

Analyses for Improved Information in Managed Care: The Data Framework for the 21st Century

The Survey and Analysis Branch of the Center for Mental Health Services (CMHS) is currently supporting a project entitled *Analyses for Improved Information in Managed Care* conducted by Abt Associates, Inc., the National Association of State Mental Health Program Directors (NASMHPD), and the Mental Health Statistics Improvement Program (MHSIP).

This project will specify the requirements for a new, integrated information system that should enhance collection and reporting of mental health data and contribute to improving the quality of care for people with serious mental illness. Designed to expedite the process of creating an integrated mental health information system, this effort builds upon a decade of work in the mental health field that has produced uniform core data sets for enrollment, encounter, and administrative data, clinical practice guidelines for many mental disorders, and a variety of tools for measuring outcomes, performance, and the quality of care.

The goals and activities of the project are consistent with and complement congressionally mandated efforts to establish standards for general health care data and to achieve their uniform implementation through the Administrative Simplification provisions in the Health Insurance Portability and Accountability Act (HIPAA) of 1996 (P.L. 104-191). They are also consistent with HIPAA provisions to protect the security and confidentiality of health information associated with individuals.

The mental health field currently lacks the standardized data needed to manage mental health care systems effectively (i.e., population, enrollment, encounter, and cost data) and uniform measures to evaluate the quality of care with respect to either practice or outcomes. Specifically, no widely-accepted clinical or system guidelines are available to standardize practice or to provide criteria for judging provider and system performance, nor is there a data system to collect this information in a uniform and comparable way.

Many of the necessary building blocks exist, however. In its 1989 report, *Data Standards for Mental Health Decision Support Systems* (commonly known as FN-10) MHSIP recommended standards and presented minimum data sets for client, encounter, human resources, financial, and organization data. Voluntarily adopted by many state mental health authorities, these standards are being revised by the FN11 Task Force to facilitate enrollment tracking, include encounter and performance indicator data, and address the special needs of children. FN11 contains 13 fields of information: client master data elements, client eligibility data elements, client periodic data elements, encounter data elements, provider/organization data elements, provider/organization periodic data elements, human resources data elements, and financial data elements.

There is also noteworthy activity in the mental health field in regard to clinical guidelines, performance indicators, consumer outcome measures, and information systems. Important contributions to each of these areas have been made by consumers of mental health services and family members; state mental health authorities and federal agencies; voluntary non-profit workgroups and advocacy organizations; providers, professional societies, and academic researchers; managed care entities, software and hardware vendors, and information systems integrators.

The over-riding purpose of the new prototype information system is to link standardized data sets of several kinds (i.e., population data, enrollment data, encounter data, and financial data) with standards of practice (i.e., clinical and system guidelines) and with instruments for evaluating care (i.e., consumer outcome measures, consumer-oriented report cards, and system performance indicators). Data are of most value for clinical and administrative decision-making to the extent that these types of linkages exist.

The mental health care system is linked to many other systems of care: for example, health care, social services, educational and vocational services, housing, and corrections. Sharing information across these systems would help improve the quality of care for consumers and enhance the efficiency of managing these systems.

A closer look at the mental health care system shows that it is shaped by the community's values and principles and that these are articulated in the ethical standards that stipulate

appropriate behavior for those involved in the service delivery system and in the pragmatic standards that regulate clinical and administrative services. These standards are operationalized in clinical guidelines that specify the best pharmacologic and psychosocial treatment practices and in system guidelines that specify, on the one hand, the best treatment practices involving multiple caregivers and agencies (e.g., Program for Assertive Community Treatment [PACT]) and, on the other hand, the best administrative and management practices for organizations.

The prototype information system makes these clinical and system guidelines available to providers and managers, respectively. Providers and managers refer to these guidelines as they perform their daily activities; their *actual* performance (as encoded in the information system) is compared to the guidelines to determine how faithfully they adhere to them. Provider and manager performance is measured directly in terms of various system performance indicators and report cards and indirectly in terms of consumer outcomes. If consumer outcomes and system performance do not meet the community's standards, then improvements must be instituted. The more closely providers and managers adhere to them, the more useful are clinical and system guidelines as explicit expressions of practices.

The information system records data collected from various sources at specified times. Population data, gathered annually, describe the demographic characteristics, prevalent medical and mental conditions, health status and level of functioning, and quality of life of the community. Enrollment data (recorded as consumers enroll in health plans) describes demographic, insurance, and baseline health/mental health status of consumers and family members. Encounter data are collected on all who use services, at the time of service, and characterize users of services (e.g., health/mental health status, diagnosis, symptoms, functional status, etc.), types of services used, and frequency of use. Financial data reflect costs of the services and other administrative/organizational costs.

When population, enrollment, encounter, and financial data are linked to data generated from guideline fidelity measures and other quality assessment tools (i.e., system performance indicators, report cards, consumer outcome measures), they can be used for a wide variety of important purposes. For example, they can show the degree of adherence to guidelines: if a system guideline requires a managed care organization to provide mental health services to certain percentages and categories of a state's population, then enrollment and encounter data will show whether these standards have been met. If a clinical guideline specifies that an individual with certain clinical characteristics should receive a particular treatment, then encounter data for that individual will show whether or not the treatment was provided; data aggregated from many individuals will show the extent to which a system of care provides expected treatment.

Similarly, linking enrollment and encounter data with data from consumer outcome and system performance measures provides information to guide decision-making in regard to the care of individuals and populations. The effects of these clinical and administrative decisions can, in turn, be observed by repeating the outcome and performance measurements, thereby producing information to guide change in clinical and administrative practices.

The integrated mental health information system should be used by and meet the needs of a broad group of users including consumers, families, providers, payors, managed care organizations, state mental health authorities, administrators, researchers, policy makers, advocates. It should ensure privacy and confidentiality of data and be culturally competent. It should facilitate clinical and organizational decision-making and monitor the outcomes of decisions taken. It should be able to expand in terms of numbers and types of data elements and numbers and types of subjects and be able to be modified over time. It must be able to link with information systems in a broad range of agencies, locations, programs, organizations (e.g., social service, corrections, consumer-run programs, and 'wrap-around' services such as housing, vocational rehabilitation) and be accessible to persons with limited technical expertise.

The key components that have been suggested for inclusion in the integrated mental health information system, include population data, enrollment and encounter data, financial data, consumer outcomes, system performance, clinical guidelines, system guidelines, as well as the linkage issues and over-arching issues (cultural competency, privacy) that need to be addressed. We have specified requirements for each key component that indicate what the field has achieved to date; where there are gaps and conflicts; and where future work should be

focused. For population, enrollment, encounter, and financial data and for consumer outcome measures, system performance indicators, and report cards, we have organized the field's achievements and remaining work in terms of the degree of consensus that exists on *domains* (issues, categories or topics of interest), *indicators* (measurable activities, events, characteristics or items that represent a domain), and *measures* (the instruments used to assess, evaluate, and measure an indicator); whether the measures have been experimentally *field tested and/or implemented*; and whether the component is fully *ready for inclusion* in the information system.

Taken from a project description provided by Abt Associates, April 1999.