VIEWPOINT

ON MEDICAID MANAGED CARE

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# Medicaid Managed Care and Public Health Data

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THE PRACTICE OF PUBLIC HEALTH IS EVOLVING AS THE health care system changes from a largely fee-for-service system to a predominantly managed care system.[1-4] Several authors have suggested that these changes offer a unique opportunity to improve the public's health and to integrate prevention and public health goals into health care delivery to a much greater extent using managed care as the vehicle.[2,4,5-11]

This integration can be as straightforward as managed care organizations' incorporating public health goals such as those put forth in *Healthy People 2000*[12,13] in formulating policies and making strategic decisions. Purchasers can require certain clinical preventive service goals of the managed care organizations from which they buy health care services and enforce those goals by putting a certain percentage of the premium payments at risk.[14-17] Integrating a public health perspective can also be accomplished through the use of prevention-oriented quality assurance standards, such as the effectiveness of care performance measures in the National Committee on Quality Assurance's Health Plan and Employer Data and Information Set (HEDIS)[18] or similar efforts by the Joint Commission on the Accreditation of Hospitals and Healthcare Organizations, the Foundation for Accountability, or the Utilization Review Accreditation Council.

As purchasers require managed care organizations to be accredited and to achieve specific benchmark measures, assessment instruments such as HEDIS will become a more and more powerful driver of which specific services are delivered in managed care organizations.[19,20] And, as managed care assumes an increasingly dominant role in the nationwide health care marketplace, the quality and clinical performance standards included in HEDIS and similar instruments will shape the practice of clinical medicine in general. In very mature markets, these performance measures will define the standards of medical practice. To the extent that public health goals

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related to the delivery of clinical preventive services are included, these performance measures will be a major determinant of whether such goals are met.[19]

How then can the public health community, and specifically state public health agencies, influence managed care organizations to put a consistently high priority on clinical preventive services? State public health agencies have the responsibility to protect and promote the health of state residents and a special mandate to protect vulnerable populations. These populations are often served by other state-level agencies responsible for health care purchasing, for example, the state Medicaid agency, the state mental health agency, and whichever agency is responsible for services under the new Title XXI Children's Health Insurance Program. However, even when the state public health agency and the state Medicaid agency are in the same department in state government, often they operate in separate worlds, with different agendas, different cultures, and different languages. For state public health agencies, often the first opportunity to influence managed care organizations comes through Medicaid managed care. In what follows, we discuss Medicaid managed care as our example of how a state public health agency can use its data resources in interacting with its sister state Medicaid agency; however, we could construct similar scenarios for the interactions between state public health agencies and agencies responsible for mental health or the Children's Health Insurance Program.

As of June 1998, 45 state Medicaid agencies had implemented risk-based pre-paid capitation to varying degrees for at least some of their Medicaid beneficiaries, usually under Section 1915(b) "Freedom of Choice" waivers or Section 1115 Research and Demonstration waivers.[21] The reasons cited for moving from a fee-for-service system to a managed care system include improving access to care and containing states' shares of Medicaid costs; less frequently cited is the goal of improving the health of the Medicaid population.

Given the benefits that can accrue to the public health from the consistent provision of clinical preventive services by a well-designed and executed managed care program, we believe that state public health agencies should actively participate in the design and refinement of Medicaid managed care programs at the state level.[16]

**The role of data.** How can a state public health agency influence Medicaid managed care policy in the interest of incorporating public health priorities? Public health datasets can be the resource that provides a state public health agency "a place at the table" of Medicaid policy making. The datasets maintained by all state public health agencies are a unique resource; they can provide useful information about public health priorities, identifying geographic areas and populations that have special health risks and needs.[16,22,23] While the large majority of data useful to state Medicaid agencies will be claims data from their own systems, these agencies and the managed care plans with which they contract can also use public health data to make better decisions.[13] The uses of these data ranges from the extremely practical (for example, fraud prevention) to the academic (outcome research).

## Uses of Public Health Data

Public health datasets can be used in designing a benefits package, preventing fraud, developing rates, risk adjustment, quality assurance, and outcome research. (See Figure.)

**Design of benefits.** The basic benefits included in a Medicaid managed care package are defined by Federal law and regulation. However, a variety of

optional benefits can be added to the basic benefits package by states—including those for which the Federal government shares the costs and those for which states bear all financial responsibility. Public health datasets can be used to supplement claims data in choosing the optional benefits to include in a Medicaid managed care benefits package. State Medicaid agencies may decide to add specific optional benefits, such as outpatient prescription coverage, if patient populations with special needs, such as patients with HIV infection, are especially prevalent in a geographic region of a state. If vital statistics data show low statewide rates of prenatal care use, a state Medicaid agency may require aggressive outreach programs and a higher standard of prenatal care—for example, inclusion of nutritional counseling—in its benefit package. A state with a high prevalence of smoking, as measured for instance by the Behavioral Risk Factor Surveillance System, may require its contracting plans to cover smoking cessation programs as a benefit.

**Rate development.** Rate development refers to the establishment of a basic capitation rate based on prior claims experience and other actuarial data. Data from birth certificates can supplement claims data and help state Medicaid agencies to anticipate future Medicaid managed care costs, especially when birth certificates are linked to the Medicaid system in order to identify which mothers and babies are Medicaid beneficiaries. Moreover, statewide estimates can be calculated of the percentage of mothers with no or late prenatal care, the percentage of teenage mothers, the percentage of low birth weight babies, and fertility rates. These estimates are useful in anticipating future costs to the extent that population-based rates are assumed to be approximately the same as those for Medicaid enrollees. These statistics can then be used to predict the expected pregnancy experience of a covered population or the expected frequency of complications based on the prevalence of risk factors such as lack of prenatal care.

Comprehensive Children's Services (CCS), a health insurance program for disabled and chronically

**Figure. Public health datasets that can be useful in the design and refinement of Medicaid managed care programs**

| DATASET | DESIGN OF BENEFITS | RATE DEVELOPMENT | RISK ADJUSTMENT | QUALITY ASSURANCE | FRAUD PREVENTION | OUTCOME RESEARCH |
|---|---|---|---|---|---|---|
| Vital statistics (including birth and death certificates) | ● | ● | ● | ● | ● | |
| BRFSS | ● | | | | | |
| MCH surveillance (including birth certificates) | ● | ● | ● | ● | | ● |
| HIV/AIDS surveillance | ● | | ● | | | |
| Cancer registry | | | ● | | | ● |
| Vaccination registry | | | | ● | | |
| CCS | | ● | | | | |
| EPSDT | | ● | | | | |

BRFSS = Behavioral Risk Factor Surveillance System
MCH = maternal and child health
CCS = Comprehensive Children's Services
EPSDT = Early Periodic Screening, Diagnosis, and Treatment Program

ill children who meet certain financial criteria, and the Early Periodic Screening, Diagnosis and Treatment (EPSDT) Program are two major public health programs for infants and children usually administered through state public health agencies. If beneficiaries of these programs receive services from Medicaid managed care plans, a state public health agency can provide prior claims data to the state Medicaid agency that it may not have. Additionally, prior claims information from EPSDT will be key to rate setting under the new Title XXI Children's Health Insurance Program, which many states will implement using commercial managed care contracts and administer using their Medicaid infrastructure.

**Risk adjustment.** Risk adjustment refers to adjustments in the capitation rates paid to different health plans based on the risk profile of their enrollees. Risk adjustment for Medicaid is typically cost neutral at the state level, that is, the "adjustment" lowers the premiums for some plans and increases it for others while overall expenditures remain constant.[24]

Risk adjustment typically takes into account demographic and geographic factors in conjunction with prior claim or enrollment data. For instance, a health plan with a large number of AIDS patients should receive a higher premium than one without as many AIDS patients, or plans covering a very fertile population with many woman of childbearing age and many infants should have their premiums adjusted upward in relation to plans with fewer childbearing women and infants.[24] These risk adjustments could be further refined using public health datasets, especially vital statistics data, to calculate fertility rates and potential obstetrical and neonatal complication rates in enrolled populations. These data, however, must be timely because risk adjustment is done annually or even more frequently and public health datasets that lag months behind will be useless.

In states in which Medicaid managed care plans serve people enrolled in other programs such as Supplemental Security Income (SSI) and Supplemental Security Disability Income (SSDI), surveillance system data that describe the incidence and prevalence of high cost chronic conditions, such as AIDS, cancer, and Alzheimer's disease can be useful in risk adjustment models. For these data to be useful in adjusting rates, the distribution of these conditions in the Med-

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icaid population needs to be known or an assumption needs to be made that the distribution of these conditions for the state as a whole approximates the distribution in the Medicaid population.

**Fraud prevention.** Prevention of Medicaid fraud is a major political and financial issue. Public health datasets can be useful here as well. The regular linkage of Medicaid beneficiary rolls with state death certificate registries can prevent benefits from being collected on behalf of deceased beneficiaries. Again, the timeliness of vital statistics data is crucial.

**Quality assurance.** A number of public health datasets may be useful in comparing or documenting the quality of health plans.[25] Two datasets are of particular importance in helping Medicaid agencies design quality assurance program for its contracting health plans—vaccination registries and maternal and child health surveillance data, which include data collected as part of the Federal Title V Maternal-Child Health Block Grant program and states' birth records.

Beneficiaries may receive childhood vaccinations out of plan, and, if these data are not captured, plans will report artificially low vaccination levels. Vaccination registries, maintained by state public health agencies, can provide missing data and assure accurate reporting of beneficiaries' vaccination rates, both as a HEDIS performance measure (for children continuously enrolled in the plan for 12 months) and for their beneficiary population as a whole. Additionally, since much of the care purchased by Medicaid from managed care plans is provided to pregnant women and children, maternal and child health quality indicators are especially important for assuring high quality obstetrical and pediatric care. Data included in the Maternal-Child Health Block Grant reporting system and states' vital statistics data, such as birth outcome data, can supplement cruder obstetrical quality assurance measures such as percentage of low birth weight babies.

**Outcome research.** Several state Medicaid agencies are making major investments in developing databases for outcome research. These databases will focus primarily on encounter-level data from beneficiaries enrolled in both managed care and fee-for-service plans and can be linked to other health care delivery datasets such as those maintained by CCS, EPSDT, in-home support services, drug and alcohol programs, school-based clinics, and the Federal supplemental nutrition program for women, infants and children (WIC). Data from cancer registries or the Title V maternal and child health databases can provide additional information and can be used to validate data collected by both Medicaid and public health surveillance systems.

## USES OF PUBLIC HEALTH DATA BY MANAGED CARE PLANS

A variety of public health data may be useful to individual Medicaid managed care plans, for example, in the purchasing of hospital services. Hospital discharge data, which in some states are maintained by state public health agencies, can be used to develop hospital-specific standardized perinatal mortality rates and rates of preventable hospitalizations for both children and pregnant women. The WIC dataset can provide plans with the names of their enrollees who receive WIC services so plans can shift the cost of nutritional services from Medicaid to the 100% federally funded WIC program. Finally, public health datasets can be used by plans to better understand the special needs of their covered

populations. For example, knowing that Medicaid managed care beneficiaries in a geographic area have a high rate of HIV infection, a high prevalence of smoking, or include a large number of older people would help Medicaid managed care plans in deciding whether to develop special programs for these populations and use these programs in marketing their plans to consumers and Medicaid agencies.

## SUMMARY

In summary, there are a number of ways in which state public health data can be of value in the design of Medicaid managed care plans. At the level of the purchaser, such as a state Medicaid agency, public health data can assist in decision-making around pricing policy and can be useful in prioritizing interventions for those conditions that most severely affect the covered population. Quality assurance standards such as the HEDIS clinical performance measures can be used to define a baseline of prevention-oriented services or, by adding additional customized data points, to emphasize a particular service. From the standpoint of the managed care plan, public health data can be useful in understanding the needs of a community it serves or would like to serve and in estimating the prevalence of various conditions in that community that will influence the premium it will charge. Thus, there are multiple routes through which public health goals and priorities can be incorporated into managed care and can leverage the power of managed care to improve the public's health.

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