X. Requirements for Performance Indicators and Report Cards

What Is the Intended Purpose or Function of this Component?

The purpose of performance indicators is to evaluate and monitor how well a system responsible for providing mental healthcare is performing; to report the information in quantitative terms; and to direct the system's efforts and resources toward desirable goals. The fundamental problem with defining such a set of indicators is the lack of consensus on these goals and, therefore, lack of definition of what constitutes "good" performance.

The various stakeholders of a mental health system—consumers, family members, advocates, providers, purchasers, and policymakers—often have different expectations of the system. A purchaser may emphasize efficiency and cost while a consumer may consider outcomes more important. One stakeholder may define a "good" system as one that contains costs and increases consumer satisfaction. Another stakeholder may consider a system successful when it helps a consumer participate productively in the life of the community. These different values and expectations result in different choices of indicators and in the salience given to these indicators. In other words, the values and expectations of stakeholders in a system shape the character of the performance measurement system. They also shape the goals and objectives of the system which, in turn, determine selection and ranking of performance indicators and the criteria by which performance is judged to be adequate.

Much of the debate and lack of consensus on which performance indicators should be used is tied to differences in stakeholder perspectives on the objectives of the system and the priority of different objectives. Other considerations in selecting performance indicators include the state of the science of mental health performance measurement; the relationship of performance indicators to desired outcomes; the sensitivity of measures and other methodological issues; and the burden and cost of developing, implementing, and maintaining data collection systems to support performance indicators.

There is currently no standardized set of performance indicators for mental health systems on which to build a set of data requirements. Several national, state, and county initiatives related to mental health performance measurement are currently being implemented. They use different performance indicators and measure similar indicators in different ways. Still, there is an emerging consensus on the critical aspects of performance measurement and steady movement towards standardization.

Three major factors determine the purpose and functions of performance indicators:

- the perceived objectives and priorities of the mental healthcare system that is being evaluated;
- the level at which the performance indicators will be used; and
- the philosophy and values related to the use of performance indicators.

Objectives and Priorities of the Mental Healthcare System

From one perspective, the objectives of the mental healthcare system may be to provide adequate care at reduced cost. Here, performance indicators would be selected to monitor consumer satisfaction, complaints from consumers, and overall costs. From another perspective, the objectives of the system may be to improve housing and employment opportunities for persons with serious mental illness, reduce hospitalization, and support integration in community life and independent living. Here, performance indicators would be related to housing, employment and reduced hospitalization. Clearly, the different perspectives and priorities given to different objectives define the purpose, functions, selection, and choice of indicators.

Other factors that affect performance measurement are related to the populations to be served and the services that are covered. For example, if children and adolescents were part of the covered population, measures related to these populations would have to be included. Similarly, if medications were not part of the benefit package, monitoring the percentage of persons who received atypical medications would not be relevant.

Level of Use

Another factor determining the selection and function of a performance indicator is the level at which it will be used. Although this is somewhat arbitrary, performance indicators could be used at the levels of the population, the mental health care system, programs, and individual providers.

At the population level, indicators could be developed for a country, a state, a geographic area or a population designated for coverage by a particular entity. The indicators would be for a population whether they received services or not. At the level of the mental health care system, performance indicators would be focused on those persons who actually received services. Performance indicators related to a program would be limited to evaluating a component or type of service. At the level of the individual provider, indicators would be used to profile and monitor the provider's performance.

The level at which performance is measured will determine the type and specificity of performance indicators. A hospital administrator may consider several hospital-specific indicators critical for management such as occupancy rates, lengths of stay, and unauthorized departures. At the system level, a performance indicator related to the quality of care in hospitals might be more global, for example, the number of readmissions within thirty days.

The bottom line is that performance indicators can and should be used at every level to monitor the performance of individual providers, programs, the mental health care system, and the population. Different indicators and degrees of specificity are required at each level, but, at all levels, indicators are tools that help meet objectives and improve quality and efficiency.

Philosophy and Values Regarding Performance Indicators

A system's values and philosophy will determine whether it is willing to assume the burden of data collection, create the necessary administrative and information technology infrastructure, and accept the developmental and on-going costs of implementation. Philosophy also determines whether a system is willing to use only measures that have been shown in research studies to relate to specific desired outcomes, or whether it will adopt a more developmental approach and use measures that

have not been scientifically ratified but that have face validity related to the specific goals and objectives of the mental health care system.

Philosophy also determines whether a system focuses on proximal outcomes and measures performance in terms of indicators that can be linked to the more immediate effects of treatment or services such as change in functioning or symptom level, or whether it includes distal outcomes, that may relate less closely to the immediate impact of treatment or services and more to societal goals such as school attendance and increased employment.

Based on the above discussion, the major purpose and functions of performance indicators, by stakeholder group, are provided in the table below.

Purposes and Functions of Mental Health Performance Indicators by Stakeholder Group

For Whom?	For What?
Payors	Purchasing decisions Monitoring the performance specified in the contract
Consumers	Enrollment/renrollment decisions Choosing providers Monitoring quality and responsiveness of plans and providers
Providers	Quality management
Managed care organizations	Provider selection/retention Marketing to payors Quality improvement
Accreditation agencies	Monitoring regulations and standards
Governmental bodies	Policy-making Purchasing decisions Accountability

As the table shows, payors need performance indicators to make purchasing decisions and to ensure that contract provisions are met. Consumers need information on performance to make enrollment decisions, to choose providers, and to track quality and responsiveness of the different systems of care available to them. Providers need performance indicators for quality management and improvement purposes. Managed care entities need performance indicators for provider selection and retention, marketing and quality improvement. Accreditation agencies are starting to use performance indicators to monitor adherence to regulations and standards and to guide accreditation and program review decisions. Finally, governmental entities need performance indicators for policy-making, purchasing decisions, budget formulation, and monitoring accountability.

This is a formidable array of functions related to performance indicators and within the context developed above, reflects the complexity of the issue and the various rationales and approaches of

different entities. Too often, performance indicators are viewed as the panacea for all the problems within mental health care systems and organizations. This misconception must be laid to rest. Performance indicators can "indicate" possible successes and accomplishments and areas in which there may be problems. They can also guide the next tier of investigation and analysis. They are not solutions.

Performance indicators are one tool in the arsenal of efforts to improve quality, management, and accountability. They are not a substitute for quality assurance, management audit or contract monitoring activities. In fact, how performance indicators are used and embedded in these activities and how they relate to and support these activities must also be properly specified and understood to develop a useful performance indicator system.

An analogy to illustrate this is that performance indicators are like the reconnaissance photographs obtained by spy planes to monitor abnormal or unusual activity. Once such activity is detected, more detailed photographs, greater analysis or other forms of information-gathering may be necessary to determine and explain what is going on.

Mental Health Report Cards

Mental health report cards, like school report cards, are designed to present the results of performance in critical areas so that the intended audience can evaluate performance in relative terms. In this sense, the data requirements for a "report card" are not different from those for performance indicators.

Performance indicators are the constituent elements of a report card. Particular performance indicators are associated with particular domains and "grading" can occur at both the level of the performance indicator and the level of the domain. Just as a school report card can provide a grade for English and break it down into grades for reading, comprehension, writing, etc., mental health report cards can provide a grade for access and break it down into grades for timely response, availability of specialists, or responsiveness to minorities. The fundamental purpose of a report card is to provide a comparison, either among mental health care systems or with some standard benchmark.

What distinguishes a report card from a set of performance indicators? Performance indicators monitor performance in critical areas such as access, quality and outcomes. The results of the performance measurements are then used for accountability, contracting, budgeting, planning, quality improvement or purchasing purposes. While they use the information obtained from performance indicators, report cards generally imply a summative, global evaluation of an entity so that the intended audience can make a yes-no decision or arrive at an overall rating of the entity's performance. They report the same data as performance indicators, but do so in a more focused, simplified way. User groups are the same as are the kinds of decision-making facilitated by report cards. For example, purchasers may use report cards to evaluate managed care organizations; managed care organizations may use report cards to evaluate provider organizations; consumers may use report cards to evaluate managed care organizations or provider systems; advocacy organizations may use report cards to evaluate state mental health systems, provider organizations, and managed care organizations.

In sum, then, report cards are more global in nature, generally present comparative ratings of similar organizations, use a format that presents the results of performance measurements in summary fashion. A report card typically does not present results from the complete set of performance indicators for which data are needed or were collected. For example, a mental health report card may report "the proportion of persons with schizophrenia in a given health plan" as a global measure, although the performance indicators used to provide this information could also provide additional data, e.g., cost per consumer with schizophrenia receiving new generation medications, number of inpatient days used by a consumer with schizophrenia receiving new generation medications, etc.

What Information is Required to Accomplish this Purpose?

In the field of performance measurement, the term *domain* refers to broad areas of concern such as *access*, *quality*, and *outcomes*. The term *indicator* specifies an operational (and measurable) aspect of a domain. For example, a performance *indicator* that reflects continuity of care (an important aspect of the quality *domain*) is "the percentage of persons discharged from inpatient facilities who receive ambulatory services within 7 days." *Performance measures* are the specific methodologies that define the numerator and denominator used to compute the value for the indicator. The performance measure associated with the indicator in the example would define ambulatory services, specify how to count persons who received such services, and describe the way in which the numerator is calculated. Similarly, the denominator would be determined by providing the definition of a discharge and the period of time over which such discharges would be counted. The performance measure would then be computed by dividing the numerator by the denominator.

At a broad level, there is consensus on the domains used by various mental health performance measurement systems and on the questions that performance indicators need to address regarding mental health systems. These domains and questions include the following:

Questions and Domains Addressed by Mental Health Performance Indicators

Question	Domain
Who is (and who is not) receiving services? (Or put another way, are people who need services receiving them?)	Access
Are people who need services receiving them easily and conveniently?	Access
Are a range of appropriate services available and easily accessible?	Access Quality/Appropriateness
Are people receiving services appropriate to their need and consistent with the state-of-the-art?	Quality/Appropriateness
Do consumers have choice of provider, plan, treatment, location, etc.?	Access Quality/Appropriateness
Are the services provided of high quality?	Quality/Appropriateness

Questions and Domains Addressed by Mental Health Performance Indicators	
Question	**Domain**
Are people recovering or improving or getting worse as a result of services?	Outcomes
Are resources being used efficiently?	Structure/Plan management
Are efforts taking place to prevent or lessen problems that result in consumers seeking services?	Early intervention/Prevention

Answers to these questions would, to a large extent, address the functions associated with various stakeholders described in the previous section. There is an emerging consensus on *what* needs to be measured to answer these questions, but not on *how* to measure. That is, there is increasing agreement on the performance indicators that should be used but much less agreement on performance measures.

An analysis of performance indicator initiatives was conducted by the National Committee on Quality Assurance (NCQA), the Mental Health Statistical Improvement Program (MHSIP), the American College of Mental Health Administrators (ACMHA), the American Managed Behavioral Health Association (AMBHA), and the National Association of State Mental Health Program Directors (NASMHPD) Research Institute. Below are listed some of the indicators associated with various domains that were identified as part of the emerging consensus on what needs to be measured.

Access

- Timeliness of response
- Penetration rates for specific populations (age, gender, diagnosis, culture)
- Range of services
- Barriers, denials, disenrollment
- Consumers' perceptions of access

Quality/Appropriateness

- Timeless of follow-up after hospitalization
- Availability of services that promote recovery (atypical medications, assertive community treatment [ACT], supported employment, supported housing)
- Availability of consumer choice (provider, plan, treatment, family involvement)
- Access to health services
- Availability of appropriate services/specialists
- Consumers' perceptions of quality/appropriateness

Outcomes

- Reduced severity of problems/symptoms
- Improved functioning
- Employment
- School attendance/performance
- Living situation
- Involvement with the criminal justice system
- Quality of life
- Reduced substance abuse
- Fewer adverse outcomes
- Recovery
- Consumers' perceptions of outcomes

Structure/Plan management

- Cost per unit service
- Cost per consumer
- Administrative costs
- Consumer/family member involvement

Early intervention/Prevention[1]

- Substance abuse screening
- Use of self-help/self-management
- Identification of high risk populations
- Psycho-educational programs

As McGlynn (1997, 1998) points out, the task is to select measures, either process or outcome, for which data can be obtained at a reasonable price and within a timeframe that is meaningful to users. The disadvantage of process measures are that they may have little meaning for consumers unless the link to outcomes can be made explicit and that the "right" rate may not be known (e.g. penetration rates, emergency room rates). The advantages of outcomes measures are that they tend to be more meaningful to potential users; more clearly represent the goals to be achieved; and can provide a summary measure across different treatment modalities and conditions and types of care.

McGlynn also identifies methodological criteria for evaluation. These include: scientific soundness (clarity, reliability, validity and adaptability); adequacy of implementation (data availability, comparability, credibility); and interpretability of results. Within each of these areas, evaluation criteria and rules need to be established to ensure that adequate information is obtained.

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[1] There is less consensus on this domain than on others.

Who Provides this Information?

The sources of information for the indicators are varied and include consumers, family members, clinicians, management information systems (including claims systems), and administrative systems (including enrollment systems).

The source of information is contingent on the measure to be used for a particular indicator. The level of specificity and frequency of measurement can vary greatly, depending on the measure selected. This has a tremendous impact on the demands placed on information systems and the associated data requirements.

For example, an indicator associated with the availability of appropriate services might be the proportion of persons with schizophrenia receiving supported housing. Or, as one system proposes, it could be the proportion of adults with a diagnosis of depression receiving subclinical levels of medication. Either of these indicators could be used as an indicator of the availability of appropriate services. Clearly, the demands on information systems and data collection would be considerably different.

Similarly, different measures might be used for the same indicator. For example, the indicator might be "the percentage of persons with mental illness who are connected to primary care." One measure might by the proportion of persons with mental illnesses who had an annual physical exam; another might be the proportion of persons with mental illnesses who had any non-emergency contact with a primary care physician. Here the different measures associated with the same indicator would have different data requirements and specifications.

A major factor in the implementation of performance measurement systems is the time and burden placed on the person providing the information for the performance measure. From a clinician's perspective, the completion of forms or instruments for performance measurement is seen as an administrative burden. From the perspective of a consumer or family member, performance measurement raises concerns about confidentiality and how the system might use the information to limit or withhold services.

The Institute of Behavioral Health care conducted a survey of managed care organizations, group practices, specialty behavioral health facilities, and community mental health centers to evaluate the burden and utility of 28 widely used indicators. The study showed which indicators were perceived to provide the most and the least cost-effective information, based on scales that measured the "value" of the indicator for internal quality improvement and for external reporting and on a scale related to "costliness" of obtaining the information needed. The more cost-effective indicators focused on access and utilization, although one of the consumer satisfaction and one of the outcome measures were also rated highly. The least cost-effective indicators where those involving traditional documentation review approaches to quality assurance and prevention services.

What Information is Produced to Accomplish this Purpose?

Two types of information are generally produced by performance indicators: first, information that permits comparison of the entity across time; and second, information that permits comparison of entities with each other or with some benchmark.

In the first case, the objective is to monitor the trend in performance using past performance as a benchmark. The performance measurement taken at a previous time is compared with the performance measurement at a later time. This provides some indication of whether performance is improving or not. Such measurement does not necessarily show whether the entity is performing well, but it does provide information on the direction of movement.

Comparisons across entities provide information on their performance relative to each other. A major methodological concern is that other factors may account for the differences and that such comparisons do not reflect relative performance accurately. For example, one entity may do worse on a particular outcome measure than another, which may suggest that the entity is not performing as well. However, the reason for the difference may be that the entity is serving a more dysfunctional population; such differences must be taken into account before comparisons can be considered valid.

Depending on the stakeholder group for which the report is intended, reports will provide different levels of detail and specificity. Formats may also vary.

Who Uses the Information?

Performance indicators can be used for several purposes including accountability, quality improvement, planning, budgeting, marketing, contract negotiations and management, purchasing services, choosing providers, choosing health plans, policy making, and research. The fact that performance indicators can be used for these various functions does not mean that the entire burden of that function will be borne solely by the performance measurement system. The performance measurement system is only one tool among others needed to fulfill that function.

Performance indicators provide a picture of what may or may not be working or not, but there may be reasonable explanations of the results besides factors related to performance. These will require special studies or additional quality management efforts to supplement and clarify the information obtained through the performance measures themselves.

Conversely, just because no problem is indicated by a performance measure does not mean all is well. For example, although an indicator suggests that school attendance by children with mental illness is high, it does not mean that they have learned to read. While performance indicators are important and necessary, they are seldom—for the functions and goals they are intended to achieve—sufficient.

Given the wide variety of functions they assess, performance indicators can be used by payers and purchasers of services, consumers, providers, managed care organizations, accreditation agencies and governmental bodies. Within a particular organization, performance indicators can be used by clinicians, managers, auditors, public information officials, and consumer affairs divisions.

A major concern related to performance indicators at any level is the unintended, adverse use of the information. While the focus of performance measurement is accountability, quality improvement, and increased efficiency, the information could also have a negative impact on consumers, providers, or managed care organizations. For example, providers who do not meet some performance criteria could lose a contract or be subject to sanctions.

Another concern is that instituting an indicator places an inappropriate emphasis on a particular aspect of a program. The adage is: "What gets measured, gets done." Here, the fear is that focusing attention through an indicator will result in greater effort being placed on those activities that are directly related to the indicator at the expense of other clinical activities.

How Ready is this Component for Inclusion in the Information System?

Performance indicators are being used widely in both the public and private sectors for the several functions reviewed above. Currently, however, there is considerable variability and idiosyncrasy in the use of both performance indicators and measures. As standardized sets are developed and are required, existing systems have to undergo major transformations. Existing systems may not have the capacity to report some of these indicators.

As performance measurement systems are implemented, a major aspect in the definition and selection of indicators and measures is the burden and cost associated with collecting and analyzing the data needed to calculate the measure. The development of performance measurement systems will depend on the ability to obtain and report data in a timely way.

Several methodological issues need to be addressed in the implementation of performance measures and report cards including: risk adjustment for different populations and subgroups; weighting of the various performance indicators within a domain if domain scores are being used; and weighting of the different domains if an overall rating or score is being developed.

What Future Efforts are Required for Readiness?

Several major initiatives are currently under way related to performance measurement. Most are directed toward identifying the performance indicators that would constitute an ideal set. These have been described above. In an overarching, strategic sense, the following efforts are needed to build on this platform of current implementation and knowledge:

- development of standardized definitions of measures;
- resolution of key methodological issues and development of guidelines for implementation; and
- development of guidelines for analysis and reporting data.

Standardized Definitions of Measures

As interest in the area of mental health performance measurement has grown, various groups and organizations have developed their own approaches to performance measurement. Within their spheres of influence and organizational jurisdiction, efforts are underway to test and implement these approaches.

An example of such an effort is the work of the National Mental Health Program Directors' (NASMHPD's) President's Task Force on Performance Measures. The framework proposed by the

Task Force has been adopted by the 50 state mental health commissioners. Working with the Center for Mental Health Services, 16 states are going forward with a 3-year initiative to report the same performance measures for similar populations. Calibration studies and studies to enhance understanding of the relationship among performance indicators and between performance indicators and outcomes will also be part of this effort.

The American Managed Behavioral Health Association (AMBHA) has also initiated projects to develop and obtain data from a uniform set of performance indicators for behavioral health care organizations. Similarly, the American College of Mental Health Administration (ACMHA) is working on a project to develop a standardized set of indicators for accreditation organizations (i.e., NCQA, JCAHO, CARF, and the Council on Accreditation).

Sets of performance indicators are being promoted under still other organizational rubrics. As we learn from these initiatives, an important activity will be to develop "industry" standards relevant to the entire range of organizations and stakeholders. This should involve efforts related to calibration and consistency across all major performance measurement sets.

Methodological Issues and Guidelines for Implementation

Even if there were agreement on the definitions of performance indicators, methods of data collection and reporting would be different: for the same indicator or measure, for example, data could be collected for an entire population or for a sample. Even if the same methods were used B say, the same mail survey in two different communities B response rates might vary from 20 percent to 60 percent in the different areas. Clearly data derived from these two surveys would not be comparable: knowing who is and who is not responding is critical for understanding the bias inherent in these different responses.

Parameters for data collection and analysis are an integral part of the performance measurement development process. The performance indicators in the National Committee on Quality Assurance's Health Plan Employer Data and Information Set (HEDIS) have detailed descriptions of data collection parameters and standards. The toolkit developed by the Human Services Research Institute (HSRI) for the MHSIP Report Card is an effort in this direction. A seminal paper by Teague and colleagues on methodological considerations in the implementation of performance indicators and the Children's Outcomes Roundtable efforts to develop guidelines for performance indicators relevant to children have both advanced the field. More work needs to be done in these areas, however, if performance indicators are to become part of the currency of mental health systems.

Guidelines for Analysis and Presentation of Data

Different stakeholders have different information needs in regard to performance measurement efforts. A program manager may need more information and more detail than a legislator. Similarly, different stakeholders are comfortable with different formats for presenting the data and further work is needed to test and promote the most relevant applications. The field should explore new technologies to develop "smart" reports that are layered with information at different levels and that can produce reports in customized tabular and graphic formats.

At this stage, the state of the science of mental health performance measurement is most limited by the fact that the same concern and even the same performance indicator are measured in several

different ways. There is very little work under way to test which way works best for which purpose. There also needs to be more research to test the validity of particular indicators and measures and to understand the relationships among indicators and measures. These are critical areas for research if mental health performance measurement is to be integrated into larger systems of health care.

Specific Next Steps

Lack of proper understanding of the relationship between process and outcomes in mental health is at the root of the imprecision and lack of consensus in mental health performance measurement and related standards. As clinical and systems guidelines are better defined, so will mental health performance indicators and measures. Performance indicators will then be more clearly linked and identified with desired outcomes. Several steps, however, can be taken to move performance measurement in mental health in the right direction.

- **Link performance measurement to evidence-based practices.** As knowledge of effective treatment, support services, and organizational structure increases, performance measurements should be built around this information.

- **Identify key performance indicators that can be used across different levels within an organization and across different types of organizations.** At a minimum, this requires identification of a core set of performance measurement areas (domains) that can form the basis of a standardized performance measurement system.

- **Develop a program of research.** Research is needed to understand the relationships among performance indicators; understand the relationship of performance indicators to outcomes; and identify indicators that could constitute a standardized "core" set.

- **Develop and test guidelines for performance measurement activities.** We need guidelines to direct activities for performance measurement, including development of indicators, assessment of their acceptability, procedures for implementation, and methods for analyzing and reporting results

- Develop education and training materials. We need to develop materials related to mental health performance measurement to help consumers, family members, providers, and managers understand better the value of performance measurement and how to make the most use of this type of information.

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