

West Virginia Health Care Authority  
2000 - 2002 State Health Plan

Accountability/Measures

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# I. BACKGROUND

## A. Key Concepts

The U.S. health care system is in the midst of a long-term transformation with respect to how the effectiveness of care is defined and measured. Historically, the absence of complete and verifiable data has made it difficult, if not impossible, to evaluate the performance of individual providers, let alone the health care system as a whole. Purchasers, regulators, and consumers have had to rely on relatively “soft” information, such as patient satisfaction surveys, or on data collected in a way that prevented meaningful comparisons across providers or health plans. While the information was of some use, it painted an incomplete picture of the health care system’s effectiveness.

Beginning in the 1980s, however, and continuing through the 1990s, health care purchasers and regulators have moved toward demanding more sophisticated measures of provider performance -- ones based on “hard” data that can be compared across providers and systems. This transformation has to a large extent been an outgrowth of, and reaction to, the explosion in new medical technologies and treatments that have become available over the past three decades. In an earlier era, when the diagnostic and therapeutic tools available to providers were more limited and palliative in nature, the size and complexity of the health care system -- and its resultant costs -- remained modest. Today, in concert with an aging population that requires more intensive services, the constant flow of new technologies has spurred a tremendous increase in health care expenditures, both per capita and in total dollars.

As health expenditures have grown dramatically, their distribution has been uneven and not always correlated to where they are most urgently needed. Access to health care in general, and to advanced treatments specifically, has remained better in metropolitan than rural areas of the country, where providers are relatively sparse. Similarly, the uninsured portion of the population (about 20% nationally), while typically able to obtain essential care, has had restricted access to the types of preventive services that can help to forestall more costly acute episodes. Finally, some of the poorest regions of the country continue to lag in terms of basic public health infrastructures -- such as secure water supplies -- while exceeding national averages in unhealthy activities such as smoking.

Faced with the prospect of having to arbitrarily ration health care services, purchasers and regulators are instead seeking to direct resources to providers, particularly coordinated systems of care, that can offer the greatest access and best outcomes for the fewest dollars. The 2000-2002 State Health Plan endorses this concept by identifying seven priority areas for system reform and improvement within West Virginia, namely:

- Promotion of a Coordinated Health Care System
- Improving Access to Care
- Improving Quality of Care
- Targeting At-Risk Populations
- Exercising Greater Cost Control
- Improving Rural Health
- Improving Public Health

Although a number of these areas overlap, they each focus on a discrete component of the health care system within which the state believes there is an *opportunity* for improvement. The seven areas do share one common characteristic, however -- for progress to be measured within them, the state must have a sound plan and reliable *methods* for doing all of the following:

1. Selecting the appropriate set of indicators to measure within each area, based on what is considered most relevant to West Virginia as a whole, as well as for discrete regions of the state;
2. Identifying where the information for each indicator resides (i.e., from whom must it be collected);
3. Assigning accountability to one or more parties for collecting the information, evaluating it, and reporting back to data users;
4. Establishing a baseline, or starting point for each indicator using historical data;
5. Establishing targets, or benchmarks, to be worked toward in support of the separate initiatives that comprise the State Health Plan;
6. Monitoring progress toward the benchmarks on some regular schedule, and
7. Constructing safeguards, as appropriate, to protect the confidentiality of patient- and provider-specific information.

In developing an overall approach to measuring performance, the state must also be cognizant of the information being collected at a national level, or for which national standards are being promulgated, so that these can be exploited wherever appropriate. Similarly, the state must define reporting requirements that are reasonable, given the demands already placed on providers and health plans, even if this means limiting the scope of what is measured short of some ideal.

The remainder of this paper provides an in-depth discussion of performance (effectiveness of care) measures and how they can best be woven into the fabric of the State Health Plan. It begins in section I.B below with an overview of initiatives at the national level, particularly in terms of measuring quality of care. This is followed by a brief discussion of complementary initiatives under way within the state (more detailed West Virginia-specific information is presented in Chapter II).

Chapter II of the paper next moves its focus to an in-depth assessment of the West Virginia environment. It begins with a presentation of socioeconomic and health risk factors in the state, important for identifying where the greatest priorities should be placed with respect to improving (and therefore measuring) health outcomes. This is followed by an inventory of the types of data being collected today throughout the health care system, by purchasers, providers, and various regulatory bodies.

The relative strengths and weaknesses of the various data sources are next explored, as well as specific opportunities -- and potential hurdles -- for collaboration across interested organizations in the measurement and reporting of service effectiveness. The last portion of the chapter discusses the relative urgency for change associated with this issue, as well as its potential impact on four key elements of the West Virginia health care system: health status of the state's citizens; health care financing and delivery; the health care system infrastructure; and existing CON regulations.

Chapters III through X of the paper draw upon all of the information outlined in Chapters I and II to formulate a plan for action, consisting of:

- Problem Statement (why change is necessary and what must be overcome to achieve it);
- Issue Analysis (recapitulation of the specific magnitude of the issue, in the context of the West Virginia health care market);
- Necessary Broad Action Steps;
- Potential Solutions/Specific Recommendations (emphasizing inclusion of the public in policymaking and collaboration across stakeholders);
- Feasibility of Implementation; and
- Issues for the Future.

## **B. Measuring Effectiveness -- A National Perspective**

There has been significant activity in recent years at the national level to develop quantitative methods for evaluating provider performance in the areas of quality of care (including outcomes and patient satisfaction) and cost effectiveness. Most of this activity has been centered within managed care, where data collection can be put in the hands of accountable organizations (HMOs), although some initiatives are now also beginning in the fee-for-service arena.

Two of the most sophisticated methods developed to date -- the Health Plan Employer Data and Information Set (HEDIS) and the Consumer Assessment of Health Plans Survey (CAHPS) -- are being promoted by the federal government as ways to measure the care furnished to Medicaid and Medicare managed care enrollees across the country. As a result, they are fast becoming the “gold standard” for outcomes and satisfaction measurement nationally.

One of the barriers to the collection and analysis of data across health plans and providers has been the lack of uniform reporting standards. The 1996 Health Insurance Portability and Accountability Act (HIPAA) laid out a multiyear plan for the establishment of national standards. Implementation of HIPAA provisions is now under way, both in terms of data reporting as well measures to protect patient confidentiality.

All three national efforts -- HEDIS, CAHPS, and HIPAA -- are described in greater detail below.

*Health Plan Employer Data and Information Set (HEDIS).* The Health Plan Employer Data and Information Set is a collection of defined standards designed to measure the quality of managed care organizations. The HEDIS standards were initially developed by a private sector coalition of purchasers and managed care plans. In the early 1990s, the coalition joined forces with the National Committee for Quality Assurance (NCQA), an accreditation organization sponsored by health plans and purchasers to revise the standards. The result of the coalition’s efforts -- HEDIS 2.0 -- was published in 1993 and provided a set of standardized measures in five areas of managed care plan performance: membership and utilization, access and satisfaction, quality of care, health plan management, and finance.

Initially developed by the private sector, HEDIS 2.0 was designed to measure performance for plans serving a commercially insured population. HEDIS has since been adapted and implemented for both the Medicaid and Medicare populations, with the most recent HEDIS version designed to measure performance across all populations.

The HEDIS measures have been widely adopted and form the basis of many of the “Health Plan Report Cards” published by private companies, state governments, and Medicare. Approximately 90% of the managed care plans in the country use the HEDIS measures to some extent. A number of states require Medicaid managed care plans to report HEDIS data, while the Health Care Financing Administration (HCFA) requires all Medicare plans to report HEDIS data and further requires that the data be validated by NCQA. Today, over 300 health plans nationally report some HEDIS data to NCQA through its Quality Compass initiative.

Despite the wide reporting of HEDIS data, a study published in 1998 by the Commonwealth Fund found that only 6% of employers of 200 or more use HEDIS information to select managed care plans, and only 1% provide HEDIS data to employees. On the other hand, nearly 75% of the same employers use information on the number and quality of physicians, employee satisfaction, and cost.

Effective this year, NCQA is incorporating HEDIS data into its accreditation process for managed care

plans, reflecting the first time accreditation will be based, in part, on performance measurements rather than the plans' ability to comply with NCQA guidelines on systems and processes. NCQA has established preliminary national benchmarks and national and regional thresholds for HEDIS effectiveness of care measures, and intends to develop benchmarks for the satisfaction with experience of care measures, based on results of the CAHPS surveys (see next section for more information on the surveys). The final benchmarks will be used to "score" plans, with the results counting for as much as 25% of a plan's accreditation score.

Incorporation of the HEDIS measures into the NCQA accreditation process could increase the use of the measures by consumers and purchasers. NCQA has become the most widely recognized accrediting organization for managed care plans, with one-half the managed care plans in the country, representing three-quarters of all managed care enrollees, currently involved in some stage of the accrediting process<sup>1</sup>. Some states, including Alabama, Iowa, New York, Ohio, and Tennessee, require managed care plans to undergo NCQA accreditation reviews. A number of other states, including Connecticut, Florida, Kansas, Nevada, New Jersey, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Virginia, and West Virginia, allow plans to use NCQA to satisfy a requirement for external review.

A list of the HEDIS 1999 Reporting Set measures is included as Attachment 1. The preliminary national and regional benchmarks for the effectiveness of care measures are included as Attachment 2.

*Consumer Assessment of Health Plans (CAHPS).* The Agency for Health Care Policy and Research (AHCPR), a part of the U.S. Department of Health and Human Services (DHHS), has funded the Consumer Assessments of Health Plans Study (CAHPS) since the early 1990s. The goal of the CAHPS initiative is to develop an integrated set of standardized survey questionnaires and report forms that could be used to collect and report information from health plan enrollees about their experiences.

The CAHPS survey materials are designed for use with all types of health insurance enrollees (Medicaid, Medicare, and privately insured) and across health delivery systems, from fee-for-service to managed care. Along with a core set of items, additional questions are targeted for use with certain subgroups, such as persons with chronic conditions or disabilities, Medicaid and Medicare enrollees, and families with children.

The initial version of CAHPS (CAHPS 1.0) was released in early 1997 and subsequently refined through testing by a number of large employers and state Medicaid programs. NCQA has since worked with the AHCPR to create CAHPS 2.0H, a combination of the previous NCQA questionnaire and the CAHPS questionnaire. CAHPS 2.0H is required for HEDIS 1999 reporting and will be used in the 1999 NCQA Accreditation process.

In addition to NCQA's implementation of the CAHPS questionnaire, the Health Care Financing Administration has used CAHPS to measure Medicare beneficiaries' satisfaction with their health plans as part of the "Medicare Compare" initiative, while the U.S. Office of Personnel Management is using CAHPS to assess plans serving federal employees. States and private corporations have also incorporated CAHPS data in their report cards.

A list of the CAHPS core questionnaire topics is included as Attachment 3.

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<sup>1</sup> The most commonly used accreditation alternative to NCQA is the Joint Commission for Accreditation of Health Care Organizations (JCAHO).

*Use of HEDIS and CAHPS Data as Performance Measures.* A number of states, employers, private organizations, and the federal government have begun using HEDIS and CAHPS data to monitor the performance of managed care plans and to encourage consumers to consider quality when they make decisions about their health care coverage. This section provides several examples of how the HEDIS and CAHPS data are being incorporated into broader initiatives.

*NCQA “Quality Compass” and HCFA “Medicare Compare.”* Both the NCQA “Quality Compass” and the HCFA “Medicare Compare” initiatives use HEDIS data reported by managed care plans as a basis to educate health care purchasers and consumers about the quality of plans.

The NCQA “Quality Compass” is a national database of plan-specific HEDIS and accreditation information derived from over 200 health plans covering 28 million people. Geared towards employers and other health care purchasers, “Quality Compass” provides comparative quality and performance data in an organized format, along with national and regional averages and performance benchmarks.

Directed toward the Medicare beneficiary and consumer, HCFA’s “Medicare Compare” database provides HEDIS and CAHPS data on selected measures, as well as detailed financial information about managed care plan costs compared to other plans available in the area. Medicare beneficiaries can access the database via the Internet and can get information on the performance and cost of plans available in their area.

The HEDIS quality measures in the “Medicare Compare” database include:

- The percentage of female members who received a mammogram
- The percentage of plan members who were prescribed beta blockers after a heart attack
- The percentage of plan members with diabetes who received an eye exam
- The percentage of plan members seen by a provider in the past year
- The percentage of primary care doctors who are board certified
- The percentage of specialists who are board certified
- The percentage of providers who stayed in the managed care plan for at least one year

The CAHPS satisfaction measures include:

- Overall rating of managed care plan
- Overall rating of health care patients received
- Doctors who communicate well
- Ease of getting referrals to a specialist

Although HCFA does not currently collect satisfaction information from beneficiaries receiving care under the traditional (fee-for-service) system, it is in the process of developing a survey and intends to make such information available in the future.

**Maryland.** By state statute, the Maryland Health Care Access and Cost Commission is required to establish and implement a system to evaluate the quality of care outcomes and performance measurements of managed care organizations, in order to provide such information to consumers, purchasers, managed care plans, and other interested parties. The HMO Quality and Performance Evaluation System is based on HEDIS, including the HEDIS/CAHPS member satisfaction survey.

The state has produced detailed performance reports for 1997 and 1998. For 1998, the state published two reports -- a comprehensive report with a complete set of information, and a report geared toward consumers, which included a select subset of measures.

**Colorado.** In 1994, Colorado passed a law permitting the formation of insurance purchasing cooperatives. Following passage of this law, The Alliance, a member-owned health care purchasing cooperative, formed the Cooperative for Health Insurance Purchasing (CHIP), becoming the first group in the country to pool the purchasing power of large and small employers. Currently, over 1,100 companies are insured through the CHIP, 20% of these organizations previously offered no health insurance to their employees.

The Alliance contracts with four health plans for CHIP, three of which are NCQA-accredited. All plans are required to submit HEDIS measures annually. For eight selected performance measures, The Alliance has established performance benchmarks. Each plan has agreed to put 2% of its premium at risk, which is then pro-rated across the eight standards. If a plan doesn't meet one or more of the performance standards, it forfeits the money associated with that standard for the period of time in which it was not in compliance. At the end of each reporting year, 50% of the money collected for each indicator is awarded to the plan with the best performance in that standard.

Each plan has had to forfeit some of its premium money, and The Alliance has seen results of the accountability system, with plans hiring additional staff or taking other measures to improve their performance.

In 1996, The Alliance was selected by NCQA as a site for its Report Card Demonstration Project. Working with NCQA, The Alliance developed a report card for consumers with information in three areas: health plan performance, customer satisfaction, and NCQA accreditation status. The report card is distributed to all employers and employees participating in the CHIP plan during open enrollment, and is included in marketing materials to prospective employer members.

*Healthcare Insurance Portability and Accountability Act Of 1996.* In August 1996, President Clinton signed into law the Health Insurance Portability and Accountability Act (HIPAA). One part of this act, referred to as administrative simplification, is aimed at reducing health care administrative costs through the development of national uniform standards for the electronic processing of insurance claims and related transactions. The health care industry estimates that full implementation of these provisions could save as much as \$9 billion per year on administrative overhead, while improving efficiency and enhancing the quality of health care services.

Although HIPAA does not mandate the collection or electronic transmission of health data, it does require that its standards (once developed) be used for any electronic transmission of the following specified transactions:

- Health insurance enrollment and eligibility
- Health insurance claims and equivalent information for encounters in managed care settings
- Identification numbers for providers, health plans, employers, and individuals
- Health data codes and classification systems
- Security standards and safeguards

To ensure the preservation of privacy, HIPAA provides for the creation of confidentiality protections for information processed in accordance with the new standards. Currently, no uniform national standard protects the confidentiality of health information. State statutes or regulations on the protection of health information vary considerably according to the holder of information and for different types of

information. Most statutes do not address re-disclosure of health information and lack penalties for misuse or misappropriation.

HIPAA requires the U.S. Department of Health and Human Services (DHHS) to make detailed recommendations for health record privacy to Congress. If Congress fails to enact such legislation by August 1999, DHHS must establish and enforce confidentiality regulations on health care providers, plans and data clearinghouses using the new standards.

*Standards Adoption Process.* The DHHS Data Council, the Department's internal advisory group on data policy, has been guiding the standards development and implementation process. Work groups comprised of representatives from DHHS and several other federal agencies have been responsible for the research, development, and analysis of the standards. The National Committee on Vital and Health Statistics (NCVHS), DHHS' external data policy advisory committee, has served as the primary liaison with the public.

*Original Implementation Schedule.* The timetable set forth in the statute required DHHS to adopt standards for health insurance transactions by February 1998 and health care providers, insurers, and data clearinghouses to implement the standards within 24 months. Small insurance plans (as defined by DHHS) would have 36 months to implement the standards. Privacy protection standards will either be enacted by Congress or issued by DHHS to accompany the implementation of the new standards. The privacy and confidentiality provisions of the statute will be implemented by August 1999, either through congressional legislation or DHHS-developed regulations.

*Status of Current Regulations.* Between May and October 1998, four notices of proposed rule making were published in the Federal Register, establishing standards for:

- May 7, 1998: Electronic transactions and code sets
- May 7, 1998: National provider identifier
- August 17, 1998: Employer identification
- August 12, 1998: Security and electronic signatures

Remaining standards that as yet have not been published in the Federal Register include: identifiers for health plans, first report of injury, and claims attachment. It is anticipated that these proposed standards will be published shortly for public comment.

In September 1997, the Secretary of DHHS provided her recommendations to Congress on the privacy and confidentiality of individually identifiable health information. While six bills were introduced in the 105<sup>th</sup> Congress, none were enacted into law. Three proposed bills specifically targeted to the HIPAA confidentiality requirements have been introduced to the legislative agenda for the 106<sup>th</sup> Congress. Should Congress fail to enact privacy legislation by August 1999, HIPAA requires that the Secretary be given the final authority to promulgate regulations by February 2000.

Another HIPAA standard -- development of a unique identifier for individuals -- is stalled until patient privacy protections are put into place. In July 1998, the NCVHS held hearings on the development of patient identifiers. Significant concerns were raised during these hearings about the potential for abuse of electronically transmitted, patient-specific information. It is anticipated that until comprehensive privacy protections are in place, no standard will be adopted. An additional problem is that presently there appears to be little consensus for an acceptable standard. DHHS continues to solicit industry input regarding alternative candidates for a unique identifier.

Based upon the delay in progress to date, it seems unlikely that the final rules will be published before the end of 1999. While the overall goal is administrative simplification, implementation within an organization will be anything but simple. An April 1999 article in the *Journal of the American Health Information Management Association* provides a five-page HIPAA implementation checklist, which is included as Attachment 4.

### **C. Measuring Effectiveness -- West Virginia Initiatives**

West Virginia's public agencies, health care insurers, and providers are pursuing a variety of methods to evaluate the effectiveness of the state's health care system. While some of these efforts are multidisciplinary, or multiagency, many are stand-alone programs designed to evaluate a discrete component of the system, such as care afforded to a particular population group or by a particular provider class.

In order to thoroughly catalogue the status of activities within the state, interviews were conducted in May 1999 with senior representatives of the following government agencies and health care associations:

- Public Employees Insurance Agency
- Bureau for Medical Services (Medicaid)
- West Virginia Health Care Authority
- Bureau for Public Health
- West Virginia Hospital Association
- West Virginia Association of Health Plans

The West Virginia Medical Association also was contacted but declined an opportunity to meet on this topic.

**PEIA.** The Public Employees Insurance Agency (PEIA) has developed a "Pathways to Wellness" program to track a variety of preventive, educational programs against the long-term health status of its employees. Under this initiative, educational materials and programs targeting specific diseases, such as diabetes, are prepared and disseminated. Changes in service utilization by disease or risk factor are tracked via the number, type, and amount of claims and encounters to evaluate the impact of the Pathways to Wellness program. PEIA is also developing an approach to quantify the effect its Pathways to Wellness program has on the broader community as PEIA subscribers and dependents share program information with other family members and friends.

**Bureau for Medical Services (Medicaid).** The West Virginia Department of Health and Human Resources' Bureau for Medical Services (Medicaid) currently enrolls the non-long-term care, non-Medicare-eligible portion of the Medicaid population into some form of managed care. A portion of the population, concentrated in the Northern Panhandle and central metropolitan counties, is enrolled into managed care under a program known as "Mountain Health Trust." The remainder are enrolled into a physician case management program known as the "Physician Assured Access System," or PAAS. Both programs operate under the authority of a federal waiver, granting the state relief from certain conditions that otherwise apply to Medicaid programs. In total, the two managed care systems account for approximately 200,000 of the 300,000 Medicaid beneficiaries in the state.

The Bureau for Medical Services (BMS) has two significant initiatives in place for measuring the effectiveness of care furnished to managed care enrollees. First, under the terms and conditions of its waivers, BMS must allow for an independent evaluation of the quality and cost effectiveness of the PAAS and Mountain Health Trust programs, versus what would have occurred had the enrollees remained in the

traditional fee-for-service system. The evaluations are conducted on a biennial basis, consistent with the length of time for which the waivers are authorized/re-authorized.

In the most recent evaluation of Mountain Health Trust, the program's effectiveness, in terms of quality, was measured using HEDIS data across three domains: preventive services (e.g., immunization rates, checkups after delivery, and eye exams for diabetics); access to care, and utilization of services. In each area, the actual performance of individual HMOs was compared to pre-established state targets.

The Bureau's second initiative addresses ongoing quality assurance/improvement activities (as opposed to conducting a retrospective evaluation). Over the past decade, the federal government has developed and refined standards for quality assurance/improvement programs, to be implemented by states as a condition of receiving their Medicaid waivers. The newest of these initiatives -- the Quality Improvement System for Managed Care (QISMC) -- was unveiled in 1998. The Bureau is in the process of implementing QISMC and is working with its contracted HMOs to reach a consensus on specific performance indicators. These measures will then be incorporated in the HMO contracts.

**PEIA/Medicaid Joint Activities.** PEIA and Medicaid undertook a first-ever joint procurement for HMO services in 1998. As part of this collaboration, the two agencies are presently developing common provider evaluation standards (for managed care plans) and joint effectiveness of care standards (see Attachment 5 for the type of measures under consideration by the agencies).

The agencies' work is being facilitated by the fact that both use the same outside contractor to collect and evaluate the medical claims data generated within their systems. Once developed, the agencies intend to use the evaluation/effectiveness of care standards to judge the performance of contracted managed care plans, and to determine whether to renew contracts.

**Health Care Authority.** The Authority has brought together representatives from the provider community, including faculty from West Virginia University, other community physicians, and hospital representatives to evaluate practice pattern differences in the treatment of breast and prostate cancers. The Authority has purchased the *Dartmouth Atlas* database and analytical tools to evaluate community and regional differences in treatment approaches and utilization of health care services for these two cancers. To assist in its analysis, the Authority has also retained the services of a *Dartmouth Atlas* physician consultant.

Pursuant to the legislative mandate in Senate Bill 458<sup>2</sup>, the Authority has further established three advisory groups composed of representatives from various state agencies and private sector organizations. The three advisory panels include a Data Advisory Group, Quality Utilization Advisory Group, and State Health Plan Advisory Group. Each is being used by the Authority as a consultative body in the construction and implementation of the 2000-2002 State Health Plan.

Another initiative currently being pursued by the Authority is the evaluation of an assessment tool for use by physicians. The tool would provide practice guidelines and consumer and professional information regarding specific diseases and procedures that would be made available to physicians on an Internet site.

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<sup>2</sup> The authorizing legislation for the Consolidated Health-Related Information System.

**Bureau for Public Health.** In the early 1990s, the federal government, in collaboration with the states, launched a campaign to meet a series of health objectives by the end of the decade, under an initiative known as “Healthy People 2000.” The Bureau is presently involved in developing a successor initiative – “Healthy People 2010.” Approximately 200 objectives have been defined for Healthy People 2010, as compared to 60 in Healthy People 2000; many of these objectives could be folded into the final State Health Plan. Examples of the areas for which objectives have been defined include heart disease and stroke, maternal and child health, cancer, diabetes, nutrition, and preventive services, etc.

Healthy People 2010 will have 28 different focus areas. For each focus area, the Bureau has formed a work group to undertake development of outcome measures that will be ready for review in the fall.

The Bureau has also implemented the federally mandated Minimum Data Set (MDS), a clinical assessment tool for use with persons who are residents of long term care facilities (nursing homes). The MDS is administered on a periodic basis, allowing for the measurement of a resident’s state of health and care needs over an extended period. Similarly, the Bureau has been supporting the implementation of the new Outcome and Assessment Information Set (OASIS), for use in assessing adult home care patients.

The Bureau has further spearheaded preparation of the state’s federally mandated Primary Care Access Plan (PCAP) in conjunction with West Virginia University. The PCAP summarizes state and county demographic data with respect to population, socioeconomic status, vital statistics, hospital utilization, estimated unmet primary care needs, resource analysis, prioritization of areas, and resource recommendations. A revision to the 1996 PCAP is in process, but is not yet available.

Finally, the Bureau is responsible for developing and updating the West Virginia Rural Health Plan, a document mandated by the federal government for states participating in its Critical Access Hospital Program. The Rural Health Plan focuses on access to care in medically underserved rural areas.

**West Virginia Hospital Association.** In addition to its participation in a variety of planning activities with various state agencies, including the Authority, the Association is in the process of developing a hospital report card. The Hospital Association collects all UB92 (inpatient hospital claim form) data from its membership and is preparing a variety of reports based upon that data for review and evaluation with its member hospitals. Elements of the report card, which is still in development, include the following key indicators:

- Charge per discharge
- Cost per discharge
- Average length of stay
- Mortality and morbidity

**Managed Care Organizations.** The West Virginia Association of Health Plans and its individual member HMOs have implemented a variety of internal health delivery management processes and assessment tools. Some of these include:

- Disease management programs for conditions such as diabetes
- Acuity-adjusted physician practice pattern assessments

Along with these internal programs, all of the HMOs that contract with PEIA and Medicaid participate in the two agencies’ initiatives surrounding effectiveness of care.

**Insurance Commissioner.** Under state law, the Insurance Commissioner’s office is responsible for serving as the primary quality assurance oversight agency for HMOs operating in West Virginia. Pursuant to this responsibility (and state law), the Insurance Commission requires HMOs to seek accreditation from a nationally recognized accrediting body. The Commission is also in the process of developing a report card for HMOs operating in the state using data already reported with respect to such quality-of-care items as complaint and grievance incidence rates. The actual results reported by HMOs will be compared to national standards as established by NCQA and similar organizations.

**Multidisciplinary Activities.** Significant efforts are under way at both the public and private levels within West Virginia to develop appropriate means to evaluate the quality of health care services delivered to the state’s residents. However, many of the activities and resultant work products are either not shared with, or even known by, other health care organizations in the state. Rich data sets reside in isolation, resulting in duplication of efforts across agencies/organizations (and a resultant increased burden on reporting entities such as HMOs), while limiting the analytical potential of the information. Chapters III - X contain recommendations for the collection and analysis of data in a more coordinated, and therefore effective, manner.

## **II. SYSTEM ASSESSMENT**

This chapter provides an in-depth assessment of the West Virginia health care environment. According to the *Healthy People 2010 Draft for Public Comment*, “Differential access to social and health care resources most often reflect occupational, educational, and income and wealth differences. Socioeconomic disparities in the United States are apparent in smoking, overweight, elevated blood lead, sedentary lifestyle, oral diseases, health insurance coverage, physician and dentist visits, ambulatory care sensitive hospitalizations, low birthweight, heart disease mortality, personal health perceptions, diabetes mortality, and activity limitations.”

The chapter begins with a presentation of socioeconomic and health risk factors in the state, important for identifying where the greatest priorities should be placed with respect to improving (and therefore measuring) health outcomes. This is followed by an inventory of the types of data being collected today throughout the health care system by purchasers, providers, and various regulatory bodies.

The relative strengths and weaknesses of the various data sources are next explored, as well as specific opportunities -- and potential hurdles -- for collaboration across interested organizations in the measurement and reporting of service effectiveness. The last portion of the chapter discusses the relative urgency for change associated with this issue, as well as its potential impact on four key elements of the West Virginia health care system: health status of the state’s citizens; health care financing and delivery; the health care system infrastructure; and existing CON regulations.

### **A. Socio-economic Factors and Insurance Coverage**

Of the 1.8 million West Virginians, approximately 300,000 (16 %) are Medicare recipients, 900,000 (50%) receive health insurance benefits from their employer or purchase it independently, 342,000 (18%) receive coverage from Medicaid and 300,000 (16%) have no insurance coverage at all.<sup>3</sup>

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<sup>3</sup> Source: *Sources of Health Insurance and Characteristics of the Uninsured, Analysis of the March 1998 Current Population Survey*, an EBRI Special Report and Issue Brief, Employee Benefit Research Institute. Washington, D.C.: December 1998 and West Virginia Department of Health and Human Resources Bureau for Medical Services.

According to a recent study<sup>4</sup>, the “primary reason for the rise in the number of Americans without health coverage over the last 15 years has been the increase of health care costs relative to family income.” Eighty-two percent (82%) of Americans under 65 had some form of insurance coverage through an employment-based plan in 1997. Almost six of every 10 uninsured individuals live in families with incomes below 200% of the federal poverty level (\$33,400 for a family of four); half of these individuals live in families with incomes below 100% of the federal poverty level (\$16,700 for a family of four). Thus, information about employment and income can be a useful tool for identifying areas in which access to health care may be deficient, regardless of the number of providers available.

The tables presented over the next several pages summarize key socioeconomic, behavioral prevalences and causes of death data for six regions: Ohio, Wood, Monongalia, Berkeley, Raleigh, and Kanawha<sup>5</sup>. These regions were originally defined for the Plan Year 2000 managed care procurement recently completed by PEIA and Medicaid. The regions were established by analyzing hospital discharge patterns for state residents receiving services from in-state providers. As such, they form a reasonable basis for combining counties when examining health patterns.

<b>Estimate of people of all ages in poverty (1995)</b>	<b>Est'd Population</b>	<b>% of Pop.</b>
Ohio	27,921	16%
Wood	21,926	18%
Monongalia	71,783	20%
Berkeley	29,999	15%
Raleigh	75,712	24%
Kanawha	117,921	18%
<b><i>State Total</i></b>	<b><i>345,262</i></b>	<b><i>19%</i></b>

With 19% of the total population of the state living at or below the federal poverty level, an unemployment rate of 8.9%, and a median family income substantially below the national average of \$37,000, it is not surprising that over 16% of all West Virginians -- and 20% of the non-Medicare population -- are without health insurance.

### **B. Behavioral Prevalences**

The elderly comprise a large and growing component of the state’s population. In 1980, 12% of West Virginians were aged 65 and older. By 1995, the census estimates indicated that seniors represented over 15% of the population. As this trend continues, an ever-smaller work force will be required to support the demand for health care services of an increasing aged population.

In addition to the challenges posed by an aging population, a variety of behavioral prevalences tracked by the West Virginia Bureau for Public Health reflect long-standing issues with respect to the health status of West Virginians. High rates of hypertension, obesity, and use of tobacco products substantially diminish both the life expectancy and quality of life for the state’s population. Such behaviors contribute to the substantial loss of years in life expectancy.

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<sup>4</sup> Health Insurance Association of America Study, Health Insurance Coverage and the Uninsured, William S. Custer, PhD, Center for Risk Management and Insurance Research, Georgia State University, 1998.

<sup>5</sup> The counties comprising each region are listed in Attachment 6

As the Authority moves forward in its planning efforts, it must incorporate strategies to address unique regional health care needs and delivery issues for its residents that arise, or are exacerbated by, the broader socioeconomic environment and the population's behavioral prevalences.

**C. Inventory of Providers (Sources of Data for Effectiveness of Care Measures)**

West Virginia's regulators, payers, and providers are collecting a wide variety of data today on the health status and service usage patterns of the state's citizens. In many cases, the same data are being collected by two or more organizations, although often in isolation from the other(s).

Across all of the parties, there is a significant amount of information already available for examining the effectiveness of care delivered to a large portion of the state's population, assuming this information could be merged and analyzed as a whole. The table on the following pages provides a summary of the data being collected by various regulatory, payer, and provider groups (including Medicare).



Source	Data/Reports Maintained	Duplicate Data at State Agencies
Managed Care Organizations (MCOs): PPO, HMO, POS, etc.	<ul style="list-style-type: none"> <li>Enrollee counts and demographic data; Claims and encounter data; Quality and performance measures data, and HEDIS data</li> </ul>	<ul style="list-style-type: none"> <li>HCA (UB-92 only); Insurance; PEIA (for enrolled subscribers), and Medicaid (for enrolled recipients)</li> </ul>
<i>Providers</i>		
Provider Associations:		
West Virginia Hospital Association	<ul style="list-style-type: none"> <li>Updates for health care-related legislation on the state and federal levels</li> <li>UB-92 claims</li> <li>Population and socioeconomic data by county</li> <li>Epidemiological data from the Bureau for Public Health summarized</li> <li>Comparisons of West Virginia to national health care rankings</li> <li>Managed care enrollment by county and plan and financial performance based upon WV Department of Insurance reports</li> <li>Summaries of utilization, services provided, number of beds by type of service for each hospital</li> </ul>	<ul style="list-style-type: none"> <li>HCA; PEIA, and Insurance</li> <li>Public Health and HCA</li> <li>Public Health and HCA</li> <li>Public Health</li> <li>Insurance</li> <li>HCA and Public Health/Licensure</li> </ul>
West Virginia Health Care Association	<ul style="list-style-type: none"> <li>Extended health care provider list in West Virginia</li> </ul>	<ul style="list-style-type: none"> <li>Public Health/Licensure and HCA</li> </ul>

Source	Data/Reports Maintained	Duplicate Data at State Agencies
Purchasers/Employers		
State Agencies		
:Bureau for Public Health	<p>Data on over 90 programs related to health status, risk, prevalence, incidence rates, etc. for the state. Some highlights of the data collected by the Bureau include:</p> <ul style="list-style-type: none"> <li>• Healthy People 2000 and draft plan for Healthy People 2010, summarizing key health status improvement objectives for the next 10 years, standards by which to measure improvement, and routine biannual updates of performance since 1990</li> <li>• Office of Health Facility Licensure and Certification -- Detailed facility licensing inspections, complaint investigations, supporting licensure data, and compliance with licensure standards</li> <li>• Community and Rural Health Services -- Primary care and rural health services, emergency medical services data</li> <li>• Epidemiology and Health Promotion -- Epidemiological studies on diseases with high rates of premature death, statewide surveillance targeted to adverse and preventable disease outcomes, development of appropriate interventions and control strategies</li> <li>• Health Statistics Center -- estimates of the state's population between census years and analysis of birth, death, behavioral, and other health data</li> <li>• Maternal and Child Health -- Programmatic service volumes and outcomes of prenatal outreach, breast and cervical cancer screening, comprehensive maternity care, and family planning services to low-income or government-sponsored women</li> </ul>	<ul style="list-style-type: none"> <li>• HCA</li> <li>• PEIA; Medicaid, and HCA</li> <li>• HCA</li> <li>• HCA</li> <li>• HCA and Medicaid</li> </ul>

Source	Data/Reports Maintained	Duplicate Data at State Agencies
Insurance Commission	<p>MCO</p> <ul style="list-style-type: none"> <li>• Plan capitalization</li> <li>• Financial statements (monthly)</li> <li>• Enrollment by plan and county</li> <li>• Benefit packages</li> <li>• Provider contracts</li> <li>• Grievance and appeals</li> <li>• Sample group and individual contracts</li> <li>• Quality assurance plan including performance goals and benchmark for each indicator</li> </ul> <p>Indemnity/Fee-for-Service</p> <ul style="list-style-type: none"> <li>• Plan capitalization</li> <li>• Financial statements quarterly/ annually</li> <li>• Enrollment</li> </ul>	<ul style="list-style-type: none"> <li>• HCA</li> <li>• HCA; PEIA; and Medicaid</li> <li>• HCA</li> <li>• PEIA and Medicaid</li> </ul>

Source	Data/Reports Maintained	Duplicate Data at State Agencies
Health Care Authority	<ul style="list-style-type: none"> <li>• Demographic and health status data</li> <li>• Service demand and utilization data</li> <li>• Geographic Information System software for community, regional, state and national analyses of health care status, supply, distribution of health care services, facilities, and resources</li> <li>• Annual financial statements for all health care facilities including: hospitals, nursing homes, ambulatory health care and surgery centers, home health agencies, rehabilitation facilities, HMOs, behavioral health centers, hospices</li> <li>• Annual Uniform Financial Reports for all hospitals including: utilization, revenue, expense, wage and salary information</li> <li>• All Uniform Bills (UB-92s) for each inpatient discharged from a hospital</li> <li>• Annual rate applications for all acute care hospitals (revenue, expense, and utilization data)</li> <li>• All contracts between hospitals and payers</li> <li>• Medicaid, Workers' Compensation, and PEIA claims and encounters</li> <li>• CON applications and analyses</li> <li>• Health IQ -- Queryable database by DRG</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public Health; Medicaid; and PEIA</li> <li>▪ Public Health; Medicaid, and PEIA</li> <li>▪ Insurance (HMO only)</li> <li>▪ Medicaid and PEIA</li> <li>▪ Insurance</li> <li>▪ Medicaid; PEIA, and Workers' Comp</li> <li>▪ Insurance</li> </ul>

#### **D. Strengths, Opportunities, Weaknesses, and Challenges Analysis**

As shown in the preceding table, there are a significant number of data collection initiatives under way in West Virginia today. The sheer level of activity suggests a commitment on the part of regulators, payers, and providers to improve the health care status of West Virginians and thus can be considered a strength. At the same time, finding ways to make full use of these data will be one of the state's greatest challenges, given the natural tendency of each agency or association to retain control over its data and activities.

Other strengths, opportunities, weaknesses, and challenges faced in implementing uniform effectiveness of care measures include:

##### **1. Strengths**

- Commitment of the public sector agencies to evaluate and pursue improvements in efficiency and effectiveness of care delivery: As alluded to above, and as documented in the preceding sections, a number of public sector agencies have undertaken efforts to evaluate and improve the health care delivery system. Significant levels of resources have been committed to these efforts. Additionally, agencies have begun taking preliminary steps to increase their influence on the health care delivery system through joint initiatives (e.g., Medicaid/PEIA joint managed care procurement).
- Commonly perceived need for change: The Hospital Association, PEIA, and Medicaid have all expressed strong interest in having an independent third party develop effectiveness of care measures and standards, and undertake profiling of providers and health plans with respect to performance against these measures/standards. Additionally, providers have expressed an interest in more coordinated oversight by the various public entities in anticipation that coordinated oversight may reduce the administrative burden currently imposed by the multitude of overlapping reporting requirements and data collection efforts.

##### **2. Opportunities**

- The legislative mandate of Senate Bill 458 establishing the Authority as a central data repository: As discussed previously, most of the data currently being collected are not shared across agencies. Developing a central data repository should reduce duplication of efforts, both at the state and private agency level. By reducing duplication and total effort expended for data collection, more emphasis can be placed on data validation, thus improving the reliability of any new effectiveness of care measures.
- A broadly shared perception by payers and providers that the efficacy and efficiency of the delivery system must be improved to ensure its ongoing viability: Greatest future cost savings will come from effective management of utilization. But before an effective program of utilization management can be achieved, reliable baseline data must be collected to understand the existing degree of service delivery variability for comparable patients. The only organizations currently pursuing a coordinated utilization management approach are the state's managed care providers, covering just 10% of the total population.
- The broad representation of West Virginians in state and federally funded programs (i.e., PEIA, Medicaid, Workers' Compensation, and Medicare): The relatively high percentage of the state's residents covered by publicly funded programs (approximately 50%) gives West Virginia an unusual ability to accumulate data for a representative portion of its population, even without any private sector participation (assuming West Virginia were to obtain Medicare data, as other states have done).

### 3. *Weaknesses*

- The lack of a common reporting platform, data sets, and definition of data elements: Currently, the variation in data sets and definitions makes it difficult to share or compare data among the various collecting bodies. And development of a common data set will likely represent a substantial cost. While the administrative simplification provisions of HIPAA could resolve some data sharing issues, implementation is likely a year away, and availability of data for analysis possibly two or more years into the future.
- Low managed care penetration in the state: Much of the focus on development of effectiveness of care measures nationally has been within managed care. The low managed care penetration in West Virginia means that data reporting for utilization, referral rates, quality benchmarks, and other effectiveness of care measures covers only 10% of West Virginians. Developing comparable, consistent service delivery data sets for the 75% of West Virginians covered under a fee-for-service delivery model and the remaining 16% who are uninsured is likely to be a difficult and expensive endeavor.
- The lack of data for outpatient services: Presently, the state's orientation for data collection and reporting is toward inpatient or facility-based services. Little or no outpatient data have been collected (except from HMO-based reporting) at the state agency level<sup>6</sup>. Development of baseline data for outpatient services will represent a significant new effort and cost.
- Limited existing resources at the Health Care Authority to perform the newly mandated role of central data repository: The Authority's mandate to serve as a central data repository represents a significant opportunity for development of effectiveness of care measures. However, as the mandate has thus far come without any new resources or support, the provider and payer communities have expressed concerns about whether sufficient internal resources exist to support the accumulation, validation, and analysis of data necessary for the development of credible reports on the health care system's performance.

### 4. *Challenges*

- Widespread support and acceptance of new effectiveness of care measures: The development of new effectiveness of care measures is likely to threaten providers and payers not accustomed to publicly available performance data. Additionally, the many public and private organizations currently involved in data collection and performance improvement initiatives may be reluctant to "give up" their initiatives to support a common effort. Achieving consensus among the many private and public players, as well as a level of "comfort" in the reliability of the data used for the effectiveness of care measures, may represent the single greatest challenge to this initiative.
- Development of a credible, manageable set of effectiveness of care measures that will sustain critical evaluation by providers and payers: As noted above, there are many public and private agencies with a stake in the development of effectiveness of care measures. Before a public agency can reasonably be expected to relinquish its ongoing data collection efforts, it must be reassured that comparable, reliable data will be available on a timely basis. Private entities that are subject to evaluation will understandably feel threatened by the more widespread distribution of performance data. The data must have a very high level of reliability to withstand the evaluation of these key stakeholders.
- Complying with statutory and regulatory limits: The Health Care Authority is granted access under state law to data compiled by the state agencies, but it is not clear to what extent it can report publicly on the contents of that data. Similarly, any use of patient-specific information must take into account issues of privacy and confidentiality.

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<sup>6</sup> Claims data are collected but not actively analyzed.

### **E. Urgency for Change**

The urgency for change is predicated by mounting pressures on West Virginia's health care delivery and financing systems. An aging population, continued high unemployment and the corollary effect on the size of the uninsured population, and the significant prevalence of certain chronic conditions are three of the major contributors to the growing demands on the state's health care system. The State of West Virginia, as a major payer for health services, needs to move expeditiously to implement methods to accurately measure program results. (Specific recommendations on the structure of these methods are fully described in Chapters 6 and 7.)

The Public Employees Insurance Agency and Medicaid, the two largest publicly funded health care programs in the state, are projecting substantial increases in costs and face potential significant budget deficits in the year 2000 and beyond, absent the implementation of major cost containment initiatives. The needs of these two agencies alone warrant action on the recommendations contained in this report.

As discussed in the Background section of this document, there are, in fact, many activities under way in both the public and private sectors with respect to the collection and analysis of various measures for gauging the effectiveness of health care systems. The premise underpinning many of these initiatives is the development of a system that will permit payers (primarily employers and government agencies) to hold health care delivery systems accountable for the outcomes they produce.

However, until consistent methods for the collection and evaluation of measurement data are implemented, these systems cannot be credibly used for their intended purpose. Accordingly, there is considerable pressure for health planning agencies to undertake extensive data collection and analysis activities aimed at establishing valid and reliable measures of health care outcomes. The results of these efforts will provide important information for consumers and providers of health care services. Ultimately this information will also enable policymakers to direct resources toward those programs and health care systems that produce the best outcomes.

### **F. Impact on Health Status**

The potential impact on the health status of the population of implementing a program of effectiveness of care measures hinges on the state's success in collecting data and information from a wide array of sources in a consistent and timely manner. The collection and analysis of credible data sets will permit the identification of those programs that have the greatest potential for improving health outcomes and containing system costs over the long term. There is significant potential to improve the health status of the population by identifying what works and what doesn't, and targeting resources to initiatives that can demonstrate their worth.

Improving the health status of the population is a long-term undertaking, although effectiveness of care measures can focus on interim activities whose ultimate contribution may not be fully realized for some years. For instance, programs designed to reduce smoking rates would be expected to lead to a lower incidence of lung diseases among West Virginians in the long term. Accordingly, those programs that are most successful in lessening the use of tobacco products could be identified and targeted for continuation and expansion long before data become available documenting an actual reduction in lung disease-related morbidity.

Given the significant prevalence of certain chronic conditions and factors negatively affecting the health status of West Virginians (e.g., roughly a quarter of the population suffers from hypertension, and more than one-third is significantly overweight), there are substantial opportunities for improvement. The ultimate relevance of any initiative to measure outcomes will be dependent on how closely it is tied to

those clinical conditions and risk factors that are most prevalent in the population and/or consume a disproportionate share of the financial resources dedicated to health care.

### **G. Impact on Health Care Financing and Delivery**

As with health status, a program of outcome measurement can have a tremendous impact on health care financing and delivery by influencing the general model under which providers are paid and by tying specific financial rewards/penalties to practice patterns.

The growth in health care expenditures described in the Background section of this report has spurred a movement away from traditional fee-for-service/indemnity programs and toward managed systems of care. Increasingly, payers are entering into capitated arrangements with health care delivery systems that shift both the financial risk and operational responsibility for the provision of a pre-set package of health care services to the provider level. Although West Virginia has lagged behind other states in the growth of managed care, financial pressures within the state can be expected to accelerate the transition from fee-for-service in coming years.

The use of capitation represents a fundamental shift from the traditional fee-for-service approach to financing health care delivery and is designed to align the financial and programmatic incentives of the payer and provider. However, for the model to work, health care dollars must be allocated to providers in amounts that fairly reflect their service delivery burdens and degree of financial risk. Payers must then develop programs to monitor the financial stability of their provider contractors/subcontractors and to ensure compliance with program standards, including the provision of covered services and the maintenance of satisfactory levels of quality of care. That is, payers must have reliable methods for monitoring the effectiveness of care within the capitated systems.

As capitated systems grow and begin to enroll populations with complex health needs (e.g., the disabled or elderly), financial and utilization data can be used to develop more sophisticated payment systems -- ones that take into account the degree of risk associated with a defined population. The ability to “risk-adjust” payment rates based on the demographics of the enrolled population (including clinical morbidities) can become critical for ensuring that capitated systems receive appropriate levels of funding.

The development of valid risk adjustment methodologies requires extensive analysis of the factors contributing to the utilization and cost of health care services. The objective is to identify those factors that are distinct and reliable predictors of risk, and therefore cost, within a population of enrollees. Data and information collected as a part of the outcome measurement program proposed in this document could permit, over time, the development of incentive-based payment arrangements that reward health systems for producing positive outcomes and achieving program goals with respect to health status.

### **H. Impact on the Health Care System**

The availability of reliable outcome measures will have a significant impact on the health care system as a whole, by directing resources to those providers and programs best able to demonstrate their effectiveness. The changes in West Virginia’s demographics (an aging population) and the continued emergence of new medical technologies and therapies already guarantee that the system will continue to evolve in some manner. The precise nature of this evolution will be guided in large part by information on what works and what doesn’t, assuming such information is available.

For example, the growing elderly population in West Virginia will require more long-term care services, including less costly alternatives to nursing facilities. Measuring program outcomes in this area will allow payers to promote the development of systems and living arrangements specifically designed to

meet the needs of the elderly. It will also provide consumers with information on the quality of these programs and the results they have been able to achieve with respect to health and general quality of life.

Improvements in drug therapies may continue to reduce the need for inpatient care for certain conditions, particularly among the seriously mentally ill. However, there will be an increased need for outpatient programs to monitor compliance with the drug treatment regimen. Once again, consumers and their families will want information on which programs have the most success in keeping patients out of the hospital and functioning at their highest possible level.

These are just two examples of how the health care system is reforming in response to changing needs. Some changes can be made more quickly than others. However, in all cases there is a critical need for information that can guide the evolution of health care systems based on changes in health status, disease prevalence, the age of the population, supply of resources, and treatment patterns.

### **I. Impact on Current CON Regulations**

The intent of the Certificate of Need (CON) process is to ensure capital resources are directed to where they can have the greatest positive effect on the health status of the state's residents. This process could be significantly enhanced by incorporating measurements of the effectiveness of health care systems into CON evaluations. The measures could be used to evaluate past decisions by the HCA, determine whether different data and analyses would better predict the likely success of a new program and thus inform future Authority decisions for efficient and effective resource allocation. (See Chapter VI for a detailed recommendation to revise the CON process.)

## **III. PROBLEM STATEMENT**

### **A. Identify Symptoms and Underlying Root Causes of Issue**

Since 1983 the Health Care Authority has been charged with the responsibility for gathering information on health care costs, developing a system of cost control, and ensuring the accessibility of appropriate acute care services. The state legislature further mandated that the Authority "protect the state's citizens from unreasonable increases in the cost of acute care services and the unreasonable loss of economic resources."

The Authority administers two cost containment programs -- the CON program and the Health Care Financial Disclosure Act. The Authority is also responsible for the development and implementation of health planning activities through the State Health Plan.

An audit division ensures compliance with rate and CON orders and conducts periodic reviews of health care entities in financial difficulty. The Authority also co-administers, with the Office of Community and Rural Health Services, the Rural Health Systems program. Through this program the Authority offers financial and technical assistance to the state's rural health care systems. Finally, the Authority is responsible for coordinating the data collection efforts of other state agencies with a goal of creating centralized access to health care information.

While there has been considerable effort devoted to the creation of the centralized database for selected state agencies, overall activities related to the evaluation of health care data and information by payers in West Virginia remain fragmented. There is only limited coordination among state agencies and virtually no collaboration between state and private sector payers.

Medicaid, PEIA, and Workers' Compensation each conduct studies using claims data and enrollment statistics to evaluate utilization of services by category (e.g., inpatient hospital, physician, prescription drugs, etc.), utilization trends in fee-for-service vs. managed care, cost trends, etc. However, to date most of these analyses are evaluated on an agency-specific basis. The centralized database developed through the Health Care Authority has not been used as a tool for statewide policy analysis and program planning and reform.

Insurance companies, HMOs, and self-insured employers in the state also conduct assessments of their program operations and finances, using claims and encounter data, and other available demographic information for their insured/covered population. However, there is no mechanism for sharing or consolidating results across private payers, or for conducting comparative analyses of utilization patterns and cost trends.

There is also no statewide collaboration among the various payers and provider organizations with respect to the collection and analysis of data and information on health outcomes and the impact of various programs and policies on the health status of the population. Nor is there any coordinated process for evaluating the performance of the state's health care delivery systems.

While the Authority is collecting and reporting information on the health care system in the state, most of this information deals with service availability (i.e., quantity and distribution of resources) and utilization of selected categories of service (e.g., inpatient hospital days). The data analysis efforts of the Authority are used primarily to support the state's CON process, currently designed to ensure the provision of health care services in an orderly, economical manner that discourages unnecessary duplication. The review process encompasses an assessment of need, consistency with the State Health Plan, and financial feasibility.

However, the lack of statewide data and information on system performance and related health outcomes is a limiting factor and should be viewed as an issue to be resolved in the context of the state's planning process. Changes in the way in which the state collects, analyzes, and uses health care data and information are necessary to address the problems in the current system. Absent the development of effectiveness of care measures tied to the key objectives of the State Health Plan, West Virginia's progress toward achieving those objectives will not be known and cannot be demonstrated to the legislature or the residents of the state.

There are a number of challenges that must be addressed in order to successfully implement a statewide performance measurement system. First, there are significant issues related to the credibility of the data used in measuring performance. Providers in particular will insist upon strict adherence to an analysis plan that produces unbiased, comparative results. Second, an appropriate and relevant set of indicators must be identified, and the entities accountable for the collection, analysis, and reporting of the indicators must use consistent techniques to conduct these activities. Third, reasonable targets or benchmarks must be established by which the system will evaluate its progress toward program goals. And finally, the confidentiality of patient and provider-specific data must be protected.

Obviously, there are potential barriers inherent in developing and implementing a performance monitoring system. There may be substantial objections from the provider community. The state may also face certain obstacles in collecting and validating data from a wide array of sources. Additionally, there will be competing priorities and limited resources with which to address them. Political considerations may affect how and when certain projects and programs proceed. Finally the cost of

integrating the various independent data sets may prove prohibitive and still not yield credible data for analysis. Therefore the state must proceed in a somewhat limited stepwise fashion in constructing the underlying database.

These potential barriers, however, should not prove insurmountable. Each must be addressed through inclusiveness and in a manner that maintains the integrity of the process and ensures the ultimate goal of improving the health status of the population as the paramount consideration.

### **B. Identify Barriers to the Successful Development and Performance of the Issue**

As has been discussed in some detail, implementation of a performance monitoring system will face significant barriers. The following represent some of the most critical barriers:

- Independent, differing data sets that cannot or do not intersect: As demonstrated by the table in Chapter II, there are many data sets in existence today, maintained by different private and public entities. These data sets overlap to some degree, but generally do not share common structures or definitions, and therefore cannot be combined or even used for comparative purposes. The cost to integrate data sets may be prohibitive and still not yield credible data for analysis, while the cost of developing entirely new data sets is also likely to be high.
- Confidentiality of individual patient information: Despite the activities undertaken at a federal level, there exist today no uniform national standards for protecting the confidentiality of health information. Concerns of individual patients and providers must be addressed before data can be used and shared across entities.
- Politicizing of the process: Prior to implementation, the monitoring system will be challenged by providers who have not historically been subject to a high level of public accountability for performance. This will be especially true for measures that may be affected by factors outside of the providers' control such as poverty or environmental factors. As the monitoring system is implemented, providers who appear less than successful may try protect their status by challenging the process, the credibility of the data, and the adequacy of the analysis.
- Need for collaboration across a wide and disparate spectrum of stakeholders: To withstand the potential challenges, the monitoring system and data elements must be developed through an effective collaboration across the spectrum of providers, consumers, policymakers, politicians, and bureaucrats who share an interest in the process.

### **C. Identify the Relationship to Market Share, Work Force, Capital, Community and Consumer Protection (*Market share, work force, and capital sections are not applicable.*)**

The development of clear, consistent effectiveness of care measures for West Virginia health care payers and providers will serve to define West Virginia's baseline expectations with respect to the quality of health services. As the measures are tracked over time, communities and individual consumers will be able to identify which providers are meeting performance benchmarks -- and which are not.

## **IV. ISSUE ANALYSIS**

### **A. Report the National Health Care Supporting Research and Theory about the Issue**

Significant efforts are under way to collect and evaluate effectiveness of care information at the national level. Information on the current national research and theory on performance monitoring and effectiveness of care measures is provided in Chapter I: Background.

### **B. Identify Magnitude of Problems/Priority**

West Virginia's success in developing effectiveness of care measures to support other State Health Plan

initiatives will greatly influence the state's ability to monitor progress within these other initiatives (and therefore their ultimate achievements). The magnitude of the problem and its relative urgency are discussed in detail in Chapter II, Section E, and in Chapter III.

### **C. Address Supply, Demand, Need, and Cost**

*Supply.* For a discussion of issues pertaining to supply, see Chapter II, Section C: Inventory of Providers.

*Demand/Need/Cost.* The need, and therefore demand for reliable effectiveness of care measures is directly correlated to the broader efforts under way to direct scarce health care resources to where they can do the most good. In the face of increasing costs for health care services, employers and payers (public and private alike) are undertaking ever more aggressive cost-cutting measures. For highly managed populations, the “easy” cuts have been made, i.e., reductions in provider reimbursement and implementation of basic utilization management programs.

Some of these savings have come at the “cost” of beneficiary confidence. A recent Kaiser Family Foundation study found that a majority of those surveyed are worried about access to specialists, quality of care, and whether their health plans are more interested in saving money than providing good care. West Virginia's regulators, legislators, insurers, employers, and residents are wrestling with a need to keep health care insurance reasonably affordable, without jeopardizing quality of care.

The precise dollar costs associated with the recommendations will be difficult to quantify until the State Health Plan is finalized, the State Health Planning Committee and the Authority determine what strategic direction will be taken with respect to the initiatives covered in the Plan, and decisions are made regarding data accumulation and processing among the various state agencies. Some elements that have the potential to reduce or increase costs include:

- Centralization of financial, utilization and quality measures for all payers and providers: Potential opportunities for savings exist if only one agency performs data downloads, checks for data integrity, and maintains the financial, operational, and quality databases for payer and provider information. However, each agency has specific and somewhat unique information gathering and reporting mandates from the West Virginia Legislature. Consolidation of these databases therefore may require changes in existing law, as well as substantial cooperation among state agencies to define their unique data and reporting requirements such that a single database can serve multiple agency demands for data analysis and reporting.
- Integration of PEIA, Workers' Compensation, and Medicaid fee-for-service claims and managed care encounter data to allow disease-based and provider-specific reporting across a large, and therefore representative, population.
- Acquisition of Medicare fee-for-service claims and managed care encounter data, and synthesis and preparation of Medicare data to allow for integrated reporting with PEIA, Workers' Compensation, and Medicaid: The cost of acquiring such data will largely be determined by the cooperation of the regional Medicare Intermediary and how discretely the data is analyzed.

### **D. Identify Areas of Excess Capacity**

The table in Chapter II, Section C, summarizes the types of data being collected by West Virginia payers and providers and the extent to which duplication of effort exists. In a sense, whenever two or more entities are gathering the same information independently, the result is “excess capacity.”

As one example, the West Virginia Insurance Commission collects an array of financial, operating, and quality standards for HMOs in the state. The Authority also accumulates financial statements and

enrollment by plan and county, as well as provider contracts for each HMO. And Medicaid and PEIA both receive financial data specific to their populations, for use in monitoring the solvency of HMO contractors.

**E. Identify Assumptions, Major Challenges, and Market Forces**

See Chapter II, Section D, for a discussion of the major challenges faced. *Assumptions and market forces are not applicable.*

**V. ADDRESS EACH STATE-LEVEL ACTION STEP**

**A. Define Elements and Indicators for Key Attributes and Processes**

Chapter VI: Proposed Solution and Attachment 7 contain a proposed list of data elements for measuring the effectiveness of care and a discussion of the rationale behind each.

**B. Develop a Standard Definition**

Attachment 8 includes a proposed list of data element standard definitions.

**C. Define Enforcement Mechanisms**

Strong negative enforcement mechanisms are not typically the best tools for achieving compliance from payers or providers, as they can elicit strong protests if used (often making regulators reluctant to invoke them at all). However, moderate enforcement mechanisms are key tools to ensure that recalcitrant payers and providers either furnish what is expected, or receive a reduced payment for reduced services.

There are a variety of enforcement mechanisms used today, including payment reductions, monetary penalties, other sanctions, or termination of the business relationship. For example:

- Most managed care payers and providers are subject to contractual terms and conditions relating to reporting requirements. West Virginia HMOs contracting with Medicaid and/or PEIA are subject to the standards set forth in the joint Request for Proposals. These include routine data reporting requirements, as well as compliance with operational standards in areas such as member services, quality assurance, service delivery and access. Failure to meet reporting requirements or comply with specific standards can result in a scaled response: warnings, followed by suspension of enrollment, payment reductions or other damages, and, ultimately, the threat of contract termination.
- Regulatory mandates can also require that specific data be reported as a condition of doing business in a state. For example, HMOs operating in West Virginia are subject to the reporting requirements established by the Insurance Commission, while other providers are subject to the requirements established by various oversight agencies, including the Bureau for Public Health's Office of Health Facility Licensure and Certification and the Authority. Failure to report can result in restrictions on expansion of services in the state or, ultimately, withdrawal of state licensure or authority.
- For individual providers, certain data reporting is required in order to receive full or partial payment (i.e., completion of claims forms such as UB-92 or HCFA 1500 or reporting of encounter data under a managed care plan).

Enforcement mechanisms are most effective in areas where significant competition exists. In a state such as West Virginia, significant competition does not exist. Forty-three of West Virginia's 55 counties have

been either partially or entirely designated Health Professional Shortage Areas<sup>7</sup>. If an employer or agency cannot afford to lose a provider or health plan, and is unwilling to pursue enforcement options, such mechanisms are essentially ineffective.

Incentive approaches therefore may be more effective for promoting desired behaviors. This preference was echoed in interviews with representatives from Medicaid, PEIA, and the HMO and Hospital associations. Some alternative incentive-based approaches are:

- As described in Chapter I, the Colorado Alliance established selected performance benchmarks based on HEDIS measures for its contracted health plans. Each plan agreed to put 2% of its premium at risk, which is then pro-rated across the eight standards. If a plan doesn't meet one or more of the performance standards, it forfeits the money. At the end of each reporting year, 50% of the money collected for each indicator is awarded to the plan with the best performance.
- In Alabama, the state has contracted with a single health plan to serve the Medicaid population in Mobile County. If the health plan exceeds 10% of the prior year's number of EPSDT screens performed, it receives a bonus payment for each EPSDT screen above the benchmark level.
- In Vermont, health plans that meet established targets for encounter reporting (for publicly funded populations) receive additional capitation payment.

#### **D. Delineate Socioeconomic Status and Impact of Sectors Outside of Health, Especially Economic Development and Vulnerable Populations**

As discussed in Chapter II, socioeconomic factors can have a strong impact on health status. As performance measures are selected, it will be important to recognize the impact of factors that are outside the control of the health care providers -- including most specifically the impact of poverty. This can be addressed in part by establishing performance benchmarks on a regional, rather than statewide basis, adjusting for differences in socioeconomic conditions.

Additionally, the overall economic strength or weakness of a region or the state as a whole will impact health status. Again, as discussed in Chapter II, employment and income are correlated with a number of health factors, and are also directly linked to the health insurance coverage. If the economy in a region or throughout the state declines, a similar decline in health status may also be expected.

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<sup>7</sup> West Virginia Primary Care Access Plan, June 1996.

## **VI. IDENTIFY POTENTIAL SOLUTIONS**

### **A. Potential Solutions**

The Authority has the option of pursuing one or more of the following three options in developing an overall approach to measuring the effectiveness of care:

1. 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.
2. Extend CON data collection to include ongoing tracking of actual performance, to allow for a reconciliation between projections and outcomes.
3. Institute a comprehensive disease management program.

A more complete description of the three recommendations follows. For each, a three-year implementation plan is provided. The implementation plans are designed to put additional information into the Authority's hands relatively quickly, to permit greater reporting to the legislature and the public while allowing sufficient time to develop the internal (interagency) and external (private sector) partnerships necessary to develop fully credible effectiveness of care measures.

### **Operational Reporting Enhancement**

The Authority currently files an annual report to the legislature summarizing operations for hospitals, home health agencies, behavioral health facilities, nursing homes, and hospices. Along with general rate setting, CON, the Rural Health System Program, and Health Care Financial Disclosure information, the annual report includes such key financial and operational statistics as:

#### *Acute Care, Rehabilitation, and Psychiatric Hospitals*

- Statement of operations including gross revenues, deductions from revenues, net revenues, expenses, and rate of return
- Summary of gross revenues by payer
- Days, discharges by payer, and overall occupancy rates
- FTE wage comparisons

#### *Home Health, Behavioral Health, and Nursing Homes*

- Revenues and expenses

**Year One:** In addition to providing the above data elements, in the first year of implementation the Authority could lay the foundation for a facility-specific "report card." Report cards would be prepared for each hospital, home health agency, behavioral health facility, nursing home and hospice in the state. (The detailed data elements and indicators for key attributes and processes are presented in Attachment 7.) The data elements contained in Attachment 7 would be aggregated and summarized by region and for West Virginia as a whole.

The development of report cards in Year One would initiate a process of measuring and comparing the financial, operational and utilization performance of individual facilities to regional and/or state targets. Payer-specific data could also be furnished for each facility to measure the difference in service intensity (patient acuity) by payer classification.

Without adjustments for acuity, these report cards will probably lead to more questions than answers. It would not be fair to conclude that a hospital with a higher cost per day than the average in the state is inefficient. But questions should be asked and answered to determine why significant variances exist.

For example, is the hospital's patient acuity higher than what is experienced in the rest of the state? Does it suffer from unusually low occupancy rates because it is a rural provider? Have there been significant capital improvements recently? Even though it will be important not to attempt to draw fine conclusions from these report cards for this first year, it will be critical that a common foundation of data, analysis, and reporting be laid for building upon in subsequent years of the State Health Plan.

Hospice and nursing home facilities would be held to similar, applicable reporting standards, and report cards would be developed for each of these types of facilities as well.

The data elements required for the report cards (as delineated in Attachment 7) are currently reported to the Authority and would not require any additional reporting or analysis by the providers.

It is also recommended that the Authority begin to report on physician-based primary care activities, as well as primary care clinics and other organized provider locations<sup>8</sup> in the state. As these data will be more difficult to obtain and validate, Year One reporting could be limited to a listing of the numbers and types of physicians in practice in each region and throughout the state, as well publishing 13 data elements already collected by Medicaid and PEIA for their beneficiaries. A listing of these data elements is also provided in Attachment 7.

The reporting of these data will be the first step toward differentiating among providers in terms of the effectiveness of their care. And by making use of existing reporting requirements, the state will be imposing no new burdens on providers and HMOs. In fact, no new reporting should occur without substantial input from representatives of the provider and HMO communities.

**Year Two:** In the second year of implementation, the Authority would build upon the report cards developed in Year One, adding the disease-specific data elements for a single disease. Selection of the disease to be evaluated should reflect criteria and priorities established in the State Health Plan.

By collecting data on the services delivered to patients with a single disease, Year Two initiates a process of reporting services rendered, along with specific outcomes achieved as a result. Data will be summarized by county, region, and state. No individual physician provider will have data publicly reported in Year Two. However, it is recommended that provider-specific reports be sent to each physician, comparing his/her numbers to those for a defined peer group.

The diagnostic-related reporting, coupled with epidemiological information from the Bureau for Public Health, will provide a complete picture of what it costs the state, its insurers, and its residents to treat a specific disease. (See Comprehensive Disease Management recommendation for a more complete description of the proposed approach.)

**Year Three:** The Authority would build upon the report cards developed in Years One and Two by adding three new DRGs to track.

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<sup>8</sup> Includes primary care centers, FQHCs, RHCs, school-based health centers, and other locations.

## CON Reporting Enhancement

The Authority has developed a comprehensive and rational set of data elements to evaluate when deciding whether to approve investment in the development of a new program, or investment in new facilities and/or equipment. However, until the CON applicant seeks to replace the equipment, or in some other way renew the CON, the Authority does not have the opportunity to evaluate how closely the provider's projections matched its results in terms of improved access to services, improvement of health status in the community, volume of patient services, revenues, etc. Consequently, decisions regarding similar investments in programs/facilities are not informed by the successes or failures of prior applications.

To "close the loop" on CON activities, it is recommended that the Authority develop tracking reports for approved CONs. Report development could be phased in over three years.

**Year One:** For all applications to purchase replacement equipment for previously approved CONs, request that actual results be compared to original projections. Positive and negative variances of greater than 10% would have to be explained as part of the renewal application. Apart from the specific data required for each CON application by type of project/program, the following additional information would be required:

- Outcome measures for inpatient services:
  - Complication rates
  - Mortality/morbidity data adjusted for case mix
  - Discharge status
  - Readmission rates
- Impact on community health status, other providers, and region
  - Improved access
  - Volume of services rendered in area prior to CON program implementation and at present
  - Comparison of cost/service within the defined service area before and after implementation (adjusted for inflation)
  - Other pertinent outcome measures

During Year One, the Authority would also inform new CON applicants that they will be required to furnish annual tracking reports for projects starting in the following year.

**Year Two:** In the second year of the State Health Plan, all new projects approved would be required to produce an annual tracking report containing the same information as outlined for renewal CONs in Year One. In addition, the Authority would begin to summarize its observations from the renewal applications received in Year One regarding:

- Impact on community health status, other providers, and region (see data in Year One)
- The proportion of approved applications that achieved:
  - Over 80% of the objective utilization and financial targets set forth in the original application.
  - 50% to 80% of the objective utilization and financial targets set forth in the original application.
  - Less than 50% of the objective utilization and financial targets set forth in the original application.
- The proportion of applications (total, approved and denied) that address key objectives delineated in the State Health Plan.

Also during Year Two, the Authority would begin to analyze the data in Years One and Two to determine

whether or not there were patterns associated with more and less successful programs. These analyses would then be presented to the provider community for comment and discussion to ensure that conclusions drawn reflect appropriate analysis of the data.

**Year Three:** In the third year of the State Health Plan, the Authority would continue the reporting initiated in Year Two. Based upon the analysis and findings from the CON project outcome reporting, the Authority would also begin to link approval and disapproval of proposed projects and renewals based upon the facility's track record for past CON projects with respect to meeting its utilization and financial targets.

### **Comprehensive Disease Management**

Based upon the broader recommendations of the State Health Plan, West Virginia could marshal its public and private resources to comprehensively evaluate the need for, and adequacy of, services delivered to patients with specific diagnoses. The development of such a comprehensive approach would provide information necessary to:

- Make informed decisions regarding the benefit of education and prevention programs.
- Judge the efficacy of existing service delivery methods and isolate "best practices" either in the state or elsewhere.
- Reach ultimate conclusions about which initiatives undertaken with respect to managing a disease are succeeding, and which are not.

As with the previous two recommendations, this would require several years to fully implement.

**Year One:** A specific disease or diagnosis would be chosen for detailed analysis. Criteria for selection would be based upon findings from the State Health Plan, as well as:

- Current initiatives already under way in the Bureau for Public Health, Medicaid, or the private sector (e.g., Medicaid's evaluation of diabetes mellitus or the Authority's project with the physician and hospital providers to evaluate practice patterns for radical prostatectomy applying *Dartmouth Atlas* standards).
- The Healthy People 2000 and 2010 planning processes.

As a first step, it is recommended that the Authority involve a broad spectrum of payers, providers, consumers, and other interested parties in the development of an analytic and reporting process that could be duplicated in future years. Participants would serve on a Comprehensive Disease Management (CDM) group.

Members of the CDM group would be drawn from the full spectrum of health care stakeholders and could include:

- Government payers such as Medicaid and Medicare
- Public health officials
- Representatives from the legislature and county government
- Consumer advocates
- Representatives from the provider community, including academic medical centers and faculty, community physicians, hospitals, outpatient clinics, home health providers, fee-for-service and managed care organizations, and other ancillary service providers.

The CDM would be charged with developing a list of questions, the answers to which would enhance the understanding of state government, health care leaders, and citizens with respect to the full ramifications

of the disease. Examples of such questions might include:

- How many West Virginians have risk factors/behaviors that foster the development of the selected disease (e.g., chronic lung disease or diabetes)?
- How many West Virginians have been diagnosed with the selected disease?
- Of those diagnosed, what proportion is receiving treatment?
- What clinical/acuity indicators should be used to better evaluate the appropriateness of services provided?
- Are there accepted clinical standards developed nationally or within the state for \_\_\_\_\_?
  - Physician services
  - Outpatient/ancillary services
  - Outpatient procedures
  - Diagnostic procedures
  - Inpatient utilization
  - Inpatient procedures
  - Expected outcomes by service or acuity
- If there are no standards acceptable to the CDM, what should the standards be?
- How do all of the above items vary by county and region?

The CDM would then review all public, currently available data to determine:

- The reliability of the base data
- The gaps or shortcomings in the data and acceptable mechanisms for addressing those shortcomings
- The analyses that would be most reliable and informative to the insurer and provider community, legislature, and residents given the data available

Based upon the CDM's work, the data set(s) would be analyzed and reports generated for review and approval by the CDM. No data should be reported until the CDM has signed off on both the credibility of the source data and the corresponding analysis of that data.

Once credible reports have been run, documented outcomes would be compared to the standards developed by the CDM. Variances in practice patterns, utilization, cost, and outcomes could be evaluated both by county and regionally. The work of the CDM at this stage would be to evaluate those differences and decide what the most productive next steps should be. Expected items for an action plan would include:

- How can we enlist the aid of the public health and private health care community providers to initiate a broadly based public awareness and educational program for the selected disease?  
What data should be tracked to evaluate the effectiveness of such a program?
  - Public awareness or knowledge of the selected disease?
  - The proportion of PCPs screening all patients/high-risk patients for the selected disease?
  - The number of diagnostic tests performed within the state?
  - Changes in behaviors that will reduce the likelihood of contracting the selected disease?
  - Reduction in the number of residents diagnosed with the disease?
- What are the best practices for selected diseases?
  - Physician
  - Pharmaceutical
  - Outpatient/ancillary services
  - Inpatient
  - Sub-acute inpatient providers
- What can be learned from these practices in terms of improved outcomes, quality of life,

reduction in costs, etc., and how can the procedures from these practices be codified and communicated to relevant providers? Should protocols be promulgated based upon the best practices within the state or other practice approaches observed in other areas?

- What measurement tools should be used to evaluate the successful implementation of protocols?
  - Referral rates to appropriate specialists
  - Screening rates for expected, concomittant conditions
  - Inpatient admission rate/1,000
  - Average length of stay
  - Annual average cost per diagnosed individual for hospital (inpatient and outpatient), ancillary services (laboratory, radiology, other), physician services (PCP and specialist), home health visits, behavioral health, hospice, etc.

**Year Two:** Protocols developed in Year One would be reported by the Authority and presented at local, regional, and statewide provider meetings. Based upon finalized protocols, standards of education, care, and care outcomes would be established and published by the Authority. The CDM would then monitor the performance of public and private care providers and health officials and compare the actual performance in the regions to the promulgated standards.

At the end of Year Two, the Authority would report on the outcomes of the Best Practices in the State, including:

- Innovative approaches that improved the public’s understanding of the disease, outcomes, quality of life, prevention treatments, etc.
- General comparison of the county and regional performance to the state’s best practices. Data to be reported would be selected from Year One data and combined with ongoing data collection in Year Two. Trending of data, analyses, and reporting would be approved by the CDM. At a minimum, data reported would include:
  - Number of residents in the county/region
  - Number of residents diagnosed (new and ongoing) with the selected disease in the county/region
  - Number of residents diagnosed receiving care from the following providers:
    - Outpatient hospital department
    - Physicians (PCPs and specialists)
    - Inpatient hospital
    - Other ancillary services

At the beginning of Year Two, two additional CDMs would be established for two new diseases selected by applying the same criteria as used in Year One. The process might be refined from Year One, based on any “lessons learned” by the original CDM.

**Year Three:** The CDMs established in Year Two would perform the same data compilation, analysis, and reporting activities undertaken by the first CDM in Year One. For its part, the original CDM would further expand its reporting to include at a minimum the following:

- Number of residents in the county/region
- Number of residents diagnosed (new and ongoing) with the selected disease in the county/region
- Number of residents diagnosed receiving care:
  - Physician
  - Outpatient hospital
  - Inpatient hospital
  - Other ancillary services

- Performance report cards by county and regional providers

*Hospitals*

- Inpatient days and discharges
- Cost/day and cost/discharge
- Outpatient visits
- Cost/outpatient visit
- Outcomes adjusted by patient demographics
- Other ancillary services

*Home Health Agency*

- Patient visits and discharges
- Cost/visit and cost/discharge
- Outcomes adjusted by patient acuity
- Other ancillary services

*Hospice*

- Patient days and discharges
- Cost/day and cost/discharge
- Outcomes adjusted by patient acuity
- Other ancillary services

*Behavioral Health*

- Patient days and discharges
- Cost/day and cost/discharge
- Outcomes adjusted by patient acuity
- Other ancillary services

**B. Rationale for Impact from Patient, Employer, Physician, Provider, Purchaser and Government Perspectives**

See Chapter I: Background and see also Chapter II: System Assessment.

**C. Plausibility of Solution**

All three recommendations, or options, are achievable. Ultimately, the plausibility of any solution depends on the resources available for implementation, in light of other health care priorities in the state. The following table summarizes key areas of risk or potential impediments to implementation for each recommendation. The one consistent risk among all three is the potential for significant provider resistance to the definition and development of effectiveness of care measures.

<b>Recommendation</b>	<b>Key Area(s) of Risk</b>
<i>Operational Reporting Enhancement</i>	<p>Data integrity within a data set, and data comparability across different data sets</p> <p>Restriction to administrative, currently reported data limits the degree to which quality of care can be measured</p> <p>Acceptance by key stakeholders of accountability measures as credible indicators of efficiency, quality, etc.</p> <p>Provider resistance/backlash, particularly for those providers who haven't been subjected to administrative evaluation previously</p> <p>Financial and utilization reporting of actual experience will require that an additional report be prepared by facilities with outstanding CONs</p>
<i>CON Reporting Enhancement</i>	<p>Provider resistance/backlash to additional reporting requirement, and potential tie of future CON approval with past actual vs. projected performance</p> <p>Additional CON-related reporting might require legislative approval</p>
<i>Comprehensive Disease Management</i>	<p>Selection of a single disease for Year One may be controversial and may concern certain consumers, advocates, and providers</p> <p>Provider, community, and other key stakeholders may not be able to agree upon accountability and other process measurements to compare and evaluate care delivery</p> <p>Assembling a multidisciplinary team acceptable to all stakeholders may be difficult</p>

## **VII. DRAFT POLICY RECOMMENDATIONS**

Specific recommendations on the development and implementation of a program of accountability and performance measurement are included in Chapter VI of this document. These recommendations encompass three general areas:

1. Collecting and analyzing a series of baseline health care data and statistics
2. Enhancing the CON-reporting process
3. Implementing a comprehensive disease management program

### **A. Identify Services to be Regionalized**

This section is not strictly applicable to the issue of Accountability/Measures, as the proposed recommendations would be statewide in nature. However, as discussed throughout the document, much of the proposed analysis surrounding effectiveness of care would occur both at a state and regional level.

For purposes of discussion, the socioeconomic data presented in Chapter II is displayed using the multicounty groupings devised by PEIA and Medicaid for their recently completed managed care procurement. The actual groupings used when implementing the above recommendations would be dependent on what is most relevant for the analysis being performed. For instance, the PEIA/Medicaid

groupings, which are based on hospital discharge patterns, might work well for a CON analysis, while the most appropriate groupings for a particular disease management program might be partly driven by rates for the disease from county-to-county.

**B. Address Current and Future Resources Needed to Implement and Impact On: Personnel, Funding, Data, Technology, Plant and Equipment, Capital Expenditures, Staff Education and Training, and Cooperation of Key Groups**

The Health Care Authority will require extensive resources to develop, implement, and administer a performance-monitoring program of the type described in this document. Additional personnel will likely be required, as well as training and technical assistance for existing staff. The program outlined here would draw upon personnel trained in areas such as quality management, data analysis/statistical modeling, database maintenance, and survey development and execution. It will also require persons with strong consensus building and public presentation skills, to encourage collaboration among involved parties.

On the “capital” side, state-of-the-art computer systems and software will be essential to perform the data analysis in a timely manner. And while it is beyond the scope of this study to provide a budget for the recommendations, the costs will not be insignificant.

**C. Identify Stakeholders**

Because effectiveness of care measures ultimately serve to support (and track) other State Health Plan initiatives, the universe of stakeholders is very large. By category, they include:

*Providers*

- Physicians (and their associations)
- Community hospitals (and their association)
- Academic medical centers and other teaching hospitals
- Community clinics (and their association)
- Ancillary service providers
- Pharmacists (and their association)

*Insurers*

- Health maintenance organizations
- Health insurance companies

*Educators*

- West Virginia University Medical, Nursing, and Dental Schools
- Marshall University School of Medicine and Nursing School
- West Virginia School of Osteopathic Medicine

*Government*

- West Virginia Health Care Authority
- Department of Health and Human Resources (Medicaid and Public and Rural Health)
- Workers’ Compensation, PEIA
- Insurance Commission
- West Virginia Legislature
- Governor’s Office

*Consumers*

- Consumer groups
- Advocates

- Unions
- Employers

Most, if not all, of these stakeholders will want to participate (in varying degrees) in the development of any performance-monitoring program to be implemented by through the Health Care Authority. There must be avenues for each of these constituents to obtain information on the program and provide input to the process (see below).

#### **D. Identify Ways to Achieve Public Input on Policy Decisions**

As described in Chapter VI, there is a process envisioned for the development of the comprehensive disease management program that is very inclusive of a wide array of potential stakeholders. The CDM group will be charged with developing the program and assisting with its implementation. Provider organizations will also be involved in communicating with their peers regarding decisions made by the group and the rationale for the approach ultimately decided upon.

With respect to other aspects of the planning and development process, there are a number of forums in which public input can be gathered. First is through the issuance of public documents by the Health Care Authority and the process of review and discussion that takes place in the state legislature. Second, HCA could, as it has done with other initiatives, expand its Internet web site to include a “bulletin board” informing interested constituents of the progress to date on the project and allowing these users to make comments and receive feedback.

Third, HCA could sponsor periodic public forums where the project’s status would be reviewed and interested parties invited to provide comments in the presence of key policymakers. Written materials and information could be distributed in advance of the forums to facilitate the process. The distribution list might include previously identified stakeholders as well as persons who registered through the web site.

#### **E. Address Opportunities for Collaboration with Other Health Care Providers**

The entire process of developing an accountability and performance-measurement program for West Virginia offers extensive opportunities for collaboration among various health care providers. The input of all of the stakeholder types listed above will be needed to ensure the development of a program that is widely accepted, and whose findings are therefore seen as credible. Primary care and specialist physicians, nurses, pharmacists, representatives from managed care organizations, and hospital and clinic administrators will all play a key role in the design, development, and implementation of the program.

### **VIII. IDENTIFY FEASIBILITY OF POLICY IMPLEMENTATION**

#### **A. Identify Strategy (Timing, Barriers and Cost)**

See Chapter III, Sections B and C, and Chapter VI for a discussion of these issues.

#### **B. Identify Indicators to Measure the Performance of the Issue in the Health Care System (Baseline and Over Time, and Those That Are Critical to Success and Critical to Failure)**

The surest indicator as to the “performance” of the state in implementing any of the three recommended options will be the speed with which they are phased in (versus the three-year timetable outlined in Chapter VI) and the extent to which findings are used to modify service delivery patterns and the flow of health care dollars.

**IX. ADDRESS ACCOUNTABILITY FACTORS** *(This section is not applicable.)*

**X. IDENTIFY ISSUES FOR THE FUTURE HEALTH CARE SYSTEM AND CERTIFICATE OF NEED STANDARDS**

**A. Address the Impact on the Identified Health Care System Goals, Values, Principles, and Assumptions**

As discussed in Chapter I, the ultimate goal of the effectiveness of care measures is to direct resources to providers who can offer the greatest access and best outcomes for the least cost. But before that goal can be accomplished, there must be an understanding of how well the current delivery system is delivering care, who is receiving it, what outcomes are being achieved, and the total cost. The state's health care policy and provider community can more effectively evaluate and prioritize alternative strategies for improving care delivery effectiveness if objective baseline data are available.

Further, as the State Health Plan is implemented, accountability and performance standards will provide impartial measures by which the relative success or failure of Plan initiatives can be determined. Such information will allow participants to shift resources from less successful approaches and providers to those able to demonstrate the best results.

Ultimately, the data sources will be less than perfect. And it is unlikely that universal agreement will be reached regarding the effectiveness of care measures tracked. But the very process of developing such measures will send a signal to health plans, providers, and West Virginians as a whole that the state is assuming a leadership role in the development of a higher quality health care delivery system.

**B. Identify Potential Areas to Address in Future CON Revisions**

See Chapter VI: CON Reporting Enhancements.

**C. Identify the Lessons Learned from This Process**

The West Virginia Health Care Authority has the opportunity to take a lead role in developing methods by which regulators, payers, and providers can objectively evaluate the health care system -- both today and as it evolves in the future. This role, if properly played, will be of vital importance to the state. Success is feasible, so long as:

- Stakeholders are actively involved from the beginning and invested in the implementation of the State Health Plan, including effectiveness of care measures.
- The Authority receives sufficient resources to do the job right, including additional technical personnel and accompanying information systems hardware and technical support.

If these two conditions are met, the Authority will be well positioned to make dramatic progress in creating a "real time" profile of the West Virginia health care system and, by doing so, to advance the initiatives proposed for the other eight issues comprising the 2000-2002 State Health Plan.