



# **The 2000-2002 State Health Plan Summary, Analysis, Accomplishments, and the Future**

**September 2010**

**Draft**



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**West Virginia Health Care Authority**  
**The 2000-2002 State Health Plan**  
**Summary, Analysis, Accomplishments, and the Future**

**Executive Summary**

The West Virginia Health Care Authority (WVHCA) developed the 2000-2002 State Health Plan in collaboration with the public and private sectors and with assistance from various agencies, associations, groups and consumers. The Plan became the policy blueprint for shaping West Virginia's health care delivery system. Not only was the Plan predicated as the legal foundation for the WVHCA's decisions in its regulatory program, it also proposed needed change within the health care system to achieve cost effectiveness while balancing considerations for improved access, quality, and financing.

From nine strategic issues identified, policy recommendations were made that would have the greatest impact on the future of health care in West Virginia. Those strategic issues were as follows:

- Promotion of a Coordinated Health Care System
- Access
- Financing and cost
- Accountability
- Quality of care
- At-risk populations
- Public health
- Rural health
- Coordinated health-related information networks.

Major accomplishments have been made over the years. Although there are many more, several have been listed. They are:

- The Preventive and Primary Care Pilot Program implementation which improved access to care;
- State Children's Health Insurance Program implementation;
- AccessWV implementation, which guarantees that all West Virginia residents who qualify can purchase health insurance through the plan, regardless of their current and past health circumstances;
- CompareCareWV™ development and implementation – a web-based tool which enables patients and their families to review hospital charges, quality of care, and related health options;
- WVRx implementation which provides prescription drugs to the uninsured and under-insured;

- WVHCA's *Health IQ* implementation – an interactive querying tool that allows those seeking information to ask interactive questions based on non-confidential data derived from the hospital inpatient discharge data;
- WVHIN creation, which was established to promote the design, implementation, operation and maintenance of a fully interoperable statewide network to facilitate public and private use of health care information while ensuring the privacy and security of patient health care information;
- Health care coverage for 97.4% of children in WV; and
- The creation of the Health Improvement Institute.

West Virginia's future is predicated on the accomplishments of the past; thus, a review and comparison of state demographics, health status, availability of healthcare providers and accomplishments over the last decade was completed. The information that has been gathered will be invaluable for planning and strategizing future endeavors as a new State Health Plan is developed.

In many ways, West Virginia moved forward and became a national leader. In other areas, however, the state continues to maintain its status. Research has determined that WV ranks highest in the following health and health-related areas:

- Smokeless tobacco users (31.2%)
- SSDI benefits as a % of population (8.8%)
- Loss of teeth (42.8%)
- Diabetes (12.3%, adults)
- Disability (21.5%)
- Serious psychological distress (12.73%)
- Prevalence of smoking (26.5%)
- Preventable hospitalizations
- Poor physical health days
- High cholesterol (42.4%)
- High blood pressure (33.6%)
- Heart attack (7.6%, adults)
- Cardiac disease (8.1%, adults)
- Poorest overall health status.

Heart disease, cancer, stroke, and chronic obstructive pulmonary disease continue to be the leading causes of death in WV, exceeding national averages. Those same diagnoses have been prevalent, among others, as the top discharge diagnosis related groups for WV hospitals over the last decade.

Many other states are also experiencing the same or similar issues as WV after reviewing national initiatives and other states' health plans. Of sixteen states reviewed, including those states contiguous to WV's borders and those with similar geography and/or demographics, each state had a

different purpose and utilized a different process. The review reinforced the idea that there are as many ways to proceed in developing a new state health plan as there are states.

Certificate of need (CON) was required in eleven of the states reviewed. In many of the states requiring CON, the structure for the state's health plan was based on prevalent state health issues and changes to CON standards to meet the identified health needs. Most of the states that did not require certificate of need utilized a quality improvement approach to advance health initiatives, while others used various approaches related to specific health issues and/or *Healthy People 2010* objectives. Of all the states reviewed, Pennsylvania (PA) had the most elaborate structure and methodology for plan development, implementation, and evaluation.

Regardless of the methodology, major challenges are expected similar to those encountered during the implementation phase of WV's State Health Plan (2000). Many of the participants and agencies commonly reported encountering constraints and challenges in implementing policy recommendations, including resistance by key people or organizations, problems with governmental categorical funding or program requirements, and lack of necessary resources. Despite the challenges, it was universally agreed that there were considerable costs to the population's health status and the health care system if changes in the Plan were not addressed.

For WV, there are questions that must be answered and decisions that must be made and evaluated before a new state health plan can be developed. Besides the overarching question of "*What is the purpose of WV's state health plan?*" other important questions must be considered and decisions made before a process for developing a new state plan can begin.

Regardless of the framework of the future State Health Plan, cross divisional thinking and collaboration between the public and private sectors, state agencies, governmental and private insurance companies, and others, is vital for developing innovative strategies to improve the health of West Virginians. By highlighting health issues that are being worked by numerous groups and by combining strategies across all sectors, West Virginia's State Health Plan should become the impetus for guiding state agencies, health care policy makers, professionals and private citizens toward achievement of defined goals, and should provide a basis for program and priority development, funding requests, and implementation of regulatory functions. All play an important role in enabling the transfer of health care information into health care knowledge so that positive change can occur in reducing health risks and for improving the health status of West Virginians.

**West Virginia Health Care Authority**  
**The 2000-2002 State Health Plan**  
**Summary, Analysis, Accomplishments, and the Future**

The West Virginia Health Care Authority (WVHCA) developed the 2000-2002 State Health Plan in collaboration with the public and private sectors and with assistance from various agencies, associations, groups and consumers. The Plan became the policy blueprint for shaping West Virginia's health care delivery system. Not only was the Plan predicated as the legal foundation for the WVHCA's decisions in its regulatory program, it also proposed needed change within the health care system to achieve cost effectiveness while balancing considerations for improved access, quality, and financing.

From the beginning stages of development, goals were set that became the structure used to establish the Plan. They were:

- to control costs;
- to improve the quality and efficiency of the health care system;
- to encourage collaboration; and
- to develop a system of health care delivery that makes health services available to all residents of the state.

A statewide appraisal to gain an understanding of the demography, geography, availability of current health systems, and conditions that may indicate the health status of the West Virginia population was integral in establishing a State Health Plan for West Virginia. The information provided a framework for determining and establishing priorities for addressing statewide health care needs, not only through the present structure, but for future health care systems that may improve access to health care services while constraining costs and improving the efficiency and effectiveness of those services.

As a result of the data gathered and the perceived needs of the state, an advisory group, which consisted of representatives of consumers, providers, purchasers, payers, state government agencies, Legislators, businesses, and other groups, was invited to serve by the Governor. The group identified and ranked the strategic issues in order of urgency and priority. The issues focused on:

- Reducing unnecessary utilization of health care;



- Encouraging persons to place a higher value on health;
- Outcomes measurement;
- Improved long-term outcomes;
- Regionalizing services;
- Facilitating the development of a responsible marketplace;
- Addressing issues such as the workforce, funding, information technology, data, training, cooperation of key groups, and education of current and future providers.

“Issue Summaries” arose from the strategic issues identified by the advisory group. As a result, corresponding policy recommendations were developed. There were nine strategic issues identified for policy change that would have the greatest potential impact on the future of health care in West Virginia. They were:

- Promotion of a Coordinated Health Care System
- Access
- Financing and cost
- Accountability
- Quality of care
- At-risk populations
- Public health
- Rural health
- Coordinated health-related information networks.

Lead agencies, consisting of state agencies, university centers, and private sector programs, were designated by the advisory group to implement the Plan’s policy recommendations. The agencies were responsible for developing and implementing individual work plans for each of their assigned policies, assuring that the most urgent issues were addressed.<sup>1</sup>

Many of the agencies reported experiencing constraints and challenges in implementing the Plan policy recommendations. It was commonly reported that challenges to policy implementation were encountered, including resistance by key people or organizations, problems with governmental categorical funding or program requirements, and lack of necessary resources. Despite the challenges, it was universally agreed that there were considerable costs to the population’s health status and the health care system if changes in the Plan were not addressed.<sup>2</sup>

In nearly 10 years, many of the policy recommendations outlined in the 2000 State Health Plan were accomplished, or the accomplishments far exceeded the policy recommendations' initial intent. In many ways, West Virginia moved forward and became a national leader. In other areas, however, the state continues to maintain its status; health indicators show the population is compromised. Because the health status of the state's population does not seem to be improving, it is imperative that systems of care work collaboratively, and collectively, for change in WV.

### **Demographics and Health Status Comparisons: 1990-2009**

West Virginia's future is predicated on the accomplishments of the past; thus, a review of the state demographics, health status and accomplishments that stemmed from the 2000 Plan will be invaluable for planning, strategizing, and developing West Virginia's future State Health Plans.

Many of the strategies and policy recommendations in the 2000 State Health Plan were developed as a result of the information available about the State of West Virginia, particularly those factors reviewed and used to determine the health status of the population. In many instances, census data from 1990 was used since the 2000 census data was not yet complete at the time of the current Plan's publication.

For this analysis a comparison of demographics was made between the same or similar indicators for the years 1990, 2000, and present data available, since the 2010 census data is not yet available. Tables in the document provide a comparison snapshot of varying demographics and disease processes. The indicators chosen for comparison not only provide a picture of the state economically, but also provide information as to the health status of the population over the years.

**Population Trends and Characteristics.** Population trends and general characteristics remain virtually unchanged in nearly 20 years. Although the population has increased since 1990, it has only increased by 1.0 percent. The population is projected to decrease from 1,828,538 in 2009, to 1,825,259 by 2014. It will likely recede further to 1,806,545 by 2019.<sup>3</sup>

**Table 1** provides data on several different factors impacting the population's well being, and reflects changes over the years. There is one notable change in the race of the population in the 20-year timeframe – there is a growing Hispanic population, which was not noted in the 1990 census data. Otherwise, the population remains predominately white, with an increasing “other” population. It is hopeful that the 2010 census data may provide more information on what the

composition of those populations might be today. If it is found that the composition of the population is changing, health care requirements may also change in the future as well.

**Table 1**

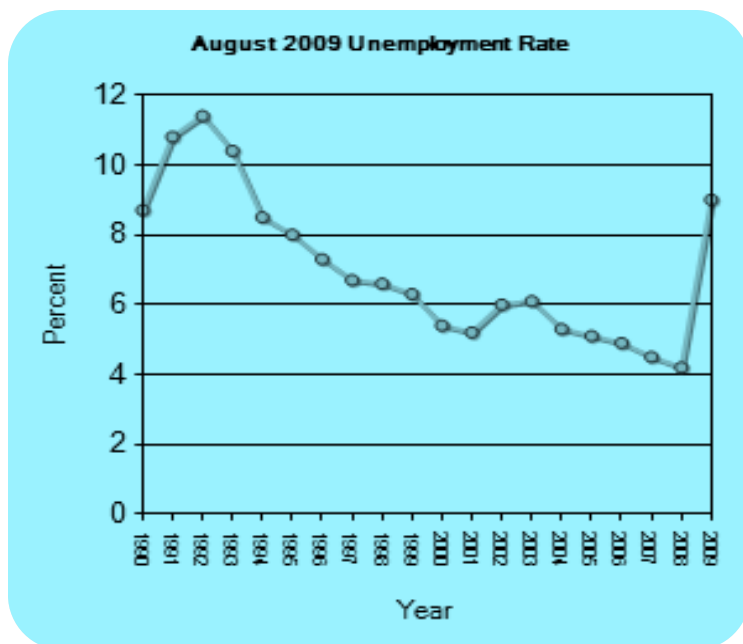
	1990 Data	2000 Data	Most Recent
<b>Population</b>	<b>1,793,477</b>	<b>1,808,344<sup>4</sup></b>	<b>1,814,468<sup>5</sup></b>
<b>Race</b>			
White	96.2%	95% <sup>6</sup>	94.5% <sup>5</sup>
Black	3.1%	3.2%	3.6%
Hispanic	--	0.7%	1.1%
Other	0.2%	1.3%	1.9%
<b>Age &gt; 65</b>	<b>15%</b>	<b>15.3%<sup>4</sup></b>	<b>15%<sup>7</sup></b>
<b>% of Population</b>			
Median Age	38	38.9 <sup>6</sup>	40.3 <sup>8</sup>
<b>Labor Force</b>			
Participation	53% <sup>4</sup>	54.5% <sup>4</sup>	53.2% <sup>9</sup>
<b>Median Household</b>			
Income <sup>10</sup>	\$36,343	\$37,857	\$37,994
<b>High School</b>			
Graduates <sup>10</sup>	77.1%	75.3%	76.9%
<b>Children in</b>			
Poverty <sup>10</sup>	27.82%	22.6%	21.8%
<b>Lack Insurance</b>			
Coverage <sup>10</sup>	13.2%	17.2%	14.6%

**Age Factors.** At the time of the current Plan, WV had the oldest population in the nation with a median age of 38. Twenty years later, WV now ranks number three in the nation with a median age of 40.3 years; only Maine and Vermont, respectively, rank higher.<sup>8</sup> The *average age* in WV is projected to continually rise over the next 10 years. By 2019, it is expected to be 42.2 years.<sup>3</sup>

Although WV had the oldest population in the nation in the last twenty years, the population over the age of 65 years grew only slightly. Although there was growth in this population, it has since diminished to 1990 levels. WV continues to have the highest number of Medicare enrollments in the nation as a percent of the total population; WV has 21 percent enrollment as compared to 15 percent nationally.<sup>7</sup>

**Employment, Education and Income.** The employment status, educational levels and median income levels seem to directly correlate with insurance coverage and health status of a population. Many of the same statistics were compared with those outlined in the 2000 Plan to gauge progress and are outlined below.

**Labor Force Participation and Unemployment.** In 2000, WV had the lowest rate of labor force participation in the nation at 54.5 percent<sup>4</sup> with no significant change at the present time as indicated in **Table 1**. The correlating annual unemployment rates have steadily fallen,



except for slight increases in 2003-2004.<sup>10</sup> During the period from 1990-1999, WV ranked highest, or near highest, in the nation in unemployment. Through the early to late 2000's, the rate ranged from 4.3 - 6.1 percent, and the rankings improved. Between 2008 and August 2009, WV's unemployment rate maintained at 4.3 percent, even though the recent economic crisis had caused the national unemployment rate to drastically increase to 10 percent. In August 2009, the rate rose sharply to 9 percent.<sup>10</sup> Between August and December 2009, the unemployment rate hovered at 9.1

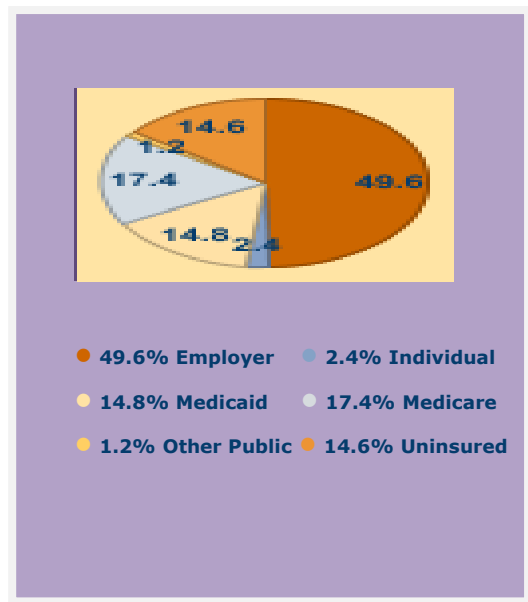
percent with an estimated 72,000 WV residents counted as unemployed during the month of December.<sup>11</sup> But in January 2010, the rate rose again to 10.5 percent and has continued to climb.

**Income and Poverty:** Although the median household income (income at which one-half of the households make more and one-half of the households make less) has increased over the years, WV's ranking has remained at or near the lowest of all the 50 states. In 1990 the median household income was \$36,343 and ranked 47<sup>th</sup>. In 2000, the median increased to \$37,857, but the ranking fell to 50<sup>th</sup> in the nation.<sup>10</sup> In 2009, not much changed relative to this indicator; median income is now \$37,994, 49<sup>th</sup> in the nation. However, according to Statemaster, which compiles statistics from sources such as the US Census Bureau, USA.gov, the FBI, Bureau of

Justice, and various other governmental and non-profit organizations, WV's present median household income is \$31,504.00 and last in the nation.<sup>8</sup> Regardless of the source, WV has not progressed in this area over the years. As a correlating factor, approximately 19 percent of the population falls below 100 percent of the federal poverty level, but children in poverty have declined, dropping from 47<sup>th</sup> to 41<sup>st</sup> in national rankings.<sup>10</sup>

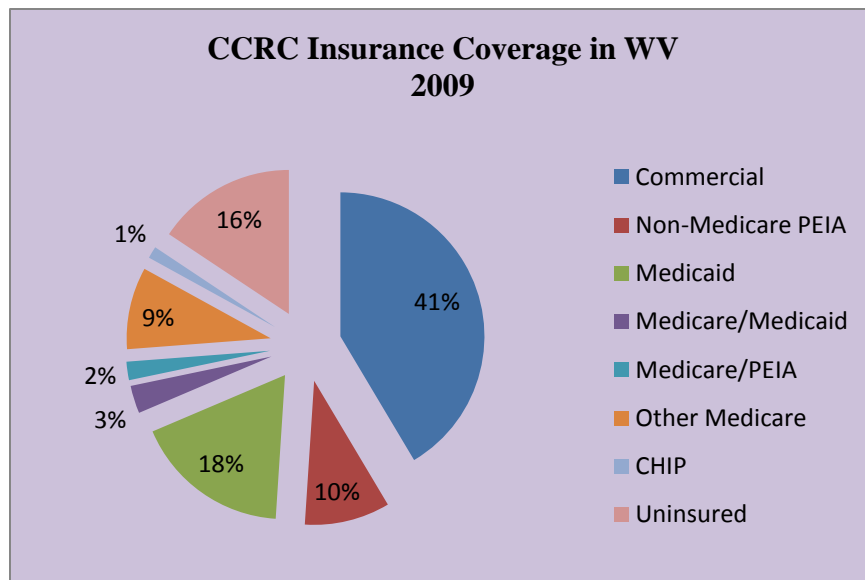
**Education Level.** Almost 77 percent of incoming ninth graders graduate with a regular high school degree within four years. The rate steadily increased from 2006-2008, but dropped in 2009 to present levels of 76.9 percent. Educational levels seem to be a contributing factor in an individual's ability to not only learn about, create and maintain healthy lifestyles, but to understand and access health care services when required.<sup>10</sup>

**Insurance Coverage.** Insurance coverage may be an indicator of the ability to access care as needed, especially preventive care.<sup>10</sup> In 2009, 14.6 percent of West Virginian's lacked health insurance privately, through their employer, or through the government as compared to 17.2 percent in 2000. The distribution of health insurance and coverage in WV in 2008 per the Kaiser Foundation is shown at right.<sup>7</sup>



In August 2009, the WVHCA engaged CCRC Actuaries, LLC, to develop an actuarial model detailing the current state of healthcare financing in West Virginia. The draft report, *“Health Care Financing in the State of West Virginia, An Analysis and Projection of the Current System and Potential Transformations, August 2009,”* provides actuarial projections for coverage and potential coverage options for the future. The analysis includes an assessment of the State of West Virginia health care financing system now and over the next ten years, assuming the current system remains unchanged.<sup>3</sup>

CCRC Actuaries, LLC received data from the State's data warehouse consultant concerning the detailed distribution of the population by age and gender for the insured groups of PEIA, PEIA-Medicare, Medicaid and Medicare Dual Eligible, Medicaid Non-Dual Eligible, and West Virginia's Children's Health Insurance Program (“WV CHIP”) from 2005 through 2007. Further data was obtained from the U.S. Census Bureau and other sources to understand the



distributions of the Commercially Insured, Uninsured, and Medicare Non-Dual Eligible and Non-PEIA groups. Actuarial analysis of WV's data shows insurance coverage similar to that shown by the Kaiser Foundation in 2008.

The charts below show the projected population and

average ages expected within each insurance category. While the population is projected to decline over the next 10 years, the Medicare population will increase 18.8 percent and the non-Medicare population will decrease 4.6 percent.

Population by Insurance Coverage			
Insurance Category	2009	2014	2019
PEIA Non-Medicare	175,324	173,557	167,792
WV CHIP	24,480	25,280	24,766
Medicaid Non-Duals	321,113	310,925	297,413
Commercially Insured	757,884	750,878	733,405
Uninsured	286,264	278,585	270,046
PEIA Medicare	37,784	41,584	46,463
Medicare & Medicaid Duals	57,118	60,712	64,692
Medicare Non-Medicaid/PEIA	168,571	183,737	201,967

Average Age by Insurance Coverage			
Insurance Category	2009	2014	2019
PEIA Non-Medicare	38.7	39.3	39.5
WV CHIP	10.5	10.5	10.7
Medicaid Non-Duals	23.2	23.4	23.5
Commercially Insured	39.9	40.7	41.5
Uninsured	36.9	37.5	37.9
PEIA Medicare	73.6	73.2	73.1
Medicare & Medicaid Duals	65.2	65.7	66.3
Medicare Non-Medicaid/PEIA	69.1	69.2	69.6

Using the information above, the change in demographics can be seen as the population in West Virginia ages. As the Medicare population increases, there will be a significant impact on future medical costs in the state.<sup>3</sup> The full report can be found and reviewed in [Appendix A](#).

## Health Status of the Population: Then and Now

As stated in the current State Health Plan, health is the physical, mental, social aspects and absence of disease that together make up the total well-being of the population. Health is influenced by biological, physical, genetic, and environmental factors as well as lifestyle choices.

The present Plan examined select health data representative of the residents of the state. Among the health indicators examined were natality, mortality, behavioral risk factors, chronic illnesses, infectious diseases, and environmental health. Together, the indicators formed a picture of the health of the residents and were the impetus behind determining health care priorities.

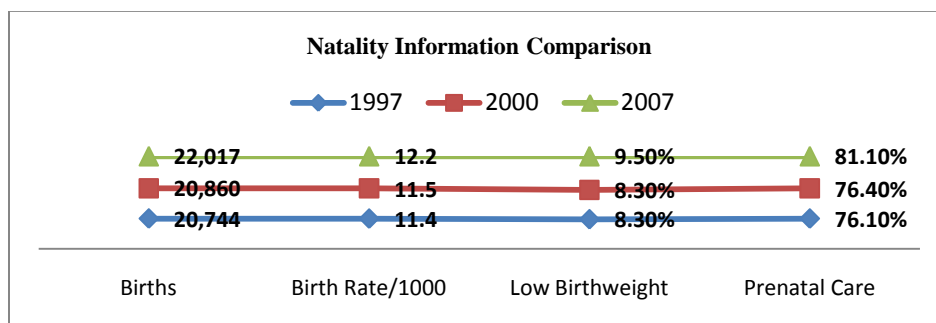
Almost a decade later, the indicators have been updated to determine if progress has been made in improving the health of the population and for identifying goals for the future.

## Natality and Infant Mortality

**Births.** In proportion to the increase in the population, births have remained virtually constant over the last 10 years. In 2007, the latest national comparison data available, WV's overall birth rate of 12.1/1000 is lower than the US birth rate of 14.3/1000.<sup>7</sup>

Although teenage birth rates were 14 percent lower in WV than in the US in 1997, the birth rates for 15-19 year-olds are now higher at 47.4/1000 live births as compared to 42.5/1000 nationally.<sup>7</sup> WV has the 35th highest teenage pregnancy rate of any state. Of the 6,980 teenage pregnancies (<20 years old) in 2005, 70% resulted in live births and 14% resulted in abortions.<sup>12</sup>

Keeping with the timeframes in the present Plan and comparing those over subsequent years from various sources, the chart below provides natality comparisons over a ten year period.



**Prenatal Care.** Among mothers with known prenatal care in 2009, 75.7 percent of WV women began their care during the first trimester of pregnancy.<sup>10</sup> The percentage of those obtaining care is down from 81.1 percent in 2007, and trending downward both in WV and on a national basis. Among state residents seeking care, 83.5 percent are white, 68.4 percent are black, and 76.7 percent are Hispanic; all fall below national levels.<sup>7</sup>

**Low Birthweight Births.** In 2007, 9.5 percent of births in WV were low birth weight, higher than the US rate of 8.2 percent.<sup>7</sup> According to the West Virginia Department of Health and Human Resources, Health Statistics Center, 9.5 percent of births in 2007 in WV are of low birth weight.<sup>13</sup>

Of those low birth weight infants, 13.9 percent are white (higher than the US rate of 11.7%), 19 percent are black (higher than US rate of 18.5%), and 9.6 percent are Hispanic (lower than the US rate at 12.2%). Although the Hispanic population presently comprises only 1.1 percent of WV's population, there seems to be a high incidence of low birth weight infants born to this group.<sup>7</sup>

The prevalence of low birth weight infants in WV may be, in part, related to illicit drug use or exposure to drugs and alcohol during pregnancy. The Drug Use during Pregnancy Committee of the West Virginia Perinatal Partnership identified that the diagnosis of neonatal abstinence syndrome has been increasing year-by-year. One recommendation of the Committee was for hospitals to conduct an umbilical cord tissue study to identify the occurrence of drug and alcohol use during pregnancy. Under a grant from the WV DHHR, Office of Maternal Child and Family Health, eight WV hospitals collaborated on the study which was lead by Dr. David Chaffin and Dr. Robert Nerhood from the Joan C. Edwards School of Medicine at Marshall University, Dr. Michael Stitely of WVU School of Medicine, and Dr. Stefan Maxwell of Charleston Area Medical Center. The study provided the state of West Virginia an accurate snapshot of the prevalence of drug use in the pregnant population.

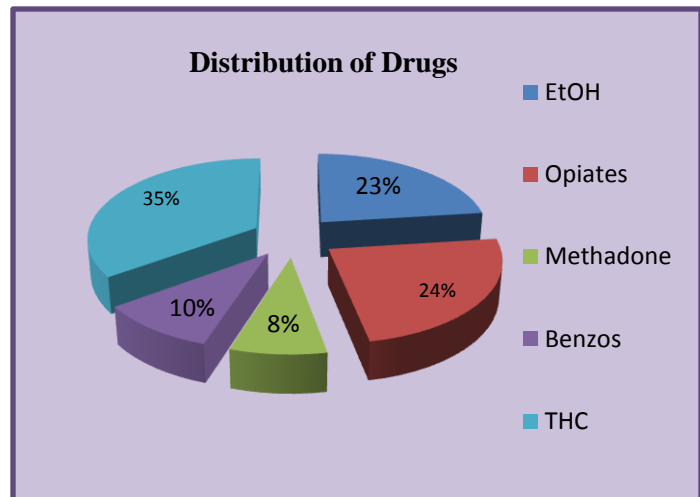
In August 2009, the multi-hospital project anonymously collected as many umbilical cord segments from patients as delivered in the hospitals volunteering for the project. The goal was to collect a 6-9 inch segment of cord from every delivery.<sup>14</sup> As stated in the report, 19 percent, or almost one in five babies born during this period in the 8 diverse hospitals had evidence of drug or alcohol exposure. The chart, recreated from a presentation by Dr. Chaffin about the study, shows the break-down of substances found. Marijuana was the most prevalent substance, followed by opiates, alcohol, benzodiazepines and methadone. The lack of finding methamphetamine or cocaine was surprising to the researchers. The use of buprenorphine (an



alternative opiate maintenance drug found in Suboxone and Subutex) does not seem to be a major problem at present. Regional variations may be important when targeting interventions. The study findings can be found in [Appendix B](#).

Generally, three major issues were found:

- 1 in 5 babies in WV were exposed to drugs or alcohol;
- polypharmacy is common; and,
- there are regional distributions of drug use.<sup>14</sup>

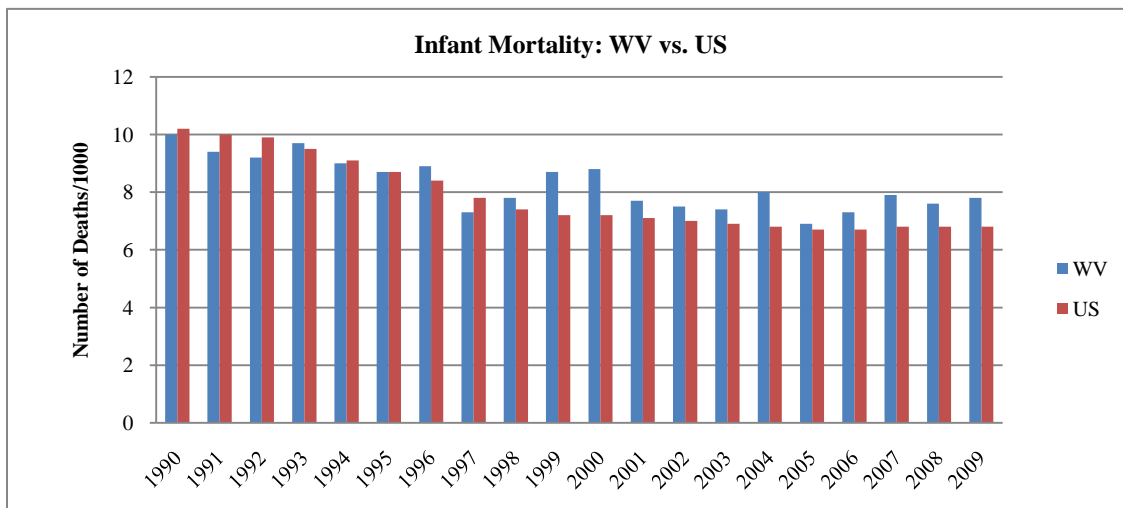


Most studies have shown that prenatal exposure to marijuana, cocaine, and/or opiates increases the risk that exposed infants will be born prematurely, weigh less, and have smaller heads than those that have not been exposed. Additionally, studies funded by the National Institute on Drug Abuse have shown that children who have been prenatally exposed to illicit drugs may be at risk of later behavioral and learning difficulties and may have subtle but significant impairments in their ability to focus, sustain attention and regulate emotions.<sup>15</sup>

The costs for the health care of exposed infants are significant immediately following birth, but the societal and economic impact this may have for years to come cannot be quantified. These issues warrant consideration for future health planning.

**Infant Mortality.** Not only have infant deaths long been viewed as an important indicator of a population's health, it is also an indication of the prenatal care, access, and birth process for both the mother and child. The chart below compares WV's yearly infant mortality with the US rate of infant mortality.

In the early 1990's, WV fell below the US in number of infant deaths. By the mid 90's, WV exceeded the US rate and continues to have a higher rate of infant mortality than the national average. In 2009, there were 7.8 deaths per 1000 live births in WV, whereas, the US rate was 6.8 deaths per 1000 live births.<sup>10</sup>



## Health and Health Related Information

Natality is just one measure of a population's health. There are other indicators that directly relate as well, such as disease, while others indirectly relate to health status. This section will detail health and health related factors affecting the population of WV.

Among the states, the disability rate in WV is the highest in the nation, with a rate of 24.4 percent; 7.7 percent is due to a mental disability.<sup>16</sup> Additional resources report WV's disability rate as 19.2 – 21.5 percent, also highest in the nation.<sup>7,8</sup>

Besides having the highest disabled population in the nation, The Kaiser Family Foundation and StateMaster report that WV ranked at the top in other health and health-related areas as well. They are:

- Smokeless tobacco users (31.2%)<sup>8</sup>
- SSDI beneficiaries as a percent of population (8.8%)<sup>7</sup>
- Loss of teeth (42.8%)<sup>8</sup>
- Diabetes (12.3%)<sup>7</sup>
- Disability (21.5%)<sup>8</sup>
- Overweight and obese (65%)<sup>8</sup>
- Serious psychological distress (12.73%).<sup>8</sup>

The United Health Foundation's, America's Health Rankings, shows similar outcomes for WV. The areas that rank 50<sup>th</sup> (poorest) in the nation from this source are:

- Prevalence of smoking (26.5%)
- Preventable Hospitalizations
- Poor physical health days
- High cholesterol (42.4%, adults)
- High blood pressure (33.6%)
- Heart attack (7.6%, adults)
- Cardiac disease (8.1%, adults)
- Diabetes (11.9%, adults).

Overall, West Virginia's health status ranked 50<sup>th</sup> in the nation in 2009.<sup>10</sup>

**Mortality and Major Health Issues.** Life expectancy is commonly used as a health status indicator. As indicated in the 2000 State Health Plan, WV ranked 44<sup>th</sup> among the states in overall average lifetime. According to the National Center for Health Statistics using 1990 census data, the average age of death was 74.23 years. In 2006, the Centers for Disease Control and Prevention reported that the average age of death in WV is now 72.1 years, with national averages at 77.7.<sup>16</sup>

The overall death rate was higher in the state than in the nation as a whole in 1997. In 2007, WV continues to have an overall higher death rate than that of the nation; there were 951.7 deaths per 100,000 as compared to the U.S. rate of 760.2 per 100,000. The rate of death among men was greater than for women, and higher for the black population as compared to the white population, matching national trends.<sup>7</sup>

The numbers of deaths indicate the toll that disease places on the population. The 10 leading causes of death in 1997 in WV were identified in the 2000 State Health Plan, and in 2006, there were few differences.

**Table 2** compares the 1997 and 2006 top 10 disease entities and the percentage differences with the comparable US death rates. WV improved and moved ever closer to the national rates in the areas of kidney disease, chronic obstructive pulmonary disease (COPD), diabetes, and septicemia; however, the rate of death due to heart disease and cancer has increased. Heart disease was the number one cause of death in 1997 in WV. In 2006, it not only remained the leading cause of death in WV, it was also the leading cause of death in the nation.<sup>17</sup> And although we have improved in the diagnosis of diabetes, West Virginia ranks highest in the nation for the number of deaths that are contributed to the disease.<sup>7</sup>

**Table 2**

1997	2006 <sup>17</sup>	2006 Death rate/100,000 <sup>17</sup>
Heart disease (+21.2%)	Heart Disease (+36.7)	236.9
Cancer (+13.8%)	Cancer (+25.2)	205.9
Stroke (+2.4%)	Stroke (+4.0)	47.6
COPD (+31.6%)	COPD (+16.1)	66.6
Accidents (+22.2)	Accidents (+22.4)	62.2
Influenza/ Pneumonia (+2.9%)	Diabetes (+9.8)	33.1
Diabetes (+40.8%)	Alzheimer's Disease (-0.8)	21.8
Kidney Disease (+34.0%)	Influenza/Pneumonia (+2.8)	20.6
Suicide (+27.8%)	Kidney Disease (+6.3)	20.8
Septicemia (+24.3%)	Septicemia (+4.2)	15.2

**Hospital Discharge Information.** As of December 2008, completed hospital data collected by the WVHCA shows that the top 10 Diagnostic Related Groups (DRG) at discharge are compatible with the leading causes of death in WV. Besides newborn and delivery services, **Table 3**<sup>18</sup> below shows that several of the top 10 medical conditions at discharge in 2006, and nine months of 2007, were related to cardiac problems and respiratory illnesses, namely, chronic obstructive pulmonary disease, heart failure & shock, simple pneumonia & pleurisy, and chest pain.

**West Virginia Hospital Acute Inpatient Discharges  
Top 10 Diagnosis-Related Group (DRG) 2006 – and nine months of 2007  
Ranked by Number and Percent of Discharges**

**Table 3**

Description	Discharges		Percent	
	2006	2007	2006	2007
Normal Newborn	13,806	10,787	4.8	5.1
Vaginal Delivery w/o Complicating Diagnoses	10,818	8,331	3.8	3.9
Psychoses	9,726	7,493	3.4	3.5
Chronic Obstructive Pulmonary Disease	10,158	7,367	3.6	3.4
Heart Failure & Shock	9,487	6,586	3.3	3.1
Simple Pneumonia & Pleurisy Age >17 w CC	8,860	6,206	3.1	2.9
Major Joint Replacement Or Reattachment Of Lower Extremity	5,255	4,171	1.8	2.0
Chest Pain	5,270	3,993	1.8	1.9
Cesarean Section w/o CC	5,079	3,975	1.8	1.9
Esophagitis, Gastroent & Misc Digest Disorders Age >17 w CC	6,169	3,953	2.2	1.9

<b>Subtotal</b>	<b>84,628</b>	<b>62,862</b>		<b>29.6</b>	<b>29.4</b>	
<b>Total All other DRGs</b>	<b>201,054</b>	<b>150,727</b>		<b>70.4</b>	<b>70.6</b>	
<b>Total</b>	<b>285,682</b>	<b>213,589</b>		<b>100.0</b>	<b>100.0</b>	

A review of the WVHCA's data shows that the inpatient discharge DRGs are virtually unchanged from **Table 3** over the course of a decade. Some changes are noted and are more than likely based on national coding or wording changes in the DRG system. Regardless, the DRG descriptions directly relate to the causes of death, prominent risk factors and behaviors in WV. **Appendix C** shows the top 10 Inpatient discharge DRGs for the past 10 years, excluding newborn services and cesarean/vaginal deliveries.

The Centers for Medicare and Medicaid Services (CMS) introduced a new DRG system, the Medicare Severity Diagnosis Related Groups (MS-DRGs), effective October, 1, 2007. MS-DRGs replaced the existing DRG system that was assigned to a diagnosis group with complications. The new system allowed Medicare to split a single DRG with complications into 2 MS-DRGs; 1) for major complications (MCC) and 2) for regular complications (CC). Based on this system, payment can be adjusted according to the severity of the illness.<sup>19</sup> As a result of the overlapping time periods between the old DRG system and the new, MS-DRGs are noted in **Table 4** for the first fiscal quarter of 2007 and for 2008.<sup>18</sup>

**West Virginia Hospital Acute Inpatient Discharges**  
**Top 10 Diagnosis-Related Groups (MSDRGs) October - December 2007 & 2008**  
**Ranked by Number and Percent of Discharges**

**Table 4**

MSDRG	Description	Discharges			Percent		
		2006	2007	2008	2006	2007	2008
795	Normal newborn		3,072	14,160		4.7	5.1
775	Vaginal delivery w/o complicating diagnoses		2,585	10,973		3.9	4.0
885	Psychoses		2,372	9,774		3.6	3.5
392	Esophagitis, gastroent & misc digest disorders w/o MCC		1,639	6,585		2.5	2.4
470	Major joint replacement or reattachment of lower extremity w/o MCC		1,216	5,310		1.9	1.9
192	Chronic obstructive pulmonary disease w/o CC/MCC		1,103	5,133		7.0	1.9
194	Simple pneumonia & pleurisy w CC		1,198	5,043		7.0	1.8
766	Cesarean section w/o CC/MCC		1,228	4,789		1.9	1.7
313	Chest pain		1,015	4,114		1.5	1.5

690	Cellulitis w/o MCC		907	3,991		1.5	1.4
	Subtotal		16,335	69,872		24.9	25.2
	All other MSDRGs		49,386	207,290		75.1	74.8
	Total		65,721	277,162		100.0	100.0

**Other Noted Health Concerns.** There were three DRGs over the 10 year timeframe, although not related specifically to death, which kept recurring as one of the top 10 inpatient discharge DRGs. They were Major Joint Replacement or Reattachment of Lower Extremity, and Esophagitis, Gastroenteritis, & Miscellaneous Digest Disorders, Age > 17 w CC (DRG 182), and Psychoses.

Given the high rates of diabetes and obesity in WV, it is not surprising that joint replacements rank very high in the number of inpatient hospitalizations. In 2007, the Centers for Disease Control and Prevention (CDC) estimated that over 500,000 people in WV have been diagnosed with some form of arthritis and more than half of those have limitations. Thirty nine percent (285,000) are women and 32 percent are men (224,000). The CDC also notes the following about WV and the prevalence of arthritis:

- Of adults with arthritis, 37 percent are obese and another 34 percent are overweight;
- 17 percent of the adult population has activity limitation due to arthritis or joint symptoms;
- 49 percent of adults with arthritis have activity limitation due to arthritis or joint symptoms;
- Of adults with diabetes 97,000 (62%) also have arthritis;
- Of adults with heart disease 96,000 (64%) also have arthritis;
- Of adults with high blood pressure 255,000 (54%) also have arthritis;
- Of adults with high cholesterol 240,000 (51%) also have arthritis;
- Of adults who are overweight 171,000 (33%) also have arthritis;
- Of adults who are obese 184,000 (45%) also have arthritis;
- Of adults who are inactive 133,000 (53%) also have arthritis;
- 115,000 adults 18-44 have DRDX+ (18%);
- 223,000 adults 45-64 have DRDX+ (44%);
- 167,000 adults 65 and older have DRDX+ (59%).<sup>20</sup>

The other noted DRG, Esophagitis, Gastroenteritis, & Miscellaneous Digest Disorders, Age > 17 w CC, on the one hand, may be indicative of the high rates of tobacco use, psychological distress, societal factors, diabetes, obesity, and loss of teeth, among others, that West Virginians experience at higher rates than most states.

On the other hand, it may be indicative of miscoding as well. In a 2004 study by the Arkansas Foundation for Medical Care, a Medicare Quality Improvement Organization, it was found that incorrect diagnosis sequencing occurred when a patient was admitted with gastroenteritis. In many cases, the documentation indicated that the reason the patient was admitted to the hospital was to treat the dehydration resulting from the gastroenteritis. Often patients received intravenous fluids to manage the dehydration and non-acute care to manage the gastroenteritis, confirming the need for inpatient admission was the dehydration. In this situation, the dehydration should have been sequenced as the principal diagnosis (the reason for admission), and gastroenteritis would be an appropriate secondary diagnosis for the admission.<sup>21</sup> More research may be warranted for determining the prevalence of esophagitis/gastroenteritis and other digestive disorders as future health planning proceeds.

The last DRG that was prevalent year after year was Psychoses. Major personality disorders such as schizophrenia, catatonia, manic disorders, bipolar affective disorders, and paranoia relate to this inpatient DRG. It is very common for those with these disorders to be determined disabled as cited previously.

Because WV has a high rate of admissions for psychosis and there is a high correlation of substance abuse with this diagnosis, it is imperative that drug abuse in WV be assessed in the health planning process. Between 1999-2006, the Centers for Disease Control and Prevention reports that opioid analgesia death rates have drastically increased. During this timeframe, poisoning death rates involving opioid analgesics increased for every age group from 15-24 years through 65 years and older,

***“I see folks who really need the pain medicine. I see issues where children or family members steal the medicine and then sell it. I see people who are ‘doctor-shopping’ trying to fraudulently obtain medicine. I see doctors over-prescribing. I see doctors under-prescribing, and I see the societal affects that go along with those issues.”<sup>22</sup>***

***-Sen. Ron Stollings, MD***

***Practicing Physician and  
Senator in WV***

males and females, and non-Hispanic white and non-Hispanic black persons. Particularly, people aged 35-54 years had higher poisoning death rates involving opioid analgesics than those in other age groups. In 2006, West Virginia was one of five states with the highest rates of opioid deaths, which ranged from 10.5 to 15.6 per 100,000. And because the rates have increased so drastically over the years, *Healthy People* 2010 noted during the midcourse review that reduction of poisoning mortality was one of the injury objectives identified as moving away from its target. One of the challenges discussed during the review is a lack of recognition of the extent of the problem.<sup>23</sup>

In this same timeframe, WV has become the nation's leader in number of medications prescribed as a result of the state's poor health. In 2009, Forbes.com ranked WV as "America's Most Medicated State." Based on information from Verispan, a health care information company, the state filled 17.7 prescriptions per capita compared to a national average of 11.5.<sup>24</sup> And after months of research and meetings with professionals, the 2010 West Virginia State Legislature also recognized the extent of the problem and proposed bills to address the issue.<sup>22</sup>

The legislation that was introduced in the State Senate sought to accomplish a number of goals. The first was to give certain professionals better access to a database of controlled substances presently kept by the Board of Pharmacy, which would provide where, when, to whom and by whom drugs are being prescribed. Other measures would add the drug Tramadol to the Schedule IV list of controlled substances and require methadone treatment centers to provide information to the Board of Pharmacy.<sup>22</sup>

The growing rates of substance abuse should be considered as health planning progresses given the effect it is having on WV's population, particularly the toll it may have on the future of our infants and children.

### **Behavioral Risk Factors**

Behavioral risk factors are health behaviors that can place individuals at risk of preventable illness and death. In the 2000 State Health Plan tobacco use, obesity, sedentary lifestyle, and alcohol misuse were determined to have a severe toll on our population and were selected for review. In 2009, tobacco use, obesity, and sedentary lifestyle remain prominent and contribute to the diagnoses attributable to the death rates. In addition, oral health has emerged as a risk factor contributing to the overall poor health of the WV population.



It has been known for many years that West Virginians are dying at a faster rate from heart disease, cancer, and many of the other diseases listed in [Table 2](#). There are several risk factors prevalent in WV that contributes to those high rates of death.

Tobacco use and obesity is a major contributing factor to many of the diseases in [Table 2](#). Although trends show that WV has decreased the prevalence of smoking in the state from 34 percent in 1990 to 26.5 percent in 2009, WV still has the highest rate of adult smokers in the U.S (18.3%). Because tobacco use and obesity have a direct correlation with heart disease, WV's rate of death from heart disease is 229.4 deaths/100,000 as compared to the US rate of 190.9/100,000.<sup>7</sup> In addition, The U.S. Centers for Disease Control & Prevention estimates that health costs related to smoking total \$10.47 per pack sold and consumed in the U.S.<sup>25</sup>

Obesity is an indicator of the incidence of various diseases including heart disease, diabetes, and general overall poor health. According to the Kaiser Family Foundation's most recent figures, adult obesity, although still prevalent in WV, has decreased from 68.7 percent to 65 percent, but remains higher than the national rate of 60.8 percent.<sup>7</sup> The United Health Foundation found that, since 1990, the prevalence of obesity in WV more than doubled from 15.0 percent to 31.9 percent of the population. Researchers estimate that the direct healthcare cost of obesity for the state of West Virginia at the rate of 31.9 percent is greater than \$668 million.<sup>10</sup>

One of the areas not mentioned in the 2000 State Health Plan that has emerged as a major health risk is oral health care; poor oral health contributes to overall poor health. It is reported that only 60 percent of adults had visited a dentist or dental clinic within the past year.<sup>7, 10</sup> WV also ranks highest in the nation for the percent of the population having all of their teeth extracted – 37.8 percent of the population with Tennessee ranking second at a rate of 31.5 percent.<sup>7</sup>

Poor oral health has an influence on so many health factors. It may be a contributing factor in the severity of many serious conditions, such as diabetes, and respiratory disease. It is also linked to sleeping problems, as well as behavioral and developmental problems in children. Untreated cavities may also lead to greater problems, such as serious infections. Because poor oral health also affects the ability to chew and digest food properly, good nutrition cannot be maintained; thus, the resistance to disease and the healing process is compromised. Also, studies are currently underway to examine whether there is a link between poor oral health and heart disease, and poor oral health and the rate of women delivering pre-term, low birth rate (PLBW) babies.<sup>26</sup>

Smoking is a major risk factor for oral and dental disease, including oral cancer; WV has the highest rate of smoking in the nation as previously noted. Tobacco smoke, which is very

harmful to gum tissue and other tissues in the mouth, is one of the biggest risk factors for gum disease. Left untreated, gum disease can lead to the loss of teeth and an increased risk of more serious disease, such as respiratory disease. The bacteria in plaque can travel from the mouth to the lungs, causing infection or aggravating existing lung conditions.

There is also a link between diabetes and gum disease. People with diabetes are more susceptible to gum disease and it can put them at greater risk of diabetic complications.

As viewed by the United Health Foundation, the major challenges faced by WV include a high prevalence of smoking, a high prevalence of obesity, many poor mental and physical health days per month at 4.5 days and 5.5 days, respectively, in the previous 30 days, high levels of air pollution and a high rate of preventable hospitalizations with 109.3 discharges per 1,000 Medicare enrollees.<sup>10</sup> With the rate of tooth loss and the correlation between the prevalence of health problems and gum disease, poor oral health may also be a major challenge faced in the health planning process.

### **Initiatives for Health Improvement**

The 2000 State Health Plan coupled the Healthy People (HP) 2000 objectives with WV's top 10 causes of death. Although HP2000 objectives were concluding and the newly established Healthy People 2010 objectives were awaiting release, they were provided in the Plan to illustrate the range and focus of the Healthy People initiatives, as well as the applicability to the state health planning process. Although Healthy People 2020 objectives are in the process of being developed presently, the national initiatives continue to have applicability for the health planning process in the future.

The Healthy People initiative was launched with the publication by the U.S. Surgeon General on health promotion and disease prevention in 1990. The U.S. Public Health Service subsequently released specific, quantifiable objectives to attain the Surgeon General's broad goals. Health and Human Services has since issued updated national health promotion and disease prevention goals and objectives each decade, i.e., HP2000 (issued in 1990) and HP2010 (issued in 2000) and, the version presently in development, HP2020. Not only have objectives evolved in response to the changing needs and circumstance of the nation, but they also expanded with each iteration.<sup>27</sup>

The HCA took an innovative approach for guiding the state towards goals for improvement by coupling the HP2000 objectives with the top 10 disease processes in the 2000 Plan. There are

many encouraging aspects to utilizing the Healthy People initiatives in the state health planning process. They include, but are not limited to:

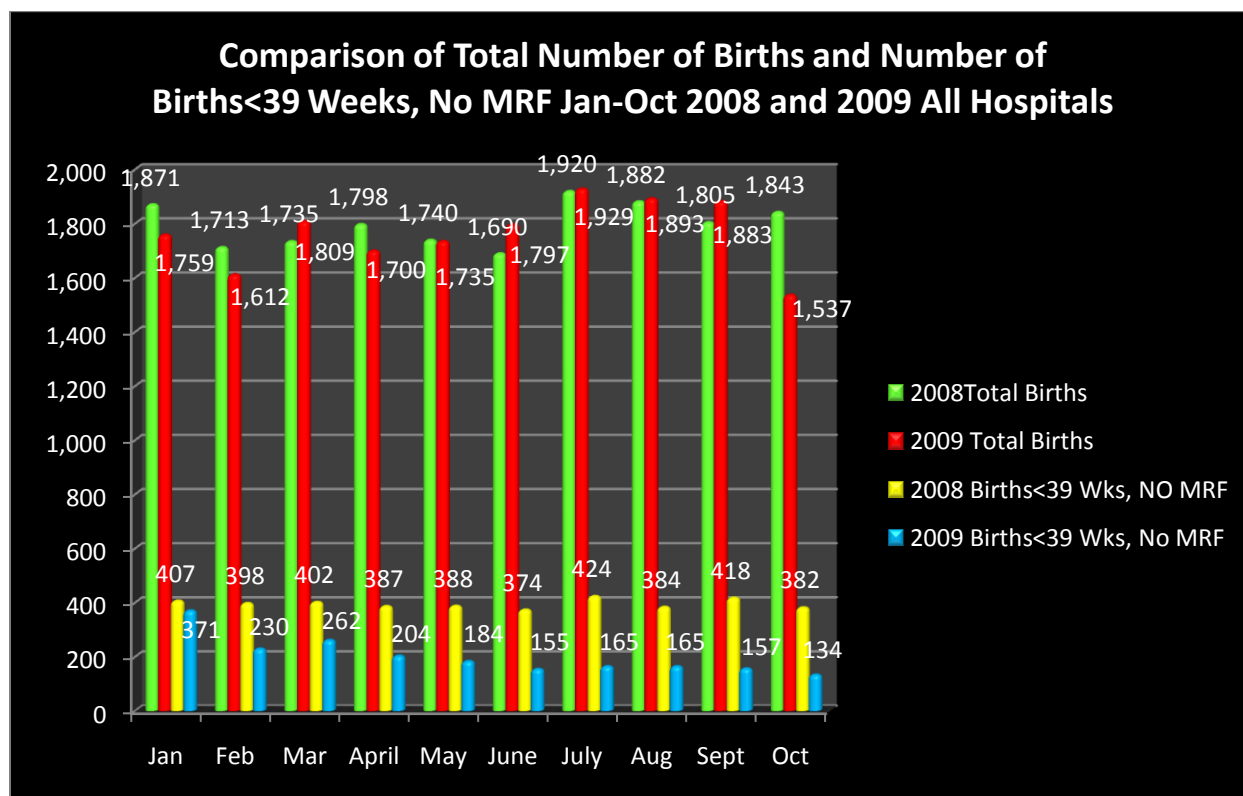
- Provides guidance and goals for improving health;
- Promotes cross-agency collaboration;
- Promotes collaboration among the federal government, stakeholders, and the private sector;
- Acts as a roadmap to better health by many different people, states and communities, businesses, professional organizations, groups whose concern is a particular threat to health, or a particular population group;
- Identifies the most significant preventable threats to health and focuses public and private sector efforts to address those threats; and
- Acts as a means to improve health in a format that enables diverse groups to combine their efforts and work as a team.<sup>28</sup>

Since the 1980's, states and some metropolitan areas have used Healthy People initiatives as a template for developing their own goals and objectives.<sup>27</sup> It doesn't appear that WV has utilized this strategy, or it has been used sporadically across agencies with no defined coordinated effort. In preparing for the future state health planning process, Healthy People initiatives may be a useful tool given the high incidence of death due to specific disease, along with the behavioral health risks that perpetuate death in the WV population. Healthy People objectives are the prevention agenda for the nation, and may serve West Virginia well if coordinated across the state. It is anticipated that HP2020 indicators will be issued in the near future.

There are also other alternatives for improving health status that may meet a local need. The West Virginia Perinatal Partnership initiated a committee to look at costly medical procedures with poor outcomes. Reducing the high number of medically unnecessary deliveries prior to 39 weeks gestation was identified as important to reducing cost and poor obstetric outcomes. Along with the WV Perinatal Partnership and the March of Dimes-WV Chapter, the WVHCA developed such an initiative when they partnered with hospitals to reduce the number of medically unnecessary preterm deliveries.

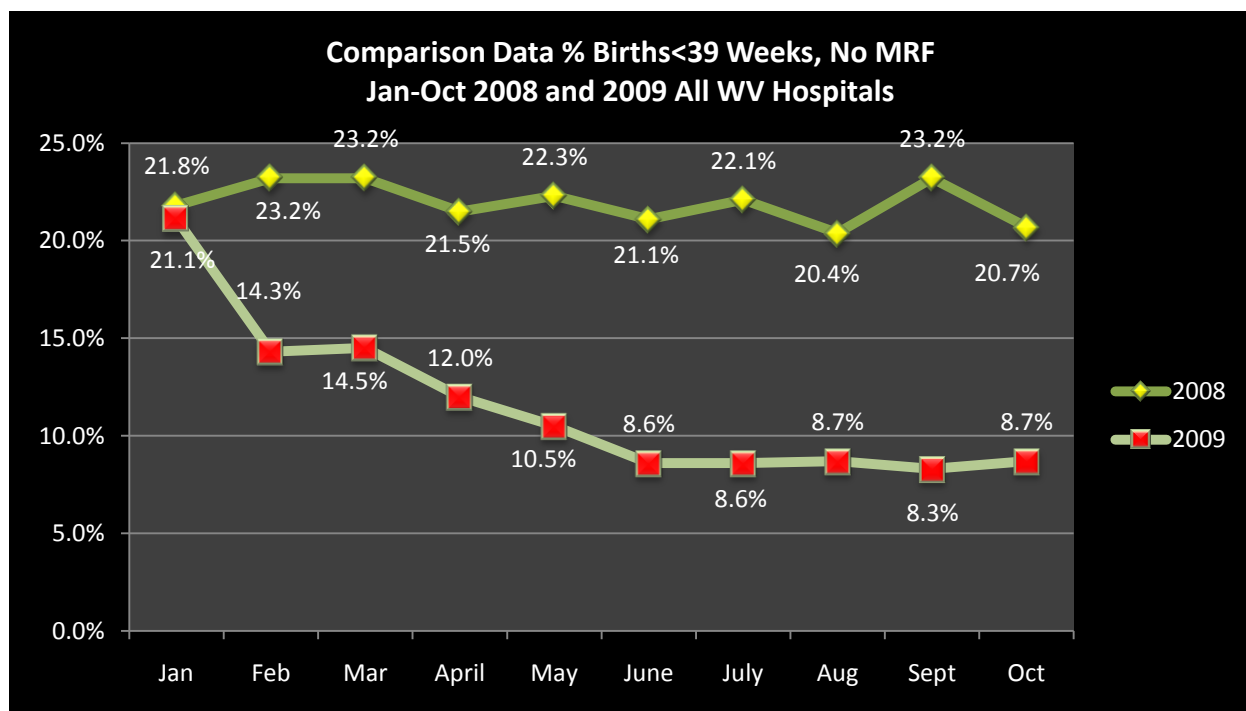
The WVHCA partnered with fifteen hospitals (Collaborative) that represented 70 percent of the births in the state when it was found that infants were being delivered prior to 39 weeks with no documented medical risk factors for either the mothers or babies.<sup>18</sup> Using proven methodology developed by the Institute for Healthcare Improvement, the Collaborative:

- used evidence-based change packages that facilitated easy to implement opportunities for improvement;
- structured monthly reporting on a common core set of measures;
- provided technical assistance from expert faculty and subject matter sources;
- incorporated web-based technology for communication and shared learning; and
- offered teleconference and in-person learning options to accelerate learning and the adoption of change.



The chart above compares the total number of births during a given period of time in WV hospitals with the number of deliveries prior to 39 weeks gestation with no maternal or fetal risk factors associated with the need for delivery.

After implementing the health improvement initiatives for only nine months, the rate of elective pre-term deliveries performed without documented medical necessity decreased from more than 21 percent of total births in January 2009, to 8.7 percent by August 2009.



Rethinking processes is just one way of bringing about change. Collaborative efforts such as this not only produce quality health services and achieve positive outcomes, but reduce costs as well. Collaboration across providers, facilities and others is a methodology proven to move the state in a positive direction and for achieving long term goals.

### Health Care Availability

**Access to Facilities and Providers.** Access to health care can be defined as having the timely use of personal health services to achieve the best health outcomes. In order to attain good access to care, three steps are required:

- 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.<sup>29</sup>

In order to assess the availability of, and access to health care providers, it is important to gain an understanding of available resources in the communities. This section reviews the migration patterns of the population, and utilization and/or financial data of several provider groups to gain an understanding of service provision across the state.

**Medical Referral Regions and Health Service Areas.** With funding from the Benedum Foundation, the first stage of a cooperative research project between the W VHCA and the WVU Institute of Health Policy Research was completed in 2004. *The West Virginia Health Indicators Project* was developed to analyze population-based health data and to improve analytical tools for obtaining reliable and timely service information for state health planners and decision-makers about the health status, health risks, and use of available health care resources by West Virginians.<sup>30</sup>

Utilizing the State Public Employees Insurance Agency, State Medicaid, hospital inpatient and ambulatory claims data, and a population profiling system, data was analyzed to develop health care market areas and assess indicators of the health status and health risks of the populations served by these market areas; Medical Referral Regions (geographic areas where health care providers routinely work together to deliver medical services to consumers) and Health Service Areas (a group of counties where most of the counties' residents received medical services) were identified.

In developing Health Service Areas (HSA), *The West Virginia Health Indicators Project* was guided by the overarching question: Where do West Virginia residents obtain their health care—both inpatient and outpatient?<sup>31</sup>

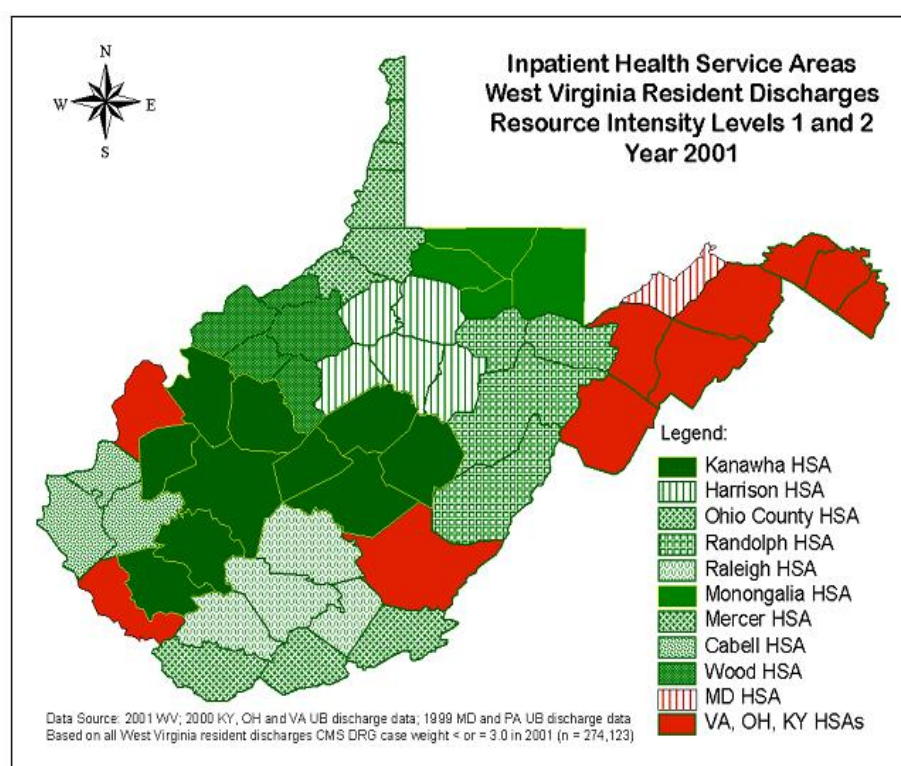
Additional questions asked in the 2004 study that assisted in the development of HSAs were:

- How many residents stay in their home counties to receive health care?
- How many go to other counties to receive health care?
- How many go out of state to receive health care?
- Which counties retain most of their residents' care?
- Among those that do not retain most of their residents' care, to which county do the residents go to primarily for care, forming a health services area that is larger than one county?
- Are there counties whose residents go to many different counties for their health care?
- How does health care utilization cluster by county?

The HSAs were developed based on actual medical care utilization through claims data. A HSA was identified based on West Virginia residents' medical services utilization patterns: the linkage between the patients' county of residence and the counties where medical services were provided. Thus, a HSA was identified as a group of counties where most of the counties' residents received medical services within a geographic area.

Based on utilization data, each county was identified as a hub county, a contributing county, or a multi-affiliated county. A hub county is a county which strongly retains 66.7 percent or more of their residents' care; a contributing county is a county where 50 percent or more of the residents strongly contribute its residents' care to another county; a multi-affiliated county is a county that retains less than 66.7 percent and contributes 50 percent or less to a single county.

The map below displays the 11 HSAs produced from the study. The hub county (county that strongly retains its residents' care) for each HSA can be seen on the map's legend. For example, Mercer County is the hub county for the Mercer HSA, and Mercer's HSA consists of Mercer, McDowell, and Monroe counties.



Actual retention and migration rates for each HSA outlined in the 2004 study are shown on the map below. Retention rates are presented for all counties with a retention rate of 66.7 percent or higher. These counties are colored either in bright green or dark green. Thus, as one can see, the retention rates of the hub counties are as follows:

Kanawha 93.7% retention rate

Harrison 81.6% retention rate

Ohio 88.3% retention rate

Randolph 70.9% retention rate



Raleigh 85% retention rate

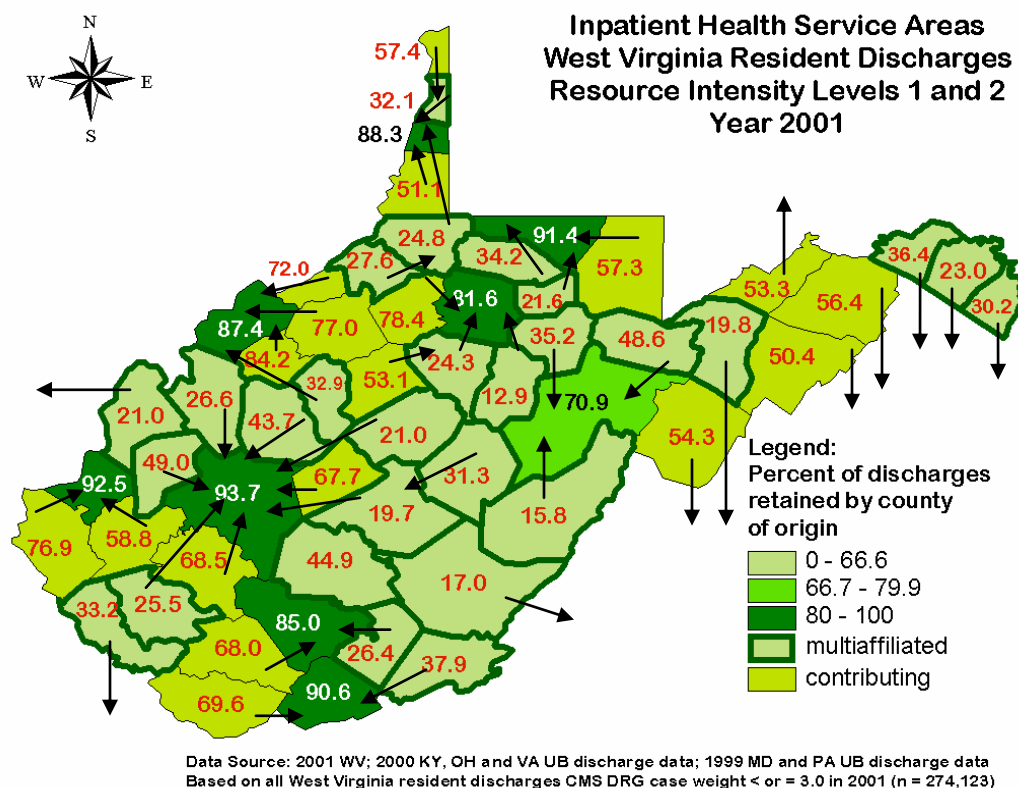
Monongalia 91.4% retention rate

Mercer 90.6% retention rate

Cabell 92.5% retention rate

Wood 87.4% retention rate

When a county's retention rate is less than 66.7 percent the largest migration rate is presented. These counties whose residents obtained the largest proportion of medical services in another county are contributing or multi-affiliated counties. The arrows indicate which county provided the highest proportion of a contributing or multi-affiliated county's residents' medical services.



An example will further illustrate patient flow within HSAs. Looking at the map above, one will see that Mercer county, a hub county, retains 90.6 percent of its residents' care. McDowell county, a contributing county, has 69.6 percent of its residents' medical services obtained from Mercer county. Monroe county, a multi-affiliated county, has 37.9 percent of its residents' medical services obtained from Mercer county. Likewise, as one can see, within the Ohio county



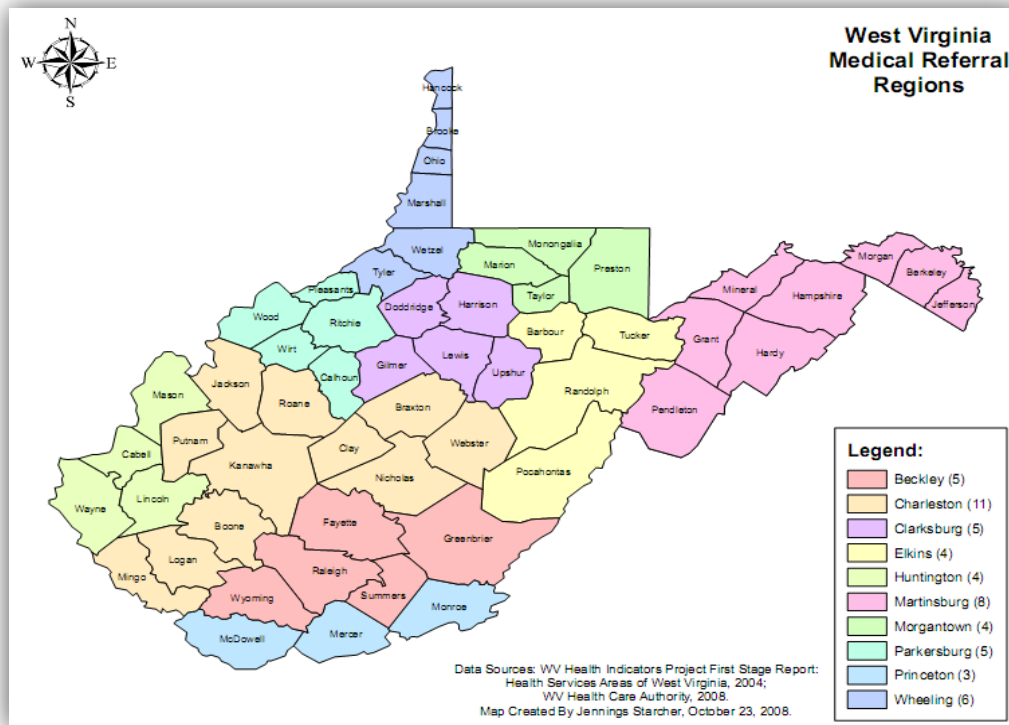
HSA, Ohio county retains 88.3 percent of its residents' care while Marshall county has 51.1 percent of its residents' medical services obtained from Ohio county.<sup>31</sup>

Recently, the West Virginia Health Information Network (WVHIN) adjusted the Medical Referral Region (MRR) model with assistance from the WVHCA staff to better represent current patterns within the state. The MRR model was also cross-checked against other sources for consistency.<sup>31</sup>

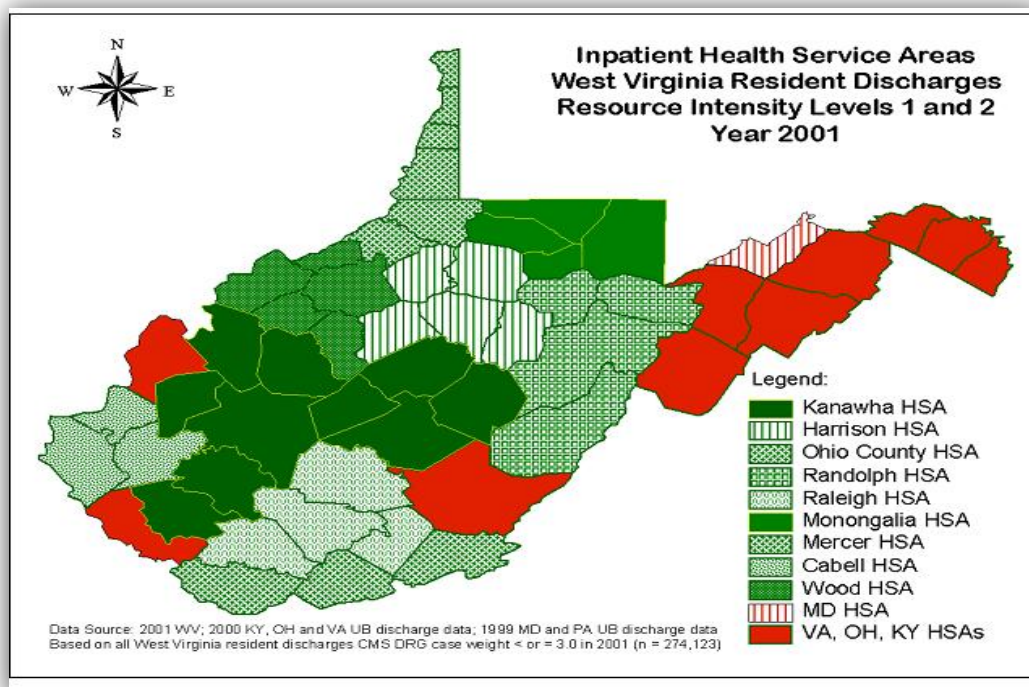
WVHIN's MRRs were developed from resident inpatient discharge data from the 2004 HSA study. In order to compare the changes that have occurred over the years, the map on the top below shows the WVHIN's MRRs while the map on the bottom below reflects the HSAs developed from the 2001 data as presented earlier. Although the basic cluster patterns on the maps are similar, discussion with WVHCA staff led to some alterations of the 2004 HSA map for defining the MRRs. Listed below are modifications made to the original 2004 HSA map and the justifications for such changes:

1. All counties must be a member of a multi-county MRR- This meant there would be no single county MRRs.
  - a. Mason county was assigned to the Huntington MRR
  - b. Mingo county was assigned to the Charleston MRR.
  - c. Greenbrier county was assigned to the Beckley MRR
2. All counties must be a member of a West Virginia MRR (even if residents flow out-of- state for inpatient care) - This meant that the panhandles would have separate MRRs.
  - a. The eastern panhandle would consolidate from Maryland to the Martinsburg MRR

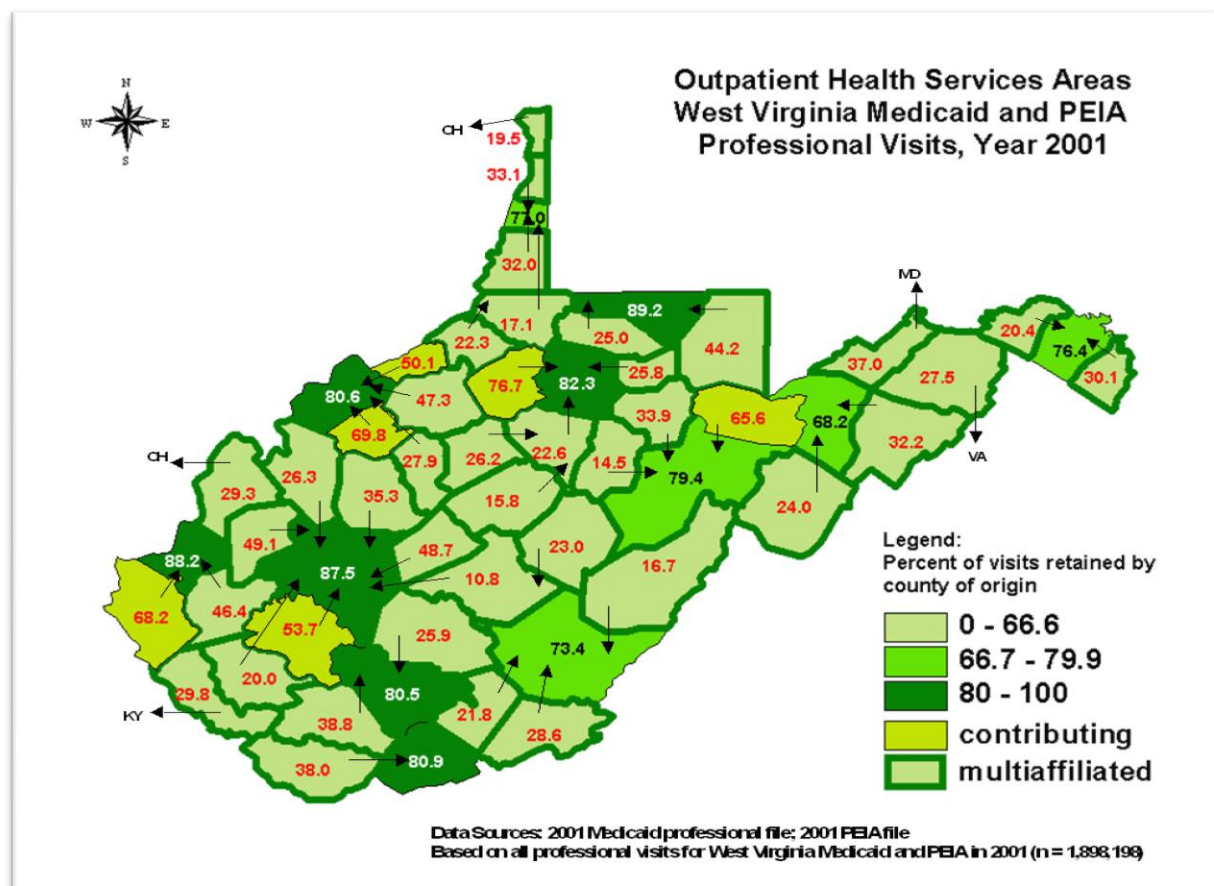
## WVHIN MRR Update



## West Virginia Health Indicators Project 2004



*The West Virginia Indicators Report* also showed outpatient visit retention and migration patterns for professional and technical visits. The map below shows that there are seven strong hub counties (tier 1) and five tier 2 hub counties for professional visits. Migration for professional services generally occurs between neighboring counties from contributing or multi-affiliated counties to a bordering hub county, or from a multi-affiliated county to a neighboring contributing county. The highest percentages of migration for a contributing or multi-affiliated county range from about 25 to 70 percent and occur in counties where there is a neighboring strong hub county. The percentage is only about 15 to 30 percent when the neighboring hub

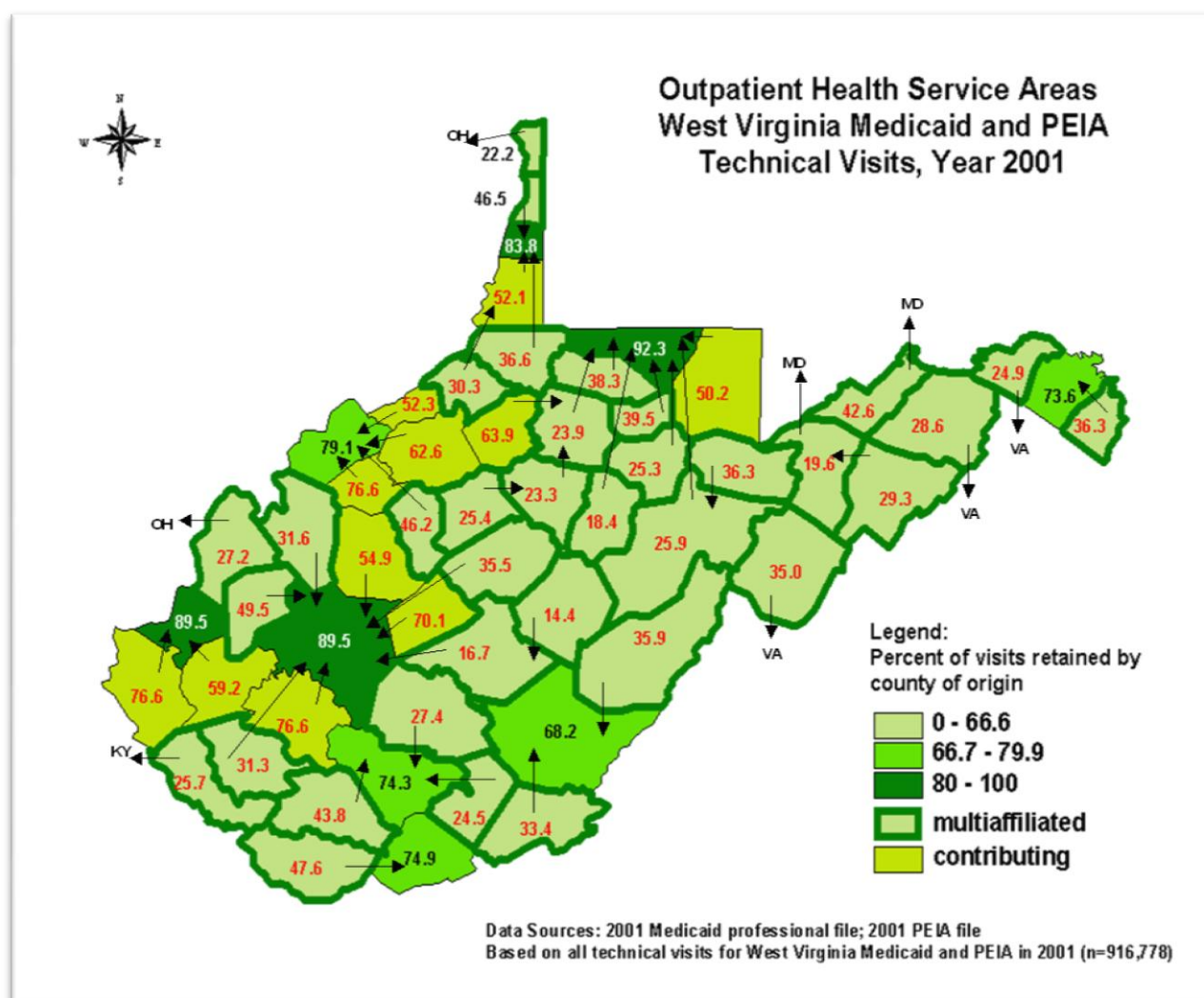


county is a tier 2 hub. There are five counties, two of which are in the Eastern Panhandle, where the biggest percentage of migration rates for professional visits were to other states.<sup>30</sup>

The map below shows the migration patterns for technical outpatient visits. There are four tier 1 hub counties with retention rates of 80 percent or more and five tier 2 hub counties with retention rates over 66 percent and less than 80 percent. Comparing this map with the map for professional visits, it appears that higher percentages of patients received their technical outpatient services

from other counties as the percentages for contributing and multi-affiliated counties are higher compared with the previous map. It is noticeable that a significant percentage of patients from some counties travel quite a long distance for technical visits. Some counties' residents passed hospitals in two or three other counties to get their technical outpatient services.

Where residents receive care is an important factor in determining their ability to access care. But equally important is whether or not services are located in their communities that may be accessed at the right place and time when the need arises.



**Acute Care Hospitals.** There are 34 general acute care hospitals and 18 critical access hospitals (CAH) across the state. In total, there are 9,075 beds available. There is a 56.1 percent occupancy rate and an average length of stay of 5.5 days. Medicare accounts for the highest

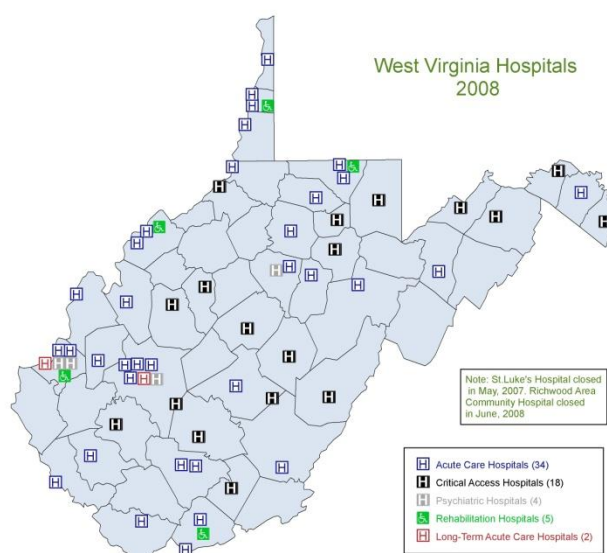
number of inpatient days and inpatient discharges at the general acute care hospitals, while Medicaid had the highest number of inpatient days at the CAHs; Medicare had the highest number of inpatient discharges.

CAHs have higher occupancy rates (61.2%) as compared to the general acute care hospitals (54.3%). The lengths of stay at CAHs are also much higher at 11.4 days as compared to 5.5 days at general acute care hospitals.<sup>18</sup>

Although inpatient utilization is decreasing overall, inpatient discharges in the CAHs grew by 3.9 percent between fiscal years 2007 and 2008, even though hospital inpatient utilization, generally, has shown very little fluctuation in recent years. Over the past three years inpatient discharges have decreased by 12,079 (4.1%). In FY 08, there were 5,856 (2%) fewer discharges than in FY07. In FY07 discharges decreased by 2,056 (2.8%) and in FY06 there was a decrease of 5,072 (1.7%). There are several factors that may have impacted that decline. They are:

- a decrease in the number of cardiac related discharges;
- continued growth in outpatient treatments; and,
- a drop in the number of hospitals from 66 in FY 2005 to 63 in FY 2008.<sup>18</sup>

In the same time period that hospital inpatient discharges declined, hospital outpatient services have grown 8.6 percent. The payer mix is different for outpatient services as compared to inpatient services. Medicare has the highest inpatient utilization, whereas the nongovernmental payer class dominates the utilization of outpatient services at 42.2 percent, followed by Medicare with 32.9 percent, and Medicaid with 15.1 percent.<sup>18</sup>



Additional information regarding inpatient utilization by payer type can be found in [Appendix D](#).

**Long-Term Acute Care Hospitals.** Long-term acute care facilities provide care for conditions requiring long-term stays such as head trauma, comprehensive rehabilitation and respiratory therapy.



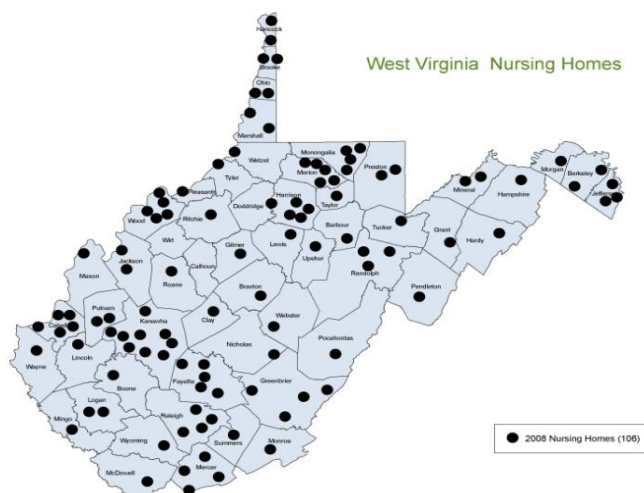
There are two for-profit, long-term acute care hospitals (LTCH), which are located in Charleston and Huntington. These are generally defined as hospitals with an average Medicare inpatient length of stay greater than 25 days. They have 60 licensed beds; have an occupancy rate of 78.6 percent; and have an average length of stay of 27.8 days.

Medicare comprises the largest number of inpatient days and inpatient discharges. There are no PEIA inpatient days or discharges, while Medicaid and other governmental payers are negligible.<sup>18</sup>

**Psychiatric Hospitals.** There are four psychiatric hospitals in WV, two private and two state run facilities. The private facilities tend to accept patients requesting treatment voluntarily, while the state hospitals offer a wide range of services to patients either committed to the hospital through civil commitment, or in the case of forensic patients, ordered through the judicial system.<sup>32</sup>

There are 485 licensed beds, which are equally divided, and have an occupancy rate of 82.7 percent and an average length of stay of 37.7 days. Although non-governmental payers comprise the majority of inpatient days and discharges, those inpatient days have decreased 19 percent from the previous year. Inpatient days for Medicaid and other governmental payers' have increased 38.1 and 54.6 percent, respectively, over the same period.<sup>18</sup>

**Rehabilitation Hospitals.** There are five for-profit rehabilitation hospitals in WV. They have 420 licensed beds with 80.6 percent occupancy and an average length of stay of 23.1 days. Medicare comprises the greatest number of inpatient days and discharges. PEIA shows no inpatient days or discharges. Non-governmental payers have seen an increase of 22.2 percent in inpatient days in the last year, and an increase of 26.8 percent in inpatient discharges during the same period.<sup>18</sup>



**Nursing Homes.** There are 106 nursing facilities with 10,068 licensed beds. Eighty percent of those facilities are for-profit entities. Aggregate utilization of 3.3 million days was reported for FY 08, and has remained steady since the late 1990s. Although there is a 95

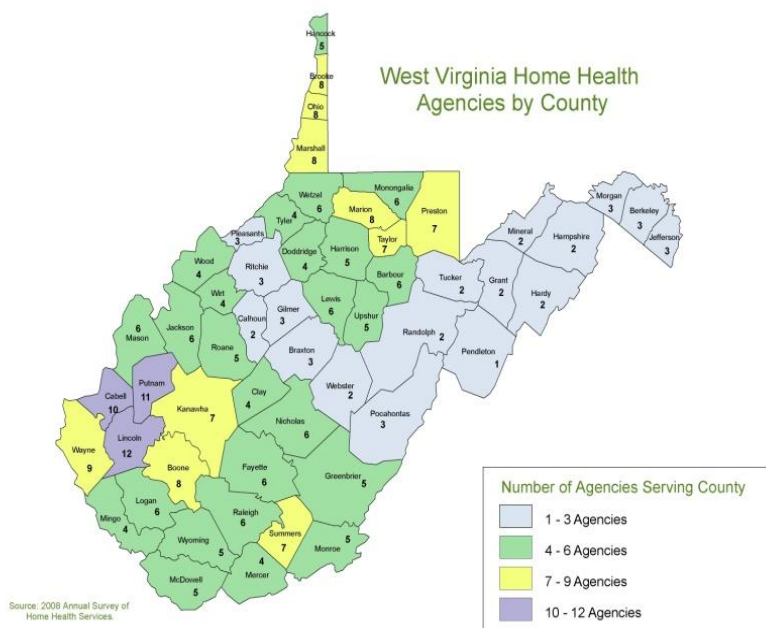
percent occupancy rate for all nursing homes combined, occupancy rates varied widely from a low of 41.9 percent to as high as 99.1 percent.

Medicare and Medicaid accounted for 12.2 percent and 74.1 percent, respectively, of total days.<sup>18</sup>

In 1987, a moratorium was placed on the expansion of nursing home beds through the passage of §16-2D-5g. Since that time, neither hospitals, nursing homes, nor other health care facilities have been able to add any intermediate care or skilled nursing beds to its licensed bed complement. However, in order to promote the health and welfare of the citizens of the state, §16-2D-4a, allows hospitals, in certain instances, to convert acute care beds to skilled nursing beds as long as there are no increases in overall hospital bed capacity. Subsequent to approval by the WVHCA to convert beds under this statute, those acute care beds will no longer be available for use in the future.

**Home Health Agencies.** There are 65 home health agencies that serve WV residents,

including those based in Kentucky, Maryland and Ohio. Service expansion continues to require Certificate of Need (CON) approval; standards are presently under review.



Agencies are categorized as county owned, proprietary, not-for-profit, not-for-profit hospital based, and proprietary hospital-based. Although there is no available utilization information, financial information

shows that, collectively, they have sustained financial losses for six consecutive years.<sup>18</sup>

**Hospice Services.** There are 21 hospice agencies serving WV residents. CON approval is currently required for service expansion; when the standards were revised in 2006, providers' ability to operate in a county was enhanced.

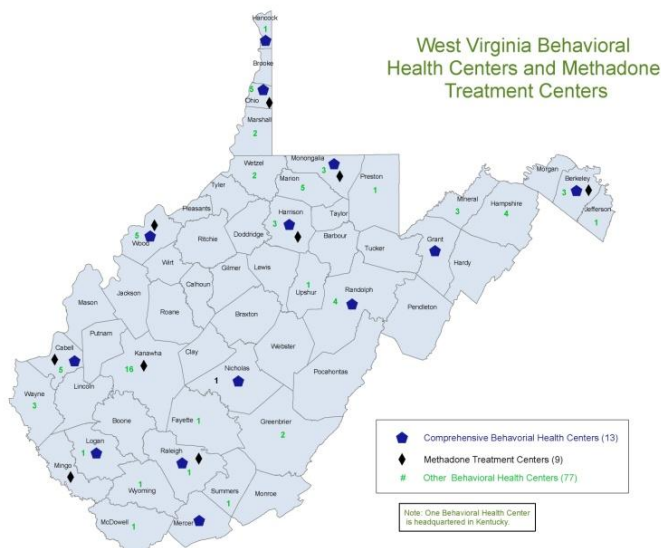
Of the 21 agencies, 13 are free-standing entities, while seven were hospital-based, and one was home health agency based. There was a 3.1 percent increase in the total number of patients served, with total patient days increasing by 9.9 percent.<sup>18</sup>

### Behavioral Health Facilities.

There are 99 behavioral health providers/facilities and methadone treatment centers operating in WV, excluding private practitioners. This is one more provider than in 2007. Two new facilities began providing services during FY08, while three facilities closed and one ceased behavioral health operations, opting to provide services that do not require a behavioral health license.<sup>18</sup>

There are 13 comprehensive behavioral health centers. These centers provide a full array of services, including crisis services, linkages with inpatient and residential treatment facilities, diagnostic and assessment services, and provision of support and treatment services. Collectively, they reported higher profits in FY08 than in FY07.

Although utilization data is not available, the financial information shows that, overall, nine of the 13 centers reported profits. Of the total profits reported, 89.5 percent of those profits were attributed to two centers.



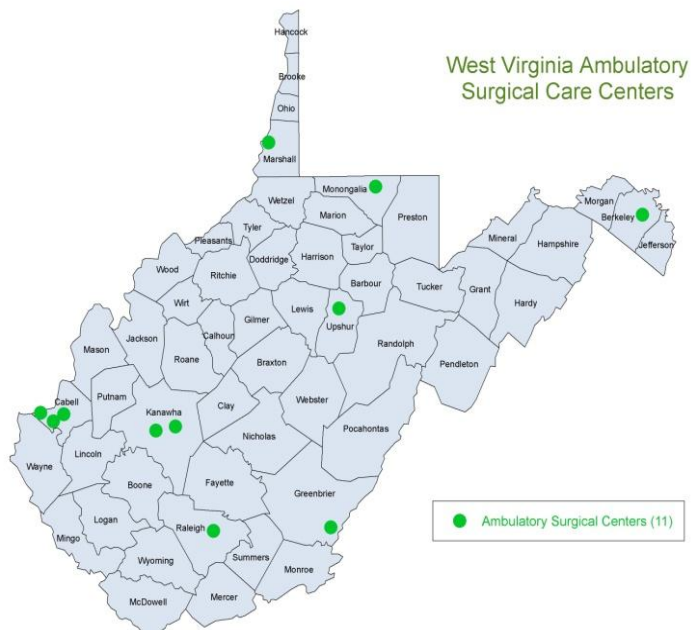
There are also 77 behavioral health providers/facilities other than private practitioners that offer specialized services, which included residential treatment, waiver, case management, counseling, and combinations of services. Collectively, there was a \$12.1 million profit, which was a decrease of \$2.1 million dollars over the previous year.

There are nine methadone



**Ambulatory Surgical Centers.** Ambulatory surgical centers (ASC) are distinct entities that provide surgical services that do not require hospital admission. There are 11 certified, for-profit ambulatory surgical centers operating in WV. The overall margin was 22.4 percent, an increase of 0.7 percent from the previous year.<sup>18</sup>

- ❖ breast repair and/or reconstruction
- ❖ carpal tunnel
- ❖ cataract removal
- ❖ colonoscopy
- ❖ endoscopy
- ❖ knee arthroscopy
- ❖ laser surgery
- ❖ LASIK
- ❖ lesion removal
- ❖ pain management
- ❖ secondary implant surgery
- ❖ sigmoidoscopy
- ❖ tonsillectomy
- ❖ urology.



## Renal Dialysis Centers.

There are 24 for-profit renal dialysis centers operating in WV. Although there is no utilization data, the financial information shows that, collectively, they had an average profit of \$933,000 and an overall margin of 26.2 percent.<sup>18</sup>



## Other Issues Effecting Service Availability

**Medically Underserved Areas.** As stated in the 2000 Plan, adequate and accessible health care personnel, services, and facilities are essential in providing quality health care to all WV residents. In 1998, 50 of the state's 55 counties were designated by the federal government as Medically Underserved Areas (MUAs). Medically Underserved Areas/Populations (MUA/MUP) are areas or populations designated by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) as having too few primary care providers, high infant mortality, high poverty and/or high elderly population. MUPs may include groups of persons who face economic, cultural or linguistic barriers to health care as well. Today, 50 counties remain classified as MUA, MUP, or both.<sup>26</sup>

In addition to MUA/MUP status, there are also Health Professional Shortage Areas (HPSAs). These areas are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility).<sup>26</sup> In WV, HRSA estimates that there are:

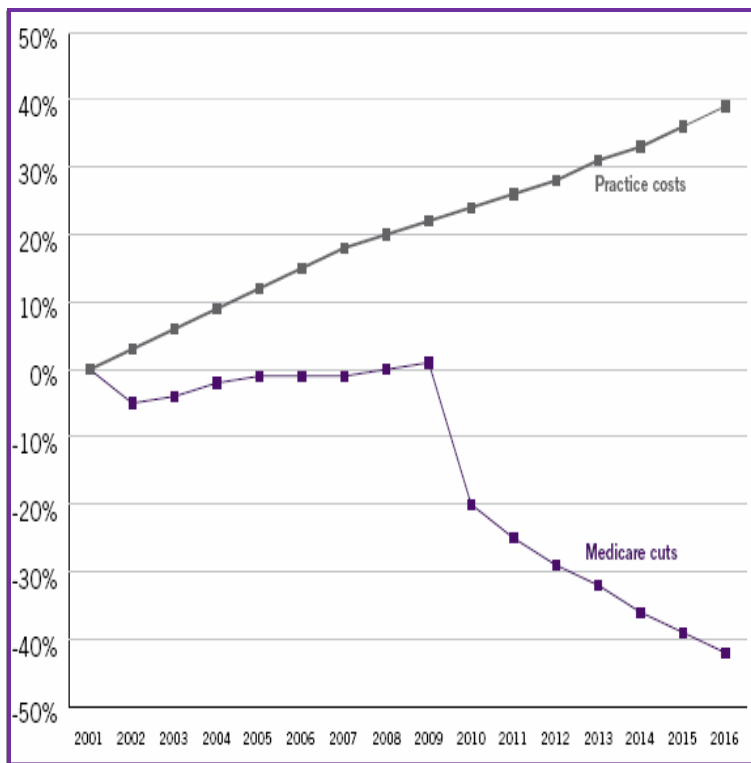
- 160,341 unserved by primary care; 63 practitioners are needed to get a 2000:1 ratio;
- 467,890 unserved by mental health practitioners; need 43 practitioners to get 10,000:1 ratio; and
- 133,191 unserved by dental providers; need 34 practitioners to get 3000:1 ratio.<sup>26</sup>

In the 2000 Plan an inventory of health care facilities and services was performed detailing the availability of beds and utilization, ambulatory care services, and professionals to care for the

population. A similar analysis of services, albeit not as detailed, can be found in the West Virginia Health Care Authority's, 2009 Annual Report. The report includes data from some 389 healthcare providers/facilities providing services to West Virginia residents in fiscal year 2008. Since the HCA collects and disseminates financial data on health care facilities, including hospitals, nursing homes, home health agencies, hospice agencies, behavioral health centers and ambulatory surgical centers, the annual report provides up-to-date information relative to facilities, revenues, service utilization and rate information, to name a few.<sup>33</sup>

Despite our efforts, it is clear that WV communities continue to be medically underserved. One telling statistic from the Kaiser Family Foundation places WV 50<sup>th</sup> in the nation since 2001 for preventable hospitalizations. Preventable hospitalizations indicate hospital discharges for diagnoses amenable to non-hospital based care and reflects how well a population utilizes various delivery sites for necessary care. An increase in preventable hospitalizations may also indicate that access to an appropriate level of care in some areas is unavailable.<sup>7</sup>

**Reimbursement.** An additional concern that has the potential to affect health care services in WV is the Sustainable Growth Rate methodology used by Medicare for physician reimbursement.



Federal law requires Medicare payments to physicians to be modified annually using a formula known as the Sustainable Growth Rate (SGR). The SGR was intended to be a budgetary restraint on Medicare's total expenditures to maintain budget neutrality. Without Congressional intervention, the 2010 SGR will be implemented leaving physicians to face a 21 percent reduction in reimbursement for Medicare covered services.<sup>34</sup> Potential effects of Medicare rate changes on physician practices into the future are depicted in the graph.<sup>35</sup>

## **Strategic Policy Initiatives and Accomplishments: 2000-2010**

Many factors effecting West Virginia's population have been presented, from the economy to health, including many factors that influence both. In some areas, WV has progressed slowly. In other areas, many accomplishments have been made and WV has become a national leader.

The advisory group contributing to the 2000 Plan, which consisted of business representatives, payers, regulators, consumers, providers, and organized labor, envisioned many of the same or similar approaches outlined through the years for achieving positive health care outcomes more effectively and efficiently, albeit, many seemed unlikely at the time.

The advisory group identified and defined nine strategic initiatives in the 2000 State Plan that required action. Each was summarized and corresponding policy recommendations were identified that would address the overall concern and issue identified. Each of the policy recommendations were then categorized in terms of urgency and value.

Although those who participated in the development of the 2000 State Health Plan envisioned many of the advancements made over the past several years, many of the accomplishments have been directly related to the visionary leadership of West Virginia's Governors, Bob Wise and Joe Manchin.

During his inaugural address in January 2001, Gov. Wise committed to the provision of quality health care to every child in West Virginia through the full implementation of the Children's Health Insurance Program (CHIP).

Gov. Wise was also committed to expanding affordable health insurance by developing solutions for the uninsured in WV. Through his efforts, a Health Resources and Services Administration (HRSA) State Planning Grant (SPG) was received in 2002 that allowed the state to explore options for expanding health insurance coverage to small business employers, their employees and individual purchasers.

The initial SPG governance structure was the Governor's Health Umbrella Group (HUG), which consisted of cabinet level state officials overseeing those agencies that related to the health care enterprise in the State. Based upon the work of the HUG and a constituency advisory group, the Health Advisory Council (HAC), recommendations related to insurance programs and other system improvements were presented to Gov. Wise, who ultimately included the majority of recommendations in his legislative proposals for the 2004 Legislative Session.

The passage of Senate Bill 143 during the 2004 Legislative Session, which created the Small Business Plan, enabled private insurance companies, health care providers and state government to combine strengths, which enabled more affordable coverage plans. The legislation was a key component of the Wise Administration's commitment to helping more working West Virginians secure health care insurance. Additional information related to the Small Business Plan can be found in the *"Financing and Cost"* section of this report.

Governor Manchin continued to build upon the accomplishments of the past through his commitment to provide affordable, individual insurance products for low wage workers, a more affordable small group product that could service both individuals and/or small companies, and a product that would increase access to and use of primary care and preventive services. Thus, the Affordable Insurance Workgroup (AIW) was formed as recommended by the Health Advisory Council.

Gov. Manchin included much of the AIW's health insurance recommendations in his 2006 State of the State proposals to the Legislature. The Governor's legislative package included three specific health insurance expansions:

1. An expansion of public SCHIP coverage from 250 to 300 percent FPL;
2. A provision to allow the Commissioner of Insurance to approve limited benefit plans such as those envisioned by the AIW; and,
3. A pilot demonstration of a Clinic Health Services program to provide primary and preventive care for uninsured West Virginians in community health clinics, physician office practices and urgent care centers for a specific monthly fee.

In April of 2007, Gov. Manchin published his vision and plan, *Towards a Healthy West Virginia: A Strategic Vision and Action Plan*, to change the health of the population and health care delivery system in WV. Encompassing his guiding principles, four strategic goals to address the most significant challenges in health care emerged.

- **Value in Government** – Because WV spends billions of dollars each year on health care programs and infrastructure, West Virginians should expect state government to spend funds in the most efficient and effective manner possible; thus, the Administration is committed to prioritizing, integrating, and coordinating the state's health care programs.

- **Value in Health Care** – The health care system must provide care of the highest value and efficiency for the resources allocated; thus, the Administration is committed to undertaking efforts to contain costs, improve health care quality, and increase efficiency, to ensure that WV families, businesses, and government are getting the best possible value out of the health care system.
- **Healthy West Virginians** – The health care system in WV should strive for the best possible outcomes; thus, the Administration believes that prevention and health promotion must be cornerstones of health policy.
- **Access to Care** – Accessing affordable health care is a significant challenge facing WV. The Administration is committed to building on accomplishments, while studying additional ways to expand access to health insurance, community-based care, and appropriate services.

Governor Manchin’s strategic vision and action plan can be found in [Appendix E](#).

Through the vision and leadership of many in the past 20 years, West Virginia has accomplished a great deal. The nine goals that were identified in the 2000 State Health Plan have been summarized and the corresponding accomplishments noted below. Particular attention has been given to those that were categorized as highly valued and urgent for the state in 2000, while others that may not have been as highly valued or urgent at the time will be noted if major accomplishments have been made. West Virginia’s future is predicated on the accomplishments of the past, and based on those accomplishments, there is much to do in the future.

## **I. Promotion of a Coordinated Health Care System**

It was recognized that integrated health care networks would provide operating efficiency, as well as improvements in quality, access, service delivery, and utilization of resources. Because coordinated health care systems have a greater likelihood of having integrated health information systems, it was recommended that the WVHCA, working with other interested parties, should promote the implementation of electronic health records and linkage across health provider

- ✚ The first policy recommendation was to use planning and licensing, certificate of need and settings.

reimbursement incentives to promote system coordination and integration. Build monitoring and enforcement mechanisms into the certificate of need process.

### Accomplishments

- In 2001, there were 36 states and DC that had retained CON statutes.<sup>1</sup> Today there are 37 states that require CON.<sup>36</sup> In WV, health care providers, unless exempt, must obtain CON if exceeding capital expenditure thresholds, obtaining major medical equipment and exceeding cost thresholds, or developing or acquiring new health facilities.

Certificate of Need programs are noted for being effective in encouraging the rational distribution of health care services, particularly by limiting purchases of new technology. States that have eliminated CON programs report that expensive new technology is purchased as soon as it is available, while states retaining their CON programs report being able to control costs and placement by delaying purchases until lower cost and more efficient generations of the technology are available.<sup>1</sup>

CON programs have the advantage of encouraging accountability by providing an avenue for public comment, discouraging or limiting unnecessary services, and promoting community planning. In WV, the CON program offers some protection for small, often financially fragile, rural hospitals and the underinsured population they serve by promoting the availability and accessibility of services and, to some extent, the financial viability of the facility.<sup>1</sup>

The CON process, in and of itself met the requirements of the policy recommendation. However, the WVHCA reviewed the present standards, and as a result, many changes were made that would assist providers in improving quality, access, service delivery and utilization. The CON requirements:

- have changed to reflect current national trends to encourage participation;
- were intentionally changed to promote system coordination and integration;
- have been lifted and/or eliminated as changes have warranted;
- increased capital expenditure reporting requirements and established thresholds for non-medical, capital expenditures, i.e., parking garages, cafeterias, chapels, information systems, etc;
- enhanced the ability to open ambulatory care centers through the development and implementation of exemption processes.



- The CON process built monitoring and enforcement mechanisms into the certificate of need process by:
  - requiring new starts to report utilization, revenue, and expense (actual vs. projected) comparisons;
  - requiring certain services to report to a federal registry in order that utilization information and outcomes reporting could be downloaded for WVHCA use;
  - reviewing entities that fail to meet standards, and if compromised, having the authority to withdraw the CON.

## II. Access

Access to health care was defined in the Plan as the ability to afford, to reach, and to pay for care when it is needed. Through the planning process it was identified that the essential resource base, i.e., the personnel, facilities, and equipment necessary to provide adequate care simply did not exist in many areas given the State's rugged, mountainous terrain, limited highway system, and scattered pockets of population.

Where resources do exist and are readily available, there are also problems accessing services, whether from an inability to reach care, afford care, or lack of knowledge to seek care. These limitations may reflect deeply entrenched economic and social problems that may change gradually over time by ensuring the stability, efficiency and operational flexibility of the existing health care system, particularly primary care centers, small rural hospitals, and local health departments. As previously mentioned, the CON requirements were intentionally changed in order to promote system coordination and integration that would assist in improving access, particularly in rural communities.

There were two policy recommendations to improve access to health care services that were categorized as high priority and urgent.

- ✚ The first policy recommendation centered on improving health care coverage by increasing access to insurance and managed care to the currently uninsured. Not only was this a recommendation specific to WV at the time, it has become a national focus as well. Regardless of what happened on the national level, WV took steps over the years to mitigate the lack of health care coverage by developing and promoting programs that assisted the under- and uninsured.



## Accomplishments

- In 2004 the West Virginia Legislature created the West Virginia Health Insurance Plan for high-risk, uninsurable individuals. The plan, AccessWV, which is offered by the State of WV, began operations in July 2005, and guarantees that all West Virginia residents who qualify can purchase health insurance through the plan, regardless of their current and past health circumstances.<sup>37</sup> This program is not available to persons who:
  1. are eligible for a government health insurance program (Medicare, Medicaid or WVCHIP);
  2. have access to employer-sponsored coverage;
  3. reside in a state or federal correctional facility or hospital;
  4. have terminated coverage in AccessWV during the previous 12 months.

AccessWV members participate in the cost of their coverage by paying premiums and out-of-pocket amounts when they receive services. Premiums are charged based on geographic region, age, gender and type of coverage (single or family). There are various plans from which to choose with varying premiums for both single and family coverage. Through premiums and by special assessments made by all hospitals that are based in WV, financing for the program is made available. No public or state funds are used to support the plan.

As of April 2010, there were 875 covered lives in the program.

AccessWV also serves as a mechanism for enabling employees of small businesses, self-employed individuals, and uninsured persons to obtain health insurance as outlined in the *“Finance and Cost”* section of this report.

- In order to increase the number of West Virginians covered by health insurance, Governor Manchin signed legislation, §33-16-1, allowing young adults to remain on family insurance coverage up to age 25 years of age, regardless of student status.
- Through an initiative created by Governor Manchin, the Legislature authorized (West Virginia Code § 16-2J-1 et seq.) the Preventive and Primary Care Pilot Program in 2006.

The program permitted health clinics and private medical practitioners to provide primary and preventive health services for a prepaid fee, enabling more West Virginians to gain

access to affordable health care. By establishing this pilot project, it allowed state health and insurance officials to study this method of delivering health services. In addition, it was intended to encourage all West Virginians to establish a medical home.<sup>38</sup>

The Insurance Commissioner and the WVHCA were jointly responsible for the regulatory oversight of this project and for determining the efficacy of prepaid clinic models and whether there was a basis for future development and expansion of such models.

The WVHCA solicited applications from providers who wanted to offer an array of primary care type and preventive care services to program enrollees.<sup>33</sup> Six clinics across WV became primary care pilot sites, enrolling over 800 members, including 15 employers. One clinic, although approved as a pilot site, has not yet implemented the program.

In order to understand the success of the program from the member perspective, a satisfaction survey was sent to the membership, resulting in a 30 percent response rate. As a result, key findings included:

- Over 85 percent of those participating visited a clinic, some more than 5 times;
- 65 percent were very satisfied with the quality of care at their clinic;
- Six in ten were very satisfied with the range of services at their clinic;
- Seven in ten believed the monthly fee was very reasonable;
- Only 1 percent were displeased with the value of services received;
- 67 percent reported no emergency room visits.

Many of the negative comments received about the program directly related to specific staff at the clinic, rather than dissatisfaction with the program, premiums, or services. When asked how the program might be improved, many stated that expanding the program and including more services was needed. Suggestions varied on how that expansion might work; one response recommended a “tiered” approach with a greater number of services offered as the premium increased, while others thought it should be “marketed” more across the state.

Success from the provider perspective, feasibility of expanding the program or similar programs on a statewide basis, and continued need will be assessed in the future.

- Through another initiative by Governor Manchin, WVRx was created as an electronic, free medicine distribution system for nearly 30 percent of the state's uninsured and underinsured residents who lack prescription drug coverage. The program allows WV physicians to prescribe name-brand pharmaceuticals online for eligible patients. One of the first initiatives of its kind in the nation, the WVRx Program, which debuted in 2008, partnered with WV Health Right to be the central-fill pharmacy for the program.<sup>39</sup>

The program was expanded in 2009 when Governor Manchin announced that WV would become the first state in the nation to coordinate hospital charity care programs with its charitable pharmacy program.

Because West Virginia is the first state in the country to have such a program in its current form, the state has shown that it is a leader and model for the nation.<sup>40</sup>

- The State Children's Health Insurance Program (SCHIP) has become an important source of coverage for children and families in WV. Although fully implemented, it continues to evolve.

Enacted to provide health coverage to targeted low income children, West Virginia is one of only 19 states that set eligibility for coverage at a level greater than 200 percent of the federal poverty level (FPL).<sup>41</sup> In 2006, during the Regular Session of the State Legislature, WVCHIP was expanded to cover uninsured children and families over time with incomes between 200 percent and 300 percent of FPL. Effective January 1, 2007, West Virginia's upper income eligibility limit rose to 220 percent FPL and did not include premium requirements.<sup>42</sup> After encouragement from Gov. Manchin, the program was further expanded on January 1, 2009, when the WVCHIP Board approved a financial plan to include eligibility for families with incomes up to 250 percent of the federal poverty level (FPL). At this level, premium plans were implemented.

Current enrollment figures show that there are approximately 25,000 enrollees. Since its inception in 1998, WVCHIP has enrolled over 109,000 unduplicated children, as outlined in the WVCHIP 2008 Annual Report (the latest available).<sup>43</sup> With all the programs available in WV for children, including Medicaid, WVCHIP, and private insurance, WV's rate of uninsured, low-income children has dropped to 2.4 percent per the U.S. Census Current Population Survey 2008 Annual and Economic Supplement.

- In 2009, legislation passed that gave insurance carriers the authority to negotiate with the state Insurance Commissioner's Office to offer limited-benefit plans to seasonal and temporary workers who couldn't otherwise afford coverage. The new law allows carriers to develop plans that exclude certain types of coverage otherwise required by statute, but continues to require coverage for mammograms, pap smears, Hepatitis tests and colonoscopies.<sup>44</sup>
- The affordable health care plan program created in 2009 by the Legislature through SB 552 was designed to encourage and expand the availability of health care options for uninsured residents by developing affordable health care products that emphasize coverage for basic and preventive health care services, provide inpatient hospital and emergency care services and offer optional catastrophic coverage.

Under the 552 Program, the Office of the Insurance Commissioner invited insurers to submit proposals for approval for low-cost affordable plans that could be sold to any person who had not been covered in the last six months with some applicable exceptions, and not currently eligible for other public or employer sponsored coverage.<sup>45</sup>

- In 2009, WV was awarded \$37 million over four years in grant funding to create WV CONNECT, a State Health Access Program (SHAP) that will subsidize expansion of coverage and access to care for working, uninsured West Virginia residents.

The program aims to link those who are uninsured to health coverage through medical homes that will provide basic primary care, preventive care and other wrap-around coverage.

This project will be implemented in phases and includes the following components:

- **Health Insurance Exchange:** The state will develop an insurance exchange, which will provide enrollees with information on insurance products, available sources of health care, and quality measures of participating providers. The exchange will also include a call center, online enrollment for insurance plans, premium collection/remittance, and a system to administer eligibility determination and premium subsidy program components. Funding will also be used to link adults needing oral health care to providers, and will support the telehealth initiatives to improve rural health through education and outreach;

- **Medical Homes, Prepaid Clinic Model, and Premium Assistance [Pilot]:** WV CONNECT will link uninsured residents with suitable medical homes, through expansion of previous pre-paid clinic pilots. These pilots will help provide limited benefit wrap-around coverage to enrollees with sliding-scale premium assistance available. The target population for this initiative is working parents between 115-250 percent of FPL;
- **Use of Health Information Technology (HIT) and Centralized Clinic Portal:** This portal will allow providers participating in the pilot(s) above to submit service/clinical information needed to evaluate program effectiveness, measure patient health outcomes, and populate patient personal health records.<sup>46</sup>

✚ The second policy recommendation was to require collaboration at the state, regional and local levels to address complementary roles of various agencies in promoting public/private partnerships targeting infrastructure for access to health care. Collaboration and planning within local communities are essential to ensure the maximization of all resources. For example, communities would use facilities such as schools for clinics.

### Accomplishments

- The Office of Community Health Systems and Health Promotion in conjunction with the Centers for Disease Control and in collaboration with the West Virginia University, Office of Health Services Research, Department of Community Medicine, provides onsite trainings to primary care centers and free clinics in the areas of patient-centered medical home concepts and improved management of chronic illness through the Chronic Care Model.

Not only is the goal to promote improved access for patients, such as extending office hours, but also to improve care by scheduling patients with their personal clinician, which provides continuity of care, and coordinating visits with multiple clinicians and/or diagnostic tests during one trip. The concepts serve to promote patient compliance and maximize patients' health.

- The Office of Community Health Systems and Health Promotion has partnered with the West Virginia Primary Care Association to promote the National Committee for Quality Assurance (NCQA), Patient-Centered Medical Home Recognition. The framework for recognition includes delivery system design changes to improve patient access,

community linkages, culturally competent interactions with patients and enhanced access to care.

- School Based Health Centers have focused on providing access to care and health services for students since 1994. As a means to improve health care and administrative systems at the centers, the West Virginia Performance Effectiveness Review Tool (WVPERT), an electronic tool was developed in collaboration with the Division of Primary Care, Marshall University School Based Health Technical Assistance and Evaluation Office, West Virginia School Based Health Assembly and Center for Rural Health Development.

As a result of WVPERT and various committees, school based health continues to improve access, systems, and processes while decreasing school absenteeism.

- In 2009, Cabin Creek Health Systems announced that it would convert the second floor of a three-story, abandoned school building in Clendenin as an expansion of the Cabin Creek Health Clinic.<sup>47</sup>
  - The various DHHR Bureaus and other government agencies are just beginning the process of leveraging their resources to identify areas of need and collaboration. There are, however, opportunities to review whether there are resources that may be duplicative. This avenue for change may require further exploration as the health planning process progresses.
- ✚ The third recommendation, although not high on the priority list and not urgent, was to improve access to health care providers by:
1. supporting programs targeting physician recruitment and retention;
  2. supporting programs that will train residents and students in rural, underserved areas;
  3. supporting communities to “grow their own,” and
  4. promoting the development of provider networks in rural areas.

### Accomplishments

- Although not a high priority, nor urgent at the time, much has been done to accomplish this goal. On March 19, 1996, Governor Gaston Caperton signed HB 4137, codified at W.Va. Code § 16-2D-5. This legislation created the Rural Health Systems Program

(RHSP). The goal of the RHSP was to avoid the potential crisis or collapse of essential, rural health care services by encouraging the restructuring of the rural health care system.<sup>48</sup> The program accomplishes this goal by granting or loaning funds to facilities to ensure health care delivery is streamlined and continuous.

Still in existence today and administered by the WVHCA, the RHSP provides technical assistance and collaboration grants to help rural communities to integrate and strengthen health care delivery systems and assure people in the community reasonable access to necessary health care services. For those health care facilities in medically underserved areas that are vulnerable due to loss or decreased essential health care services, technical assistance, crisis grants and loans are available to facilitate transition or restructuring.<sup>49</sup>

Through a collaborative arrangement with the Bureau for Public Health, Office of Community Health Systems and Health Promotion, the applications for grant requests are reviewed by technical experts. Technical assistance may also be requested and/or provided depending on the area requesting the grant, i.e., Primary Care, Emergency Medical Centers/Providers, Rural Hospital Flexibility Program, and Local Health Departments.<sup>48</sup>

Since its inception, the RHSP has awarded numerous grants totaling in excess of \$4 million. Not only has the RHSP program been successful for ensuring entities in crisis are able to continue to function, other collaborative grants have been awarded that improved access to health care services across the state.

- Within DHHR, Bureau for Public Health, Office of Community Health Systems and Health Promotion, there are four divisions, the Division of Rural Health, the Division of Primary Care, the Division of Recruitment, and the Division of Local Health that support, facilitate, and coordinate comprehensive and integrated community-based health services throughout the state. The Office promotes health service availability and accessibility to all West Virginians through support of community primary health care centers, local health departments, hospitals, and emergency medical systems.

The Division of Rural Health serves as the focal point for rural health issues in West Virginia and contributes to innovative approaches for addressing rural health care needs of the citizens. The Division collaboratively plans and develops policy, provides technical assistance and coordinates statewide rural health activities.

The Division of Primary Care allocates funding to community-based comprehensive primary care health centers and free clinics to improve the health status among medically underserved and/or uninsured populations.

The Division of Recruitment assists West Virginia's rural and medically underserved communities in their efforts to recruit and retain qualified health care providers and ultimately alleviate the shortage of medical providers in the state's rural areas.

The Division of Local Health provides support for local health department employees and local boards of health as they deliver public health services and improve community health.

Within the Division of Health lies the Recruitable Community Program (RCP), a program that was initiated in 1998 which focused on increasing a rural community's recruiting potential. The original RCP strategies included:

1. Enhancing the ability of rural communities to recruit medical providers through community development and increased knowledge of recruitment and retention issues.
2. Placing primary care resident, nurse practitioner and physician assistant trainees in selected communities to make them more familiar with the rewards and challenges of practicing in rural areas.

Cornerstones of the Program have been and continue to be:

- Frequent interaction between participant communities and program personnel who work with the communities providing technical assistance and maintaining focus as they work through the various RCP components;
- Visits to participant communities initially by a “first impression” team that assesses the appearance of the community and provides recommendations for enhancing its image to recruits and others, and subsequently form a “community design” team that makes assessments and recommendations for general community development and for enhancement of community recruiting potential;
- Recruitment workshops with a rural focus; and
- Continued technical assistance to the community recruitment boards of the participant communities.<sup>50</sup>



Many programs exist to meet the original goals outlined for recruitment and retention of practitioners and for promoting the development of provider networks in rural areas. Despite the efforts of many, West Virginia continues to be medically underserved as outlined in the *“Health Care Availability”* section of this report. Further analysis and examination of the issues being encountered that prevents access to healthcare may be an area for review in the future health planning process.

### **III. Financing and Cost**

The uninsured and underinsured continue to be a source of concern at both the federal and state levels. National health care reform is at the forefront and change is imminent. As outlined in the 2000 Plan, WV and the nation have wrestled with how to deal with the fairness of payment systems, access for individuals who lack health insurance or who have inadequate insurance, and the preservation of health care providers that act as a “safety net” for the uninsured and underinsured. We continue to deal with these same issues today.

In addition to the uninsured and underinsured, many West Virginians continue to be dependent on public health insurance programs and federal programs for sustainability. As previously noted in the *“Insurance Coverage”* section of this report, 17.4 percent have Medicare coverage, 14.8 percent have Medicaid coverage, and 1.2 percent are covered by some other public insurance. Per the WVHCA’s 2009 Annual Report, Medicare inpatient hospital days and hospital discharges doubled, or nearly doubled, all other payer sources in WV in the 2008 fiscal year.<sup>18</sup> As the state’s population ages and economic factors remain constrained, dependence on Medicare and Medicaid may only increase.

The need for federal programs and dollars are not only prevalent with insurance coverage, they are also of great assistance for preserving the safety net, particularly in the rural areas of WV. The federal government has developed various means for preserving the safety net; federally funded critical access hospitals and federally qualified health centers receive cost-based reimbursement, which is integral in maintaining health facilities in the rural areas for access to healthcare. For hospitals that serve a disproportionate share of low-income and indigent patients, WV provides disproportionate share hospital (DSH) adjustment payments. WV has leveraged federal dollars to prevent the destruction of the safety net, while working to provide insurance coverage for more of the population.

There were several high priority and urgent policy recommendations in this area. They are listed below with their associated accomplishments.

- ✚ The first policy recommendation of highest priority and urgency was to enable employees of small businesses, self-employed individuals, and uninsured persons to obtain health insurance.

### Accomplishments

- As a component to the overall commitment by WV state government to provide access to health insurance and medical care for all citizens, the legislature created the West Virginia Small Business Plan under Senate Bill (SB) 143, which was signed into law by former Governor, Bob Wise. It was created to help more uninsured working adults obtain comprehensive health insurance coverage through employer-sponsored plans at prices lower than the usual rates for comparable coverage.<sup>51</sup>

SB143 encouraged a private/public partnership among insurance carriers, health care providers and PEIA in order to bring commercially comparable coverage plans to qualifying uninsured small businesses at a premium cost reduction. This was primarily accomplished by allowing the participating carriers to access PEIA's provider reimbursement rates, which were 20-25 percent lower on average than those of private insurance companies.

In order to participate in the West Virginia Small Business Plan, businesses must meet the following eligibility criteria outlined in SB143:

- the Plan is available for businesses having 2 – 50 employees;
- the small business must have been without a company-sponsored health plan for the prior 12 consecutive calendar months;
- the employer must pay at least 50 percent of the individual premium costs;
- 75 percent of eligible employees must participate, and
- the business must have been in existence for at least the past 12 consecutive months.

Currently, there are approximately 1600 covered lives in this program.

- AccessWV, as previously described in the “*Access*” section, also serves as a mechanism for enabling the uninsured to obtain health insurance coverage.

- ✚ The second policy recommendation was to determine the existing public and private healthcare provider's sources and uses of revenue and assess the current and future impact of federal reimbursement changes on WV health care providers.

As stated in Gov. Manchin's strategic vision and action plan, the Administration is committed to prioritizing, integrating, and coordinating the State's health care programs in order to spend funds in the most efficient and effective manner possible.

- ✚ The third policy recommendation was to provide incentives for preventive care and wellness by lowering health insurance co-payments for individuals who meet their personal health care goals.

### Accomplishments

- PEIA announced on December 16, 2009, that it will be providing incentives, particularly wellness discounts, for preventive care and wellness.
- Medicaid, through the Mountain Health Choices Program, is developing a methodology for incentivizing recipients to meet health and wellness goals developed between the primary care provider and member. At this time, the plan has not yet been approved by CMS.

- ✚ The fourth policy recommendation was to develop policies to enhance the role of the consumer as the purchaser of health care services.

### Accomplishments

CompareCareWV™ was developed by the WVHCA as a means for enabling the consumer to compare average hospital and professional charges and care quality. As purchasers of health care services, consumers now have a vehicle for obtaining information that may assist with their individual health decisions.

- ✚ The sixth policy recommendation was to provide adequate reimbursement for health care providers to encourage use of technologies to improve health care.

## Accomplishments

- Although a policy recommendation at the time, it was not a priority, nor was it considered urgent. However, the federal government, through The American Recovery and Reinvestment Act of 2009 (ARRA), is encouraging providers to use technologies to improve health care delivery. As state health planning proceeds, it is important to recognize financing opportunities available to West Virginia.

Because West Virginia does not have the resources to finance the technology needs of the state, it must seek partnerships that leverage available resources while allowing the state to retain its innovative and leadership role in the execution of its HIT strategies. The recent American Recovery and Reinvestment Act (ARRA) has made resources available to enable providers to adopt health information technology as well as resources to facilitate the vision for the Health Information Exchange.<sup>52</sup>

It is estimated that in excess of \$80 million will be necessary to support providers in WV with investments in electronic health records technology. The ARRA will provide incentive payments totaling \$45,000 over five years to encourage capital investments by medical providers. Financial incentives available through the ARRA may stimulate the adoption curve.

As funding to support physician acquisition of electronic health management systems becomes available there will need to be a coordinated effort to deploy the resources in the field. Regional Information Technology Extension Centers in WV as envisioned in the ARRA will be the mechanism for achieving this goal. Once funding is identified and made available through the deployment process, it is proposed that waves of providers be supported in their implementation process.

WV is well positioned to be an early adopter state to demonstrate how those resources can be efficiently distributed in the field. The penetration of open source technology in WV also offers a national model for consideration that could help the federal government better leverage its own resources as it moves forward.

- WV has received numerous grants and funding to improve health care through health information technology.

- \$2.6 million provided to the WVHIN from the Office of the National Coordinator (ONC) in order to establish health information exchange demos, provide support to the National Health Information Network workgroups and provide legal expertise regarding health information exchange;
- \$9.7 million received from the FCC Rural Health Care Pilot Program through the WV Telehealth Alliance to fund improved broadband connectivity among eligible healthcare entities in the state;
- \$7.8 million received through the WVHIN/DHHR to establish a statewide health information exchange;
- \$126 million to expand broadband across WV;
- \$6 million for the Regional HIT Extension Center through the WV Health Improvement Institute to assist physicians in electronic health record adoption.

#### **IV. Accountability**

Per the 2000 Plan, accountability was an important non-clinical element of the health care system and provided a structural incentive for all parties to perform as effectively and efficiently as possible. At the time, there was a vision of a health care system that would incorporate a high degree of accountability that would likely bring better outcomes. It was also recognized that the State of WV, as a major payer of health services, needed to move expeditiously to implement methods to accurately measure what was being purchased with its scarce health care dollars.

It was also recognized that the need for available and reliable outcome measures would have a significant impact on the health care system. Without outcome measures, resources could not be directed to those providers and programs best able to demonstrate their effectiveness. In addition, absent the development of effectiveness of care measures tied to the key objectives of the State Health Plan, WV's progress toward achieving objectives could not be known or demonstrated to the legislature or the residents of the state.

Presently, the lack of system coordination and reliable outcome measures continue to have a significant impact on the health care system. However, there are numerous opportunities for providers to pursue health information technology implementation and gain monetary incentives in order to collect the data that can be used for improving quality, safety, care coordination, and outcomes.

Whether electronic or otherwise, WV can begin the process of developing the framework for establishing best practice benchmarks across all service settings, monitoring feedback to

providers of care and to those served, and developing specific measures for at-risk populations chosen for special focus.

Rather than attempt to develop and use unique measures specific to WV, national accountability measures and experiences of other states and organizations may be beneficial. Some examples of measures that are available include Agency for Health Care Policy & Research Quality Indicators, Health Employer Data & Information Set (HEDIS), and Consumer Assessment of Health Plans Survey (CAHPS), as well as other national initiatives and clinical guidelines. Regardless of the measures chosen, it is imperative that methodologies utilize the state's resources efficiently and improve health outcomes.

As technology improves and services can be more effectively and efficiently measured and tracked, accountability may be an area of focus in the future health planning process.

- ✚ The first policy recommendation was to establish a set of population-based baseline indicators/performance measures and develop a standard definition for accountability.

### Accomplishments

- Chronic illness, along with risk factors associated with chronic disease, is prevalent in the WV population. The rural nature of the state also presents unique challenges for providing optimal care for those who are acutely or chronically ill. Ongoing initiatives throughout the state are attempting to address these concerns.

One mechanism for addressing the issues was the creation of the West Virginia Health Improvement Institute. The Institute was created as a result of a grant award from the Centers for Medicare and Medicaid Services (CMS) to the West Virginia Department of Health and Human Resources, Bureau for Medical Services (Medicaid). The vision of the Institute during the grant period was to act as the vehicle to prepare community health providers to qualify as advanced medical homes for Medicaid members, to participate in performance-based health outcome incentives under the pay for performance demonstration concepts, and become a statewide collaboration among multiple stakeholders focusing on improving the health and health care of all West Virginians.<sup>53</sup>

In addition to the grant initiatives, the Institute was to be the key element for bringing stakeholders together to leverage collaboration and resources in order to foster alignment across the health care system and to expand and address broader health issues in the

State. Once the grant initiatives are complete, the long-term goal of the Institute is to improve the health status of all West Virginians through aligned initiatives focusing on improved access, prevention, promotion of wellness and healthy lifestyle choices, and optimal evidence-based chronic illness management.

In order to accomplish these goals, a series of workgroups were created to address the issues in the State. Those workgroups and their focus are:

➤ **Adoption of Health Information Technology**

Focus: Acceleration of the adoption of electronic health information technology by providers in West Virginia in support of the medical home model and adoption of physician practice technology.

➤ **Measurement/ Reporting/ Reimbursement**

Focus: Recommendation of draft measures and reporting requirements for the Medical Home as well as pilots for testing alternative reimbursement models.

➤ **Provider Outreach and Education**

Focus: Development of strategies to provide education and assistance to primary care providers in West Virginia.

➤ **Self-Management Workgroups**

Focus: Identify mechanisms with which to make Medicaid beneficiaries aware and accessible to resources to assist them in improving self-management capacity.

➤ **Innovation and Evaluation Work Group**

Focus: Promote and coordinate the development and support of pilot/demonstration programs for the Health Improvement Institute.

A Coordinating Council was also formed of the work group chairs to assure alignment across all groups. It is anticipated that a Mental Health System Work Group will be created in the future.



The Health Improvement Institute recently was among 32 non-profit organizations awarded federal dollars to support the development of regional extension centers (RECs) that will aid health professionals as they work to implement and use health information technology.

- ✚ The second policy recommendation was to extend certificate-of-need data collection to include ongoing tracking of actual performance and to measure quality indicators and access to care by the medically indigent population. The second part of this policy recommendation was to augment current operational reporting to more fully inform the public and legislature about the quality of care and financial performance of the state's key health care providers and insurers.

### Accomplishments

- The WVHCA oversees the certificate of need process related to therapeutic and elective cardiac catheterizations. As part of the process, quality of care reviews are completed and outcomes are assessed. If significant numbers of negative outcomes are found, those concerns are provided to the facility and monitoring continues.

## **V. Quality of Care**

Although there are many definitions of the term “quality,” it was defined in the Plan as “the improvement of clinical, financial, functional, and organizational outcomes.” The three general areas of concern in the Plan focused on underuse of services by those in need, overuse of services by many, and avoidable medical errors.

In 2000, it was recommended that strategies for improving quality must include a mix of techniques involving provider interventions, patient-oriented interventions, and health-system-oriented interventions, while keeping in mind that determinants of community and personal health may reflect environmental factors.

- ✚ The first policy recommendation was to establish a clearinghouse for quality data collection.
- ✚ The second policy recommendation was to establish an advisory group on quality as a private/public partnership of health care stakeholders to develop and implement a quality plan, establish statewide standards, identify and select national benchmarks, monitor selected quality outcomes, and create a forum for measuring and reporting quality.

- ✚ The third policy recommendation was to determine the definition for quality. The parameters of this definition would include measurement of health care services against established standards, consumer expectations, and improvement in health status. The term “standard” includes established targets, appropriateness criteria, or guidelines.
- ✚ The fourth policy recommendation was to establish conservative objectives and timetables for the advisory group on quality to develop strategies ensuring linkages among financing, care management, and community-based care that will:
  1. Assess the resources available to provider organizations to improve quality performance;
  2. Assess the experiences of other states to provide insight into the practical and technical problems occurring in their health care systems;
  3. Perform small area variation studies using existing hospitals data to identify variations among facilities, communities, and high-risk populations;
  4. Identify and select high-risk populations to study by using valid, reliable, tested measures;
  5. Use a systems approach to measure quality.

### Accomplishments

Today, WV continues to develop mechanisms for improving quality of care, cost-effectively, without sacrificing access or burdening any element of the delivery system.

- As a result of legislation in 2008 (§16-5B-17), the W VHCA, with assistance from the Healthcare Associated Infection Control Advisory Panel, is performing the following activities to enhance and promote quality care in the state:
  - Providing guidance to hospitals in their collection of information regarding healthcare-associated infections;
  - Providing evidence-based practices in the control and prevention of healthcare-associated infections;
  - Developing plans for analyzing infection-related data from hospitals;
  - Developing healthcare-associated advisories for hospital distribution; and
  - Determining a manner in which reporting of healthcare-associated infections is made available to the public in an understandable fashion.

Once the Advisory Panel members were identified, work began when access to the Centers for Disease Control and Prevention (CDC), National Healthcare Safety Network (NHSN) was provided and the hospitals began submitting data. The National Healthcare

Safety Network (NHSN) is a voluntary, secure, internet-based surveillance system that integrates and expands legacy patient and healthcare personnel safety surveillance systems. It is managed by the Division of Healthcare Quality Promotion (DHQP) at the CDC. NHSN also includes other components for hospitals to use, such as monitoring adverse reactions and incidents associated with receipt of blood and blood products. Enrollment is open to all types of healthcare facilities in the United States, including acute care hospitals, long term acute care hospitals, psychiatric hospitals, rehabilitation hospitals, outpatient dialysis centers, ambulatory surgery centers, and long term care facilities.<sup>54</sup>

When the data is collected, meaningful information will be provided to various programs, including but not limited to the WVHCA, WVDHHR, Bureau for Public Health, the Office of Health Facility, Licensure, and Certification, and ultimately the public at large.

- Hospital readmissions within 30 days has become a national focus since being discussed during health care reform. As a result, it is anticipated that Medicare may implement some form of payment restriction related to readmissions. Given the national focus, the Health Improvement Institute (HII) pulled national Medicare data, which showed that WV's rate of readmissions ranked as one of the highest in the nation. Subsequently, the HII's Measurement Workgroup began reviewing data provided by the WVHCA to not only determine next steps, but also for exploring ways to effectively reduce unnecessary hospital readmissions in WV.

It is anticipated that a collaborative approach between WV hospitals and primary care providers will be utilized to decrease the rate of readmissions similar to the collaborative effort previously utilized for decreasing the pre-term delivery rate as outlined in the *“Initiative for Health Improvement”* section of this report.

- CompareCareWV™ was developed by the WVHCA to enable patients and their families to make informed decisions about medical procedures and/or diagnostic testing. This tool was developed as a means for the consumer to review cost and quality and other related health options prior to making determinations about health care. Additional information can be found in the *“Coordinated Health Related Information Networks”* section of this report.

- The creation of the Health Improvement Institute and the movement toward electronic data will assist WV in moving forward in accomplishing all of the policy recommendations outlined in the 2000 Plan.

Although all of the workgroups created by the Health Improvement Institute play a role in improving the quality of care in WV, it is the key role of the Institute's Measurement, Reporting, and Reimbursement workgroup. Another key focus of the group has been to ensure that proposed measures for health and quality improvements are aligned with other initiatives in the State. This group has the potential to move the state forward and to accomplish many of the policy recommendations outlined above. At the present time, however, the Institute's initiatives continue to focus on the medical home concepts as well as pilots for testing alternative reimbursement models.

## **VI. At-Risk Populations**

WV has limited resources available to meet all of the needs of its population. There are many areas that continue to be medically underserved and national statistics show that WV has maintained its poor health status over the years. In addition, the population continues to be older than the national average. These three issues have major implications for the demand for, and provision of, health service utilization in the state.

As outlined in the 2000 Plan and applicable today, strategies to address as many of the major health problems as is practicable, and using available health resources as efficiently as possible must be devised.

- ✚ The first policy recommendation was to generate an initial list of potential at-risk groups based upon existing data with an explanation of the rationale for their selection.

There are many public programs operating today that are available for specific at-risk groups. However, in March 2006, the legislature focused on the substance abuse and behavioral health systems of care as ones requiring attention. Particularly,

- the behavioral health system in WV was rapidly moving toward a state of crisis as a result of overcrowding in state facilities and prisons, and inadequate community support services to prevent these problems, and

- untreated and inadequately treated behavioral illness and substance abuse have placed a significant burden on WV by placing heavy fiscal pressures on many WV government and non-profit agencies.

As a result of these issues, the Comprehensive Behavioral Health Commission (CBHC) was formed to conduct a comprehensive study and review of the behavioral health care system in WV. In addition, an analysis of the total public and private dollars actually being spent on prevention, treatment, education and other services related to mental illness, substance abuse and domestic violence in WV was required.

Subsequently, Public Consulting Group (PCG) concluded an analysis of the funding of mental health and substance abuse in March 2007. The report shows there is a “lethal combination” of mental illness and substance use which generates broad and deep costs to the state of West Virginia. Their findings estimated a \$3.6 billion impact in fiscal year 2006.<sup>55</sup>

The Substance Abuse and Mental Health Services Administration (SAMHSA) estimates 8.84 percent of the state’s population in 2004 was dependent on a drug or alcohol, and 12.73 percent of its adults had serious psychological distress in 2004, which ranks as the highest percentage in the nation. In the estimated 1.4 million adults in West Virginia, it is estimated that 152,000 persons over the age of eighteen have a substance use problem and 182,000 persons have a mental illness. The report can be found in [Appendix F](#).

The Commission has worked to assess the issues and has provided findings over the years. In May 2009, the CBHC was reestablished through SB 667 to continue the study of the current behavioral health system. As part of the CBHC, a task force presented a preliminary report to Gov. Manchin in May 2009, with recommendations identified. Those recommendations were:

- Increase the pay rates for staff employees at the state psychiatric hospitals
- Enhance the use of uncompensated care incentives
- Increase the prevalence and support for a variety of group homes
- Create a crisis intervention system that is accessible and integrated
- Enhance reimbursement rates for community services provided under the clinic, specialty, rehabilitation and community health center codes
- Enhance reimbursement rates for targeted case management
- Provide additional funding for peer supports, supported living and basic living skills

- Provide additional funding for mental health courts
- Provide additional funding for care coordination.

To date, changes have occurred in compensation for psychiatric hospital employees and the reimbursements to comprehensive behavioral health centers have been enhanced. In the meantime, the CBHC continues its work with final recommendations due to the Governor and the legislature by January 1, 2011.

## **VII. Public Health**

At the time that the 2000 State Health Plan was being developed, the public health system was in transition. Gradual reductions in state and local support, changes to Medicare reimbursement methodologies, and increased reliance on managed care plans all contributed to issues encountered in the public health sector.

In 1999, MacQuest Consulting issued a paper for the WWHCA for use in the state health plan development related to the public health issue. It was found that there were such fundamental problems facing the public health system that a Public Health Transitions Project Team was organized to develop recommendations for improving the system.

At the same time local health departments were in such dire economic straits that a legislative subcommittee appropriated millions in additional state funds over the next two years to assist with the problem, while the Public Health Transitions Project identified ways to improve the situation.

One of the recommendations made by the transition team was to fully integrate the public health system with the overall health care system. As a result, a 44-member advisory board was established to assist the Bureau for Public Health in developing a transition plan to do so. Today, many of the local health departments have become integrated into the health care system, and in many ways practice as other providers and bill services accordingly.

Although this particular issue was identified in the 2000 State Health Plan, the urgency of the issue seems to have passed. However, there were other general public health issues for which policy recommendations were made, which were based on the health status of the population.

- ✚ The first policy recommendation was to target initiatives in cardiovascular disease.

- ✚ The second policy recommendation was for the WVBPH and the WV Dept. of Education to collaborate in encouraging school policy development and partnerships between the local boards of health and county boards of education to determine school-specific environmental interventions and measurement indicators that promote healthy eating, a tobacco-free lifestyle, and physical activity among students, faculty, and staff.

### Accomplishments

- The Office of Healthy Schools within the Department of Education has a mission to provide leadership, training and support for schools and their communities designed to improve collaboration and ensure the health and educational achievement of children in a safe, nurturing and disciplined environment.<sup>56</sup>

Age specific health and wellness education is provided specifically for pre-kindergarten through 4<sup>th</sup> grade.

- ✚ The third policy recommendation was to target initiatives in cancer control, not only through coalitions, but through the legislature for cancer screening and treatment.

In WV there are a few benefits that all insurers are required to cover under all plans related to cancer treatment and/or prevention, including screening for breast, colorectal, cervical and HPV cancer, medical costs for certain clinical trials, and reconstruction surgery following mastectomies.

- ✚ The fourth policy recommendation was to continue and support financially the strategic process that has laid the groundwork for a strengthened public health system emphasizing the basic public health services of prevention and control of communicable diseases, community health promotion, and environmental health protection.

### Accomplishments

- Governor Manchin's commitment to the promotion of healthy lifestyles for all West Virginians was solidified by the passage of the West Virginia Healthy Lifestyles Act (HB 2816) on April 5, 2005. This act created the Healthy Lifestyles Coalition, which was comprised of representatives from a variety of community organizations appointed by the Governor.



The bill also established a Clinical Advisory Committee to assist in the development of healthy lifestyles policy and practice guidelines. It also facilitated the creation of the West Virginia Office of Healthy Lifestyles within West Virginia's Department of Health and Human Resources as a means for coordinating the efforts of all agencies to prevent and remedy obesity and related weight problems, and for ensuring that all citizens are educated on the serious health risks related to obesity.

The mission of the Office of Healthy Lifestyles is to increase the proportion of people who are at a healthy weight by creating, improving, and communicating opportunities for residents to engage in healthy eating and physical activity behavior.<sup>57</sup>

The Act also called for the state to take action to engage the population in healthy eating and regular physical activity, and to invest in research that improves the understanding of inappropriate weight gain and obesity. These efforts were identified to improve the health of its citizens and reduce the cost of health care.

- ✚ The fifth policy recommendation was to create and pass legislation to curb tobacco use among the state's children, making tobacco products harder to obtain by causing a significant increase in the retail cost of tobacco products.

### Accomplishments

- In 2001-2002, the Legislature established a new state excise tax on smokeless tobacco products. Although a tax equivalent to 25 percent of the wholesale prices of the products was advocated, the final legislation established a tax of 7 percent of the price, which equaled the excise tax on cigarettes.<sup>2</sup>

Today, WV has a tax of .55 cents per pack and ranks 43<sup>rd</sup> in the nation as one of the states with the lowest taxes on tobacco. As a comparison, there are currently 28 states that have cigarette tax rates of \$1.00 per pack or higher; 15 states have cigarette tax rates of \$2.00 per pack or higher; and two states (CT, RI) have cigarette tax rates of \$3.00 per pack or higher. In states that are considered tobacco states, i.e., KY, VA, NC, SC, GA, and TN, the median tax rate is \$1.18 per pack. MI, MN, and UT also have a special 35¢ per pack tax or fee on brands of manufacturers not participating in the state tobacco lawsuit settlements.<sup>25</sup>

## VIII. Rural Health

Given the geography, socioeconomic factors and rural nature of the state, it has been difficult to preserve the stability of the existing rural health care infrastructure while simultaneously working to transform and integrate private and public health systems. Over the years, primary care centers and rural health networks have been developed to maintain health care services in the rural areas.

- ✚ The first policy recommendation was to identify circumstances that are needed to support rural health care and identify the barriers that need to be eliminated.
- ✚ The second policy recommendation was to evaluate payment levels in WV and their impact on rural health providers and make needed changes to the system assuring continued viability of existing providers.

### Accomplishments

- As early as 1977, Rural Health Centers (RHC) were established by the Rural Health Clinics Act (P.L. 95-210), (Section 1905 of the Social Security Act). The program was established to address an inadequate supply of physicians serving Medicare beneficiaries and Medicaid recipients in rural areas and to increase the utilization of non-physician practitioners. To be designated as a RHC, the practice must be located in a rural, medically underserved area, and meet other requirements as outlined in the Act.<sup>58</sup>

At the federal level, President Bush launched the Health Centers Initiative in 1996 to significantly increase access to primary health care services through new or expanded health center sites, including federally qualified health centers (FQHC).

FQHCs are community-based organizations that provide comprehensive primary care and preventive care, including physical health, oral health, and mental health/substance abuse services to persons of all ages, regardless of their ability to pay. FQHCs charge for services on a community board approved sliding-fee scale that is based on patients' family income and size. In return for serving all patients, FQHCs receive consideration from the federal government in the form of a cash grant, cost-based reimbursement for their Medicaid patients, and free malpractice coverage under the Federal Tort Claims Act (FTCA).<sup>59</sup>

The federal government also designates a category of health centers as "FQHC Look-Alikes." These health centers receive cost-based reimbursement for their Medicaid services, but do not receive malpractice coverage under FTCA or a cash grant.

Nationwide, approximately two-thirds of health center patients are minorities, and 9 out of 10 have incomes below 200 percent of the federal poverty level. Four in 10 health center patients have no health insurance. Between 2001 and 2006, the number of patients treated at health centers has increased by over 4.7 million, representing a nearly 50 percent increase in just five years. In 2006, the number of patients served topped the 15 million mark for the first time.<sup>59</sup>

WV providers have taken advantage of the opportunities provided by the federal government and have expanded services across the state, particularly in the rural areas. The most current information reports 53 rural health clinics in 2010, 28 FQHCs with a total of 188 service sites, and 346,650 people were served in 2008.<sup>7</sup>

## **IX. Coordinated Health Related Information Networks**

When the 2000 State Health Plan was developed, it was recognized that reliable information is the key in understanding the healthcare system on a statewide, community, and even a personal level. However, the essential information was not consolidated, but housed in many large, disparate databases. It was unavailable as an integrated information system or for any meaningful use. Systems that could provide the data were cost prohibitive at the time.

Since 2000, much has been accomplished; thus, the accomplishments, overall, will be noted after the policy recommendations outlined in the 2000 Plan.

- ✚ The first policy recommendation was to facilitate the adoption of a core set of measures, indicators, and data when establishing the Coordinated Health Related Information System (CHRIS) that would be used for planning, policy setting, performance monitoring, and other system-wide measures utilizing encounter-level detail data.
- ✚ The second policy recommendation was to integrate existing health databases and health information networks to lead to better understanding of the health status and socioeconomic conditions of WV's population and how the health care system is responding to its needs.
- ✚ The third policy recommendation was to use data standardization methods from other states, the federal government, and voluntary standardizations.

- ✚ The fourth policy recommendation was to implement gradually electronic patient records across health provider settings.
- ✚ The fifth policy recommendation was to require all affected entities to participate in an integrated electronic patient records system in order to obtain data from CHRIS.

### Accomplishments

- It was recognized that the costs of not having efficient integrated information systems would outweigh the cost of not developing them, and thus the WVHCA developed the Coordinated Health Related Information System (CHRIS). CHRIS was developed as the initial system to be used for planning, policy setting, performance monitoring, and other system-wide measures. A standard data set from the Centers for Disease Control and Prevention was accepted as standard data elements for CHRIS, providing uniformity with national standards. In its infancy, data was collected from various sources, beginning with the hospitals' claims data, and was utilized by a limited number of users.

Although CHRIS is no longer operational, it became the impetus for improving and enhancing operating systems with greater capacity at the WVHCA. The enhanced operating systems improved the health care planning process by allowing more data to be obtained from more sources and used in a more meaningful manner by a multitude of users, including providers, insurance companies, managed care organizations, advocacy groups, and even consumers.

Over the last decade, operating systems have vastly improved, costs have been reduced, and the vision outlined in the Plan has been accomplished. Collaboration between state agencies, universities, and private groups have moved WV forward. The WVHCA has become the data repository for the major insurance carriers in the state, both public and private sectors, managed care organizations, and many healthcare providers.

The WVHCA understood that hospitals, providers, and others must have data available to them as needed. By having the data available, administrators and providers could identify areas of need prior to expending resources unnecessarily.

With the passage of the Health Information Portability and Accountability Act (HIPAA) at the federal level, the data has become standardized so health officials can utilize the data to improve quality of care, for coordination of care, and for planning for particular

health care services and expenditures at their institutions. For consumers, they can now use systems to choose healthcare providers and make personal healthcare choices.

Health IQ, an interactive querying tool, is a web-based product that allows those seeking information to ask interactive questions based on non-confidential data derived from the hospital inpatient discharge data (UB-04) the WVHCA maintains. The information on the UB-04, excluding personal health information, is extracted and provides the opportunity for individuals and organizations to analyze, make decisions, and plan for the future.<sup>60</sup>

Through the WVHCA, the data may now be utilized and manipulated through various operating systems and software programs that meet the needs of the end user. Also, consumers now have the ability to use similar tools to personally compare health care providers and technological advancements through the WVHCA's CompareCareWV™ online site. This system allows the user to choose a procedure and compare average hospital and professional charges. The consumer now has tools available to review services based on cost and quality as outlined in the *“Financing and Cost”* section of this report.

Through the integration of the existing databases and health information networks, health status, socioeconomic conditions of WV's population, and the response by the health care system is now available. With present systems and others that are emerging, WV has moved ever closer to having an integrated statewide health information network.

- Contributing to that movement toward a statewide health information system is the formation of The West Virginia Health Information Network (WVHIN). The WVHIN was established by the Legislature at the request of Governor Manchin. The WVHIN, created by §16-29G-1 in 2006, is a public-private partnership with the purpose of promoting the design, implementation, operation and maintenance of a fully interoperable statewide network to facilitate public and private use of health care information in the state while ensuring the privacy and security of patient health care information.<sup>61</sup>

Per the statute the network was envisioned to support and facilitate the following types of electronic transactions or activities:

- 1) Automatic drug-drug interaction and allergy alerts;
- 2) Automatic preventive medicine alerts;

- 3) Electronic access to the results of laboratory, X-ray, or other diagnostic examinations;
- 4) Disease management;
- 5) Disease surveillance and reporting;
- 6) Educational offerings for health care providers;
- 7) Health alert system and other applications related to homeland security;
- 8) Links to evidence-based medical practice;
- 9) Links to patient educational materials;
- 10) Medical record information transfer to other providers with the patient's consent;
- 11) Physician order entry;
- 12) Prescription drug tracking;
- 13) Registries for vital statistics, cancer, case management, immunizations and other public health registries;
- 14) Secured electronic consultations between providers and patients;
- 15) A single-source insurance credentialing system for health care providers;
- 16) Electronic health care claims submission and processing; and
- 17) Any other electronic transactions or activities as determined by legislative rules promulgated pursuant to this article.<sup>61</sup>

Since the WVHIN was created, much has been accomplished. Recently, the WVHIN was among a select group of health information networks that showcased a health information exchange at the 5th Nationwide Health Information Network Forum in Washington DC. The WVHIN's prototype network successfully transmitted de-identified live patient data in two scenarios; the transmission of reference lab results and consumer preferences for registration and medication history.<sup>61</sup> The WVHIN's efforts toward the development of a health information exchange have been so successful that they recently were awarded a grant of \$7,819,000.

On November 23, 2009, the WVHIN released a Request for Proposal (RFP) for a Health Information Exchange (HIE) solution in order that healthcare information may be mobilized across organizations, systems, communities, or regions.<sup>62</sup>

In the future, the health information exchange (HIE) will provide the capability to electronically move clinical information among disparate health care information systems while maintaining the meaning of the information being exchanged.

The goal of HIE is to facilitate access to and retrieval of clinical data in order to provide safer, more timely, efficient, effective, equitable, patient-centered care. HIE is also useful to public health authorities for analyzing the health of the population.<sup>62</sup>

- Under the leadership of DHHR Secretary, Martha Y. Walker, a strategic health information technology plan was developed for WV. There are six core strategies presented in the draft plan. They are:

➤ **Accelerating the Adoption of Health Information Technology:**

The priorities focus on accelerating the adoption of electronic medical records (EMR) and related health information technologies by the provider community and the need for a well-coordinated effort to ensure that providers are informed purchasers of technology and that their investments translate into meaningful use in daily work.

➤ **Fostering Health Information Exchange:**

In order for the benefits of use of technology to be fully realized there needs to be an efficient, affordable and reliable exchange of information. This plan incorporates the work of the West Virginia Health Information Network, ensuring that a viable and robust exchange supports the flow of information across the health care system.

➤ **Ensuring Broadband Infrastructure is Available to Support Technology:**

The rural geography of West Virginia, coupled with the population dispersion, presents unusual challenges, ensuring that adequate infrastructure is able to support technology in communities. Priorities are offered and aimed at encouraging infrastructure investments in the state.

➤ **Creating Usable and Accessible Statewide Data:** The adoption of technology allows for strategic use of data for planning and improvement of health care services.

*“It's important to realize information technology's impact on productivity and profitability in other businesses. If we can make similar investments in information technology for health care, we can bend the curve of overall spending from more than 20 percent of gross state product, which is the highest in the nation, to something more manageable, while increasing the health and economic status of our citizens.”<sup>61</sup>*



Priorities are aimed at ensuring that data are readily available for decision support. This includes strategies for encouraging voluntary reporting and transparency of data.

- **Develop the Work Force:** The acceleration of adoption of technology will present challenges to the work force. As a result, priorities are offered for the purpose of ensuring that the work force is trained and available to support efficient use of technology. This plan also presents a vision where West Virginia plays a role as a national resource for the training of professionals in health information technology.
- **Ensuring Financial Viability and Sustainability:** Finally, the plan recognizes that West Virginia will need strong partners in order to ensure that the financing of this vision, plan and its priorities is viable and sustainable. The plan recognizes that the financing strategies cannot be a burden assumed entirely by any single stakeholder, but will need to be a collaborative effort shared across the health care system.

A copy of the draft plan can be found in [Appendix G](#).

## State Comparisons

After researching other states' health plans and national initiatives, it was found that many states are experiencing the same or similar issues as WV. Sixteen states were reviewed, including those states contiguous to WV's borders and those with similar geography and/or demographics. Subsequently, numerous methodologies were identified that WV could use for developing a new state health plan.

Certificate of need (CON) was required in eleven of the states reviewed. In many of the states requiring CON, the structure for the state's health plan was based on prevalent state health issues and changes to CON standards to meet the identified health needs. Most of the states that did not require certificate of need utilized a quality improvement approach to advance health initiatives, while others used various approaches related to specific health issues and/or *Healthy People 2010* objectives.

Of all the states reviewed, Pennsylvania (PA) had the most elaborate structure and methodology for plan development, implementation, and evaluation. The PA state health improvement plan (SHIP) is a 4-year plan developed to assist communities, stakeholders and other state agencies in identifying issues and trends that impact the overall health of the citizens. Voluntary local health improvement partnerships, consisting of public, private, and voluntary organizations serving a geographic area, define health indicators that will be pursued in the community. As a result of affiliate agreements with the Department of Health (DOH) to advance specific initiatives, the DOH engages with communities to meet Healthy People 2010 and SHIP goals and assists them to develop strategies and solutions to local issues.

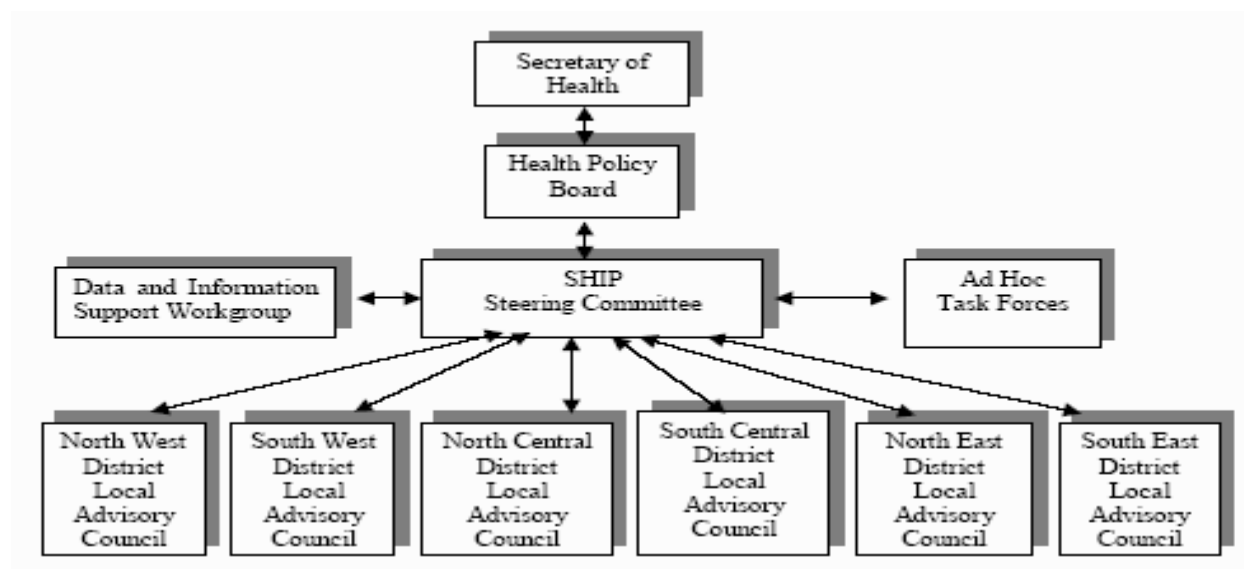
Utilizing a Steering Committee, the outcomes from the local partnerships are reported to a Health Policy Board which is appointed by the Governor and confirmed by the Senate. The members of the Steering Committee, who also serve on the three task forces charged with creating the Plan, are selected based on their expertise, knowledge, and leadership on various health issues. The Partnerships are given additional representation on both the Steering Committee and the Task Forces to insure that local concerns and the relationship between the partnerships and the Department are considered. The three task forces are:

- **Partnering Committee** – advises the DOH on ways to maintain effective working relationships with community partnerships, state agencies, and stakeholders to achieve healthy communities, and provide guidance in improving and enhancing the relationships.

- **Data Information & Evaluation Committee** – makes recommendations for improving community access to health-related data for the purpose of community health improvement planning, for the retrospective evaluation of the SHIP, and for an ongoing evaluation of the SHIP.
- **Health Improvement Planning Committee** – provides state, local and community public health partners throughout the Commonwealth with a clear and accurate report of the state’s progress toward Healthy People 2010 goals and objectives and provides an evidence-based blueprint for improving and maintaining the health of all Pennsylvanians.

The task forces met monthly beginning in February 2005. By the end of June, they had completed an evaluation of the SHIP 2001-2005 and developed many of the recommendations in the current document. The SHIP Steering Committee is also responsible for overseeing development of the next Plan.

The organizational structure for PA’s SHIP development and oversight is outlined below.



This is just one example of how complex the organizational structure and development of the state plan can be. There are other approaches that may be used as well. [Appendix H](#) provides additional information from states reviewed, including certificate of need requirements, the health plan purpose and other related information used for state health plan development.

## State Health Plan Considerations

Regardless of the methodology used for the new State Health Plan, there are questions that must be answered and decisions that must be made and evaluated before a new plan is developed. Besides the overarching question – of *“What is the purpose of WV’s state health plan?”* – other important questions must be considered.

Some of those questions include, but are not limited to:

- Who is responsible for developing and implementing the state health plan? What organizational structure should be adopted?
- What methodology will be used for the state plan? Will it be a health plan that utilizes CON as the basis for improving health; a state health improvement plan; a combination of both CON and health improvement; or some other approach?
- How will the methodology and structure be chosen? Who will choose the methodology and structure?
- Once the methodology and structure are chosen, who will participate in the plan’s development? How will those participants be chosen? Who will choose the participants? How will those participants be managed? Will there be requirements for being a participant? Will there be guiding principles for being a participant? Who will develop those? What if there is no participation from a particular group that has been chosen? How will that be handled? How and where will those entities meet and how often?
- Once the participants are chosen, what will be the structure and approach for developing initiatives? How will those be chosen? What will be the rationale for choosing one over another?
- Once initiatives are developed, what will be the structure and organizational approach to move those initiatives forward? If those in various public and private sector agencies are involved and responsible for initiatives, who will be responsible for making sure the initiatives/goals within the plan are met?
- What workforce is available or needed to accomplish goals? Does WV have the workforce, or does it need to be developed?
- How will those goals be evaluated and accomplishments determined? Who will be responsible for making those determinations?
- How often should the plan be evaluated and updated? Should there be a new plan or should there just be updates? How often?

- How will overall communications be handled, i.e., to participants, to communities, to state decision-makers?
- What role, if any, will state agencies, private sector entities, the Health Improvement Institute and other agencies play in the process?

Despite the many questions that must be answered before the process of developing a new state plan can begin, change continues to occur. As recent as March 23, 2010, President Obama signed comprehensive health reform, the Patient Protection and Affordable Care Act, into law. The new law focuses on provisions to expand coverage, control health care costs, and improve the health care delivery system.<sup>63</sup> The package of health care reforms launched by the Act is the beginning of the process of change for extending affordable, high quality care to every West Virginia resident.

Reform is critically important to West Virginia where the health care spending is 13 percent more per person than the national average. West Virginia health costs continue to rise at a faster rate than the national average, eroding business profits and wage growth in a state where mean household income ranks among the lowest in the nation. Rising state health costs are associated with a growing incidence of expensive and life-threatening, but preventable, chronic disease. As previously noted, data from the U.S. Centers for Disease Control and Prevention (CDC) indicate that West Virginia has the highest rates of obesity in the country, which are, in turn, associated with growing rates of diabetes, hypertension, hyperlipidemia, heart disease, pulmonary disorders, and co-morbid depression.

Many of the accomplishments made in the last decade have led us down the path to where we are today, and should continue to pave the way for changes in the future. Change is fast occurring at the federal level; thus, State reform efforts must be in concert with federal efforts in order to maximize the benefits for State residents. By utilizing all of the tools and opportunities that have been created and are available, WV's health planning process can begin.

Major challenges, however, are expected similar to those encountered during the implementation phase of the 2000 State Health Plan. Many of the participants and agencies commonly reported encountering constraints and challenges in implementing policy recommendations, including resistance by key people or organizations, problems with governmental categorical funding or program requirements, and lack of necessary resources. Despite the challenges, it was universally agreed that there was considerable costs to the population's health status and the health care system if changes in the Plan were not addressed.

There are many in WV working on the same or similar projects seeking to meet similar goals. Although there may be challenges, the numerous projects, i.e., legislative initiatives and strategic plans of government agency programs, must be coordinated in a manner that meets the health care needs of West Virginians. Regardless of the framework used for the future State Health Plan, cross divisional thinking and collaboration between the public and private sectors, state agencies, governmental and private insurance companies, and others, is vital for developing innovative strategies to improve the health of West Virginians. By highlighting health issues that are being worked by numerous groups and by combining strategies across all sectors, West Virginia's State Health Plan should become the impetus for guiding state agencies, health care policy makers, professionals and private citizens toward achievement of defined goals, and should provide a basis for program and priority development, funding requests, and implementation of regulatory functions. All play an important role in enabling the transfer of health care information into health care knowledge so that positive change can occur in reducing health risks and for improving the health status of West Virginians.

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*"The same trends that are driving chronic disease and soaring health costs across the country are driving them in West Virginia. But conditions are worse in West Virginia than in many other parts of the country. People are more ill, and the cost of good health coverage is rising even faster than in other places. The reform plan enacted in West Virginia should be very encouraging for all Americans. If we can start to turn around the health care crisis in a state like West Virginia, there is no reason we cannot succeed in solving America's health care crisis."*<sup>64</sup>

*Doug Dority, President, America's Agenda*

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