cancer and heart disease. Smoking causes an estimated 90% of all lung cancer deaths in men and 80% of all lung cancer deaths in women. More deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined. BRFSS data show that 23% of Tennesseans report smoking regularly or occasionally. The benefits of quitting smoking are well established: 24 hours after quitting, blood pressure and pulse rate may drop. 48 hours after quitting, carbon monoxide level in the blood may return to normal. 2 to 12 weeks after quitting, circulation may improve and lung function may increase. 1 year after quitting, excess risk of coronary heart disease is half that of a smoker's.

The Tennessee Tobacco Use Prevention and Control Program (TUPCP) Strategic Plan ("TUPCP Strategic Plan") sets out the Program's four goals in its mission to reduce tobacco-related disease, disability and death:

- Preventing initiation of tobacco use among young people.

- Eliminating nonsmokers' exposure to secondhand smoke.
- Promoting quitting among adults and young people.
- Identifying and eliminating tobacco-related disparities.

The TUPCP Strategic Plan calls for increased marketing and promotion of the Tennessee Tobacco Quitline (TTQL) to reach all Tennesseans, focusing on populations and communities in rural areas with a disproportionate burden of tobacco use. The TTQL is a free telephone-based, web-based tobacco cessation coaching program in English and Spanish that is free to all residents of Tennessee. It offers personalized support for Tennessee residents who want to quit smoking by connecting them with trained quit coaches to guide them through the quitting process. Clients receive ongoing professional coaching via individually scheduled calls with a quit coach personally assigned to them. The Quitline is accessed at 1-800-QUIT-NOW (1-800-784-8669) or online at www.tnquitline.com. This convenient and confidential service is available for the deaf and hard-of-hearing at TTY: 1-877-559-3816. From its inception on August 3, 2006 through September 30, 2012, the TTQL has received a total of 59,124 calls, 32% of whom completed the Intake process and were assigned to a Quit Coach; 67% of those assigned to a coach have enrolled into the *iCanQuit* tobacco cessation program.

The Tennessee Anti-Tobacco Advocacy Program (TATAP) assists the TUPCP in conducting statewide tobacco control advocacy initiatives. TATAP organizes and presents one tobacco control advocacy spokesperson training session in each of the three grand divisions of the State, which provide information on effective advocacy methods and build on networks of community advocates who will campaign for tobacco control policy at the local, regional and state levels. Following each grand division training session, TATAP assists the advocacy spokespersons in implementing at least two advocacy activities. All three grand division trainings were held in October 2012. The TUPCP works closely with 13 funded programs in Rural/Metropolitan Regional Health Departments. Each of these Health Departments has a Tobacco Coordinator that works on community tobacco prevention collaborations and partnerships. The Tobacco Use Prevention and Control Program are partners with The Department of Education Coordinated School Health Program, Community Health Councils, TennCare, and the American Cancer Society among others.

Smoke-Free State Facilities. As examples of the TDH's efforts to reduce smoking rates, the Bedford County Health Department established a smoke-free campus effective August 1, 2012. While the clinic has long been a smoke-free facility, local health leaders have extended the smoke-free area around the clinic building as part of a Primary Prevention Initiative to prevent tobacco-related diseases in the community. The Van Buren County Health Department became a tobacco-free campus effective November 1, 2012. Formerly designated smoking areas at the facility have been eliminated, and use of all tobacco products is prohibited on the clinic property, including parking lots. The TDMHSAS's Regional Mental Health Institutes have been tobacco-free facilities and campuses since January 2008.

The Tennessee Nonsmokers Protection Act (2007) makes it illegal to smoke in most places where people dine, shop or visit. Smoking is prohibited in all enclosed public places within the state, with a few exceptions. The Tennessee Tobacco Use Prevention and Control Program grantees continue to work closely with their health departments, hospitals, local clinics, universities, colleges, schools and the public by providing them with educational information on the Tennessee Nonsmokers Protection Act.

The Tennessee Youth Prevention Work Group includes the TUPCP staff, the Department of Agriculture, the Division of Alcohol and Drug Abuse Services, who work closely together on youth tobacco use prevention. Tobacco coordinators develop, organize and maintain youth councils who focus on strategies that increase the enforcement of the youth access law by working with retailers, law enforcement, the judicial system and the public. Tennesseans under the age of 18 will purchase and consume over 16.8 million packs of cigarettes this year. Approximately 7,600 young people in Tennessee become new youth smokers each year. Approximately 412,000 of today's Tennessee children will become smokers and nearly 132,000 of them will die prematurely from tobacco related causes. For more facts and information about smoking and youth in Tennessee or in other states, please visit <http://www.tobaccofreekids.org>.

Primary Prevention

The Department of Health's Strategic Plan calls for a focus on primary prevention. The United States Preventative Services Task Forces Guide to Clinical Preventive

Services defines primary prevention measures as those provided to individuals to prevent the onset of a targeted condition. Primary prevention measures include activities that help avoid a given health care problem. Examples include passive and active immunization against disease as well as health protecting education and counseling promoting the use of automobile passenger restraints and bicycle helmets. Since successful primary prevention helps avoid the suffering, cost, and burden associated with disease, helping lead to better health and prosperity, it is typically considered the most cost-effective form of health care.

SPECIFIC STRATEGIES TO PROMOTE PRIMARY PREVENTION

Immunization

Children enrolling in Tennessee's schools for the first time and all children going into 7th grade must provide schools with a state immunization certificate before classes start as proof they have had immunizations necessary to protect them and their classmates from serious vaccine-preventable diseases. Getting vaccinated is a safe and simple way to protect everyone from potentially deadly diseases, and it helps ensure children won't miss important classroom time due to a preventable illness.

Most insurance plans, including TennCare, fully cover recommended and state-required childhood vaccines, as well as the cost of annual well child examinations through the age of 21. Local public health departments have vaccines available for all uninsured children, those whose insurance doesn't cover vaccines, and any child who has difficulty getting in to see a healthcare provider to get a required vaccine. Local health departments can issue immunization certificates and transcribe immunization records (don't know what this means or its significance) for any child if the family is not able to get a certificate from their healthcare provider for any reason. The complete list of Tennessee Child Care and School Immunization requirements is available on the TDH website at <http://health.state.tn.us/TWIS/requirements.htm>.

Infant Mortality: Safe Sleep Campaign

TDH recently launched a Safe Sleep campaign focusing on the "ABCs of Safe Sleep." This campaign urges all caregivers to focus on easy steps to help keep infants safe:

infants should sleep Alone, on their Backs and in a Crib. Tennessee data show that in 82 % of these sleep-related deaths, the infant was found not sleeping in a crib or bassinette. In nearly 60 % of cases, the infant was sleeping with another person. To learn more about the TDH Safe Sleep campaign, visit <http://safesleep.tn.gov>. Tennessee's infant mortality rate in 2011 decreased from 7.9 in 2010 to 7.4 deaths for every 1,000 live births. The national average in 2010 was 6.4.

Infant Mortality: Healthy Babies are Worth the Wait

30% of Tennessee babies are born at 37 or 38 weeks gestation. Prematurity is one of the leading causes of infant mortality in Tennessee. Research shows the final weeks of pregnancy are crucial to a baby's development. The TDH is working to educate health providers and parents that "Healthy Babies are Worth the Wait" for a full-term, 40-week pregnancy. TDH partners with the March of Dimes, the Tennessee Hospital Association, the Tennessee Center for Patient Safety, and the Tennessee Initiative for Perinatal Quality Care to reduce elective inductions and deliveries in Tennessee before 39 weeks gestation. The rate of babies born before reaching full-term in Tennessee dropped for the fifth consecutive year, according to research issued by the March of Dimes. The state improved its rate of children born preterm to 12.8 % in 2011, down from 14.8 % in 2006. The national average was 11.7 %.

Breastfeeding

Breastfeeding is one of the best examples of primary prevention—something we can do to prevent disease from ever occurring. Breastfeeding is the foundation of optimal nutrition and health for infants; it has distinct benefits for mothers as well. Mothers who breastfeed are at reduced risk for cardiovascular disease, Type 2 diabetes, post-partum depression, breast and ovarian cancer and other debilitating conditions. Tennessee has enacted laws protecting a mother's right to breastfeed in any location, public or private; prohibiting local governments from criminalizing or restricting breastfeeding; and requiring employers in Tennessee to accommodate breastfeeding mothers at work. Beyond the physical and psychological benefits, mothers can save money, effort, and time by breastfeeding. Employers can also save money by providing breastfeeding accommodations; breastfed babies tend to be healthier, meaning nursing mothers may be away from their jobs less to care for a sick child. TDH recently updated a department-wide policy that all facilities provide a private space for breastfeeding.

Neonatal Abstinence Syndrome (NAS)

A collection of state leaders known as the Neonatal Abstinence Syndrome Subcabinet Working Group is working collaboratively to reduce the problem in Tennessee of babies being born dependent on addictive drugs their mothers used during pregnancy. NAS is considered one of the most troubling effects of drug misuse and abuse across the United States. Tennessee hospital discharge statistics show the problem is increasing every year, with a ten-fold increase between 2000 and 2010. The problem can affect any woman using powerful drugs during pregnancy, including alcohol. In addition to the impacts on the baby's health, NAS is also a very costly disease. Babies suffering from NAS spend much longer in the hospital after birth than healthy babies. The average cost of a baby receiving TennCare benefits born with neonatal abstinence syndrome in Tennessee was \$40,931 in 2010. That compares with \$7,258 for a baby receiving TennCare benefits not born addicted that same year. The Subcabinet Working Group has petitioned the U.S. Food and Drug Administration to help combat the rising number of NAS births in Tennessee by adopting a "Black Box Warning." The warning would appear in the medication reference material used by clinicians and would alert them to have heightened awareness of the possibility of unintended harm to a newborn from the mother's use of narcotics. The request to the FDA follows earlier action by the TDH to make NAS a reportable condition effective Jan. 1, 2013. That move will allow health officials to identify cases more quickly and accurately as part of an expanded effort to reduce NAS births statewide. For more information about neonatal abstinence syndrome, go to <http://health.state.tn.us/MCH/NAS/index.shtml>.²⁴

Other Significant Initiatives

Children's Cabinet

On January 30, 2012, Governor Haslam issued Executive Order No. 10, refocusing and restructuring the Governor's Children's Cabinet. The Cabinet is co-chaired by Governor Haslam and First Lady Chrissy Haslam, making it the only one in the country co-chaired by both a governor and spouse, according to the National Forum for Youth Investment. The Cabinet is creating a comprehensive strategy focused on issues such as children's physical and mental health, education, safety and overall well-being. It is also working to coordinate, streamline and enhance the state's efforts in providing resources and services to Tennessee's children,²⁵ focusing on the

availability of services, the quality of services, and the interaction of state agencies that provide services to ensure that Tennessee's children are healthy and ready to enroll in school and to measure school readiness on these factors.

Public Safety Action Plan

On January 5, 2012, Governor Bill Haslam announced the Public Safety Action Plan, a comprehensive, multi-year action plan designed to improve public safety statewide. The three goals of the Public Safety Action Plan are:

- To significantly reduce drug abuse and drug trafficking
- To curb violent crime; and
- To lower the rate of repeat offenders.

There are 11 objectives and 40 action steps outlined in the plan, all specifically linked to those goals. The Plan was developed by a sub-cabinet working group that includes commissioners of the departments of Safety and Homeland Security, Mental Health and Substance Abuse Services, Children's Services, Corrections, Health, and Military along with the chairman of the Board of Probation and Parole, the directors of the Governor's Highway Safety Office (Department of Transportation), the Office of Criminal Justice Programs (Department of Finance and Administration), the Law Enforcement Training Academy (Department of Commerce and Insurance), and the Tennessee Bureau of Investigation. The group developed the Plan after months of meetings with more than 300 public safety professionals and stakeholders across the state.

The Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS)'s Three Year Plan

Available at <http://tn.gov/mental/3yrplan/planbody.pdf>, the Plan established goals for change. Highlights include strengthening community mental health and substance abuse services through reorganization, restructuring of the Department and focusing on resiliency and recovery; decreasing the abuse of prescription drugs through legislation that focuses prescriber attention toward monitoring and reporting and through improved treatment availability for opioid addiction; increasing effectiveness of the regional mental health institutes through standardizing practices, implementing best practices; and increasing collaborative efforts between Divisions, departments, providers and funders in the State at large. The Plan's Goals and Objectives are listed in Appendix C.

TDH Community Health Assessment Program

The TDH has initiated a program that empowers the state's system of local health councils to research, identify, and plan for work to address specific health care issues in the local community. The process will result in the ability to take successful programs to scale across the state.

Principle 2. Access to Care

“Every citizen should have reasonable access to health care.”

Background

According to the Institute of Medicine, having access to health care means “the timely use of personal health services to achieve the best health outcomes.”²⁶ In the 2010 National Health Disparities Report (NHDR), attaining good access requires:²⁷

- Gaining entry into the health care system
- Getting access to sites of care where patients can receive needed services
- Finding providers who meet the needs of individual patients and with whom patients can develop a relationship based on mutual communication and trust

Status of Tennesseans

In Tennessee the availability or use of prevention services has received significantly less attention than has the delivery of health care in Tennessee and the access Tennesseans have to it. Investment in prevention activities should reduce dependence on the health care delivery system in the long run.

Different strategies have been employed in Tennessee to improve access to health care, including the expansion of the TDH and its safety net activities under the previous administration, the inclusion of health care access issues in the Certificate of Need program, and the provision of health insurance to qualifying Tennesseans under the state’s Medicaid program, TennCare.

Insurance

For most Tennesseans, having health insurance is a key element of access to health care. Those without insurance can face major barriers to accessing health care as outlined by the NHDR. The percentage of uninsured Tennesseans fell this year to its lowest level since 2005, according to a 2012 University of Tennessee (UT) report. An estimated 9.2% of the population or 577,813 people don't have insurance, UT's Center for Business and Economic Research reports. That compares to last year's 9.5% rate. It was the lowest number of people since 2008. The number of uninsured adults, meanwhile, decreased from 12% in 2011 to 11.2% or 537,113 this year. The number of uninsured children inched up slightly from 2.4% to 2.7%. An estimated 40,700 under age 18 had no private or government-sponsored insurance. The report is based on a survey of the heads of some 5,000 households. UT began the annual survey on TennCare and the uninsured in 1993, the year before TennCare took effect. TennCare, the state's expanded version of Medicaid, funds medical assistance for low-income children, pregnant women and disabled adults. TennCare enrollees continue to give good marks to the program with 93% of those surveyed saying they were "somewhat satisfied" or "very satisfied" with their care.

Promoting Prevention

National expert panels and economists are unanimous in their concern about the sustainability of growth of the health care sector costs. This concern has led to multiple proposals comprising a mix of strategies aimed at improving payment for quality of care, creating a more efficient system of care through accountable care organizations, and promoting prevention of risk factors and management of the course of the chronic diseases that are overwhelming national health care costs. Access to health care will be affected by these changes. While recognition of prevention is important, the availability of effective prevention services statewide will be a challenge. Complementing individual primary and secondary prevention efforts could be value-added community-based prevention now being promoted.²⁸

SPECIFIC STRATEGIES TO PROMOTE ACCESS TO HEALTH CARE

Expansion of Health Care Safety Net Services

A comprehensive approach for healthcare safety net services, both long and short term, exists through a strong collaborative effort among state, public/private, not-for-profit and for-profit sectors. Behavioral health services are available through a network of seventeen (17) community mental health providers with one hundred fifty (150) sites in seventy three (73) counties with expanded service areas covering all ninety-five (95) counties of Tennessee. More than half of those eligible for mental health safety net services have enrolled in the program and are receiving benefits.

Case management as a component of the healthcare safety net both formally and informally has significantly helped in assisting the uninsured obtain necessary services. For example, programs such as Project Access and Bridges to Care have provided thousands of uninsured Tennesseans assistance with obtaining services such as specialty care, diagnostic services, hospitalizations, and in some instances even surgical procedures at little to no cost to the individual. These models are a means to expand the patient service area in contiguous and outlying counties. TDH estimates that the array of primary care, dental and behavioral health direct care providers participating in the safety net consortium served approximately 255,040 uninsured adults during the state fiscal year period ending June 30, 2011. In addition, approximately 118,120 individuals were enrolled in CoverTN insurance program options for the uninsured during that fiscal year period. Notwithstanding variations in funding, steady increases in numbers of uninsured patient encounters have been recorded since 2006.²⁹

Children's Access to Dental Care

In the last 10 years, Tennessee has made huge strides in the number of low-income children who receive dental services. The Pew Center on the States study evaluated states on eight policy indicators, including how many children on Medicaid received dental services and whether schools with low-income students have programs to apply clear plastic coatings that help prevent cavities. In 2003, Tennessee overhauled its program and contracted with a dental benefit manager to oversee the program, which is still under TennCare but has its own advisory board. Now the program has close to 1,000 dentists approved to provide care, nearly one-quarter of the state's total. About 94 % of enrollees said they were “very” or “somewhat happy” with their dental plan, while 95 % of dentists gave it high marks. About 41 % of Tennessee's children—more than 729,000—use the TennCare dental program.³⁰

West Tennessee Regional Office Dental Clinic

Although not a 2012 initiative, mention must be made of the West Tennessee Regional Office Dental Clinic in Jackson, Tennessee, that provides comprehensive dental care for uninsured adults and children. It has served Tennesseans from 20 counties, demonstrating the value of these services in West Tennessee. The Clinic is the result of a partnership among the University of Tennessee Dental School in Memphis, the UT Health Sciences Center, the Jackson-Madison County Health Department also supports the partnership, and Jackson-Madison County General Hospital. It serves as a model for service, training and job creation in other parts of Tennessee going forward. The West Tennessee Regional Office Dental Clinic provides services on a sliding fee scale based on income. Dental students serve their rotations. The West Tennessee Regional Office Dental Clinic is located at 295 Summar Street in Jackson. Hours are Monday through Friday, 8 a.m. until 4:30 p.m. For more information or to make an appointment, call (731) 421-6740.

Health Provider Shortage Areas

Access to health care also involves having the right services available within a geographic region, having adequate transportation, and having the service available at the right time. The Health Services and Resources Administration designates areas that may have a shortage of primary medical care, dental or mental health providers as Health Provider Shortage Areas (HPSAs) and areas where residents may have a shortage of personal health services as Medically Underserved Areas (MUAs).³¹ Every county in Tennessee has an HPSA and/or an MUA designation.

Certificate of Need Program

The aim of CON programs is to help control health care facility costs and allow for meaningful planning of new services and facilities. Specific emphasis is placed in each CON application on whether the applicant intends to provide services to low income residents and TennCare beneficiaries. Please see the discussion beginning on page 38 for more information on the CON program and the Health Services and Development Agency (HSDA) as well as revisions to specific CON facility and service programs.

Principle 3. Economic Efficiencies

“The state's health care resources should be developed to address the needs of Tennesseans while encouraging competitive markets, economic efficiencies, and the continued development of the state's health care system.”

Background

The health of Tennesseans is a quality of life issue and also an economic issue. The TDH recognizes the connection in its mission statement: The mission of the Department of Health is to protect, promote, and improve the health and prosperity of persons living in, working in, or visiting the State of Tennessee. The health care sector is an economic engine and job creator in many parts of Tennessee. Health care costs though are also an influential part of the financial picture of Tennessee's businesses.

America's health care system is one of the most innovative and technologically advanced in the world. It is also expensive. In 2010 the U.S. spent \$2.6 trillion in health expenditures, an increase over 2009 of \$1 billion.³² In fact, the U.S. spends 2.5 times more than the per capita average of the industrialized countries that make up the Organization for Economic Development and Cooperation (OECD), although all of these countries, including the U.S., experienced a slowing – or in some cases even a reduction – in the increase of per capita average annual expenditures as a result of the worldwide recession. Despite these higher costs, life expectancy in the U.S. of 78.2 years is below the OECD average of 79.5 years. The U.S. is also below average on other measures, including infant mortality and potential years of life lost. Better measures of the effects of health spending on outcomes show that the U.S. performs well in some subsystems, such as cancer care and treating acute conditions in hospitals, but does not perform well in primary care and in preventing costly hospital admissions for chronic conditions.³³

In 2010-2011, Tennessee's per capita spending was somewhat lower than the US national average (\$6,411 to \$6,815), an improvement over previous years. Still, Tennessee's health outcomes tend to be worse than those other states.³⁴ Thus, providing economic efficiencies in health care is a primary concern for state policy makers. Given the inefficiency and fragmentation in the health care delivery system in the United States, as well as the generally acknowledged increases in health care costs, the state health planning process should explore opportunities to improve care while containing cost growth in Tennessee.

Tennessee's ability to improve the health of Tennesseans and the health care system is influenced by federal policies whose impact is not fully known or yet felt. Foremost among these is the Patient Protection and Affordable Care Act, which places pressure on health systems to grow and sustain patient volumes while dealing with a new emphasis on, among other things, integrated services and management of chronic conditions. The Medicare program's future reimbursement changes will also directly impact the economic efficiencies of the health care system.

Status of Tennesseans

Health care is a major expense in our state. Tennessee's per capita spending on health increased from \$5,464 annually in 2010 to \$6,411 in 2011.³⁵ However, despite this high level of spending, Tennessee ranks 44th worst (an improvement from 46th in 2010) out of the 50 states for the percentage of adults with diabetes mellitus type 2 and ranks 44th worst (an improvement from 45th in 2010) in the nation in cardiovascular disease prevalence.³⁶ As seen in previous sections, Tennesseans fare worse than their counterparts in other states in many other areas of health as well.

In addition to the fact that Tennesseans spend more than most people on health care, health care programs in fiscal year 2011-2012 consumed 50% of the state government expenses (by comparison, education represented 29% of state government expenses).³⁷ Tennessee's per capita health care spending is also growing faster than the national average, at 7.4 % for Tennessee compared to 6.7 % for the U.S.³⁸ Thus, holding back the growing cost of health care and finding cost effective ways to promote health of Tennesseans are primary concerns for state policy makers.

SPECIFIC STRATEGIES TO PROMOTE ECONOMIC EFFICIENCIES

The Governor's Three Star Program

Governor Haslam's Three-Star program, which is administered through ECD's Community Development Division, assists urban and rural communities in their effort to achieve excellence in community and economic development. The program fosters community consensus toward accomplishing development goals and objectives, thus creating an environment for businesses and citizens of Tennessee to profit and succeed. Participating communities are guided through a strategic program of essential planning, issue prioritization, action planning and measurement. All of the criteria are developed by local economic and community development professionals and various state agencies. The Three-Star program is an important component of the state's economic strategy that helps communities set strategic goals that will truly make a difference today and well into the future. There are five foundation initiatives that are required of every Three-Star Community, encompassing the 'back-bone' of the Three-Star organization. Before a community can tackle other development issues, they must maintain the following: Adult Leadership Program; Health Care Committee; Web Site Development; Existing Industry Program; and Education Committee. In order to receive incentives from the Department of ECD, each Three-Star community must meet minimum benchmarks for each of the five key areas of development. These benchmarks are progressive and establish a standard of progress required for greater incentives.

Impact of Potential Medicare Spending Reductions

More than 17,423 health care and related jobs could be lost in Tennessee by 2021 as a result of the 2% cut in Medicare spending mandated by the Budget Control Act of 2011. Tennessee's job losses could include 11,279 positions in 2013 alone, according to the report by the American Hospital Association, American Medical Association and American Nurses Association. The cuts are scheduled to begin in 2013 and continue until 2021. The report ranks Tennessee 14th in the nation for biggest job losses as a result of the Medicare reductions. Nationwide, more than 766,000 jobs, including 144,000 hospital jobs, would be lost according to the report. The study measured job losses in health care and reduced purchases by health care institutions, which would result in furloughs by health system vendors and reduced purchases by families of laid-off workers.

The Certificate of Need Program

The aim of CON programs is to help control health care facility costs and allow for meaningful planning of new services and facilities. Please see the discussion beginning on page 38 for more information on the CON program and the Health Services and Development Agency (HSDA) as well as revisions to specific CON facility and service programs.

Principle 4. Quality of Care

“Every citizen should have confidence that the quality of health care is continually monitored and standards are adhered to by health care providers.”

Background

The issue of the quality of health care provided in the United States has received increased attention in recent years. The Institute of Medicine, a science-based non-profit organization with a mission to advise the nation on health matters, defines “high quality care” as care that is:

- **Safe:** avoiding injuries to patients from the care that is intended to help them;
- **Effective:** providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding under use and overuse, respectively);
- **Patient-centered:** providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions;
- **Timely:** reducing waits and sometimes harmful delays for both those who receive and those who give care;
- **Efficient:** avoiding waste, including waste of equipment, supplies, ideas, and energy; and
- **Equitable:** providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.³⁹

Having an adequate number of physicians and providing health care does not, by itself, ensure quality of care. In a study reported in the *New England Journal of Medicine*, patient outcomes were not necessarily better—and were sometimes

worse—in regions with a very large supply of physicians.⁴⁰ Providing quality care is a complex issue involving many facets of the health care system.

Status of Tennesseans

Many Tennessee hospitals and healthcare systems have been on the leading edge of quality and performance improvement initiatives. Although there are many testaments to the provision of high quality health care in Tennessee, Tennessee has room for improvement. An example is the number of hospitalizations that could have been avoided, which is an outcome indicating not the quality of care in a hospitals but instead the ability of the overall health care system to reach out to people, help them manage their diseases, and avoid problems leading to hospitalization. Tennessee’s discharge rate among its Medicare population for these “preventable hospitalizations” has improved significantly from 97.8% in 2008 to 83.4% in 2012; however, this rate still compares unfavorably with the rest of the nation, as the state’s ranking has remained at 46 over this period of time.⁴¹

Health care quality is also reflected in adherence to evidence-based procedures. For example, the proportion of Tennessee diabetics over age 40 who received important screenings such as HbA1C and foot exams has improved since 2009 when its proportion was 82%, but at 85% in 2011 it remains worse than the national average (85% as compared to 89%).⁴² The percentage of adults over the age of 18 who had their blood cholesterol checked annually was at the national average, while the percentage of women who received important cancer screenings such as pap smears and mammograms was rated as average when compared to all other States.⁴³

SPECIFIC STRATEGIES TO PROMOTE QUALITY OF CARE

Hospital Readmission Reduction Program

Nearly one in five Medicare patients return to the hospital within a month of discharge, costing the Centers for Medicare and Medicaid Services (CMS) an extra \$17.5 billion in 2010. The Hospital Readmission Reduction Program, part of the 2010 Patient Protection and Affordability Care Act, became effective on October 1, 2012 and reduces payments to hospitals that excessively readmit patients suffering from acute myocardial infarction, heart failure and pneumonia.⁴⁴

Patient Satisfaction Measures

As Medicare moves forward with its value-based purchasing program designed to incentivize higher-quality care at U.S. hospitals, it is estimated that nearly 60% of the hospitals in Tennessee will experience lower CMS reimbursements due to metered performance in the areas of patient satisfaction as well as process measures.⁴⁵

Partnership to Improve Dementia Care

Unnecessary antipsychotic drug use is a significant challenge in ensuring appropriate dementia care. CMS 2010 data show that over 17% of nursing home patients received daily dosages exceeding recommended levels. Through a CMS grant program called “Partnership to Improve Dementia Care,” the TDH has received a grant to train nursing home care providers how to treat dementia and Alzheimer’s patients without these drugs in order to protect the patients from unnecessary drug use. CMS statistics show that approximately 30% of long-term nursing home residents in Tennessee are treated with antipsychotics drugs, as compared to a national average of 23.8%. Federal officials have set a goal to reduce this usage by 15% in one year.⁴⁶

The Certificate of Need Program.

The CON program requires applicants to provide information to the HSDA on their quality improvement efforts as they relate to a proposed facility or service and to provide assurances that they will seek appropriate accreditation. Revisions to standards and criteria also require applicants provide information on the employment of qualified health care professionals. Please see the discussion beginning on page 38 for more information on the CON program and the Health Services Development Agency as well as revisions to specific CON facility and service programs.

Principle 5: Health Care Workforce

“The state should support the development, recruitment, and retention of a sufficient and quality health care workforce.”

Background

This State Health Plan recommends that the state consider developing a comprehensive approach to ensuring the existence of a sufficient, qualified health care workforce, taking into account the following issues:

- The number of providers at all levels and in all specialty and focus areas
- The number of professionals in teaching positions
- The capacity of medical, nursing, dental, allied health, and other educational institutions
- State and federal laws and regulations impacting the capacity and funding of programs and the needs of current workforce members
- The collaboration and consideration of all health professions in creating practices and policies to address workforce issues

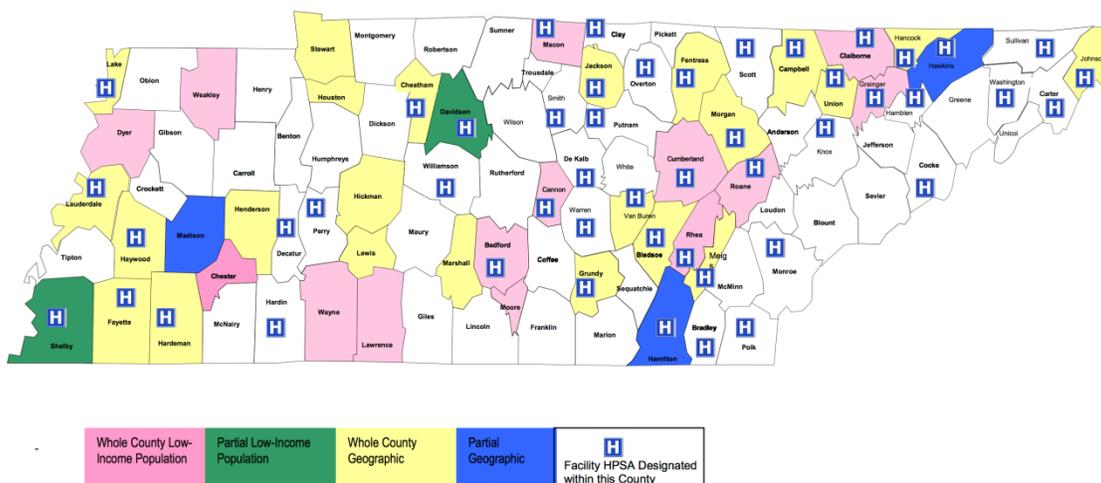
Status of Tennesseans

Health Professional Shortage Areas (HPSAs) are designated by the U.S. Department of Health and Human Services. The designation is indicative of a shortage of primary care physicians in a rational service area. Shortage areas are identified through analysis of physician/population ratios. There are four degrees of shortage and the physician/population ratio varies depending on whether the area is considered to have a high need. Criteria used to determine high need are based on infant mortality rates, poverty rates, and fertility rates. The counties designated as partial shortage areas have a shortage in only part of the county, such as certain census tracts or selected segments of the population. In-depth census data and

information is available on the web site of the Census Bureau, a division of the United States Department of Commerce.

Below is map of Tennessee’s primary care health professional shortage areas.

Federal Health Professional Shortage Areas
PRIMARY CARE, 2008



Physicians

A report from the Council on Graduate Medical Education predicts that by the year 2020 the United States will experience an overall 10% shortfall in the number of physicians, and in particular raises the concern of a potential shortage of generalists/primary care physicians.⁴⁷ Tennessee compares well with the remaining states in the overall number of primary care physicians practicing in the State. Tennessee has approximately 120.4 actively practicing primary care physicians per 100,000 people, ranking 20th in the U.S., just above the national average of 120 primary care physicians per 100,000.⁴⁸ The number of active physicians in the U.S. is 258.7 per 100,000 while Tennessee’s number is lower at 241.4 per 100,000. However, 24.1% of Tennessee’s physicians are over the age of 60 and thus nearing retirement age.⁴⁹ The Rural Partnership in its 2008 Demand Assessment reported, “Primary care physicians continue to be in greatest demand,” raising the critical issue of the disproportional primary care workforce distribution within the state.⁵⁰

Nursing

Nurses fill a wide range of roles in the health care system. In addition to providing direct clinical care, nurses are also better able to perform many administrative and support services than non-clinically trained personnel,⁵¹ although it should be noted that the use of nurses in non-clinical roles is also a factor in the shortage of nurses in direct patient care roles. Over the short term overall RN supply slightly exceeds demand. Over the long term, however, overall demand exceeds supply by a large margin.⁵² For the near future, Tennessee is predicted to have sufficient associate degree nurses as a result of efforts made by stakeholders comprising the Nursing Education Master Plan Steering Committee.⁵³ However, it is predicted that by 2020 Tennessee will have a shortage of 15,000 registered nurses. The shortage of BSN and MSN graduates is also critical. High level bachelors (BSN), master's degree (MSN) graduates, and doctoral level nurses comprise the nursing faculty pipeline, meaning that without more of these higher degree nurses, a sufficient number of new nurses may not be trained and brought into the workforce. Additionally, more research is needed on the numbers and availability of licensed practical nurses, advanced practice nurses (nurse midwives, nurse anesthetists, nurse practitioners, and clinical nurse specialists) who play a vital role in the healthcare delivery system, particularly in under-served areas.

Oral Health Professionals

In the US there are over 141,800 dentists and more than 174,100 dental hygienists.⁵⁴ However, 49 million people still lack adequate access to dental care in 4,230 areas and less than 10% of dentists regularly provide care to these areas.⁵⁵ Out of the 95 counties in Tennessee, 86 of them are designated as partially or totally lacking adequate access to dental care.⁵⁶ Currently, Tennessee has 3,614 dentists who are licensed to practice dentistry or approximately 56 dentists per 100,000 people, lower than the national average of 60 dentists per 100,000 people.⁵⁷ The number of dentists per 100,000 people has been declining since 2000 and this trend is anticipated to continue. Some states have applied for federal grants to improve the workforce shortage of oral health care providers, and Tennessee currently does not participate in the loan repayment program.⁵⁸

A Pew Center for the States study found that the United States has a shortage of more than 6,000 dentists. The study finds that in Tennessee approximately 21% of the entire population is “unserved,” that is, with no access to a dentist. By comparison, Alabama has a 25% unserved population, while Georgia's numbers are

slightly addressed the fast-growing demands in others.” Areas that do not meet the supply demand ratio include: respiratory therapy, health information administration, physical therapy assisting, nursing assisting, laboratory services, occupational therapy assisting, physician assisting, recreation therapy, and dental hygiene.

Public Health Workforce

Critical to the health of Tennesseans is the existence of an adequate public health workforce. Public health professionals focus on improving health outcomes in their states through a wide variety of activities, ranging from HIV/AIDS counseling, testing, and surveillance to bioterrorism and emergency preparedness.⁶¹ Tennessee’s average age of a state public health employee was over 48 years in 2008, over the national average of 47. The percentage of these Tennessee state employees who are eligible to retire within five years is approximately 48%, significantly higher than the 29% average of the 28 states reporting this data.⁶²

Additional Data to be Gathered

Data on the number of and accessibility to pharmacists, psychologists, and social workers remains to be developed under the State Health Plan. The Tennessee Hospital Association’s Workforce Advisory Committee is currently updating data on Tennessee’s Allied Health Workforce.

Below is a map of Tennessee’s behavioral health shortage areas.

Federal Health Professional Shortage Areas MENTAL HEALTH, 2008



Comparison of Current Tennessee and US Health Care Workforce: Projected Tennessee Need

	TN	U.S.	TN Projected Need
Primary Care Physicians (per 100,000 residents) ⁶³	120.4	120.0	Most sources suggest that due to Tennessee's aging population, there will be an need for additional physicians in all specialties, although the number is difficult to predict.
Total Active Physicians (per 100,000 residents) ⁶⁴	241.4	258.7	See above comment
Nurses (per 1,000 residents)	9.2 ⁶⁵	8.74 ⁶⁶	Additional need of 8,495 (2020) ⁶⁷
Dentists (per 100,000 residents) ⁶⁸	56	100	Nationwide 21% in-crease in employment from 2010-2020 ⁶⁹

It should be noted that significant economic benefits result in the recruitment, retention, and development of a qualified health care workforce. Studies have supported the importance of a quality health sector in rural communities for industrial development and for retaining existing businesses and industries. Health care industries are important to attracting retirees to a rural community. In several studies health services were documented as primary concerns for selection of retirement locations for the elderly. A study in rural Oklahoma has shown that for each job created in the health care sector, 0.70 additional jobs were created throughout the area due to business (indirect) and household (induced) spending.⁷⁰

SPECIFIC STRATEGIES TO PROMOTE TENNESSEE'S HEALTH WORKFORCE

Workforce Investment Act

Through the Workforce Investment Act, workforce training efforts in Tennessee provided over 16,000 new health care workers over the past 4 years, representing approximately 18% of all of the Workforce Investment Act training conducted in the state at an investment of over 60 million dollars.⁷¹

TEAM Act

On April 24, 2012, Governor Bill Haslam signed into law the Tennessee Excellence, Accountability and Management (TEAM) Act. Among other matters, the Act created a new state hiring system that facilitates the hiring of public health care professionals by requiring agencies to define minimum qualifications and specifically identify the knowledge, skills, abilities and competencies required for each position.

THA Health Workforce Advisory Committee

The TDH and the Tennessee Department of Labor and Workforce have representatives on the Tennessee Hospital Association's Health Workforce Advisory Committee, a broad-based stakeholder group that was established in 2012 to address workforce availability issues.

TDH Update on Oral Health Services, February 1, 2012

In an effort to improve access to dental services for high risk children in underserved areas, the TDH Oral Health Services Section conducts a mobile dental program. Three mobile dental clinics are located in east, central, and west

Tennessee. These clinics offer comprehensive care to low-income children at school sites. During Fiscal Year 2011, a total of 108 children received 1675 dental services.

The update can be found online at

[http://health.state.tn.us/statistics/Legislative Reports PDF/Update OralHealthServices 2012.pdf](http://health.state.tn.us/statistics/Legislative_Reports_PDF/Update_OralHealthServices_2012.pdf)

Tennessee Rural Partnership (TRP) and TDH Office of Rural Health (ORH)

TRP and the ORH in 2012 developed a recruitment plan to fulfill their joint mission to improve access to primary care in Tennessee's underserved communities through providing opportunities for the placement of primary care practitioners. State public health clinic vacancies are now sent to TRP, which locates, recruits, and directs candidates to the ORH website. TRP has a separate recruitment function, connecting clinicians to communities, and TRP also contracts with the Tennessee medical schools' residency programs to provide up to \$1 million annually for primary care residency slots. The ORH also administers the Tennessee State Loan Repayment Program for qualifying practitioners, among other recruitment and development activities.

The Certificate of Need Program

As new revisions are made to its standards and criteria, the CON program requires applicants to provide detailed information on the availability of a qualified workforce to provide services in connection with a proposed facility or service. Please see the discussion beginning on page 38 for more information on the CON program and the Health Services Development Agency as well as revisions to specific CON facility and service programs.

Certificate of Need Standards and Criteria

Introduction

Ambulatory Surgical Treatment Centers

Hospice Services

Certificate of Need Standards and Criteria Revisions

Why Certificate of Need

Certificate of Need (CON) laws were developed from the federal Health Planning Resources Development Act of 1974. The aim of CON programs is to help control health care facility costs and allow for meaningful planning of new services and facilities. Under the authority of TCA Title 68, Chapter 11, Part 1, the Tennessee Health Planning and Resource Development Act of 1987, Tennessee has developed a set of guidelines for CON Standards and Criteria. These original CON Standards and Criteria can be found at the HSDA's website at http://www.tn.gov/hsda/con_standards.shtml.

Past, Current, and Future Revisions

In 2009, the Division revised the original CON standards for

- Positron Emission Tomography Services
- Cardiac Catheterization Services.

In 2010, the Division updated the CON standards for:

- Open Heart Surgical Services
- External Shock Wave Lithotripsy Services

In 2011, the Division updated the CON standards for:

- Magnetic Resonance Imaging Services
- Megavoltage Radiation Therapy Services

In this 2012 Update to the State Health Plan, the Division updates the CON standards for:

- **Ambulatory Surgical Treatment Centers**
- **Hospice Services**

These 2012 revisions and their corresponding rationale statements are included on the following pages. Future updates will contain updated revisions of other CON Standards and Criteria. The new revisions replace the versions found in the HSDA's "Guidelines for Growth."



STATE OF TENNESSEE

STATE HEALTH PLAN

CERTIFICATE OF NEED STANDARDS AND CRITERIA

FOR

AMBULATORY SURGICAL TREATMENT CENTERS

The Health Services and Development Agency (HSDA) may consider the following standards and criteria for applications seeking to establish or expand Ambulatory Surgical Treatment Centers (ASTCs). Existing ASTCs are not affected by these standards and criteria unless they take an action that requires a new certificate of need (CON) for the establishment or expansion of an ASTC.

These standards and criteria are effective immediately as of May 23, 2013, the date of approval and adoption by the Governor of the State Health Plan changes for 2013. Applications to establish or expand an ASTC that were deemed complete by the HSDA prior to this date shall be considered under the Guidelines for Growth, 2000 Edition.

Definitions

1. "Ambulatory Surgical Treatment Center" (ASTC) shall have the meaning set forth in the Rules of the Tennessee Department of Health, Board for Licensing Health Care Facilities, Chapter 1200-08-12, or its successor.
2. "Full Capacity" shall mean:
For a dedicated outpatient Operating Room: 1,263 Cases per year¹

¹ From information provided at the Public Meeting, the Division of Health Planning believes the previous 1,333 number is high and is lowering this calculation by increasing the estimated average time per Case in an Operating room from 60 to 65 minutes, resulting in a "Full Capacity" number of 1,266 Cases for an Operating Room.

For a dedicated outpatient Procedure Room: 2,667 Cases per year

3. "Operating Room" shall mean a room at an ASTC where general and/or Monitored Anesthesia Care (MAC) (the ability to administer general anesthesia) is employed. Any level of sedation or anesthesia can be utilized in Operating Rooms as the anesthesia equipment is present in the room.
4. "Procedure Room" shall mean a room at an ASTC where local and/or intravenous sedation is employed.
 1. If an applicant intends to utilize an Operating Room or Procedure Room for types of sedation other than are set forth in the above definitions or for no type of sedation, it must provide information in its application setting forth the reasons for employing such different sedation type(s) (or lack thereof) and identify the types of Cases so impacted..
5. "Optimum Utilization" shall mean:
 2. For a dedicated outpatient Operating Room, 70% of Full Capacity
 3. For a dedicated outpatient Procedure Room: 70% of Full Capacity
6. "Service Area" shall mean the county or counties represented by the applicant as the reasonable area to which the facility intends to provide services and/or in which the majority of its service recipients reside.
7. "Specialty ASTC" shall mean an ASTC that limits its Surgical Cases to specific types.
8. "Case" shall mean one visit to an Operating Room or to a Procedure Room by one patient, regardless of the number of surgeries or procedures performed during that visit.

Assumptions in Determination of Need

The need for an ambulatory surgical treatment center shall be based upon the following assumptions:

1. Operating Rooms
 - a. An operating room is available 250 days per year, 8 hours per day.
 - b. The estimated average time per Case in an Operating Room is 65 minutes.
 - c. The average time for clean up and preparation between Operating Room Cases is 30 minutes.
 - d. The optimum utilization of a dedicated, outpatient, general-purpose Operating Room is 70% of full capacity. $70\% \times 250 \text{ days/year} \times 8 \text{ hours/day} \div 95 \text{ minutes} = 884 \text{ Cases per year}$.
2. Procedure Rooms
 - a. A procedure room is available 250 days per year, 8 hours per day.

- b. The estimated average time per outpatient Case in a procedure room is 30 minutes.
- c. The average time for clean up and preparation between Procedure Room Cases is 15 minutes.
- d. The optimum utilization of a dedicated, outpatient, general-purpose outpatient Procedure Room is 70% of full capacity. $70\% \times 250 \text{ days/year} \times 8 \text{ hours/day}$ divided by 45 minutes = 1867 Cases per year.

Determination of Need

1. Need. The minimum numbers of 884 Cases per Operating Room and 1867 Cases per Procedure Room are to be considered as baseline numbers for purposes of determining Need.² An applicant should demonstrate the ability to perform a minimum of 884 Cases per Operating Room and/or 1867 Cases per Procedure Room per year, except that an applicant may provide information on its projected case types and its assumptions of estimated average time and clean up and preparation time per Case if this information differs significantly from the above-stated assumptions. It is recognized that an ASTC may provide a variety of services/Cases and that as a result the estimated average time and clean up and preparation time for such services/Cases may not meet the minimum numbers set forth herein. It is also recognized that an applicant applying for an ASTC Operating Room(s) may apply for a Procedure Room, although the anticipated utilization of that Procedure Room may not meet the base guidelines contained here. Specific reasoning and explanation for the inclusion in a CON application of such a Procedure Room must be provided. An applicant that desires to limit its Cases to a specific type or types should apply for a Specialty ASTC.
2. Need and Economic Efficiencies. An applicant must estimate the projected surgical hours to be utilized per year for two years based on the types of surgeries to be performed, including the preparation time between surgeries. Detailed support for estimates must be provided.
3. Need; Economic Efficiencies; Access. To determine current utilization and need, an applicant should take into account both the availability and utilization of either: a) all existing outpatient Operating Rooms and Procedure Rooms in a Service Area, including physician office based surgery rooms (when those data are officially reported and available³) OR b) all existing comparable outpatient Operating Rooms and Procedure Rooms based on the type of Cases to be performed. Additionally, applications should provide similar information on the availability of nearby out-of-state existing outpatient

² The Division recognizes that estimated or average cleanup/preparation times and Case times may vary significantly by specialty and type of Case.

³ The Department of Health is currently in the rule-making process necessary to implement the statute requiring the collection of office-based surgery data (Public Chapter 373, 2007). The Division recognizes that the Department of Health does not have sufficient data available on hospital ambulatory/outpatient surgery rooms at this time to include them in the determination of need; however, the Division plans to work with stakeholders towards this goal.

Operating Rooms and Procedure Rooms, if that data are available, and provide the source of that data. Unstaffed dedicated outpatient Operating Rooms and unstaffed dedicated outpatient Procedure Rooms are considered available for ambulatory surgery and are to be included in the inventory and in the measure of capacity.

4. Need and Economic Efficiencies. An applicant must document the potential impact that the proposed new ASTC would have upon the existing service providers and their referral patterns. A CON application to establish an ASTC or to expand existing services of an ASTC should not be approved unless the existing ambulatory surgical services that provide comparable services regarding the types of Cases performed, if those services are known and relevant, within the applicant's proposed Service Area or within the applicant's facility are demonstrated to be currently utilized at 70% or above.
5. Need and Economic Efficiencies. An application for a Specialty ASTC should present its projections for the total number of cases based on its own calculations for the projected length of time per type of case, and shall provide any local, regional, or national data in support of its methodology. An applicant for a Specialty ASTC should provide its own definitions of the surgeries and/or procedures that will be performed and whether the Surgical Cases will be performed in an Operating Room or a Procedure Room. An applicant for a Specialty ASTC must document the potential impact that the proposed new ASTC would have upon the existing service providers and their referral patterns. A CON proposal to establish a Specialty ASTC or to expand existing services of a Specialty ASTC shall not be approved unless the existing ambulatory surgical services that provide comparable services regarding the types of Cases performed within the applicant's proposed Service Area or within the applicant's facility are demonstrated to be currently utilized at 70% or above. An applicant that is granted a CON for a Specialty ASTC shall have the specialty or limitation placed on the CON.

Other Standards and Criteria

6. Access to ASTCs. The majority of the population in a Service Area should reside within 60 minutes average driving time to the facility.
7. Access to ASTCs. An applicant should provide information regarding the relationship of an existing or proposed ASTC site to public transportation routes if that information is available.
8. Access to ASTCs. An application to establish an ambulatory surgical treatment center or to expand existing services of an ambulatory surgical treatment center must project the origin of potential patients by percentage and county of residence and, if such data are readily available, by zip code, and must note where they are currently being served. Demographics of the Service Area should be included, including the anticipated provision of services to out-of-state patients, as well as the identity of other service providers both in and out of state and the source of out-of-state data. Applicants shall

document all other provider alternatives available in the Service Area. All assumptions, including the specific methodology by which utilization is projected, must be clearly stated.

9. Access and Economic Efficiencies. An application to establish an ambulatory surgical treatment center or to expand existing services of an ambulatory surgical treatment center must project patient utilization for each of the first eight quarters following completion of the project. All assumptions, including the specific methodology by which utilization is projected, must be clearly stated.
10. Patient Safety and Quality of Care; Health Care Workforce.
 - a. An applicant should be or agree to become accredited by any accrediting organization approved by the Centers for Medicare and Medicaid Services, such as the Joint Commission, the Accreditation Association of Ambulatory Health Care, the American Association for Accreditation of Ambulatory Surgical Facilities, or other nationally recognized accrediting organization.⁴
 - b. An applicant should estimate the number of physicians by specialty that are expected to utilize the facility and the criteria to be used by the facility in extending surgical and anesthesia privileges to medical personnel. An applicant should provide documentation on the availability of appropriate and qualified staff that will provide ancillary support services, whether on- or off-site.
11. Access to ASTCs. In light of Rule 0720-11.01, which lists the factors concerning need on which an application may be evaluated, and Principle No. 2 in the State Health Plan, “Every citizen should have reasonable access to health care,” the HSDA may decide to give special consideration to an applicant:
 - a. Who is offering the service in a medically underserved area as designated by the United States Health Resources and Services Administration;
 - b. Who is a “safety net hospital” or a “children’s hospital” as defined by the Bureau of TennCare Essential Access Hospital payment program;
 - c. Who provides a written commitment of intention to contract with at least one TennCare MCO and, if providing adult services, to participate in the Medicare program; or

⁴ The Division recognizes that not all ASTCs can be CMS certified or accredited.

- d. Who is proposing to use the ASTC for patients that typically require longer preparation and scanning times. The applicant shall provide in its application information supporting the additional time required per Case and the impact on the need standard.

Rationale for Revised and Updated Standards and Criteria for Ambulatory Surgical Treatment Centers

Definitions

Operating Room/Procedure Room. The Division of Health Planning recognizes that there are vast differences in estimated utilization times and clean-up times for operating rooms and procedure rooms, and has worked with stakeholders to develop workable definitions to assist the HSDA in its deliberations. The Division recognizes that there remain measurable differences among the types of Cases performed in Operating Rooms, and among the type of Cases performed in Procedure Rooms, but is not comfortable at this time developing standards and criteria based on specific types of Cases. However, the revised and updated standards and criteria encourage applicants to provide information on variations from the standards and criteria to the HSDA to support a need determination that varies from the standards set forth herein. Additionally, the standards and criteria retain the ability of an applicant to apply for a Specialty ASTC.

Case. The previous Guidelines for Growth did not properly distinguish between “case” and “procedure.” To solve this problem, which hindered the HSDA’s ability easily to assess need, the Division has clarified this definition and deleted all references to “procedure.”

Full Capacity. The Division solicited operating information from owners/operators of ASTCs. From this information, the Division learned there is significant variation in utilization between Operating Rooms and Procedure Rooms, as well as among Operating Rooms and among Procedure Rooms, depending on the type of Case. Based the information it received, the Division has developed a reasonable “base” capacity for an Operating Room and for a Procedure Room. Applicants may provide data that supports an application that varies from base capacity.

Future revisions to these standards and criteria may take into account Operating and Procedure Room capacity based on the type of Case. At this time, however the Division does not believe there is sufficient readily available data to enable applicants, opponents, and the HSDA for these types of revision.

Optimum Utilization. Based on information provided by stakeholders, a 70% optimum utilization standard is provided.

Standards and Criteria Regarding Certificate of Need Applications for Ambulatory Surgical Treatment Centers

Need: The Department of Health is currently in the rule-making process necessary to implement the statute requiring the collection of office-based surgery data (Public Chapter 373, 2007). The Division recognizes that the Department of Health does not have sufficient data available on hospital ambulatory/outpatient surgery rooms at this time to include them in the determination of need; however, the Division plans to work with stakeholders towards this goal.

Access Issues: The provision of health care doesn't recognize state boundaries. Accordingly, applicants may include non-Tennessee counties in proposed service areas if that data are available. The majority of the population in a Service Area should reside within 60 minutes average driving time to the facility, and an applicant should provide information regarding the relationship of an existing or proposed ASTC site to public transportation routes if that information is available. Other standards and criteria are provided that provide demographic and geographic data on potential patients, as well as reinforcing the HSDA's own Rule regarding underserved populations and areas.

Economic Efficiencies: To support the goal of reducing health care costs, applicants should document all provider alternatives in a proposed Service Area. Additionally, projected utilization must be provided.

Quality of Care: The Division recognizes that not all ASTCs can be certified or accredited by the Centers for Medicare and Medicaid Services (CMS), but provides that an applicant should be accredited, or agreed to pursue accreditation, by an accrediting organization approved by CMS or by another nationally recognized accrediting organization.

Qualified and Sufficient Workforce: An applicant should provide documentation on the availability of appropriate and qualified staff that will provide ancillary support services, whether on- or off-site.



STATE OF TENNESSEE

STATE HEALTH PLAN

CERTIFICATE OF NEED STANDARDS AND CRITERIA

FOR

RESIDENTIAL HOSPICE SERVICES AND HOSPICE SERVICES

The Health Services and Development Agency (HSDA) may consider the following standards and criteria for applications seeking to provide Residential Hospice and Hospice services. Existing providers of Residential Hospice and Hospice services are not affected by these standards and criteria unless they take an action that requires a new certificate of need (CON) for Residential Hospice and/or Hospice services.

These standards and criteria are effective immediately as of May 23, 2013, the date of approval and adoption by the Governor of the State Health Plan changes for 2013. Applications to provide Residential Hospice and/or Hospice services that were deemed complete by HSDA prior to this date shall be considered under the Guidelines for Growth, 2000 Edition.

Definitions Applicable to both Residential Hospice Services and Hospice Services

1. "Deaths" shall mean the number of all deaths in a Service Area less the number of reported accidental, motor vehicle, homicide, suicide, infant, neonatal, and post neonatal deaths in that Service Area, as reported by the State of Tennessee Department of Health.
2. "Residential Hospice"⁵ shall have that meaning set forth in Tennessee Code Annotated Section 68-11-201 or its successor.

⁵ The Division recognizes the current Guidelines for Growth's statement that "the purpose of residential hospice facilities is not to replace home care hospice services, but rather to provide an option to those patients who cannot be

3. "Hospice" shall refer to those hospice services not provided in a Residential Hospice Services facility.
4. "Total Hospice" shall mean Residential and Hospice Services combined.

STANDARDS AND CRITERIA APPLICABLE TO BOTH RESIDENTIAL AND HOSPICE SERVICES APPLICATIONS

1. **Adequate Staffing:** An applicant should document a plan demonstrating the intent and ability to recruit, hire, train, assess competencies of, supervise and retain the appropriate numbers of qualified personnel to provide the services described in the application and that such personnel are available in the proposed Service Area. In this regard, an applicant should demonstrate its willingness to comply with the general staffing guidelines and qualifications set forth by the National Hospice and Palliative Care Organization
2. **Community Linkage Plan:** The applicant shall provide a community linkage plan that demonstrates factors such as, but not limited to, relationships with appropriate health care system providers/services, and working agreements with other related community services assuring continuity of care focusing on coordinated, integrated systems. Letters from physicians in support of an application shall detail specific instances of unmet need for hospice services.
3. **Proposed Charges:** The applicant shall list its benefit level charges, which shall be reasonable in comparison with those of other similar facilities in the Service Area or in adjoining service areas.
4. **Access:** The applicant must demonstrate an ability and willingness to serve equally all of the Service Area in which it seeks certification. In addition to the factors set forth in HSDA Rule 0720-11-.01(1) (listing the factors concerning need on which an application may be evaluated), the HSDA may choose to give special consideration to an applicant that is able to show that there is limited access in the proposed Service Area.

adequately cared for in the home setting." The Division also recognizes that Residential Hospice and Hospice providers may in fact provide the same services.

5. **Indigent Care.** The applicant should include a plan for its care of indigent patients in the Service Area, including:
 - a. Demonstrating a plan to work with community-based organizations in the Service Area to develop a support system to provide hospice services to the indigent and to conduct outreach and education efforts about hospice services.
 - b. Details about how the applicant plans to provide this outreach.
 - c. Details about how the applicant plans to fundraise in order to provide indigent and/or charity care.

6. **Quality Control and Monitoring:** The applicant should identify and document its existing or proposed plan for data reporting, quality improvement, and outcome and process monitoring system. Additionally, the applicant should provide documentation that it is, or intends to be, fully accredited by the Joint Commission, the Community Health Accreditation Program, Inc., the Accreditation Commission for Health Care, and/or other accrediting body with deeming authority for hospice services from the Centers for Medicare and Medicaid Services (CMS) or CMS licensing survey.

7. **Data Requirements:** Applicants should agree to provide the Department of Health and/or the Health Services and Development Agency with all reasonably requested information and statistical data related to the operation and provision of services and to report that data in the time and format requested. As a standard of practice, existing data reporting streams will be relied upon and adapted over time to collect all needed information.

8. **Education.** The applicant should provide details of its plan in the Service Area to educate physicians, other health care providers, hospital discharge planners, public health nursing agencies, and others in the community about the need for timely referral of hospice patients.

RESIDENTIAL HOSPICE SERVICES

DEFINITIONS

9. **“Service Area”** shall mean the county or contiguous counties represented on an application as the reasonable area in which a health care institution intends to provide Residential Hospice Services and/or in which the majority of its service recipients reside. A radius of 50 miles and/or a driving time of up to 1 hour from the site of the residential hospice services facility may be considered a “reasonable area;” however, full counties shall be included in a Service Area. Only counties with a Hospice Penetration Rate that is

less than 80 percent of the Statewide Median Hospice Penetration Rate may be included in a proposed Service Area.

10. **“Statewide Median Hospice Penetration Rate”** shall mean the number equal to the Hospice Penetration Rate (as described below) for the median county in Tennessee.

NEED

11. **Need Formula.** The need for Residential Hospice Services shall be determined by using the following Hospice Need Formula, which shall be applied to each county in Tennessee:

$$A / B = \text{Hospice Penetration Rate}$$

Where:

A = the mean annual number of Hospice unduplicated patients served in a county for the preceding two calendar years as reported by the Tennessee Department of Health;

and

B = the mean annual number of Deaths in a county for the preceding two calendar years as reported by the Tennessee Department of Health.

Note that the Tennessee Department of Health Joint Annual Report of Hospice defines “unduplicated patients served” as “number of patients receiving services on day one of reporting period plus number of admissions during the reporting period.”

Need shall be established in a county (thus, enabling an applicant to include it in the proposed Service Area) if its Hospice Penetration Rate is less than 80% of the Statewide Median Hospice Penetration Rate; further, existing Residential Hospice Services providers in a proposed Service Area must show an average occupancy rate of at least 85%.

The following formula to determine the demand for additional hospice service recipients shall be applied to each county included in the proposed service area, and the results for each county’s calculation should be aggregated for the proposed service area:

$$(80\% \text{ of the Statewide Median Hospice Penetration Rate} - \text{County Hospice Penetration Rate}) \times B$$

OTHER RESIDENTIAL HOSPICE SERVICES STANDARDS, AND CRITERIA

12. **Types of Care.** An applicant should demonstrate whether or not it will have the capability to provide general inpatient care, respite care, continuous home care, and routine home care to its patients. If it is not planning to provide one or more of these listed types of care, the applicant should explain why.
13. **Expansion from Non-Residential Hospice Services.** An applicant for Residential Hospice Services that provides Hospice Services should explain how the Residential Hospice Services will maintain or enhance the Hospice Services' continuum of care to ensure patients have access to needed services.

HOSPICE SERVICES

DEFINITIONS

14. **“Service Area”** shall mean the county or contiguous counties represented on an application as the area in which an applicant intends to provide Hospice Services and/or in which the majority of its service recipients reside. Only counties with a Hospice Penetration Rate that is less than 80 percent of the Statewide Median Hospice Penetration Rate may be included in a proposed Service Area.
15. **“Statewide Median Hospice Penetration Rate”** shall mean the number equal to the Hospice Penetration Rate (as described below) for the median county in Tennessee.

NEED

16. **Need Formula.** The need for Hospice Services shall be determined by using the following Hospice Need Formula, which shall be applied to each county in Tennessee:

$$A / B = \text{Hospice Penetration Rate}$$

Where:

A = the mean annual number of Hospice unduplicated patients served in a county for the preceding two calendar years as reported by the Tennessee Department of Health;

and

B = the mean annual number of Deaths in a county for the preceding two calendar years as reported by the Tennessee Department of Health.

Note that the Tennessee Department of Health Joint Annual Report of Hospice defines “unduplicated patients served” as “number of patients receiving services on day one of reporting period plus number of admissions during the reporting period.”

Need shall be established in a county (thus, enabling an applicant to include it in the proposed Service Area) if its Hospice Penetration Rate is less than 80% of the Statewide Median Hospice Penetration Rate and if there is a need shown for at least 120 additional hospice service recipients in the proposed Service Area.

The following formula to determine the demand for additional hospice service recipients shall be applied to each county, and the results should be aggregated for the proposed service area:

$(80\% \text{ of the Statewide Median Hospice Penetration Rate} - \text{County Hospice Penetration Rate}) \times B$

Rationale for Revised and Updated Standards and Criteria for Hospice Services

Definitions

Deaths. The Division of Health Planning patterns its need formula off the Kentucky certificate of need formula that takes into account all deaths, instead of using a type of cancer death weighted formula that appeared in the Guidelines for Growth. Cancer patient utilization of hospice services has lessened in relation to non-cancer patients, while the utilization of hospice services continues to grow.

Residential Hospice and Hospice. The Division recognizes that residential hospice services and hospice services are able to perform the same level of services and has thus not distinguished between the need for hospice services based on the two types of service providers. However, certain standards, such as service area, provide for a difference in consideration of an application.

Standards and Criteria

Quality of Care: Providing for adequate and qualified staffing is an important part of providing quality care to patients, and is one of the State Health Plan's Principles for Achieving Better Health. A community linkage plan that assures continuity of care also falls within this Principle. Letters from physicians in support of an application shall detail specific instances of unmet need for hospice services. Quality improvement, data reporting, and outcome and process monitoring fall under this Principle as well, as does accreditation of the hospice service program. Finally, it should be noted that Medicare currently requires all four levels of hospice care for reimbursement (which also supports the third Principle regarding Economic Efficiencies, below).

Access: The second Principle for Achieving Better Health in the State Health Plan focuses on access to care. Accordingly, the applicant must demonstrate an ability and willingness to serve equally all of the Service Area in which it seeks certification and provide a plan for its care of indigent patients. As well, in addition to the factors set forth in HSDA Rule 0720-11-.01(1) (listing the factors concerning need on which an application may be evaluated), the HSDA may choose to give special consideration to an applicant that is able to show that there is limited access in the proposed Service Area.

Economic Efficiencies: The third Principle for Achieving Better Health focuses on encouraging economic efficiencies in the health care system. The new standards and criteria provide that the applicant's proposed charges shall be reasonable in comparison with those of other similar facilities in the Service Area or in adjoining service areas. Educating the health care community on hospice services also falls within this Principle; the education component also addresses the last Principle of recruiting, developing and retaining a sufficient qualified health care workforce.

Data Needs. The Division recognizes that Hospice patients known as “general inpatients” receive Hospice services in locations other than their homes, such as nursing homes and hospitals, and that these patients are not separately identified on the Joint Annual Report. The Division is hoping to correct this omission in the future to better account for the total utilization of Hospice services.

Appendices

Appendix A: Health Services and Planning Policy Statement

Appendix B: Health and Wellness Task Force Members

Appendix C: Tennessee Department of Mental Health and Substance Abuse Services Three Year Plan's Goals and Objectives

Appendix A. Health Services and Planning Act

Policy Statement

The Office of Health Planning is charged by TCA § 68-11-1625 with creating a State Health Plan. The text of the law follows.

- a. There is created the state health planning division of the department of finance and administration. It is the purpose of the planning division to create a state health plan that is evaluated and updated at least annually. The plan shall guide the state in the development of health care programs and policies and in the allocation of health care resources in the state.
- b. It is the policy of the state of Tennessee that:
 1. Every citizen should have reasonable access to emergency and primary care;
 2. The state's health care resources should be developed to address the needs of Tennesseans while encouraging competitive markets, economic efficiencies and the continued development of the state's health care industry;
 3. Every citizen should have confidence that the quality of health care is continually monitored and standards are adhered to by health care providers; and
 4. The state should support the recruitment and retention of a sufficient and quality health care workforce.
- c. The planning division shall be staffed administratively by the department of finance and administration in a manner that the department deems necessary for the performance of the planning division's duties and responsibilities, which may include contracting for the services provided by the division through a private person or entity.
- d. The duties and responsibilities of the planning division include:
 1. To develop and adopt a State Health Plan, which must include, at a minimum, guidance regarding allocation of the state's health care resources;

2. To submit the State Health Plan to the Health Services and Development Agency for comment;
3. To submit the State Health Plan to the Governor for approval and adoption;
4. To hold public hearings as needed;
5. To review and evaluate the State Health Plan at least annually;
6. To respond to requests for comment and recommendations for health care policies and programs;
7. To conduct an ongoing evaluation of Tennessee's resources for accessibility, including, but not limited to, financial, geographic, cultural, and quality of care;
8. To review the health status of Tennesseans as presented annually to the Division by the Department of Health and the Department of Mental Health and Developmental Disabilities;
9. To review and comment on federal laws and regulations that influence the health care industry and the health care needs of Tennesseans;
10. To involve and coordinate functions with such State entities as necessary to ensure the coordination of State health policies and programs;
11. To prepare an annual report for the General Assembly and recommend legislation for its consideration and study; and
12. To establish a process for timely modification of the State Health Plan in response to changes in technology, reimbursement and other developments that affect the delivery of health care.

Appendix B. Health and Wellness Task Force Members

John Lacey III, MD, Co-Chair. University of Tennessee Chief Medical Officer

Richard Bracken. Healthcare Corporation of America Chief Executive Officer

Reggie Coopwood, MD. Regional Medical Center Chief Executive Officer

Pete DeBusk. DeRoyol Industries Chief Executive Officer

John J. Dreyzehner, MD, MPH, Co-Chair. Department of Health Commissioner

Darrell Freeman. Zycron Chief Executive Officer

Inga Himelright, MD. Blue Cross/Blue Shield of Tennessee Chief Medical Officer

Kevin Huffman. Education Commissioner

Cato Johnson. Methodist Hospital Vice President

Alan Kohrt, MD. TC Thompson Children's Hospital Medical Director

Wendy Long, MD, MPH. TennCare Chief Medical Officer

Michael Minch, MD. Tennessee Medical Association

Randy Wykoff, MD, MPH. Dean, East Tennessee State University College of Public Health

Ed Pershing. Pershing Yoakley & Associates President

Vickie Shepard. Healthways, Inc. Senior Vice President

Doug Varney. Mental Health Commissioner

Dennis Vonderfecht. Mountain States Health System Chief Executive Officer

Appendix C. Department of Mental Health and Substance Abuse Services Three Year Plan Goals and Objectives

Goal 1: Tennesseans understand that behavioral health is essential to overall health.

Objective 1.1: TDMHSAS increases awareness, knowledge and sensitivity of the public, state entities and other relevant parties regarding mental illness, serious emotional disturbances, substance use disorders, and COD, including the service needs of these populations.

Objective 1.2: TDMHSAS promotes activities and education to decrease deaths by suicide.

Goal 2: Services are Service Recipient and Family Driven and Youth Guided.

Objective 2.1: Service recipients and families participate in the design, implementation and evaluation of the service system.

Goal 3: Disparities in Services are Eliminated.

Objective 3.1: TDMHSAS increases awareness of the importance of a culturally competent service system and improves availability of services and supports that reflect the cultural diversity of Tennessee.

Objective 3.2: TDMHSAS increases access to services and supports, especially in rural areas.

Goal 4: Early Screening, Assessment, and Referral to Services are Common Practice.

Objective 4.1: TDMHSAS provides prevention and early intervention services and education to persons or families with persons at risk of or who have serious emotional disturbance, mental illness, and substance use disorders.

Objective 4.2: TDMHSAS promotes screening, assessment, and treatment/service options for persons with co-occurring disorders of substance use disorders and mental illness.

Objective 4.3: TDMHSAS promotes screening for mental illness and substance use disorders in primary health care.

Goal 5: Excellent Services are Delivered.

Objective 5.1: TDMHSAS promotes the use of research findings and evidence-based practices.

Objective 5.2: TDMHSAS promotes the use of research findings and evidence-based practices.

Objective 5.3: TDMHSAS improves and expands the workforce that provides services and supports.

Objective 5.4: Quality services are available to persons with mental illness, serious emotional disturbance, and substance use disorders.

Goal 6: Technology is Used to Access Services and Information.

Objective 6.1: TDMHSAS will use technology to improve access and coordination of services, especially in remote areas or in underserved populations.

Objective 6.2: TDMHSAS will develop and implement an integrated electronic health record and personal health information system.

¹ “America’s Health Rankings,” United Health Foundation, accessed December, 2012
<http://www.americashealthrankings.org/>.

² “National Center for Health Statistics mortality data and US Census Bureau population data,2010; calculations from the American Human Development Index.” The Centers for Disease Control and Prevention, Accessed December 2012.

<http://measureofamerica.org/maps/?area=States&race=All&sex=All&year=Year2010&index=Life%20Expectancy%20at%20Birth%20%28years%29>.

³ “Healthy People 2020: Leading Health Indicators” Accessed December, 2012.

<http://www.healthypeople.gov/2020/LHI/default.aspx>

⁴ “America’s Health Rankings,” United Health Foundation, accessed December 2012.

<http://www.americashealthrankings.org/2010/index.html>

⁵ “National Center for Health Statistics mortality data and US Census Bureau population data,2011; calculations from the American Human Development Index.” The Centers for Disease Control and Prevention, Accessed December 2012.

<http://measureofamerica.org/maps/?area=States&race=All&sex=All&year=Year2010&index=Life%20Expectancy%20at%20Birth%20%28years%29>.

⁶ “A New Way to Talk About the Social Determinants of Health.” Copyright 2010 Robert Wood Johnson Foundation. <http://www.rwjf.org/vulnerablepopulations/product.jsp?id=66428>

⁷ National Centers for Chronic Disease Control and Prevention Behavioral Risk Factor Surveillance System Annual Survey Data, United States Department of Health and Human Services Centers for Disease Control and Prevention, accessed December 2012. <http://apps.nccd.cdc.gov/brfss/page.asp?cat=XX&yr=2011&state=All#XX>.

⁸ The Behavioral Risk Factor Surveillance System (BRFSS), a state-based computer-assisted telephone interviewing effort conducted in cooperation with the Centers for Disease Control and Prevention. Questions are constructed to determine the behaviors of individuals that will affect their risk of developing chronic diseases that may lead to premature mortality and morbidity. The data collected help to identify high risk populations that can be targeted for intervention programs. The data can also be used to track changes over time of prevalence of risk factor behaviors and related diseases, and can assess the impact of health promotion and prevention intervention programs. The Tennessee Department of Health has been participating in this system on a continuing basis since 1984, surveying adults from randomly selected households throughout the state every month. Many of the behavioral risk factors surveyed in this system cannot be obtained from any other health statistics sources and this system serves as an important, timely, accurate, and often sole, resource in measuring and monitoring the personal health behaviors and lifestyle conditions that are related to good or poor health outcomes or situations. These figures are taken from the BRFSS; its 2011 prevalence data should be considered a baseline year for data analysis and is not directly comparable to previous years of BRFSS data included in previous updates to the State Health Plan because of the changes in weighting methodology and the addition of the cell phone sampling frame).

⁹ “State Estimates of Substance Use and Mental Health,” Office of Applied Studies of the 2006-2007 National Surveys on Drug Use and Health. Substance Abuse and Mental Health Services Administration, accessed December, 2012. <http://www.oas.samhsa.gov/2k7/State/Tennessee.htm>.

¹⁰ National Centers for Chronic Disease Control and Prevention Behavioral Risk Factor Surveillance System Annual Survey Data, United States Department of Health and Human Services Centers for Disease Control and Prevention, accessed December 2012. <http://apps.nccd.cdc.gov/brfss/page.asp?cat=XX&yr=2011&state=All#XX>.

¹¹ Tennessee Department of Health, Office of Policy, Planning and Assessment, Division of Health Statistics – Death Certificates

¹² Report by the Controlled Substance Database Advisory Committee of the State Board of Pharmacy to the Tennessee General Assembly, April 2012.

¹³ SAMHSA, Center for Behavioral Health Statistics and Quality, State Estimates of substance Use and Mental Disorders from the 2008-209 National Surveys on Drug Use and Health (data provided by Tennessee Department of Mental Health and Substance Abuse Services).

¹⁴ National Centers for Chronic Disease Control and Prevention Behavioral Risk Factor Surveillance System Annual Survey Data, United States Department of Health and Human Services Centers for Disease Control and Prevention, accessed December 2012 <http://apps.nccd.cdc.gov/brfss/page.asp?cat=XX&yr=2011&state=All#XX>.

¹⁵ SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 and 2010 (data provided by Tennessee Department of Mental Health and Substance Abuse Services).

¹⁶ “Illicit drugs” include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription type psychotherapeutics used non-medically.

¹⁷ Cancer in Tennessee 2005-2009, November 2012, Tennessee Department of Health, Division of Policy, Planning and Assessment, Office of Health Statistics

¹⁸ America’s Health Rankings,” United Health Foundation, accessed December, 2012 <http://www.americashealthrankings.org/>.

¹⁹ The Youth Risk Behavior Survey (YRBS) is a population-based survey of students in grades 9 through 12. The YRBS, developed by the Centers for Disease Control and Prevention (CDC), provides information on the prevalence of behaviors practiced by young people that put their health at risk. This information can then be used to more effectively target and improve health programs. The YRBS is conducted every two years.

²⁰ Fletcher and Richards, “Diabetes’s ‘Health Shock’ To Schooling And Earnings: Increased Dropout Rates And Lower Wages And Employment In Young Adults;” *Health Affairs*, January 2012.

²¹ The database assists in research, statistical analysis, criminal investigations, enforcement of state or federal laws involving controlled substances, and the education of health care practitioners, per its statutory language.

²² ACS Chemical Neuroscience, September, 2012;

<http://pubs.acs.org/doi/abs/10.1021/cn3000923?prevSearch=prescription%2Bdrugs&searchHistoryKey=>

²³ Report by the Controlled Substance Database Advisory Committee of the State Board of Pharmacy to the Tennessee General Assembly, April 2012.

²⁴ Members of the Neonatal Abstinence Syndrome Subcabinet Working Group are the Commissioners of TDH, the Department of Human Services, the Department of Children’s Services, TDMHSAS, the Deputy Commissioner of the Division of Health Care Finance and Administration (HCFA), and the Chief Medical Officer of HCFA.

²⁵ The Cabinet is comprised of commissioners from the departments of Children’s Services, Education, Health, Human Services, and Mental Health and Substance Abuse Services, as well as the Bureau of TennCare director

²⁶ Institute of Medicine, Committee on Monitoring Access to Personal Health Care Services. Access to health care in America. Washington, DC: National Academies Press; 1993.

²⁷ *National Healthcare Disparities Report, United States 2010* (Rockville, MD: Agency for Healthcare Research and Quality, 2011). AHRQ Publication No. 11-0004. Accessed November, 2011.

<http://www.ahrq.gov/qual/nhdr10/Chap9.htm>

²⁸ Institute of Medicine. An Integrating Framework for Assess the Value of Community –Based Prevention. National Academies Press. 2012.

²⁹ Update on the Healthcare Safety Net, January 23, 2012, John J. Dreyzehner, MD, MPH, Commissioner; https://health.state.tn.us/statistics/PdfFiles/Healthcare_Safety_Net_Report.pdf

³⁰ Children’s Dental Campaign, Pew Center on the States, accessed December 2012, <http://www.pewstates.org/projects/childrens-dental-campaign-328060>

³¹ “Shortage Designation: HPSAs, MUAs, and MUPs.” Health Resources and Services Administration, U.S. Department of Health and Human Services, accessed September 2010. <http://bhpr.hrsa.gov/shortage/>

³² “National Health Expenditures 2010 Highlights.” Centers for Medicare and Medicaid Services, accessed December, 2012. <https://www.cms.gov/NationalHealthExpendData/downloads/highlights.pdf>.

³³ “OECD Health Data,” Organization for Economic Development and Cooperation, accessed December, 2012, <http://www.oecd.org/unitedstates/49084355.pdf>. The Centers for Medicare and Medicaid Services predicts that in 2011, national health spending is estimated to have reached \$2.7 trillion, growing at the same rate of 3.9 percent

observed in 2010, which is just slightly above the historically low 2009 growth rate of 3.8 percent. According to the CMS, the low rate of estimated growth in overall health spending in 2011 largely reflects the lingering effects of the recent recession and modest recovery, which contributed to slower growth in the use of health care goods and services, slower medical price growth, reduced private health insurance enrollment, and employer efforts to control spending. Similar growth in nominal GDP of 3.9 percent has maintained the estimated health share of GDP at 17.9 percent.

<http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/Proj2011PDF.pdf>

³⁴ “Health Care Expenditures per Capita by State of Residence,” Kaiser Family Foundation,, accessed December, 2012. <http://www.statehealthfacts.org/profileglance.jsp?rgn=44>

³⁵ “Tennessee: Health Care Expenditures per Capita by State of Residence, ,” Kaiser Family Foundation, accessed December, 2012. <http://www.statehealthfacts.org/profileglance.jsp?rgn=44>.

³⁶ “Cardiovascular Deaths/ Diabetes: America’s Health Rankings, 2011,” United Health Foundation, accessed December 20, 2012. <http://www.americashealthrankings.org/ALL/CVDDeaths/2012>.

³⁷ State Of Tennessee, “Comprehensive Annual Financial Report Year Ending June 30, 2010” 17. Accessed December 2011. http://www.tn.gov/finance/act/cafr_fy2011/cafr_fy11.pdf

³⁸ “Health Expenditure Data, Health Expenditures by State of Residence,” Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, accessed November, 2012. <http://www.cms.hhs.gov/NationalHealthExpendData/downloads/res-us.pdf>

³⁹ “Crossing the Quality Chasm: A New Health System for the 21st Century.” Institute of Medicine. 2001. Accessed December 2011. http://www.nap.edu/openbook.php?record_id=10027&page=39

⁴⁰ Elliott S. Fisher, Julie P. Bynum, and Jonathan S. Skinner. “Slowing the Growth of Health Care Costs — Lessons from Regional Variation,” *The New England Journal of Medicine*, 360(2009): 849-852.

⁴¹ “America’s Health Rankings,” United Health Foundation, accessed December 2012.

⁴² Souce: Medicare data analyzed by the Dartmouth Atlas of Health Care; <http://www.countyhealthrankings.org/#app/tennessee/2010/measures/factors/7/map>

⁴³ Agency for Healthcare Research and Quality. 2009 *National Healthcare Quality Report*. (Rockville, MD: U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, 2010), AHRQ Pub. No. 10-0003, accessed December 2012. <http://statesnapshots.ahrq.gov/snaps10/dashboard.jsp?menuId=4&state=TN&level=0>.

⁴⁴ “National Medicare Readmission Findings: Recent Data and Trends.” . Centers for Medicare & Medicaid Services, n.d. Web. 10 Oct 2012. <<http://www.academyhealth.org/files/2012/sunday/brennan.pdf>>.

⁴⁵ “By State: Hospital Quality Bonuses and Penalties,” Kaiser Health News, December 20, 2012, <http://www.kaiserhealthnews.org/Stories/2012/December/21/value-based-purchasing-by-state-chart.aspx>

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⁴⁷ Council on Graduate Medical Education. “Physician Workforce Policy Guidelines for the United States, 2000-2020,” Council on Graduate Medical Education Sixteenth Report, (2005).

⁴⁸ “America’s Health Rankings,” United Health Foundation, accessed December, 2012 <http://www.americashealthrankings.org/>.

⁴⁹ “Tennessee Physician Workforce Profile.” American Association of Medical Colleges, accessed December 2012. <https://www.aamc.org/download/152182/data/tennessee.pdf>

⁵⁰ Gary Kulkulka. “Tennessee Health Care Providers Workforce Assessment,” *The Rural Partnership* (2008).

⁵¹ Bureau of Labor Statistics, “Nurse,” U.S. Department of Labor, <http://www.bls.gov/k12/help04.htm>.

⁵² Supply and Demand Study, Tennessee Center for Nursing, February 18, 2013, <http://www.centerfornursing.org/nursemanpower/>

⁵³ “Curing the Crisis...Progress and Prognosis.” Center for Nursing, accessed on September 14, 2010. <http://www.centerfornursing.org/CuringtheCrisisProgressPrognosis.pdf>

⁵⁴ “Oral Health,” US DHHS Health Resources and Services Administration, accessed December 2012, <http://www.hrsa.gov/publichealth/clinical/oralhealth/>

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- ⁵⁵ Oral Health Workforce,” US DHHS Health Resources and Services Administration, accessed October 21, 2010. <http://www.hrsa.gov/publichealth/clinical/oralhealth/workforce.html>
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- ⁶⁰ Middle Tennessee State University Center for Health and Human Services, *Allied Health in Tennessee: A Supply and Demand Study 2010*. (2010).
- ⁶¹ “2007 State Public Health Workforce Shortage Report.” Association of State and Territorial Health Officials. Accessed October 28, 2010. <http://biotech.law.lsu.edu/cdc/astho/WorkforceReport.pdf>
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- ⁶³ “America’s Health Rankings,” United Health Foundation, accessed December, 2012 <http://www.americashealthrankings.org/>.
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- ⁶⁷ Supply and Demand Study, Tennessee Center for Nursing, February 18, 2013, <http://www.centerfornursing.org/nursemanpower/>
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