REPORT OF THE
VIRGINIA HEALTH SERVICES COST REVIEW COUNCIL ON

# ASSESSMENT OF THE COST, QUALITY, AND ACCESSIBILITY OF HEALTH PLANS

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

# HOUSE DOCUMENT NO. 47

COMMONWEALTH OF VIRGINIA
RICHMOND
1995

# COMMONWEALTH *of* VIRGINIA

*Office of the Governor*

George Allen
Governor

Kay Coles James
Secretary of Health and Human Resources

February 9, 1995

TO: The Honorable George Allen

and

The General Assembly of Virginia

The report contained herein is pursuant to House Joint Resolution 267, agreed to by the 1994 General Assembly.

This report constitutes the response of the Virginia Health Services Cost Review Council to the request to study assessment of the cost, quality, and accessibility of health plans.

Respectfully Submitted,

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## I. EXECUTIVE SUMMARY

Published measurements of health care provider performance, frequently referred to as "report cards", are increasingly common. Prompted in part by the prospect of federal or state health care reform and in part by consumer demand and provider efforts to improve and market their services, report cards are being prepared and released at the individual provider (e.g., physicians), health care institution (e.g., hospitals), and health plan levels.

In keeping with this objective of enhanced assessment and accountability, the 1994 Virginia General Assembly passed House Joint Resolution (HJR) 267, attached as Appendix A,

> "Requesting the Virginia Health Services Cost Review Council, in cooperation with appropriate public and private entities, to examine data being compiled in the development of the patient level data base and by other appropriate health-related state agencies and to propose additional elements and reporting formats to facilitate the evaluation and assessment of the cost, quality, and accessibility of health plans."

In compliance with the legislation, several objectives were set. The first was to identify key cost, quality, and access indicators that can be used to measure plan performance. Another objective was to inventory existing data bases, determine their relevance to constructing the identified indicators, and propose additional reporting elements. A third objective was to assess the feasibility and expense to health plans and to the Commonwealth of collecting and analyzing data. The fourth objective was to analyze issues related to housing and disseminating data. The final objective was to determine an appropriate rôle for the state in a health plan performance measurement system.

In order to identify key cost, quality, and access indicators of health plan performance, relevant literature was reviewed. Based upon the review, the Health Plan Employer Data and Information Set (HEDIS) Version 2.0, developed by the National Committee for Quality Assurance (NCQA), was identified as the most logical standardized format presently available for measuring health plan performance in Virginia.

Prominent among the HEDIS indicators are measures of quality and access. There are relatively few cost indicators, an area NCQA has identified for improvement in the forthcoming HEDIS 3.0 release. While not without limitations, HEDIS enjoys broad acceptance by business and the insurance industry. It is probably most suitable for use by businesses making purchasing decisions for employees. It is probably less useful for individual consumers. With HEDIS as a basic standardized format, other

indicators could be added, if any are found to be needed. Exhibit 2, page 18, describes the HEDIS 2.0 indicators.

The feasibility of using these indicators as a basis for health plan report cards was further illuminated by notifying potentially affected health insurers, as well as business health trade organizations, of the findings from the literature review and soliciting their opinions. Their responses are summarized in Appendix B. From comments received, it appears feasible for plans to collect HEDIS 2.0 performance data, although plans' initial costs for development of their data collection systems appear substantial.

Nevertheless, many plans responding to the inquiry report they currently collect HEDIS-type information or are developing a system to do so. While designed specifically for use with HMOs, HEDIS-type quality measures have been used with other types of health plans, including managed indemnity plans.

To determine the usefulness of existing data bases in constructing the identified indicators, a review of health-related data bases collected under the authority of the Commonwealth was conducted. From this review, it does not appear possible to form HEDIS 2.0 indicators of health plan quality, access, and cost from data already collected by the Commonwealth. Most data now available to the Commonwealth relate to quality, access, and cost at the level of the provider. Where information is available or can be aggregated at the level of the health plan, it is quite limited in scope and applicability.

In order to learn about the roles other states have assumed in measuring health plan performance and associated costs, a survey of states was conducted. Responses revealed that eight states have already placed health plan performance measurement systems in regular operation, are actively preparing to do so, or are engaged in a demonstration or pilot test of a health plan performance measurement system. The experience and progress of these eight states are described in Appendix C.

The survey of states (summarized in Appendix C) revealed little information about the costs associated with health plan performance measurement systems. This is due to the fact that most of the measurement systems are still in planning, design, pilot-testing, or initial implementation stages. The most enlightening information came from Maryland and California.

In Maryland, a pilot project is being conducted through a contract with the developers of the HEDIS data set, NCQA. Seventeen HEDIS measures are being gathered by five participating health maintenance organizations. The total cost to the state for the project, which was begun in June of 1994 and is expected to be completed by January of 1995, is $218,870.

Information from California is more enlightening with respect to specific cost items. Twenty-two plans are participating in a project that will produce a report card with nine measures of performance. Plans that do not have data collection systems in place or administrative data bases from which to draw information are incurring a cost of approximately $51,000 per plan to draw information from medical records to produce the performance measures. The cost of auditing and verifying performance measures supplied by health plans that have the appropriate data collection systems in place is approximately $7,000 per plan in the first year. The project directors expect this to decline by 15 to 20 percent in the second year. Exhibit 4, page 25, is a table describing the principal activities and cost elements in measuring the performance of health plans.

Health plan data can be housed in a health data organization within the state system or in the private sector. The Institute of Medicine has outlined crucial characteristics which can be used to select candidate organizations. Additional measures for assuring accountability, security, protection, and control over access to the data have been outlined as well.

Work by NCQA suggests that report cards should be designed specifically for various user groups. In particular, NCQA recommends that report cards for consumers include educational materials about health services, while presenting comparative information on available health plans. Those for practitioners should have additional statistical detail beyond that contained in the consumer report card. Report cards targeted to employers and policy makers should include statistical detail and information about plan characteristics.

Health plans contacted by letter, as described above, were also given the opportunity to comment about the appropriate role of the state. Appendix B summarizes the responses from 30 health plans, while Appendix C summarizes the activities of eight states that have initiated or are actively exploring a performance measurement and reporting system for health plans. From this research, several potential roles for the Commonwealth were identified.

In the order of increasing magnitude, potential roles of the state are: (1) encourage, but not mandate, health plans to produce report cards; (2) mandate health plan report cards but leave the choice of measures and definitions to the discretion of the health plans; (3) mandate submission of a standardized set of indicators that are verified by an independent organization; and (4) mandate submission of claims data that will enable the state to calculate the performance measures.

Health care consumers and purchasers, as well as the health plans, will gain the most benefit from performance measurement

and reporting if all health plans measure performance in a standard way and report in a standard format. Standardized measurements, auditing procedures and reporting formats are essential for valid interplan comparisons. All parties are likely to benefit more from some plans voluntarily producing report cards that allow valid comparisons across plans than from all plans being required to produce an unspecified type of report card that may not be comparable. Therefore, a voluntary approach to health plan performance measurement and reporting should pursue development and consensus on a standard set of core measures that can be meaningfully compared across health plans.

Accordingly, option 1 is an opportunity for the state to provide stimulus and leadership toward greater health system accountability, better information for consumers and purchasers of health care, and a more competitive health care marketplace. A role for the Commonwealth could be to undertake some specific activities to encourage health plans to develop standardized performance measurement and reporting systems. A first step could be establishing an advisory group of representatives from health plans, employers, health care providers, consumers, and government. This group could consider modifications, additions, and deletions to the HEDIS measures and consider the design of a standardized reporting format and the manner of its distribution to the public.

Technical expertise can also be secured to guide the efforts of this group in developing any technical specifications that may be needed beyond those provided by NCQA for the existing HEDIS indicators. The role of the Commonwealth would be that of educating the affected parties regarding the value of standardized measurement and reporting of health plan performance. This voluntary, market-driven approach needs to be evaluated for its effectiveness over time.

In summary, there is a constructive role for the state, which would not constitute a new regulatory burden, but would still provide stimulus and leadership toward desirable goals of greater health system accountability, better information for consumers and purchasers of health care, and a more competitive health care marketplace. Such a role would be for the Commonwealth to undertake some specific activities to encourage health plans to develop performance measurement and reporting systems, using standardized measures. In fact, this report, with its discussion and support of HEDIS 2.0, is a first step in that direction.

## II. INTRODUCTION

It has been said that the American health care system has entered the "era of assessment and accountability", the third revolution in U.S. health care since World War II. This was preceded by the eras of expansion and cost containment (Relman, 1988).

Partially as a result, published measurements of provider performance, frequently referred to as "report cards", are becoming increasingly common. Prompted in part by the prospect of federal health care reform and in part by consumer demand and provider efforts to improve and market their services, report cards are being prepared and released at the individual provider (e.g., physicians), health care institution (e.g., hospitals), and health plan levels.

In keeping with this objective of enhanced assessment and accountability, the 1994 Virginia General Assembly passed House Joint Resolution (HJR) 267,

> "Requesting the Virginia Health Services Cost Review Council, in cooperation with appropriate public and private entities, to examine data being compiled in the development of the patient level data base and by other appropriate health-related state agencies and to propose additional elements and reporting formats to facilitate the evaluation and assessment of the cost, quality, and accessibility of health plans."

HJR 267 further calls for the Virginia Health Services Cost Review Council (VHSCRC) to report its findings to the Governor, the 1995 Session of the General Assembly, and the Joint Commission on Health Care. (See Appendix A.)

This document provides findings from the VHSCRC study. Section III gives background information about the history of health insurance plans, identifies different types of plans, and places this study in the context of the changing health care environment. Section IV outlines the legislative mandate. The scope of the research and the methodology follow in Section V. Sections VI and VII provide the findings and recommendations, respectively.

## III. BACKGROUND

### A. The History of Health Insurance Plans

In the late 1800s, companies, particularly mining and railroad, began offering medical services for their workers. Payroll deductions paid the salaries of company doctors who

attended to work-related accidents. Offering this service was a way for companies to recruit workers and maintain their capacity and motivation to work (Starr, 1982).

Modern health insurance began in the late 1920s when a group of school teachers in Texas contracted with Baylor Hospital to provide hospital services at a predetermined monthly cost. It was not until the early 1940s, however, that health insurance became tied to employment. The freeze on wages during World War II led companies to offer health insurance and other benefits to attract workers. Employee health benefits were greatly expanded in the late 1940s through collective bargaining by labor unions and other employee groups.

The 1960s marked the beginning of publicly financed health insurance with the advent of Medicaid and Medicare. During the next decade, managed care began to grow. With passage of the Health Maintenance Organization (HMO) Act of 1973, employers with more than 25 employees were required to offer HMO plans in their benefit packages (Starr, 1982).

In the early 1980s, about 90 percent of workers and their dependents were covered by traditional "indemnity" plans, characterized by choice of provider and fee-for-service payment. A much smaller percentage of workers (5 percent) were covered under pre-paid health maintenance organizations (Weiner & de Lissovoy, 1993). By the end of the 1980s these two arrangements were joined by an array of new health care financing and delivery mechanisms. These new plans, along with HMOs, came to be known as "managed care" or "alternative delivery systems."

By 1990, conventional indemnity health insurance policies, with an estimated market share of 37 percent, no longer covered the majority of Americans (Weiner & de Lissovoy, 1993). Managed care, in its various forms, became dominant. HMOs, once a small part of the market, assumed much greater importance. HMOs now provide health care for more than 50 million Americans.

Of course, individual states vary in their degree of HMO penetration (Marion Merrell Dow, 1994). In 1993, Massachusetts had the greatest HMO penetration, with 38.9 percent of its population in HMOs. Mississippi had the lowest penetration, counting less than 0.1 percent of its population in HMOs.

While HMO penetration is not yet as great in Virginia as in some other states, rapid growth of managed care, including HMOs, is occurring in the Commonwealth. As shown in Exhibit 1 below, HMO coverage, as a percent of the total population in Virginia, increased from 6.2 percent in 1990 to 9.5 percent in 1993. The Commonwealth supports managed care as an insurance option through its purchasing decisions for state employees and for Medicaid recipients. These trends were considerations underlying HJR 267.

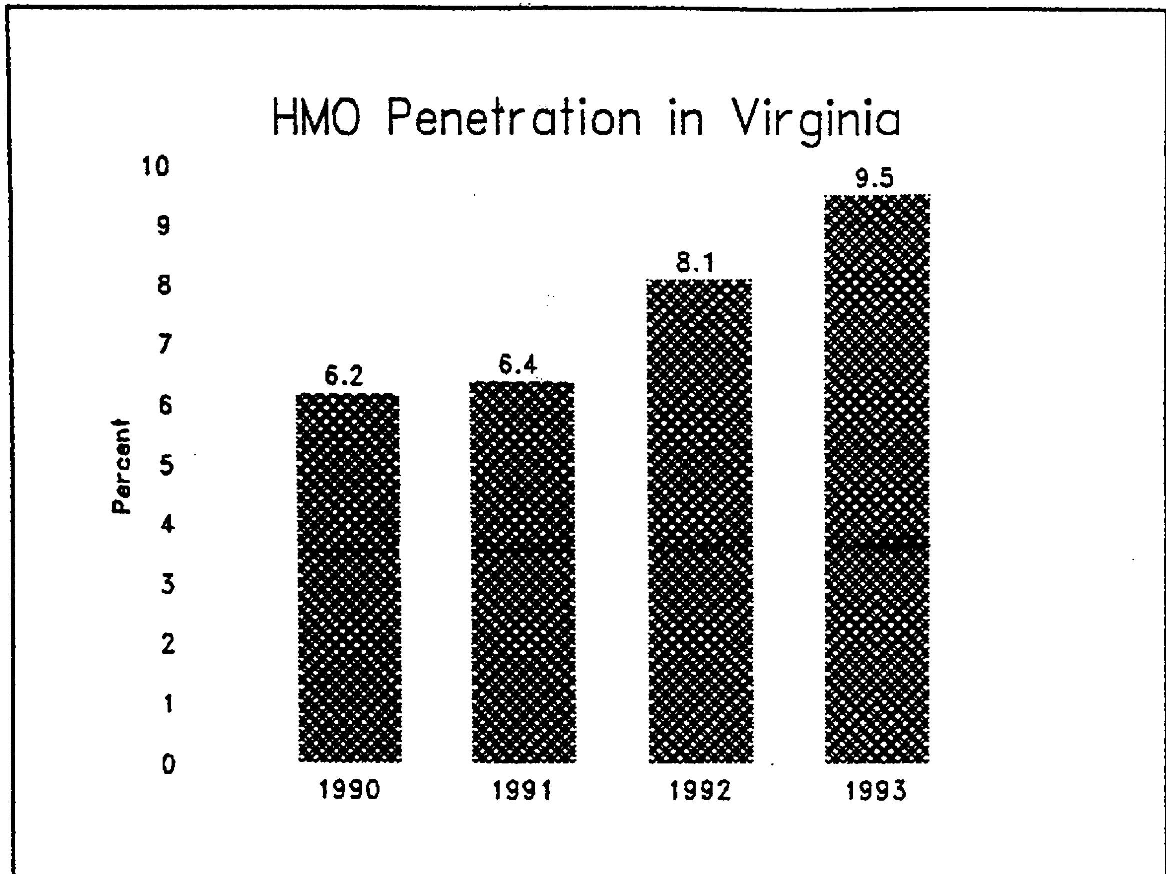


Exhibit 1: HMO Penetration in Virginia (Marion Merrell Dow, 1994)

## B. A Classification Scheme for Health Insurance Plans

Generally speaking, a health plan is a mechanism through which an individual or a group receives health benefits. Most health plans in this country are sponsored by business or government. Businesses may self-insure, financing all benefits internally and contracting with insurance companies for administrative services only, or purchase benefits from an insurer.

A classification scheme developed by Weiner and de Lissovoy (1993) is useful for categorizing different types of health plans. Their typology includes four broad classes: (1) traditional indemnity plans, (2) managed indemnity plans (MIPs), (3) preferred provider organizations (PPOs), and (4) health maintenance organizations (HMOs).

In traditional indemnity plans, consumers are free to choose any available provider, and insurance companies pay bills on a fee-for-service, retrospective basis. The characteristic that distinguishes the other three types of plans from the traditional indemnity plan is an extensive system of utilization controls.

"Provide a required benefit package covering prevention, inpatient and outpatient treatment, rehabilitation, and long-term care.

Deliver care in a coordinated way for a fixed amount of money to people enrolled in local community care networks.

Report publicly on local operations including access to services, costs, quality outcomes, and enrollee health status and satisfaction.

Cover everyone without regard to their health status or expected use of services through open enrollment, broad risk-sharing, portability, guaranteed renewability; eliminate pre-existing condition exclusions." (AHA, 1994)

The AHA's third point appears to relate directly to report cards. In this model, health plans provide consumers with information to make informed purchasing decisions.

On the demand side, purchasing cooperatives have been used by businesses and state governments for many years. Recently, however, states have begun using cooperatives to reduce the overall level of uninsured persons, especially among the employees of small businesses (GAO, 1994). Many of the federal health care reform proposals include provisions for purchasing cooperatives, although there is debate on whether these cooperatives should be voluntary or mandatory.

Just as there are multiple names for accountable health plans, purchasing cooperatives are known by various names as well. These include the Jackson Hole Groups's HIPCs (health insurance purchasing cooperatives), President Bush's HINs (health insurance networks), Representative Cooper's HPPCs (health plan purchasing cooperatives), Senator Chafee's HPPGs (health plan purchasing groups), and President Clinton's alliances.

Recently, some purchasing cooperatives began asking for programs to measure, improve and report on the cost, quality and access to services in participating health plans. The California Public Employees' Retirement System (CalPERS), for example, expects to publish quality report cards beginning in 1995. In Florida, plans are underway to provide report cards as a part of the state health care reform initiative. These examples suggest a recognition among buyers of the need for information upon which to base decisions.

In Virginia also, there has been discussion about the appropriate structure for the health care system. This has occurred mainly within the Joint Commission on Health Care and

the legislature. Senate Joint Resolution 332 (1993) requested the Joint Commission on Health Care to study health insurance purchasing cooperatives. The resulting report to the Governor and the 1994 General Assembly suggested that the creation of one or more HIPCs is a complex task that requires further study and planning.

Senate Joint Resolution 126 (1994) requested that the Joint Commission continue its study and report back to the Governor and 1995 General Assembly. One of the planning issues the Joint Commission will consider is the role of HIPCs in certifying health plans. The Annual Report of the Joint Commission on Health Care (1994) makes reference to standards for health plans that will allow HIPC members to comparison shop.

In 1993, the General Assembly also passed Senate Joint Resolution 316 requesting the Joint Commission on Health Care to study organized delivery systems in general, and community health networks in particular. The Joint Commission's resulting report suggested the appropriate role for the Commonwealth is to facilitate the development of organized delivery systems while protecting consumer interests.

Several strategies to promote accountability and protect consumer interests were suggested: (1) public report cards, (2) internal practice guidelines, (3) accreditation, and (4) community governance. This, in turn, led the Joint Commission on Health Care to recommend legislation which became HJR 267 (1994) and led to the present study.

Providing information for accountability at the health plan level is consistent with other recent legislative initiatives. In 1992, the General Assembly passed Senate Bill 518 directing the VHSCRC to establish a methodology for the review and measurement of the efficiency and productivity of health care institutions. In addition, Senate Joint Resolution 118 required the VHSCRC to develop a methodology that would improve the identification of the most efficient providers of high quality health care within the Commonwealth. The overall objective was to develop and adopt an easily understood method for identifying efficient and effective hospitals and nursing homes. The VHSCRC will release its first measures during fall of 1994.

In the year following enactment of Senate Bill 518, House Bill 2351 (1993) created the patient level data system. The resulting data base provides a single source of patient level data for hospital discharges in the Commonwealth and the ability to examine the utilization of services, charges, and some outcomes of care occurring in Virginia's hospitals.

## IV. LEGISLATIVE MANDATE

HJR 267 (1994) requested that the VHSCRC study the feasibility of developing report cards to assess and compare the performance of health plans across the state. The legislation directs the VHSCRC to identify key cost, quality, and access indicators which would form the basis of a standardized report card for use by providers and consumers in health care decision making.

The VHSCRC was also directed to include an examination of the feasibility and expense of collecting and analyzing necessary data. Appropriate methods for housing and disseminating the information with necessary safeguards for patient confidentiality, and the appropriate role of the Commonwealth in such a process are to be examined as well. (See Appendix A.)

## V. OBJECTIVES, SCOPE, AND METHODOLOGY

### A. Objectives

In compliance with the legislative mandate, several objectives were set. The first was to identify key cost, quality, and access indicators that can be used to measure plan performance. Another objective was to inventory existing data bases, determine their relevance to constructing the identified indicators, and propose additional reporting elements. A third objective was to assess the feasibility and expense associated with collecting and analyzing data. The fourth objective was to analyze issues related to housing and disseminating data. The final objective was to determine the appropriate role of the state in a health plan performance measurement system.

### B. Scope and Methods

This study looks at the feasibility of developing report cards for the four broad classes of health plans specified earlier in this report: traditional indemnity, managed indemnity, PPOs, and HMOs. Insurance policies and subscription contracts that are considered to be health plans for the purpose of this report are limited to those providing coverage for hospital, medical and/or surgical expenses on an expense-incurred basis. This definition does not include short-term travel, accident only, limited or specified disease policies or contracts, or policies or contracts designed to supplement coverage provided by government programs such as Medicare.

In order to identify key cost, quality, and access indicators of health plan performance, a literature review was conducted. Because many efforts to develop performance measures are relatively new, particular attention was given to identifying projects through popular health care news magazines. Once a project was identified, additional information was sought by

contacting project staff and requesting prepared reports and other supporting documentation.

This material was reviewed to determine the history of the project, intended users of the performance indicators, criteria used for the selection of the indicators, dimensions of performance measured, any risk adjustment used, strengths and limitations of the indicators, and future plans. On the basis of this review, key cost, quality and access indicators, which can be used as a starting point for measuring health plan performance in Virginia, were selected.

The feasibility of using these indicators as a basis for health plan report cards was further illuminated by notifying potentially affected health insurers of the findings from the literature review and soliciting their opinions. A letter was sent to certain insurers selected from the approximately 900 companies licensed to write accident and sickness insurance in Virginia. The Code of Virginia (Section 38.2-109) defines accident and sickness insurance as,

> "insurance against loss resulting from sickness, or from bodily injury or death by accident or accidental means, or from a combination of any or all of these perils."

Since most of these companies write little or no health insurance applicable to this project, the sample was reduced to the 110 companies, including 21 HMOs, that account for the majority of accident and sickness premiums written in Virginia. The State Corporation Commission Bureau of Insurance identified the 110 companies that were surveyed. The letter was also sent to business health trade organizations and other individuals and organizations that identified themselves as interested parties.

To determine the usefulness of existing data bases in constructing the identified indicators, a review of health-related data bases was conducted. These were identified through reference to an earlier state study, Virginia's Health Information Planning Project (1991). Each data base identified in the earlier study was reviewed for relevance to measuring cost, quality, and access of medical care. The resulting reduced list of data bases was supplemented with the names of the newly created patient level data base and two data bases related to health plans maintained by the Bureau of Insurance at the State Corporation Commission.

Agency staff persons familiar with each data base were identified and interviewed in order to gather information about: (1) the purpose of the data base, (2) the name of the data collection instrument, (3) whether the data are maintained in electronic format, (4) whether there is a data dictionary,

(5) the level of the data, (6) the time between collection of data and availability for public use, (7) procedures for accessing the data, and (8) the type of data collected. Requests were made for copies of the data dictionaries and/or collection instruments. This information was used to determine the feasibility of using already collected data to form indicators of health plan cost, quality, and access.

Other states, as well as other organizations that have produced report cards, were surveyed to determine the extent of their involvement with health plan performance measurement and the associated costs. Each state's health data organization was contacted. Health plans were also contacted through a letter, as described above, and given the opportunity to comment about the feasibility and expense of collecting data.

Findings from the Institute of Medicine (1994) study, Health Data in the Information Age: Use, Disclosure, and Privacy, were drawn upon to identify appropriate methods for housing health plan data and disseminating the information it produces. The National Committee for Quality Assurance (NCQA), a leading organization in the national report card movement, was contacted to gather information about reporting formats for dissemination of health plan information to various audiences.

Additional project information was solicited from states that are involved in health plan performance measurement. Comments on the appropriate role for the state were also solicited from insurance companies and others through the letter described above. Information from all these sources was used to identify different roles the state can assume in the development and implementation of a health plan performance measurement system.

## VI. FINDINGS

### A. Key Cost, Quality, and Access Indicators

#### 1. Performance Measurement at Various Levels Other than the Plan Level

A review of the literature revealed a number of projects sponsored by state and federal governments, as well as the private sector, aimed at measuring health care provider performance at all levels. For example, the Pennsylvania Health Care Cost Containment Council produces a Consumer Guide to Coronary Artery Bypass Graft Surgery (1991) that provides physician-specific and hospital-specific mortality rates.

Other efforts, such as a project sponsored by the Health Care Financing Administration called DEMPAQ: A Project to Develop and Evaluate Methods to Promote Ambulatory Care Quality

(Palmer, Clark, Lawther, Edwards, Fowles, Garnick, and Weiner, 1994), focus on assessing the quality of care given in physicians' offices. Even some home health agencies are getting "home care scorecards" through a project sponsored by the Community Health Accreditation Program (staff, LTC Management, 1993).

Hospital performance is receiving a great deal of attention through projects such as the "Indicator Measurement System" developed by the Joint Commission on Accreditation of Health Care Organizations (Nadzam, Turpin, Hanold, and White, 1993) and the Maryland Hospital Association "Quality Indicator Project" (Kazandjian, Lawther, Cernak, and Pipesh, 1993). In Virginia, the VHSCRC is measuring hospital efficiency and productivity.

While these projects confirm that the U.S. has entered the age of health care accountability, they were less helpful in identifying indicator sets for health plan performance. Consequently, they were eliminated from further consideration while attention was focused on health plan performance measurement projects.

### 2. Performance Measurement at the Health Plan Level: Individual Plan Report Cards

Numerous managed-care insurers are engaged in efforts to measure their own performance. In the summer and fall of 1993, three insurers published the first health plan report cards. Each was based on the plan's own internally compiled quality measurements. Included among these pioneers were the Northern California unit of Kaiser Permanente, United HealthCare Corp. based in Minnesota, and U.S. Healthcare's Pennsylvania HMO.

Kaiser's report card included 102 performance measures, including member satisfaction, child health, maternal care, cardiovascular disease, and mental health, drawn from data on 2.5 million members. Using data from 1.5 million members, United HealthCare published measures of quality, patient satisfaction, operating efficiency, and cost reduction. U.S. Healthcare's report card included 11 indicators within the categories of preventive services, prenatal care, acute and chronic disease, mental health, and patient satisfaction.

Following the release of these first report cards, other managed care companies joined the movement. Some companies, such as United HealthCare, have already released their second report card.

### 3. Performance Measurement at the Health Plan Level: Multiple Plan Measurement Systems

Aside from efforts by individual health plans, a number of multi-plan performance measurement systems have been under

development or in use for several years. Four projects that have been in progress for several years were identified from the literature. They represent variously the initiative of health systems, government activity, or cooperation between health plans and business.

Included are: (1) Consortium Research on Indicators of System Performance (CRISP), (2) Delmarva Foundation for Medical Care (DFMC) External Review Performance Measurement of Medicare HMOs/CMPs, (3) the Cost/Quality Challenge, and (4) the Health Plan Employer Data and Information Set (HEDIS). A description of each is presented below. A comparative summary table, further describing these four measurement systems, is available from the Virginia Health Services Cost Review Council.

The CRISP project began in late 1989 to identify a conceptual framework and performance indicators for vertically integrated regional health systems, entities which the researchers acknowledge can also be called accountable health plans (Nerenz and Zajac, 1991; Nerenz, Zajac, Rosman, and Zuckerman, 1992; and Nerenz, Zajac, and Rosman, 1993). The indicators were designed for internal management use, but the developers suggest that clinicians practicing within systems, regulators, purchasers, and individual consumers will find them useful as well.

The CRISP indicators were designed to relate to a generic mission statement for health care systems. In total, 91 indicators were developed in eleven categories including quality of care, satisfaction, efficiency, and financial performance. This set was later reduced to 33 on the basis of data collection feasibility. During 1993, twenty-three health care systems, including INOVA of Springfield Virginia, became involved in testing, refining, and assessing the validity of a core set of 12 performance indicators that are intended to serve as a starting point for system measurement. Data collection and analysis are expected to occur through most of 1994.

CRISP attempts to systematize measurement through standardization of concepts and units. Cross-system comparisons are limited, however, by the degree of standardization systems are able to achieve. CRISP is a forward-looking project in the sense that researchers and managers from a small number of progressive health care systems have joined forces to anticipate the vertically integrated health care systems of the future and prepare to measure their performance now.

As part of its Health Care Quality Improvement Program (HCQIP), the Health Care Financing Administration (HCFA) contracted with Delmarva Foundation for Medical Care, Inc. to develop a new method for overseeing quality of care provided to Medicare beneficiaries in health maintenance organizations (HMOs) and competitive medical plans (CMPs) that are reimbursed through

risk contracts with HCFA. Delmarva's charge was to: (1) develop a set of performance measures, (2) identify the minimum data set needed for the measures, and (3) develop a new review methodology to replace the individual case review and implicit review criteria used for Medicare quality oversight in the past.

In their August 1994 final report, Delmarva recommended using two types of performance measures: (1) a core set of measures drawn from the Health Plan Employer Data and Information Set Version 2.0 (HEDIS 2.0), which is described in Exhibit 2 below, and from DEMPAQ, the Medicare ambulatory care measurement project referenced earlier in this report, and (2) various sets of measures to evaluate care for patients with specific diagnoses. Diagnosis-specific measures for diabetes mellitus and ischemic heart disease have already been developed. The addition of patient surveys at the earliest possible date was also recommended.

The recommended approach will begin with a pilot study. Although the measures are to be used by the Peer Review Organizations in conducting external reviews and to stimulate health plan internal quality improvement programs, Delmarva suggests that the measures may eventually be used in a "report card" to help Medicare patients make informed decisions.

The Cost/Quality Challenge (1994) was issued by the Massachusetts Healthcare Purchaser Group, which was formed in January of 1993. The Group represents 41 purchasers. Its challenge was accepted by 15 area insurers. The Massachusetts Medicaid Program joined the project as well. As such, the Challenge represents a joint effort by health care buyers and providers to fulfill several objectives, including the development of standards and mechanisms for the evaluation and communication of health care provider performance. Essentially, the challenge includes restricting annual premium growth rates and reporting yearly on clinical quality indicators.

As did CRISP and the Delmarva/HCFA project, the Cost/Quality Challenge sought to provide detailed data specifications that allow for comparisons to be drawn across plans. This, in turn, was intended to give suppliers an opportunity for competitive benchmarking and to give buyers the data necessary to make informed purchasing decisions.

The first report on plan performance was issued in March of 1994. However, because all indicators were self-reported (i.e., unaudited), and because sufficiently standardized coding practices may not exist across all plans, the developers advise making comparisons with caution. The initiators of the Cost/Quality Challenge expect to expand their efforts in the years ahead. In particular, they intend to include HEDIS 2.0 quality indicators.

As is apparent, the HEDIS measures are finding their way into various projects other than those specifically sponsored by the National Committee for Quality Assurance (NCQA), the developer of the data set. In fact, given the widespread support of large private employers, many speculate that HEDIS will become the managed care industry's standard for measuring health plan performance. Through HEDIS, a core set of performance measures has been identified, along with standardized definitions and specific methodologies for deriving the measures. These methodologies include directions for calculating HEDIS measures from administrative data bases and from medical records.

HEDIS is an evolving set of performance measures now in its second version. A third version is expected to be released in 1995. The HEDIS measures were primarily designed for use by employers in making purchasing decisions and to help managed care plans improve their performance. The actual indicators were selected for their: (1) relevance and value to the employer community, (2) feasibility to measure, and (3) potential impact on improving patient care and reducing morbidity and mortality.

Included among the indicators are measures of quality and access. Cost indicators are relatively few in number. Cost is an area NCQA has identified for improvement in the HEDIS 3.0 release. In fact, NCQA does not consider the HEDIS 2.0 data set to be an optimum data set. Rather, it is a first attempt to define measures of performance. (See Exhibit 2, next page, for a description of HEDIS 2.0 quality, access, and cost indicators.)

Other recognized limitations of HEDIS include problems in using the Version 2.0 measures to compare the performance of health plans. This is due to limitations in the data systems health plans maintain. Not all health plans gather the same type of data in the same way. Gathering the same data in the same way is necessary if performance is to be compared.

This cannot be considered an indictment of the HEDIS 2.0 measures, however, since the problem will be encountered regardless of the performance measures selected. Perhaps a more significant shortcoming of HEDIS 2.0 is the lack of standard patient satisfaction measures. This problem is also to be addressed with the release of HEDIS 3.0.

The validity and reliability of the HEDIS 2.0 measures have not yet been determined. However, NCQA began working with more than 20 health plans in January of 1994 to pilot test the measures. Among the objectives of the test are to: (1) assess health plans' internal data capabilities, (2) establish a central comparative database and reporting mechanism, and (3) develop an external auditing function. NCQA also hopes to determine the costs of using HEDIS 2.0 to measure health plan performance.

Exhibit 2

DESCRIPTION OF HEDIS 2.0 INDICATORS

| TYPE OF INDICATOR | CONDITION/OPERATION BEING MEASURED | METHOD OF CALCULATION | REMARKS |
|---|---|---|---|
| Quality | Childhood immunization at age two. | Percent of children with second birthday during reporting period who have completed six types of immunization. | For children continuously enrolled since age 42 days. |
| Quality | Cholesterol screening during past five years. | Two measures: percent of members age 25-39 and percent of members age 40-64. | For members continuously enrolled for past five years. |
| Quality | Breast cancer screening (mammography) during past two years. | Percent of women age 52-64. | For women continuously enrolled for past two years. |
| Quality | Cervical cancer screening during past three years. | Percent of women age 21-64. | For women continuously enrolled for past three years. |
| Quality | Low birthweight. | Two measures: percent of live births <1500 grams and percent <2500 grams. | To women continuously enrolled for 12 months prior to delivery. |
| Quality | Prenatal care in first trimester. | Percent of women with a first obstetrical visit 26-44 weeks prior to delivery. | For women continuously enrolled for 12 months prior to delivery. |
| Quality | Asthma inpatient admission rate and readmission rate during past year. | Two rates for each of two groups: for members age 2-19 and for members age 20-39. | For members continuously enrolled for past 12 months. |
| Quality | Diabetic retinal exam during past year. | Percent of diabetic members age 31-64. | For members continuously enrolled for past 12 months. |

Exhibit 2 (continued): Description of HEDIS 2.0 Indicators

| TYPE OF INDICATOR | CONDITION/OPERATION BEING MEASURED | METHOD OF CALCULATION | REMARKS |
|---|---|---|---|
| Quality | Ambulatory follow-up within 30 days after discharge from hospitalization for major affective disorder. | Percent of members age 18-64 with such discharges during first 330 days of the reporting period. | |
| Satisfaction | Degree of satisfaction as reported on a survey conducted by the health plan. | Percent of survey respondents rating themselves "satisfied" or higher or rating plan care as "good" or better. | Survey content not yet standardized across plans, limiting inter-plan comparisons. |
| Access | Percent of members with a visit to a health plan practitioner in the prior three years. | Two measures: for members age 23-39 and for members age 40-64. | For members continuously enrolled for past three years. |
| Access | Number and percent of plan's primary care physicians accepting new patients. | | Plan defines "primary care physician". |
| Access | Plan's standard and average actual waiting times for general health care service. | Four measures: (1) non-urgent care, (2) urgent care, (3) emergency care, (4) phone. | Based on non-standardized surveys and monitoring done by the plan. |
| Access | Plan's standard and average actual waiting times for mental health and chemical dependency care. | Four measures: (1) non-urgent care, (2) urgent care, (3) emergency care, (4) phone. | Based on non-standardized surveys and monitoring done by the plan. |
| Finance | Average total premium per member per month. | Average total monthly premiums divided by average total members during the reporting period. | Reported for each of past five years. |
| Finance | Annual percent change in monthly premium rates. | Percent change, by product line, for each type membership unit: family, employee only, etc. | Reported for each of past five years. |

Exhibit 2 (continued): Description of HEDIS 2.0 Indicators

| TYPE OF INDICATOR | CONDITION/OPERATION BEING MEASURED | METHOD OF CALCULATION | REMARKS |
|---|---|---|---|
| Finance | Various aspects of financial stability, including financial performance, liquidity, efficiency of financial administration, and reserves. | Various specifications using data from the plan's annual audited financial statements and annual report to the state insurance authority. | Reported for each of past three years, with percent change over last two years. |
| Cost | Average cost per discharge for nine specified high-cost/high-occurrence DRGs. | Health plan's total actual liability plus patient copayments and deductibles for these discharges, divided by number of these discharges. | Non-standardized approach to cost estimation limits inter-plan comparisons. |
| Cost | Average total cost of prescriptions per member per month. | Health plan's total actual liability plus patient copayments and deductibles for prescriptions (incl. dispensing fees), divided by number of member months for members with a drug benefit. | A "prescription" is one supply of pharmaceuticals for which the plan accepts a copayment. |

Although the HEDIS 2.0 measures do not enjoy universal support (Harris, 1994), they are receiving increasing use and acceptance from both employers and the insurance industry. In light of this and the extensive effort that went into their development, the HEDIS measures must be considered "key" indicators of quality, access, and, to a lesser extent, cost.

Based upon the literature review, the HEDIS 2.0 measures seem to provide a reasonable starting point for measuring health plan performance in Virginia. These indicators are most suitable for use by businesses making purchasing decisions for employees. They are probably less useful for individual consumers.

## B. Health-Related Data Bases in Virginia

Virginia's Health Information Planning Project (1991) identified all the health policy data bases then available to the Commonwealth. Since then, the Patient Level Data Base has been established. The Health Information Planning Project showed that health-related data bases are maintained by many different organizations. Most of these are state agencies under the Secretary of Health and Human Resources, but two important data bases related to health insurers are maintained by the Bureau of Insurance of the State Corporation Commission.

However, many of the data bases focus on special populations or services. After reviewing the entire list of health-related data bases for relevance to measuring cost, quality, and accessibility of medical care, the list was reduced to seven of possible usefulness for measuring health plan performance. These seven are profiled along several dimensions in Exhibit 3 (next page).

The usefulness of information from these data sets to measure health plan performance is partially contingent upon the level at which the information is collected or can be aggregated. None of the seven data sets collects information at the level of the health plan. The Annual Financial Statement Data Base and the Mandated Benefits System maintained by the SCC contain information reported at the level of the health insurance company.

The three data bases maintained by DMAS contain cost and access information at the level of the hospital, nursing home, and/or medical service. Data maintained by the VHSCRC is also at the level of the health care institution. Finally, the Patient Level Data Base contains information at the level of the inpatient.

Exhibit 3

VIRGINIA DATA BASES WITH RELEVANCE FOR MEASURING COST, QUALITY, AND ACCESS OF MEDICAL CARE

| Data Base Name | Purpose | Instrument | Electronic Format | Data Dictionary? | Level of Data | Timeliness | Access | Type of Data[1] |
|---|---|---|---|---|---|---|---|---|
| Annual Financial Statement Data Base (SCC) | Review of insurance company solvency | Annual statement filings for licensed insurers | Mainframe | Yes - on mainframe | Health insurance company | Hard copy by 3/1 Into database by 5/1 | Request information from Automated Systems and Admin. Section. | Cost |
| Mandated Benefits System (SCC) | Measure cost to provide legislatively mandated health benefits | Mandated health insurance benefits filing | PC - Foxpro | Yes | Health insurance company, limited information on HMOs | Reported by 5/1 Available 8/1 | Request information from Automated Systems and Admin. Section. | Cost |
| Hospital Cost Settlement Data Base (DMAS) | Setting reimbursement rates, statistics, and forecasting | Cost reports (HCFA 2552, DMAS 783) | Mainframe - download to Excel/Lotus | Yes | Hospital | Reported FYE (varies) Previous year's data available 11/1 | Request information from the Director, Cost Settlement and Audit Division. | Cost Access |
| Nursing Home Cost Settlement Data Base (DMAS) | Setting reimbursement rates, statistics, and forecasting | Cost reports (HCFA 2552, HCFA 2540, DMAS 1090) | Mainframe - download to Excel/Lotus | Yes | Nursing home | Reported FYE (varies) Previous year's data available 11/1 | Request information from the Director, Cost Settlement and Audit Division. | Cost Access |
| Claims Files (DMAS) | Claims processing and payment | Billing invoice forms (HCFA 1500, UB82) | PC - SAS | Yes | Individual service | Provider submits PRN, data continuously updated and verified | Request information from the Director, Client Services Division. | Cost Access |
| Annual Filings (VHSCRC) | Produce annual reports | Annual filings (budget, historical, quarterly) | PC - Foxpro | Yes - import/export manual | Hospital, nursing home | Reported FYE (varies) Previous year's data verified and available in November | Request information from the VHSCRC. | Cost |
| Patient Level Data Base (VHI) | Compile patient-level data for public use | UB92 plus additional information | Mainframe | Yes | Patient | Submitted on a calendar-year quarterly basis | Apply for purchase of patient level data and sign release. | Quality |

[1]Cost, quality and/or access measures

While none of the preceding seven data bases is well suited for measuring health plan performance, two have some limited applicability. The first is the Annual Financial Statement data base maintained by the SCC. Insurance companies file annual statements with the SCC, and this information is used to assess financial viability. Information is reported for the entire company. Licensed HMOs file as separate companies. Self-funded plans are exempt from reporting. The HEDIS 2.0 financial performance measures can be computed from annual financial statements filed by HMOs. Comparable information is not available for non-HMO health plans.

The second data base with limited applicability for measuring cost, quality, and access in health plans is the Patient Level Data Base maintained by Virginia Health Information (VHI). Since 1993, every inpatient hospital has been required to submit patient level data on each admission. The data base contains treatment (diagnosis and procedure), utilization, and charge information specific to each inpatient.

The Patient Level Data Base can provide information to calculate the numerators in some HEDIS 2.0 quality and cost (high cost DRGs) indicators. Although the data base contains a field identifying the payor type for each inpatient, this information is self-reported by the patient. As a result, there is potential for error. Also, the data base provides no information on health plan members who do not have an inpatient admission. This makes it impossible to measure health plan populations, or produce the denominators for HEDIS indicators.

In conclusion, it is not feasible to use already collected data to form HEDIS 2.0 indicators of health plan cost, quality, and access. Most data now available relate to cost and access at the level of the provider. Where information is available at the level of the health plan, it is quite limited in scope and applicability.

### C. Feasibility and Expense of Collecting, Analyzing, and Disseminating Data

#### 1. Types of Expenses

The cost of collecting, analyzing and disseminating information about health plan performance is contingent upon a number of factors. These include:

(1) The extent to which the basic HEDIS data set is supplemented with additional indicators;

(2) The extent of stakeholder involvement in finalizing the indicator set;

(3) The number and types of plans participating in the report card system;

(4) The sophistication of data collection and reporting systems maintained by health plans;

(5) The number of indicators included in a report card;

(6) The extensiveness of an audit system to assure the integrity of the data; and

(7) The extent to which information is disseminated.

While the full costs of a report card system cannot be determined without answering questions in each of these areas, two steps were taken to gain insight into the expenses involved. First, state data agencies across the country were contacted to gather information about current efforts to report on health plan performance and the costs associated with these projects. Second, insurance companies were given the opportunity to comment about the feasibility and expense of collecting data.

The survey of state data organizations revealed several state-sponsored voluntary or mandatory health plan report card projects in various stages of development. Unfortunately, little information was available about the costs associated with such projects. This is due to the fact that in most cases the performance measurement systems being used in these projects are still in planning, design, pilot-testing, or initial implementation stages. (See Appendix C for additional information on projects in eight states to measure health plan performance.)

Yet, some information is emerging about the structure and behavior of costs associated with measuring health plan performance. If the Commonwealth decides to move ahead--either on a pilot or a comprehensive basis--with a performance measurement system for health plans operating in Virginia, the cost elements described in Exhibit 4 (next page) will become relevant.

Of these, the costs to health plans to develop the appropriate systems to collect information and the costs to the state to audit health plan data are likely to be the more significant ones. These are the subjects of the next two sections, following Exhibit 4.

Exhibit 4

PRINCIPAL ACTIVITIES AND COST ELEMENTS
INVOLVED IN MEASURING THE PERFORMANCE OF HEALTH PLANS

| ACTIVITY/ COST ELEMENT | RESPONSIBLE PARTY | COST BORNE BY | COMMENTS ON SIZE OF COST |
|---|---|---|---|
| Determine data set(s) (possibly different data sets for different plan types). Design performance reports (may be different reports for different plan types and different users). | Commonwealth | Commonwealth | May vary greatly, depending on the extent of use of established measurement systems and range of participating plans/ plan types. |
| Communicate with reporting plans and assist them in determining actions needed to provide accurate reports. | Commonwealth | Commonwealth | May vary greatly, depending on the number and type of plans, status of their data systems, and degree of assistance provided. |
| Modify health plan information systems to collect required data. | Health plans | Health plans | May vary greatly by plan. |
| Collect data, compute and report indicators. | Health plans | Health plans | Minimal new cost, once systems exist. |
| Audit health plan information systems, verify reported indicators. | Commonwealth | Commonwealth or shared by Commonwealth and plans | Perhaps $7,000 per plan in first year, less later (based on California project). |
| Obtain indicators from plans, check completeness, and create data file. Produce and disseminate "report cards" (may be different reports for different users). | Commonwealth | Commonwealth | Will vary depending upon size of report and extent of distribution. |

## 2. The Feasibility and Expense of Collecting Health Plan Performance Data

Appendix B contains a summary of key points made by respondents to a letter soliciting comments about the feasibility and expense of collecting health plan performance data. These letters were sent to insurance companies, business groups, and trade organizations. Full copies of the responses are available upon request.

Thirty of the 110 insurance companies that were contacted responded to the letter. The majority of responses came from licensed HMOs, managed care holding companies, or health insurance companies that offer managed care products. All but one of the insurance companies that provided a substantive response support the concept of reporting comparative health plan measures.

The company opposing the reporting of performance measures states that providing this information would be a financial and administrative burden, and of no value to the company. This company writes only individual health and life insurance policies. It does not write group policies.

Most of the respondents to the letter support the use of HEDIS 2.0 to measure health plan performance. They report that HEDIS measures are practical, collectible, standardized, and useful. Respondents also note that the development of HEDIS was a collaborative process with a commitment to continually update and refine the measures. Several of the respondents are already collecting all or some of the HEDIS information, either for their own uses or as part of national demonstration projects.

Although insurance companies consistently support HEDIS 2.0 as the plan performance measurement system, they recognize there are some limitations and weaknesses of this still-developing system. Some of the more commonly noted limitations include:

(1) Problems with administrative data sets, such as incomplete information on services received outside the managed care network, inconsistent coding, and variability in the type of information collected by different health plans;

(2) Incomplete or inaccessible medical records, which are required for some of the HEDIS measures;

(3) The lack of case-mix, severity, or population risk adjustments in HEDIS measures;

(4) Difficulty in complying with the continuous enrollment criteria for some HEDIS measures;

(5) The focus on process rather than outcome measures of quality;

(6) The use of an unstandardized measure of patient satisfaction; and

(7) The lack of common expense categories between HMOs and insurance indemnity plans.

In addition to these limitations, comments received suggest it may be less feasible to implement the HEDIS measurement system in non-HMO plans. HEDIS measures reflect the "health maintenance" goals of HMOs. Non-HMO plans are oriented to somewhat different goals, not so closely aligned with the HEDIS measures.

A commonly mentioned problem is that HEDIS is designed for managed care plans that encourage the use of preventive services. Because indemnity plans may not cover such services (e.g., cholesterol screening), data are not available on indemnity plan members who may obtain the service. Still, even though designed for HMOs, the HEDIS measures have been used to evaluate non-HMO plans, including managed indemnity plans. An example is the "State Hancock Plan" participation in the Massachusetts Cost/Quality Challenge.

The State Hancock Plan is a self-funded, managed indemnity plan in which the Commonwealth of Massachusetts contracts with John Hancock Insurance Company to provide administrative services only. The plan covers 13,000 Massachusetts state employees and retirees across the country. This plan's experience in calculating HEDIS-type quality measures suggests that managed indemnity plans, which do not have a network of physicians, may encounter certain unique problems.

These problems include lack of easy access to the medical records needed to calculate some of the measures and difficulty intervening with physicians to pursue opportunities for quality improvement that are identified. The latter derives from the fact that managed indemnity plans interact with large numbers of providers rather than smaller networks of physicians. Even acknowledging these problems, the few indemnity plans responding to the VHSCRC survey generally support the aims and concepts of HEDIS indicators, noting their expectation that differences between the HMO and indemnity environments will be satisfactorily addressed as experience accumulates.

Several respondents to VHSCRC's letter discuss issues related to releasing HEDIS information. Many note that HEDIS data should only be used by educated consumers. Data should not be released without additional information that explains such factors as differences in benefit designs and contractual arrangements with providers that may affect performance measures.

Further, some respondents advise against releasing HEDIS measures to individual consumers, because there is concern that the complexity of the information may lead to misinterpretation. Some suggest that results from plan member satisfaction surveys are more appropriate performance measures for use by individuals.

Although most insurers note that it is, or would be, feasible to collect health plan performance data, they emphasize that significant costs are associated with doing so. Some of the main cost categories identified by respondents include development of reporting software, maintenance of automated systems, and review of medical records. The expense to plans of implementing a performance measurement system will vary according to the degree of automation and the number and types of measures.

Smaller companies that do not routinely collect this type of information will incur significant costs. Many large insurance companies already have systems in place to collect HEDIS or HEDIS-like measures. These companies note that requiring the collection of additional measures will only increase costs.

Two respondents provided cost estimates: $5 million for Prudential to implement HEDIS in 35 of its health plans and $2 million for AETNA to participate in the National Report Card Pilot Project sponsored by NCQA. It is not clear what scope of activities and cost elements is in these reported costs.

The Virginia Hospital Association (VHA) and the Medical Society of Virginia Review Organization (MSVRO) also commented favorably on the use of a standardized system to measure plan performance. The VHA supports the use of HEDIS 2.0 as a starting point for measuring plan performance in Virginia. Their representative noted HEDIS' track record, focus on preventive health services, and national standardization that allows for comparisons across regions.

The MSVRO, however, cautions against establishing a system based on self-reporting of quality measures without validation by an independent entity. Their representative also expressed concern about: (1) allowing networks to decide which conditions/ procedures they will measure, (2) releasing physician-specific information, and (3) expecting at-risk health networks to take the responsibility for disseminating performance information.

In summary, it appears clearly feasible for HMO plans to collect HEDIS 2.0 performance data, although the initial costs appears substantial. Many plans responding to the letter report they currently collect this information or are developing a system to do so. Yet, it is critical to recognize limitations in all performance measurement systems, including HEDIS 2.0. It is also important that HEDIS measures be released to educated consumers, who are given sufficient description and explanation.

### 3. The Feasibility and Expense of Analyzing Health Plan Performance Data

The most specific information about the feasibility and expense of analyzing health plan data comes from the experiences of Maryland and California. (See Exhibit C.) Neither state has yet undertaken a statewide effort to measure health plan performance, but both are involved in pilot efforts.

In Maryland, a pilot project is being conducted through a contract with the developers of the HEDIS data set, NCQA. Seventeen HEDIS measures are being gathered by five participating health maintenance organizations. The total cost to the state for the project, which was begun in June of 1994 and is expected to be completed by January of 1995, is $218,870.

This covers the entire bundle of services provided by NCQA, including working with an advisory group to finalize the indicator set, working with the five participating plans to establish data collection systems, auditing the submission of data and verifying its accuracy, and developing report card formats. A breakdown of the costs by line items or major task groups was unavailable.

Information from California is more enlightening with respect to specific cost items. Twenty-two plans are participating in a project that will produce a report card with nine measures of performance. Each plan without data collection systems in place or administrative data bases from which to draw information is incurring a cost of approximately $51,000 to draw information from medical records to produce the performance measures. The cost of auditing and verifying performance measures supplied by health plans that have the appropriate data collection systems in place is approximately $7,000 per plan in the first year but is expected to decline by 15 to 20 percent in the second year.

## D. Methods for Housing and Disseminating Information with Necessary Safeguards for Patient Confidentiality

### 1. Methods for Housing Information

According to the Institute of Medicine (1994), health data should be housed in an organization that has "access to (and possibly control of) databases and a primary mission to publicly release data and the results of analyses done on the databases under their control". The organization should have the ability to amass credible descriptive information and evaluative data and the capacity to analyze data and make that information available through public disclosure. Crucial characteristics of health data organizations (HDOs) include the abilities to:

(1) Operate under a single, common authority;

(2) Acquire and maintain information from a wide variety of sources and put the databases to multiple uses;

(3) Have files containing person-identified or person-identifiable data;

(4) Serve a specific, defined geographic area;

(5) Have inclusive population files;

(6) Have comprehensive data that includes administrative, clinical, health status, and satisfaction information;

(7) Have the ability to process, store, analyze and manipulate data electronically; and

(8) Support electronic access for real-time use.

For maximum accountability, security, protection and control over access to data, HDOs should have an organizational structure, a corporate or legal existence, and a physical location. HDOs should acquire, maintain and periodically update information from institutions and facilities, agencies and clinics, pharmacies, physicians, and health plans. The data bases should have multiple uses, not just a few specific tasks.

HDOs should serve specific geographic areas, such as regions or states, and include data related only to those who reside or receive services in that area. If HDO files include all members of a defined population, population-based rates of service utilization and health outcomes can be calculated. Files held by HDOs should be designed for interactive access in real time.

The health data organization must establish appropriate safeguards to protect confidentiality. In this context, confidentiality implies controlled access to and protection against unauthorized access to, modification of, or destruction of health data. One way to implement controlled access is to establish policies about who may be allowed to use health-related information and how they may use it.

In order to ensure that information housed by the health data organization is secure, the data system should: (1) function in a defined operational environment, (2) serve a defined set of users, (3) contain prescribed data and operational programs, (4) have defined network connections and interactions with other systems, and (5) incorporate safeguards to protect the system against defined threats. An administrative unit or board is needed to promulgate and implement policies concerning data

protection and analyses, confidentiality, the dissemination of educational materials, security practices, and employee training about protection of data.

In Virginia, two models have been used to house data. In the first, a state organization is selected to house, analyze, and disseminate data. Examples of this model include data bases maintained by the VHSCRC, the Department of Health, the Department of Medical Assistance Services, and the State Corporation Commission.

A second model was employed when Virginia Health Information, Inc. was established for the purpose of housing patient level data. In this model a private nonprofit organization (VHI) contracts with a state agency (VHSCRC) to house data. Both are viable models. However, the preceding HDO characteristics and capacities should be considered in making a selection and in overseeing the selected organization's conduct of its duties.

### 2. Methods for Disseminating Information

The Institute of Medicine (1994) suggests that public disclosure of information is only acceptable when it: (1) involves information and analytic results that come from studies that have been well conducted, (2) is based on data that can be shown to be reliable and valid, and (3) is accompanied by appropriate educational materials. This section focuses on types of information released, report card formats, and confidentiality in public disclosure.

Two types of information can be disseminated: (1) descriptive facts and (2) results of evaluative studies. Information should be released in formats and with explanations that can be easily understood, and in such a manner that actual events can be distinguished from derived or computed information. Further, it is important that information be released in ways that reveal the magnitude of any differences among providers, and in sufficient detail that all providers can be easily described and compared.

A health plan performance report card is an example of releasing information from evaluative studies. Before releasing report card information, providers should have opportunity to confirm data and methods. Reports should also include a format in which plans can make known their perspectives and/or explanations of the findings. Further, it may be necessary to tailor the formats of health plan performance report cards to meet the needs of different constituents.

NCQA (1994) identifies three primary constituents and offers suggestions for tailoring reports to their needs: (1) consumers, (2) practitioners (clinicians and providers), and (3) employers and health officials. Report cards aimed at consumers should be

tailored to include a greater degree of educational material about health care services while presenting comparative information on the available health care delivery products.

Report cards aimed at practitioners should have additional statistical detail beyond that contained in the consumer report card. Since employers and health officials both have oversight responsibilities, formats for these two constituents may look similar. In addition to reporting statistical detail, report cards for employers and health officials would include plan characteristics and comments.

It is critical that information be disseminated in a way that protects the privacy and confidentiality of individuals. The broad legal protection of patients' medical records and information is based in federal and state law. Some states have specific statutes protecting the confidentiality of third-party payer information relating to mental health services and/or drug and alcohol treatment. Virginia is one of these states. There may also be particular laws regarding the disclosure of insurance transaction data.

Two issues should still be considered when releasing aggregate information. First, the more specific the information regarding patient services (e.g., type and nature of medical referrals), the more likely the information may be patient-identifiable. For example, if a sufficiently small number of patients receives mental health services, it is conceivable that an employer could identify a patient. Second, the smaller the subset of members, the greater the likelihood of patient identification. This may especially be an issue when risk-stratifying health plan performance data (NCQA, 1993).

Briefly, the following principles, adapted from a concept paper developed by the National Committee for Quality Assurance (1994), should guide the public dissemination of health plan performance information. They address issues of quality of information, report formats, and patient confidentiality.

(1) In spite of the many dilemmas posed by imperfect data, health plans must recognize their accountability to the public and should use the best methods available to report on their performance.

(2) For information to be useful, it must be scientifically credible. Differences in health plan data that are not statistically significant should either not be reported or should be presented as differences that may be caused by random variation in the data and are not necessarily the result of health plan performance.

(3) Those involved in performance measurement should be aware of the need for risk adjustment and should attempt to do some preliminary stratification with known risk factors. Users should be warned of the need to exercise caution in interpreting the findings.

(4) Data should be presented in a context that creates relevance for the user. Known sources of bias in the data should be disclosed.

(5) Information that could individually identify specific patients should not be reported.

(6) Performance data should be used as a vehicle to drive improvement rather than a way to "punish" those plans that appear to perform less well.

(7) When collecting performance data, sample sizes should be based on the most conservative estimates possible of the incidence of the event in question.

### E. The Role of the Commonwealth

Based upon a review of project documents and comments received in response to the survey letter, four potential roles the Commonwealth could assume in a health plan performance measurement system were identified:

(1) The state can encourage, but not mandate, health plans to produce report cards.

(2) The state can mandate that health plans produce and distribute report cards but not specify the content or format of the report card.

(3) The state can mandate that health plans report a minimum set of verified measures that would be accumulated in a statewide data base and used by the state to produce comparative report cards.

(4) The state can mandate that health plans file standardized claims data that would be accumulated in a statewide data base and used by the state to produce measures and comparative report cards.

Of the eight organizations (seven insurance or holding companies and one trade association) that commented explicitly on the appropriate role for the state, four indicated that the state should not mandate health plan performance measurement for report cards. The organizations opposed to a state mandate for report cards believe that the marketplace and consumer demands for accountability will drive health plans to produce performance

data. However, as several insurance companies pointed out, the state could perform a service in educating consumers about the general usefulness of report cards.

Under option 1, the plans are free to choose the extent to which they will become involved in producing report cards. Health plans that decide to produce report cards have the flexibility to respond to specific consumer demands. Further, no additional regulatory burden is placed on the insurance industry.

However, in this free-market approach, no information will be available from plans that do not choose to participate. Second, there may not be true standardization of definitions, assured accuracy of results, and full comparability of data across plans. Accordingly, future evaluation of the effectiveness of this approach will be important.

If the state assumes the second role and mandates that health plans produce some unspecified form of report card, the state's role is limited to assuring that each health plan makes a report card available to the public. If it wishes, the state can gather the report cards and further distribute the information. Most aspects of the second approach are similar to those of the non-regulatory approach just discussed. The one exception is that every health plan, not just those volunteering to participate, would produce a report card.

In the third option, health plans calculate the performance measures, using administrative data sets and available medical records. This information is then submitted to the health data organization selected by the state to house the data. The health data organization or a subcontractor audits and verifies the data. The state also has responsibility for producing and disseminating report cards.

A value of the third option is that a centralized public use data base is formed from which comparative report cards can be produced. Further, the state, as an independent and objective third party, assures that measures are defined uniformly, calculated accurately, and disseminated in an unbiased manner. This approach also recognizes the varying levels of sophistication in health plans' data systems. Health plans can use administrative or medical records data to produce the measures. Further, they are not prevented from producing additional measures for various audiences if they choose.

However, this role places a costly and burdensome requirement on health insurance companies that otherwise would choose not to produce performance measures. Comments from insurers suggest that start-up costs for data collection can be substantial. The centralized data base that is comprised only of calculated measures may have limited applicability to other

projects. Without original claims data, data users (including the state) cannot calculate other performance measures. Also, the data base may lack elements that could be used to explain and/or interpret performance measures.

In the fourth option, health plans submit claims data to the selected health data organization which, in turn, calculates the performance measures. In this approach, the health data organization assumes the burden of abstracting relevant information from claims data set(s). This approach creates a larger centralized public use data base; however, the state assumes a larger burden in analyzing claims data. Also, this option may not be feasible to implement, because not all health plans will have the necessary claims data bases in a standardized format.

Each of the four options can be considered along two dimensions: standardized format vs. non-standardized format and mandatory reporting vs. non-mandatory reporting. The four options can thus be classified as shown in the following table.

| **TYPE OF REPORTING** | ***Non-Mandatory Reporting*** | **Mandatory Reporting** |
|---|---|---|
| **Non-Standardized Format** | Option 1: State encourage but not mandate. | Option 2: Mandated reporting, non-standard format. |
| **Standardized Format** | Option 1 variation: State encourage reporting in a standard format. | Options 3 & 4: Mandated reporting, standard format. |

Of the various options, health care consumers and purchasers will derive the most benefit if all health plans report audited data in a standard format. However, Commonwealth mandating of universal reporting in a standardized format would produce the greatest burden on health plans. It would also require the greatest application of state resources to develop the regulations and then implement them.

Inasmuch as health plan report cards are a new and rapidly developing phenomenon, state mandates at this time may prove counterproductive. State mandates now may inhibit initiative and innovation in the development of performance measures and reports by individual plans. State mandates now may tend to lock in place a performance measurement and reporting system that will soon be superseded by the rapid pace of development in performance reporting around the country. Yet, without standardized reporting formats and auditing procedures, interplan comparisons will be difficult or meaningless.

Therefore, a voluntary approach to health plan performance measurement and reporting should pursue development and consensus on a standard set of core measures that can be meaningfully compared across health plans. Health care consumers, health care purchasers, and health plans themselves are likely to derive more benefit from some plans voluntarily producing report cards that permit valid comparison across plans than from all plans being required to produce an unspecified type of report card that may not be comparable or may even be misleading.

## VII. SUMMARY AND RECOMMENDATIONS

In this study, projects to evaluate the performance of managed health care plans were examined to identify key cost, quality, and access indicators that could be used to form the basis for a standardized report card on the performance of health plans. As a result, indicators from HEDIS Version 2.0 were selected as the most appropriate candidates.

HEDIS is an evolving set of performance measures which have broad support among employers and insurers. To date, HEDIS has been used primarily with managed care products. Designed for use in HMOs, HEDIS is most readily suited to measuring performance in this type of plan but has been used with others as well.

Most respondents to a letter soliciting comments support the use of HEDIS measures. However, several problems, which must be overcome, were acknowledged as well. On the positive side, HEDIS enjoys widespread acceptance by employers and insurers. HEDIS provides standardized definitions and specific methodologies for deriving most indicators. An exception is a non-standardized measure of patient satisfaction. Also, the current Version 2.0 of HEDIS does not have a comprehensive set of cost indicators. National pilot tests are underway to validate the current indicators, and efforts are being made to improve and enhance the current set of HEDIS measures. The forthcoming Version 3.0 of HEDIS is expected to show improvements in the areas where HEDIS is now viewed as weak.

Problems that are encountered in using HEDIS include limitations in the data systems health plans use to construct the measures, inconsistent coding practices among plans, incomplete or inaccessible medical records to produce measures, a focus on process rather than outcome measures of quality, and the lack of risk adjustments to reflect differences among plans in case mix and in characteristics of the enrolled population. HEDIS was designed for use by employers in contracting with health maintenance organizations. It is primarily suited to this purpose. Consequently, it may be necessary to supplement the basic set of HEDIS measures with other measures more useful to individual consumers in selecting health plans from among those options offered by an employer.

In most cases, it is not feasible to use data already collected by the Commonwealth to form HEDIS 2.0 indicators across various plan types such as HMOs, PPOs, and indemnity plans. The one exception is computation of financial performance measures for HMOs. Data for these measures are available in the State Corporation Commission's Annual Financial Statement data base.

Most insurance companies responding to the VHSCRC's invitation to comment indicated that it is feasible to collect HEDIS measures. However, many also noted that there are significant costs associated with doing so. Prudential estimated it has spent $5 million to implement HEDIS in 35 of its health plans, and AETNA reported spending $2 million to participate in the NCQA National Report Card Pilot Project.

These figures include one-time, start-up costs as well as costs which will continue over time. A project underway in California gives some insight into the cost of calculating HEDIS measures by extracting data from medical records. Costs to participating plans of having a contractor perform this function are reported to be approximately $51,000 per plan.

Publicly reported measures of quality, access, and cost calculated by health plans should be subject to independent audit and verification by an objective outside party. The only information available about the cost of verification comes from California, where these expenses are budgeted at approximately $7,000 per participating plan for the first year. Project directors expect a 10 to 15 percent reduction in the verification cost per plan in the second year.

Work by NCQA suggests that report cards should be designed specifically for various user groups. In particular, NCQA recommends that report cards for consumers include educational materials about health services while presenting comparative information on available health plans. Those for practitioners should have additional statistical detail beyond that contained in the consumer report card. Report cards targeted to employers and policy makers should include statistical detail and information about plan characteristics.

Several potential roles are available to the state. In the order of increasing magnitude, they are: (1) encourage, but not mandate, health plans to produce report cards, (2) mandate health plan report cards but leave the choice of measures and definitions to the discretion of the health plans, (3) mandate the submission of a standardized set of indicators that are verified by an independent organization, and (4) mandate the submission of claims data that will enable the state to calculate the performance measures.

The third option meets the indicated interest of HJR 267 in having standardized report cards, but places a smaller administrative burden on health plans and on the Commonwealth than the fourth option would. Certainly, health care consumers and purchasers will benefit more from performance measurement and reporting if all health plans report in a standard format.

However, even under the third option, Commonwealth mandating of universal reporting in a standardized format would place a considerable administrative burden on health plans. Also, it would require considerable state resources to develop the regulations and then implement them. Then too, state mandates now may tend to lock in place a performance measurement and reporting system that could soon be superseded by the rapid pace of developments in health plan performance reporting around the country.

Given the general lack of experience in establishing health plan performance measurement systems, most states currently involved in these efforts are beginning incrementally. Often this means starting with health plans that volunteer to participate. This provides an opportunity to gain experience and gather reliable information about the associated costs to health plans and about problems in design and implementation of standardized performance measurement and reporting. If the Commonwealth wishes to encourage development of such a system, this incremental approach could be pursued.

To encourage development of standardized performance measurement and reporting by health plans in Virginia, an advisory group of representatives from health plans, employers, health care providers, consumers, and government can be convened. This group can develop a recommended standard set of performance measures, audit procedures, and standard format for the public report card. Presumably, this work would draw largely from the existing HEDIS measures, perhaps recommending some additions and/or deletions.

Technical expertise should be secured to assist this group and develop any technical specifications beyond those provided by NCQA for the existing HEDIS indicators. One objective would be to minimize the data gathering and reporting burden by specifying a relatively small set of indicators to be calculated by participating plans, based on the advisory group's recommendations.

The advisory group could also undertake activities to inform health care consumers and purchasers and to generate additional interest and participation by health plans in voluntary, standardized performance measurement and reporting. The role of the Commonwealth would be that of educating the affected parties regarding the value of standardized measurement and reporting of health plan performance. This voluntary, market-driven approach will need to be evaluated for its effectiveness over time.

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# APPENDIX A

## HOUSE JOINT RESOLUTION NO. 267

*Requesting the Virginia Health Services Cost Review Council, in cooperation with appropriate public and private entities, to examine data being compiled in the development of the patient level database and by other appropriate health-related state agencies and to propose additional elements and reporting formats to facilitate the evaluation and assessment of the cost, quality, and accessibility of health plans.*

Agreed to by the House of Delegates, February 14, 1994

Agreed to by the Senate, March 8, 1994

WHEREAS, the 1993 Session of the General Assembly established a patient level data system for the "collection and analysis of data which shall be used by consumers, employers, providers, and purchasers of health care and by state government to continuously assess and improve the quality, appropriateness, and accessibility of health care in the Commonwealth and to enhance their ability to make effective health care decisions"; and

WHEREAS, pursuant to the authority conferred by § 9-166.4 of the Code of Virginia, the Executive Director of the Virginia Health Services Cost Review Council (VHSCRC) has entered into an agreement with Virginia Health Information, Inc., (VHI) for the compilation, storage, analysis, and evaluation of patient level data; and

WHEREAS, VHI has submitted a report to the Joint Commission on Health Care regarding the nature and type of specific analysis from the patient level data system that can be used to compare institutions based on certain hospital indicators of performance; and

WHEREAS, consistent with the directive of § 9-161.1 of the Code of Virginia, requiring the VHSCRC to promulgate regulations establishing a methodology for the review and measurement of the efficiency and productivity of health care institutions, the VHSCRC has entered into an interagency agreement with the Williamson Institute for Health Studies at Virginia Commonwealth University to provide statistical and economic expertise to identify efficient and productive providers of quality health care; and

WHEREAS, the National Committee for Quality Assurance has released a 1993 version of the Health Plan Employer Data and Information Set, which provides employers with an evaluation tool or report card to assess the performance of health plans; and

WHEREAS, while the Commonwealth currently collects a wide variety of health care information, this information has not been integrated into an effective policy information system, and there may be a need to collect additional, new types of data; and

WHEREAS, many of the national health care reform proposals focus on statewide evaluation of health plans to encourage competition among health plans and to assist employers and consumers in making informed choices; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Virginia Health Services Cost Review Council be requested, in cooperation with appropriate public and private entities, to examine data being compiled for the patient level database and by other appropriate health-related state agencies and to propose additional elements and reporting formats to facilitate the evaluation and assessment of the cost, quality, and accessibility of health plans. The study shall identify key cost, quality, and access indicators which would form the basis of a standardized report card for use by providers and consumers in health care decision making. The study shall also examine the feasibility and expense of collecting and analyzing necessary data; appropriate methods for housing and disseminating the information with necessary safeguards for patient confidentiality; and the appropriate role of the Commonwealth in such a process.

The Council shall complete its study for inclusion in the 1994 annual report of the Joint Commission on Health Care and shall report its findings and recommendations to the Governor, the 1995 Session of the General Assembly, and the Joint Commission on Health Care as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

# APPENDIX B

# COMMONWEALTH of VIRGINIA

*Virginia Health Services Cost Review Council*
*805 East Broad Street, 6th Floor*
*Richmond, Virginia 23219*

Ann Y. McGee
Executive Director

Telephone (804) 786-6371
TDD (804) 786-6371
FAX (804) 371-0284

August 2, 1994

Re: Assessment of Health Plan Performance

Dear :

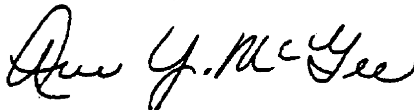
I am writing to ask your assistance in the completion of a legislative study looking at the feasibility of measuring the performance of health plans. House Joint Resolution Number 267, adopted by the 1993 Session of the Virginia General Assembly, requires the Virginia Health Services Cost Review Council, in cooperation with appropriate public and private entities, to identify key cost, quality and access indicators. These indicators could form the basis of a standardized report card for use by providers and consumers in health care decision-making. The Health Services Cost Review Council will report its findings to the Governor, the 1995 Session of the General Assembly and the Joint Commission on Health Care. A copy of HJR 267 is enclosed for your review.

My staff has conducted a comprehensive review of projects currently underway to measure health plan performance. These projects have been initiated by health plans themselves, the business community, and government. At present, a measurement system called the Health Plan Employer and Data Information Set, Version 2 (HEDIS 2.0) appears to be gaining wide acceptance. Some projects we reviewed use HEDIS measures exclusively. Others use a combination of HEDIS and other measures. As a result of staff review, the HEDIS 2.0 measures have been identified as key cost, quality and access indicators that could serve as a starting point for a Virginia health plan performance measurement system. Some basic information about HEDIS is included here as an enclosure.

We are interested in your comments about the use of HEDIS 2.0, and/or other systems with which you may be familiar, to measure plan performance. We invite you to mail your written comments about the indicators themselves, the issue of providing report cards to consumers, the cost and feasibility of producing report cards

with HEDIS 2.0 or other measures, and the appropriate role of the state. We would like to receive your written remarks by August 23rd. If you have any questions, please call Marilyn Spotswood at (804) 786-6371. Thank you in advance for your assistance.

Sincerely,



Ann Y. McGee
Executive Director

AYM/mfs
Enclosures

**HEDIS 2.0**
**FACT SHEET**

- HEDIS is the result of efforts made by representatives from a variety of health plans and employers. The effort was originally organized in late 1989 by The HMO Group (a coalition of group and staff model HMOs) and included representatives from four large employers and Towers Perrin. Key objectives were: (1) to define and understand employer needs to document the "value" of a health plan, and (2) to develop performance measures that would provide data and information in response to those needs. A draft document, known as HEDIS 1.0, was completed in September 1991.

- The National Committee for Quality Assurance (NCQA) organized a Performance Assessment Committee (PAC) to revise and refine HEDIS 1.0. The NCQA PAC's membership included representatives of the original four employers and several health plans and insurance companies. The revision effort was initiated in October 1992, and the revised document, known as HEDIS 2.0, was completed in May 1993. The final version of HEDIS 2.0, released in November 1993, contains over 60 performance measures in five major areas: quality, access and patient satisfaction, membership and utilization, finance, and descriptive information on health plan management.

- HEDIS 2.0 attempts to systematize the measurement process by recommending standardized definitions and specific methodologies for deriving performance measures. As HEDIS 2.0 measures are refined and more widely used, health plans are expected to have a common set of reporting standards for comparative purposes.

- Due to the variability of existing data systems between health plans, data can be derived by extracting information either from administrative data bases or from medical records.

- HEDIS 2.0 currently consists of two types of measures: inter-plan and intra-plan. For inter-plan measures, the performance of each plan can be compared as long as all plans correctly follow the specifications for data extraction and measurement. The intra-plan measures are only appropriate for year-to-year changes in a specific plan's performance.

- A panel of experts has been formed to address the operational issues in measuring plan performance using HEDIS 2.0. This group will produce HEDIS 3.0 sometime in 1995.

## SELECTED HEDIS 2.0 INDICATORS RELATED TO QUALITY, ACCESS, AND COST

**Quality**

**Goal:** Measure health plan's performance in the delivery of certain selected services.

- Childhood immunization
- Cholesterol screening
- Mammography screening
- Cervical cancer screening
- Low birthweight
- Prenatal care in first trimester
- Asthma inpatient admission rate
- Diabetic retinal exam
- Ambulatory follow-up after hospitalization for major affective disorders

**Access**

**Goal:** Measure health plan's performance in providing members access to health care.

- Percentages of members ages 23-39 and 40-64 with plan visit in previous 3 years
- Number and percent of primary care physicians accepting new patients
- Provision of plan access standards for various types of visits and telephone response

**Work is underway to expand HEDIS 2.0 indicators. Below are the indicators related to finance and cost available in the current version of HEDIS.**

**Finance**

**Goal:** Measure health plan's performance in achieving financial stability.

- Fourteen performance measures are specified which encompass performance, liquidity, efficiency, and compliance with statutory requirements. In addition, premium trend information is requested.
- Frequency and average cost of 9 DRG categories and the frequency of 7 selected procedures

## RESPONSES FROM INSURANCE COMPANIES

Aetna Health Plans, Richmond VA

- Support the use of HEDIS measures. HEDIS measures are practical, collectible, and fair in theory, and their application can be standardized. Also support building a uniform national data/quality system.
- AETNA participated in the development of HEDIS 2.0. They are currently participating in the National Report Card Pilot Project sponsored by NCQA. Approximate cost of participation in the project is $2 million.
- Limitations in the use of HEDIS measures to compare health plan performance in the short run include: (1) health plans do not collect the same data; (2) coding is not consistent; and (3) HEDIS does not currently adjust for case-mix and severity of illness.
- Support information systems with clinical and administrative standards which: (1) recognize differences in information availability between types of plans, (2) rely on data that are routinely captured and maintained by plans, (3) build on the work of HEDIS to refine health plan performance measures for HMOs and develop comparable measures for other types of plans (i.e., indemnity), (4) rely on collaborative efforts between public/private groups to perform outcomes research and develop practice parameters, and (5) protect patient confidentiality.
- Do not support the collection of financial data to set global budgets or overall spending caps.
- Support the development of appropriate standards for privacy, confidentiality and security protection for identifiable health care information. Also support the use of unique identifiers for patients, providers, employers, and payers to locate original data bases.
- HEDIS measures are designed for HMOs and do not easily adapt to other delivery systems (i.e., PPO and indemnity plans). Comparable measures need to be developed for these types of plans.
- Responding to externally imposed measurement standards will increase health plan expenses. Costs to Aetna include expenses of developing reporting software and reviewing medical records ($20.00 per record).
- States should adopt nationally standardized measures like HEDIS and not require additional ones. Public and private indicators should be similar.

Blue Cross Blue Shield of the National Capital Area, Washington DC

- Support/encourage use of the HEDIS 2.0 measurement system.

- Need to ensure uniformity in the use of HEDIS 2.0 across jurisdictions, i.e. Maryland, DC, and Virginia.

- All insurers operating in Virginia should have to participate in the state's use of a measurement system. Participation should not be applied to only one type of carrier (e.g. HMOs).

- Since HEDIS is still evolving, incremental implementation is the most efficient and cost-effective approach. The first priority should be to implement quality measures, recognizing the following three factors: (1) the system of measurement should encourage carriers to establish mechanisms to continually improve the quality of services; (2) carrier quality measures should be compared to defined populations, such as "Healthy People 2000", CDC statistics or county/regional health data; and (3) carriers should submit a sequence of several years' data in order to reveal trends in quality.

- Since HEDIS member satisfaction measures are not standardized, the current state regulations on member satisfaction measures, complaint handling, and claims grievance oversight should be maintained.

- The quality measurement system should focus on measures which allow for comparisons in the context of the populations that individual carriers serve.

- HEDIS financial measures duplicate existing state regulations.

Blue Cross Blue Shield of Virginia, Richmond VA

- Support the concept of health plan performance measures. Currently preparing HEDIS reports for employer group customers in HMO and primary care based Point of Service (POS) networks.

- HEDIS is mainly applicable to HMO delivery systems. It is not applicable to loosely formed PPOs or indemnity health care plans, where there is no primary care coordination and little "selectivity" of providers based on cost and quality measures.

- One problem in using HEDIS for comparisons across health plans is differences in case- or risk-mix among plan memberships. This may lead to erroneous conclusions.

- The HEDIS quality measures are important indicators of quality but by themselves are not conclusive or all-inclusive to determine whether a health

plan offers quality services. Employers should evaluate both process and outcome measures of quality.

- A practical issue with HEDIS measures is the difference in benefit designs between different plans and employer groups. Many plans do not cover some preventive care services, and encounter forms from doctors in capitation arrangements are sometimes incomplete.

- An educated user is required to properly use information in the HEDIS report card and avoid misinterpretation.

- Most measures are not appropriate for individual consumers due to the complexity of the measures. Some measures that are appropriate include member satisfaction and access to appointments.

- BC/BS of Virginia has the database structure and programming tools to create the HEDIS reports. However, there are significant costs associated with collecting, storing, processing, and producing the information for HEDIS. Manual collection (review of patient records required for some of the measures) will become more costly as HMO populations grow.

- In terms of the role of the state, it is appropriate for the market to take the lead in the area of health plan performance reporting.

Bradford National Life Insurance Company, New Orleans LA

- Bradford does not offer any form of health or disability insurance; merged with another company.

Business Insurance Operations, Atlanta GA (Life of Georgia and Southland Life)

- Business Insurance is not writing any new cases of health insurance and have limited business on the books.

Cigna HealthCare, Glen Allen VA

- Endorse the use of HEDIS measures. Have already initiated measuring 10 of the HEDIS 2.0 indicators.

- Implementation of HEDIS measures requires significant investment of system and personnel resources. Recommend flexibility including a phase-in period for health plans to assemble data, requiring plans to measure only certain key parameters, or allowing plans to submit a select group of HEDIS measures.

Continental General Insurance Company, Omaha NE

- Continental writes individual health and life policies in state. Providing information for HEDIS measures would be a financial and administrative burden, and information would be of no value to the company.

Equitable Insurance Company, New York NY

- No longer selling insurance in Virginia.

General American Life Insurance Company, St. Louis MO

- Support the concept of standardized/comparative reporting by providers and payers.
- Significant costs are associated with collecting some of the information.
- Patient and employer education is essential, and this will add to the costs of producing report card information.
- Not enough emphasis on actual quality of care and outcomes.
- Employer-specific reports will not be useful because of small numbers.

HealthPlus, Greenbelt MD

- Very supportive of the use of HEDIS. Are currently participating in the NCQA National Report Card pilot project.
- Emphasize the need to adopt the NCQA report card data collection standards and auditing process, in order to have comparability of data among plans and to minimize the administrative burden and cost of compiling and validating HEDIS data.
- Recommend a consumer education process to help non-medically trained consumers better evaluate competing health plans.

Kaiser Foundation Health Plan of the Mid-Atlantic States, Inc., Rockville MD

- Have recently completed production and begun dissemination of their first full HEDIS data set.
- Endorse the development of aggregate data sets that will enable consumers to measure the quality and cost-effectiveness of health plans. Support HEDIS as the best measurement tool now available. Expect the consistency and comparability of HEDIS data to improve over time.
- Establishing the capability to implement HEDIS has been challenging and time-consuming and was underway for more than a year before completion. Strongly urge state acceptance of current HEDIS measures without alteration or expansion until a new version of HEDIS comes forth.
- Recommend that if Virginia decides to pursue use of HEDIS to measure health plan performance, this be phased in as follows: first, quality measures to include multi-year data to show trends within plans; second, member satisfaction measures, in spite of their present non-standardization; third, risk-adjustment measures, when and as developed by HEDIS, to adjust for such differences among plan memberships as age and gender; and fourth, financial measures, which are already substantially collected by the Bureau of Insurance.

Liberty Life, Boston MA

- No longer in business.

MAMSI, Rockville MD

- Support the adoption of HEDIS 2.0 as the basis for evaluating the cost, quality, and accessibility of health plans. Have implemented the HEDIS measurement set for its plans.
- Emphasize the need to maintain strict compliance with the definitions of the performance measures.
- Report card information should be used for broad-based comparisons and relative trend analysis.
- The HEDIS measurement set should not be modified for regional or other concerns.
- Statistical sampling of medical records, where appropriate, is economically and qualitatively superior to collection of capitated encounter information not currently gathered by managed care plans. Virginia should include this

alternative, regardless of the particular performance measures that are ultimately adopted.

- The Commonwealth should facilitate the process of meaningful quality measurement, without increasing the cost of health care delivery. This is least achieved through mandated procedures, both in terms of substance and time schedules.

MassMutual, Springfield MA

- Recognize HEDIS 2.0 as an excellent attempt at managed care performance assessment. Support the selective use of current HEDIS measures, with at least a year of lead time to produce the data. Clear direction is needed on how to apply the methods fairly to PPOs.

- Drawbacks to using the full scope of HEDIS indicators (especially for PPOs) include: (1) lack of data on services that are not paid for by the insurer, (2) difficulty in getting access to detailed medical record data that are needed for some HEDIS statistics, (3) difficulty in identifying numbers of individuals who have been continuously enrolled in the plan, and (4) difficulty in getting detailed age, sex, and other data on dependents.

- Among other needed improvements, some HEDIS measures need to be risk-adjusted, additional acute-care measures need to be developed, and some HEDIS measures for which data collection is impractical need to be eliminated.

- Should find measures that do not require so many caveats and explanations that they become impractical and misleading to their audience.

- It is not inappropriate for the state to become interested and actively involved in performance assessment as an aide to consumer understanding. State involvement, with fair dialogue and input from multiple parties, is preferable to an uncontrolled marketplace disbursing contradictory information.

Metropolitan Life, Westport CT

- Support and encourage the use of HEDIS for reporting plan performance. Are participating in a one-year NCQA Report Card pilot and are a member of the HEDIS User's Group (HUG). Will be releasing HEDIS information soon.

- HEDIS provides an opportunity for comparable reporting nationwide. HEDIS describes standard definitions and specific analytical methodologies.

- Developing and producing HEDIS was time-consuming and costly, but is worthwhile for MetLife and the entire industry.

- Encourage the selection of HEDIS as the measurement system. Continuing to respond to multiple reporting requests with different measures and methodologies will be fragmented and of lower overall quality.

Mutual of Omaha, Omaha NE

- Plan to make HEDIS measures available in the 2nd Quarter of 1995 for HMO business. No HMO business in Virginia.

NWNL Health Network, Inc., Minneapolis MN

- Are participating in the Medicaid QARI Demonstration Project sponsored by NCQA and in a state-mandated survey of HMO indicators of quality and access. Both projects use HEDIS as a template.

- Limitations with HEDIS include: (1) incomplete definitions and options for calculating rates limit the ability to compare measures across plans; (2) plans vary in contract type, which limits ability to compare measures across plans; (3) member demographics vary according to product or plan; (4) continuous enrollment requirements limit the usefulness of certain measures for specific populations of enrollees; and (5) claims data may be lacking for services received outside the network of primary care.

- Limitations related to health plan data systems include: (1) variability in data systems and capabilities between plans and (2) difficulties ensuring accuracy of administrative data. Record review may provide more valid results but costs are prohibitive.

- Data comparability is key to measuring plan performance.

- Performance measures must be stated in terms meaningful to consumers.

- Administrative costs associated with producing performance measures cannot be overlooked.

PM Group Life Insurance Company, Fountain Valley CA

- They contract with providers through network arrangements with firms such as Private Health Care Systems (PHCS). Along with PHCS, PM Group is participating in the NCQA report card pilot project, as the only non-HMO.

- Support projects to measure health plan performance. Recognize that such work is in its infancy, and existing measurement systems will undergo

substantial modification. Therefore, believe it is important to develop the ability to report current HEDIS 2.0 measures, while being prepared to respond to future altered and expanded specifications for reporting data.

- Since "the majority of people covered by health plans are covered by various forms of indemnity plans," it is important to develop a performance measurement system that can work for indemnity plans as well as HMOs.

- The inaccessibility of medical records to indemnity plans requires greater reliance by indemnity plans on administrative data to compute HEDIS measures, which casts doubt on the accuracy and completeness of the resulting measures. Also, the lack of common expense categories between HMOs and indemnity plans makes some of the HEDIS finance measures non-comparable between HMOs and indemnity plans.

Penn Treaty Life Insurance Company, Allentown PA

- Only sell long-term care and home health care policies in Virginia. No comments.

Physicians Mutual Insurance Company, Omaha NE

- Write individual, supplemental policies. Do not gather any information in the areas of cost, quality, and access. No comments.

The Principal Financial Group, Des Moines IA

- Advantages of HEDIS are that it uses standardized performance measures, addresses key areas of interest identified by employers, includes indicators that can be reasonably provided by health plans, and measures aspects of care delivery processes that don't need risk adjustment.

- One disadvantage of HEDIS is that some indicators require risk adjustment to minimize the effect of population differences. These indicators can only be used to measure performance within a given plan over time.

- A second disadvantage is that HEDIS lacks measures of health outcomes.

- A third disadvantage is that the patient satisfaction measure is not standardized. Comparison of satisfaction among plans is not possible.

- A fourth disadvantage is the requirement of continuous enrollment data for some measures. Health plans may not have such extensive data bases.

- The final disadvantage is that HEDIS indicators ignore unit costs. Unit costs vary with types of service and health plan, and real differences exist between health care accounting systems and methodologies to track costs.

- Report cards on providers should be made available to consumers.

- The cost and feasibility of producing a report card depend on the completeness of the data sets, whether data can be extracted from an administrative data set or requires record abstraction, the number of HEDIS indicators, the availability of the data (i.e., PC-based or mainframe), and the type and amount of survey data to be collected.

- The role of the state might be to investigate the cost and feasibility issues discussed above.

Priority Health Care, Virginia Beach VA

- Favor developing an assessment tool which will provide information that is comparable between health plans.

- They are beginning to collect data but caution its use for inter-plan comparisons.

- Due to the significant cost of collecting and analyzing the data, encourage a well-thought-out plan that is cost-effective.

- Recommend the development of a working group with membership from health plans to create a statewide plan.

Prudential, Roseland NJ

- Firmly support the use of HEDIS 2.0 for several reasons: (1) the standardized measures allow for comparison of performance across health plans; (2) it is impossible for plans to respond to numerous requests for detailed data on performance measures that have different specifications; and (3) the development of HEDIS was a collaborative process with a commitment to continually update and refine the measures.

- One concern about the implementation and use of HEDIS is its focus on process, rather than outcome, measures of care.

- Other concerns are: (1) comparisons using HEDIS data should be made with extreme caution; (2) careful attention must be paid to how the data are reported and released in order to avoid unfounded conclusions (e.g., must account for population risk differences); and (3) much of the data for quality

measures are available only via the medical record which has missing data (and translates into worse numerical results).

- Is essential to have a standardized and consistent independent audit of HEDIS data for accuracy.

- The role of the state should be to use HEDIS data as a basis for discussions with health plans regarding their performance.

- Caution should be taken in sharing HEDIS data with individual consumers until the measures are better tested.

- Member satisfaction survey results are more appropriate to share with consumers, but information is not comparable across plans if different survey instruments and methods are used.

- Some of the HEDIS measures, such as inpatient utilization data, are relatively easy to produce. Other measures, such as quality measures and those requiring ambulatory encounter data, are more difficult.

- Collecting and reporting HEDIS data are difficult, time-consuming and expensive. The cost to Prudential to collect HEDIS measures consistently across its 35 health plan locations cost more than $5 million in 1993.

Sentara, Virginia Beach VA

- Strong supporter of developing performance measurements for HMOs.

- Undertook a review of various measurement systems and selected HEDIS 2.0. HEDIS data collection is specific and rigid, thus ensuring that comparisons can be made.

- Information regarding quality, access and patient satisfaction, membership and utilization, finance, and descriptive health plan information has been requested in every major account RFP received for 1995 renewal.

- Sentara plans have made numerous modifications to computer systems in order to obtain HEDIS data.

- Made certain measurements a priority: childhood immunization, mammography, and PAP-smear rates.

- The marketplace is demanding performance measurement, and most plans are accepting the HEDIS measurements. Therefore, no additional regulation is warranted. Such action would be duplicative and add to the administrative costs of providing quality health care.

Southern Health, Richmond VA

- Endorse the use of HEDIS measures. Very useful for employers to have information that can be used to compare and evaluate health plans for employees. Also beneficial because indicators are based on standards developed by the Public Health Service (Healthy People 2000).

- HEDIS measures are costly in terms of time for computer programming.

- State should take an active role in implementing HEDIS guidelines on a universal basis for all health plans.

State Farm Life Insurance Co., Bloomington IL

- Market individual hospital-medical expense policies and no group policies. Are unfamiliar with HEDIS and have no substantive comment regarding its use or the use of any similar performance measurement system.

Time Insurance, Milwaukee WI

- Currently programming the system requirements to produce HEDIS 2.0 reports. Strongly support the use and acceptance of HEDIS as a standard measure of plan performance.

- Costs associated with making report cards useful include consumer education, provider education, and provider re-direction.

- Report cards should include results from consumer satisfaction surveys.

- The appropriate role of the state should be limited. Regulatory requirements should not go beyond requiring plans to produce and implement a report card program. State regulation which forces requirements to the level of specifying the data criteria and reporting formats inhibits further development of the tool. A major drawback to state regulation arises when states choose different reporting formats. Producing multiple report card formats to comply with state regulations is very costly and will eventually limit insurers from doing business in multiple states.

The Travelers, Hartford CT

- Currently using HEDIS 2.0 with point-of-service and other HMO plans. Endorse the use of HEDIS.

Trustmark Insurance Company, Lake Forest IL

- Support the use of HEDIS 2.0.

Wausau Insurance Companies, Wausau WI

- Recommend the use of HEDIS since many plans are working to measure HEDIS indicators. This would avoid the expense to health plans of measuring the same subject using different criteria.
- Health plans vary widely in their ability to produce meaningful data from their claims systems. Recommend starting with a small number of key criteria and adding to this in the future.
- Recommend a survey of health plans to learn what areas are already evaluated. Include these areas in the list of initial core indicators.
- The "continuous enrollment" criteria for HEDIS quality measures is difficult to comply with.
- The accuracy of the administrative/claims data base is dependent on what is coded on bills submitted and what is entered in the claims payment system at the time of adjudication. Limited use of CPT coding by hospitals and inaccurate coding by physician offices make analysis of medical claims data a challenge.
- In terms of the appropriate role of the state, state office could coordinate the criteria for indicators with the input of plans on the usefulness and feasibility of the measures. Recommend a meeting with representatives from health plans and a partnership approach.

## RESPONSES FROM INTERESTED PARTIES

### Hampton Roads Health Coalition, Virginia Beach, VA

- Generally support developing and refining data to facilitate assessment of the cost, quality, and accessibility of health plans operating in Virginia. Developing a set of measures meaningful to consumers is critical.

- Suggest the use of external auditors to verify HEDIS data collected by the plans, because of the significant decisions that the data will affect.

### Medical Society of Virginia Review Organization, Richmond VA

(Comments from the MSVRO response to the Joint Commission on Health Care Issue Brief No. 2, Community Health Networks)

- Question whether self-reporting by community health networks will provide an adequate mechanism for ongoing quality measurement and sufficient incentive for continuous quality improvement. At a minimum, validation of self-reported quality data by an objective, independent organization is required.

- Question standard of accountability when networks are able to decide which conditions or procedures they will measure and report.

- Question whether smaller managed care plans and networks could duplicate model report cards published by health plans.

- Recommend a single statewide or metropolitan/regional report card aggregating information about all plans or networks, using a uniform set of quality indicators. Providers would report data to the entity responsible for data validation and report card production.

- Consumers believe true outcome measures, such as complication rates, are better indicators of quality than process measures, such as immunization rates.
- Have serious concerns about the release of physician-specific information because of the potential for reports to be misinterpreted by the general public.

- A multi-faceted community outreach program will be essential to ensuring that quality data are distributed and understood.

- Questions whether a substantial dissemination process is realistic to expect of at-risk health networks.

- Vesting quality information in an independent, non-profit organization would eliminate concerns about conflict of interest and increase public trust.

- Suggests the following principles for any quality assurance and improvement program: public accountability, independent oversight, checks and balances, public/private partnership, health care community involvement, and utilization of existing resources.

- Quality oversight should be conducted in a manner that is not burdensome to health networks and by an independent organization that has: (1) no role in providing health care or managing its costs, (2) a history of service to consumers, (3) demonstrated cooperative relationships with the health care community, and (4) proven expertise in analyzing, interpreting, and reporting complex health care data in a responsible manner.

Virginia Hospital Association, Glen Allen VA

- Concur with the recommendation to use HEDIS 2.0 as a starting point to measure plan performance in Virginia.

- HEDIS 2.0 has a track record, can be understood by consumers, and focuses on preventive health services and access. National standardization allows comparisons across geographic regions.

- Health plans in Richmond area began participating voluntarily in the database this year at the request of the Richmond Area Business Group on Health.

- Market appears to be driving companies' interest in participating in the report card effort using HEDIS 2.0. The need for mandated reporting should not be assumed.

- A coalition of consumers, government and trade groups could perform the following functions: (1) inform consumers of the information's availability and use and (2) ensure that plans are calculating the rates for the indicators as specified by NCQA so that cross-plan evaluations are valid.

RESPONSES FROM INSURANCE COMPANIES (with page number)

Aetna Health Plans, Richmond VA (5)
Blue Cross Blue Shield of the National Capital Area, Washington DC (6)
Blue Cross Blue Shield of Virginia, Richmond VA (6)
Bradford National Life Insurance Company, New Orleans LA (7)
Business Insurance Operations, Atlanta GA (Life of Georgia, Southland) (7)

Cigna HealthCare, Glen Allen VA (7)
Continental General Insurance Company, Omaha NE (8)
Equitable Insurance Company, New York NY (8)
General American Life Insurance Company, St. Louis MO (8)
HealthPlus, Greenbelt MD (8)

Kaiser Foundation Health Plan of Mid-Atlantic States, Inc., Rockville MD (9)
Liberty Life, Boston MA (9)
MAMSI, Rockville MD (9)
MassMutual, Springfield MA (10)
Metropolitan Life, Westport CT (10)

Mutual of Omaha, Omaha NE (11)
NWNL Health Network, Inc., Minneapolis MN (11)
PM Group Life Insurance Company, Fountain Valley CA (11)
Penn Treaty Life Insurance Company, Allentown PA (12)
Physicians Mutual Insurance Company, Omaha NE (12)

The Principal Financial Group, Des Moines IA (12)
Priority Health Care, Virginia Beach VA (13)
Prudential, Roseland NJ (13)
Sentara, Virginia Beach VA (14)
Southern Health, Richmond VA (15)

State Farm Life Insurance Co., Bloomington IL (15)
Time Insurance, Milwaukee WI (15)
The Travelers, Hartford CT (15)
Trustmark Insurance Company, Lake Forest IL (15)
Wausau Insurance Companies, Wausau WI (16)

# APPENDIX C

Appendix C

HEALTH PLAN PERFORMANCE MEASUREMENT PROJECTS IN VARIOUS STATES

| State | Summary Description of Project | Number of Plans Participating | Implementation Schedule | Budget/Costs |
| --- | --- | --- | --- | --- |
| Arizona | The Arizona Health Care Cost Containment System (AHCCCS), which is the Arizona Medicaid program, contracts with a number of integrated health systems to provide managed care to AHCCCS members. As part of its quality management oversight, AHCCCS has developed a set of 15 health plan performance measures to assess the patient care operations of the contracted health plans.<br><br>Although these measures are not explicitly drawn from HEDIS 2.0, they are similar in concept and content. AHCCCS will combine these measures with statistics on price and consumer and provider satisfaction to prepare a "report card" on the health plans. | Twenty-one plans. | Regulation adopted, effective October 1, 1994.<br><br>The first annual or semiannual report of each performance measure will occur from April 1995 through January 1997.<br><br>Data will cover periods beginning October 1994 or later. | Information not available.<br><br>General oversight, review, and reporting already occur. No retrospectve medical record review needed. |

| State | Summary Description of Project | Number of Plans Participating | Implementation Schedule | Budget/Costs |
|---|---|---|---|---|
| California | The California Cooperative HEDIS Reporting Initiative (CCHRI) is a joint venture led by the Bay Area Business Group on Health and the California Public Employees Retirement System. CCHRI has contracted with MedStat to calculate or verify health plan performance measures for 22 health plans that have agreed to participate in the project and agreed to pay for MedStat's services associated with that plan's form of participation.<br><br>Health plans will participate in one of three ways. For 14 health plans, MedStat will calculate HEDIS performance measures, after reviewing plan medical records for seven HEDIS indicators and plan administrative records for two HEDIS indicators. For six health plans, MedStat will verify, through limited chart review, the 1993 performance measures already calculated by the plan, based on HEDIS 2.0 specifications. For the remaining two plans, which are involved in the NCQA National Pilot Project, MedStat will obtain the performance measures calculated by the plan and deem them verified. Medstat will maintain the data base.<br><br>CCHRI will obtain final, verified plan performance measures from MedStat for all participating plans and will publish a plan performance report ("report card") by 4/1/95. | Twenty-two plans. | Project underway, with participating plans from all parts of the state.<br><br>Chart review to begin by 10/1/94. All review and verification to be done by 12/31/94.<br><br>Data analysis to be completed and final performance measures reported to the contract issuers by 2/1/95.<br><br>A second cycle of chart reviews and verifications is anticipated to begin in January 1995. | The estimated cost to each plan requiring full medical record review by MedStat is approximately $51,000 (2,700 records X $19 per record).<br><br>The estimated cost to each plan requiring only verification by MedStat, using limited record review, is approximately $7,000 (350 records X $19 per record).<br><br>Review and verification costs will decline by 15%-20% in the second cycle.<br><br>Costs for other MedStat work, plus project overhead and general administration, were not available. |

| State | Summary Description of Project | Number of Plans Participating | Implementation Schedule | Budget/Costs |
|---|---|---|---|---|
| Florida | The Florida Agency for Health Care Administration will collect and analyze selected quality, efficiency, access, and utilization indicators from plans.<br><br>The Agency will design and supervise a consumer satisfaction survey of each plan, funded by plan deposits for this purpose. Plan performance and consumer satisfaction data will be used with data from other state data bases to produce a "report card." | Fifty companies with approximately 200 "plans."<br><br>("Plan" = specific coverage, e.g, HMO, PPO, indemnity, etc., offered to a specific health purchasing alliance.) | Legislation enacted, regulations adopted.<br><br>Implementing statewide: (1) filing form established 3/94; (2) first deposit by plans into survey fund due 3/1/95; (3) first performance reports due 9/1/95. | Information not available. |
| Maryland | The Maryland Health Care Access and Cost Commission, a state agency, has contracted with the National Committee on Quality Assurance (NCQA) to carry out a pilot project to measure health plan performance.<br><br>NCQA (1) has selected a set of 17 HMO performance measures, drawn from HEDIS 2.0, in the areas of quality, access, membership, and utilization, plus plan descriptive information; (2) has recruited five HMOs (from 19 operating in MD) to participate in the project and calculate and submit their plan performance measures; (3) is assisting the five pilot participants in properly collecting and processing their data and calculating performance measures; (4) will audit data submitted by the five pilot participants; (5) will develop interpretive report formats ("report cards") for consumers, employers, and health officials; and (6) will evaluate the project. | Five plans. | Legislation enacted requiring establishment and implementation of an HMO evaluation system.<br><br>Pilot project, as described, began June 1994. To be completed January 1995. | $218,870. |

| State | Summary Description of Project | Number of Plans Participating | Implementation Schedule | Budget/Costs |
|---|---|---|---|---|
| Nevada | The Nevada Board of Health has proposed a regulatory change to require each HMO to report annually to the Commissioner of Health eight health service or health status measures and one measure of satisfaction/dissatisfaction of health care providers with that HMO. There are no stated plans to produce "report cards" for dissemination to the public. | Information not available. | Proposed regulatory change drafted. | Information not available.<br><br>General oversight, review, and reporting already occur. No retrospective medical record review needed. |
| New Jersey | The New Jersey Department of Health is developing a performance assessment system for managed care plans contracting with the state Medicaid program. With consultant assistance, the Department is developing health plan performance assessment measures built on, but not limited to, the HEDIS measures.<br><br>The Department of Health will receive data, possibly by electronic submission of patient records, and will develop and maintain the data base. | Information not available. | System in design. Information not provided on status of any required legislative or regulatory changes, if any. | Information not available.<br><br>Costs expected to be funded out of savings from establishing the Medicaid managed care program. |

| State | Summary Description of Project | Number of Plans Participating | Implementation Schedule | Budget/Costs |
|---|---|---|---|---|
| New York | The New York Department of Health and the Department of Social Services jointly operate the HMO Quality Measure Reporting System. Measures and reporting requirements for health plans differ slightly between their Medicaid population and their commercial populations.<br><br>Measures and reporting requirements for managed care plans relative to commercial enrollees are based almost entirely on HEDIS 2.0, with minor deviations. Measures and reporting requirements relative to Medicaid enrollees have been more substantially modified, relative to HEDIS 2.0, to provide information on well-child care and to modify the population groups used for reporting of various services. | All HMOs and "Pre paid Health Service Plans" operating in the state.<br><br>Managed care plans serve 325,000 Medi caid enrollees and will receive 1994 Medicaid payments of $300 million. | Currently operating as part of general state oversight of all health care providers and state supervision of Medicaid providers. | Information not available. |

| State | Summary Description of Project | Number of Plans Participating | Implementation Schedule | Budget/Costs |
|---|---|---|---|---|
| Utah | The Utah Office of Health Data Analysis has initiated a voluntary pilot project for data collection from several health plans (including major insurers and self-insured employers). The plans will submit outpatient hospital and ambulatory surgical center claims data for 1992 and 1993 to the Office of Health Data Analysis. The Office will audit the data reporting system and will edit and analyze the data, using commercial software.<br><br>The objective of the study is to assess the feasibility of this type of reporting, in terms of: (1) effectiveness of commercial software for data editing and analysis; (2) usefulness of claims data for statewide comparative studies; and (3) barriers, including cost, to sustained, reporting by all plans. Aggregated summary data will be released publicly. | Five to six companies that each offer several coverage plans. Information is submitted for each plan. | Agreements executed and voluntary pilot project underway, using 1992 and 1993 claims data. | Information not available. |

ERRATA SHEET

REPORT OF THE
VIRGINIA HEALTH SERVICES COST REVIEW COUNCIL ON

# ASSESSMENT OF THE COST, QUALITY, AND ACCESSIBILITY OF HEALTH PLANS

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

# HOUSE DOCUMENT NO. 47

COMMONWEALTH OF VIRGINIA
RICHMOND
1995

In MIPs, PPOs and HMOs, the use of services is reviewed by an external entity in an attempt to "manage" care.

The first of the managed care plans, the MIP, combines utilization review with a fee-for-service reimbursement system. PPOs and HMOs are distinct from MIPs in that they are integrated delivery systems. As integrated systems, these plans have a legal responsibility to deliver medical services to enrolled populations who seek care from a network of providers employed by, or under contract to, the plan.

The major distinction between PPO and HMO arrangements is the degree to which physicians assume financial risk. In PPOs, providers are usually paid on a discounted fee-for-service basis, and they do not participate in financial risk sharing. In the HMO arrangement, the organization and providers share varying degrees of financial risk for the care provided to enrollees.

### C. The Changing Health Care Environment

The U.S. health care system is in a state of transition. As health care reform is debated at both the state and federal levels, health care providers are already developing new ways of delivering services, and employers are joining together to pool their purchasing power. On the provider, or supply side of the equation, vertically integrated health systems are beginning to develop. On the demand side, purchasing cooperatives are gaining wider acceptance.

The newly developing vertically integrated systems have alternately been called "accountable health plans," "community health networks," or "organized delivery systems." While various definitions have been given for these new entities, the Virginia Joint Commission on Health Care's definition of a community health network is similar to many and is offered here. It is,

> "a network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population, and is willing to be held clinically and fiscally accountable for the outcomes and health status of the population served." (Draft Issue Brief 2: Community Health Networks, May 23, 1994)

Some of these organizations are already in existence. Other health systems have some components and are working toward further vertical integration (Greene, 1993). Looking toward the future, the American Hospital Association's (AHA) vision for health care reform calls for community-based, collaborative networks of providers focused on improving community health status. The AHA believes that key to accomplishing this vision are health plans that: