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QUALITY ASSESSMENT IN MENTAL HEALTH

R. H. Brook, C. J. Kamberg, K. N. Lohr

A Rand Note

prepared for the

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Rand
SANTA MONICA, CA. 90406

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PREFACE

The work reported here was performed as part of the Rand Health Insurance Study, funded by a grant from the U.S. Department of Health, Education, and Welfare. The Health Insurance Study is a social experiment in which health status is examined over time in terms of differing levels of health insurance. Evaluating the quality of medical care is one aspect of that study. Assessment of mental health care, and of psychosocial aspects of medical care, is a relatively unexplored area. The issues raised in this Note should provide helpful guidance to persons interested in these two aspects of quality assessment. A slightly different version of the Note will appear in *Professional Psychology*, 1979, in press.

SUMMARY

This Note examines the quality of mental health care and the psychosocial aspects of medical care. This involves several tasks: defining quality of care, choosing an appropriate focus of quality of care studies, identifying applicable and feasible methods, and guaranteeing the reliability and validity of the data used in the assessment. Observations relevant to mental health professionals were: (1) Dogmatic statement about methods to assess quality of mental health care should be avoided at this time, because quality of care studies will require more effort than medical evaluations for developing criteria and for collecting reliable and valid data. (2) Setting valid process or outcome criteria is difficult and must be done carefully, with the input of many organizations and professional groups. (3) Mental health professionals should consider two related areas of study: the psychosocial elements of care for persons with nonmental conditions and the care for patients with primary mental disorders.

QUALITY ASSESSMENT IN MENTAL HEALTH

During the past decade, growth in the quality assessment field has been explosive. Publications have included a variety of bibliographies (e.g., Williamson, 1977) and literature reviews (e.g., Williams and Brook, 1978). Although these publications have focused on quality assessment in "medical" diseases rather than in mental diseases, the issues in performing quality assessment are generic. They are also numerous and complex and cannot be discussed in any detail in this short report. We can, however, begin to deal with some issues that pertain to the development of quality assessment in mental health. In particular, we will discuss the focus of quality assessment as it pertains to this field, noting ways in which mental health professionals can contribute to quality of care studies of nonmental conditions. We will also comment on the problems encountered in developing quality assessment mechanisms for mental health evaluation, in the hope that such a discussion will result in more carefully performed quality assessment studies of mental health.

All quality assessment activities have a common set of characteristics or requirements: A condition must be selected for study; a way of identifying the deficiencies in care for that condition must be developed; criteria of good care must be established; a data collection instrument to obtain information regarding compliance with these criteria must be produced; personnel must be hired and trained to do the assessment; and the data must be analyzed. Finally, to be meaningful, the results of the analyses must eventually be used to educate physicians, change the care system, or make regulatory decisions, such as imposing sanctions on a facility or provider, or some combination of these actions. Each step in this process involves major decisions that affect the cost-effectiveness of any quality assessment program.

PROBLEM IDENTIFICATION FOR MENTAL HEALTH QUALITY ASSESSMENT

The issue of what should be studied in the mental health field at first appears simplistic. Mental health personnel could follow the

same strategies as those used by "medical" people to identify problems: (a) They could select mental illnesses that occur most frequently; this is essentially an epidemiologic approach. (b) They could choose illnesses that presumably have the greatest potential benefit in terms of health improvement. These two approaches can be combined; i.e., mental health personnel can identify those problems in which a condition's frequency of occurrence times the amount of health benefit achievable by improvement of quality is greatest.

The combination approach to problem identification requires knowledge about the distribution of deficiencies in quality of care among mental health professionals and in the mental health system. Unfortunately, the amount of information currently available on such deficiencies is limited. This lack of data may produce studies (especially at the beginning of any quality assessment activity) focused on trivial, nonexistent, or essentially uncorrectable problems (regardless of how carefully the studies may be designed and carried out). A good deal of exploration and experimentation will be required; experiences (acquired) in defining problems and in documenting the frequency and intensity with which they occur must be shared so that the number of unproductive efforts can be minimized.

Identifying problems for study may be more exciting for mental health personnel than for nonmental health personnel, even if it is also more difficult. Mental health professionals can opt to study problems essentially outside the traditional boundaries of their discipline; i.e., they may be able to choose more readily between "patient-centered" quality assessment activities and the more frequently used "provider-centered" ones.

Patient-centered vs. Provider-centered Quality Assessment

A provider-centered study is generally performed by a single health discipline--e.g., internal medicine or physical therapy--and concentrates on those aspects of a problem that are of greatest interest to that discipline. An internist, for instance, could examine the quality of care provided to a patient with hypertension and would probably concentrate on the technical management of the patient's

high blood pressure. It is unlikely that very much, if any, attention would be paid to the psychological outcomes of patient care and to the effect of quality of care on such outcomes. A patient-centered study, by contrast, will probably involve several health disciplines and attempt to consider various aspects of the patient's life simultaneously. It is, therefore, much more likely to involve psychosocial factors, and to do so in conjunction with other elements of the patient's care.

Quality assessment by nonmental health personnel clearly could benefit from the input of mental health professionals. Brook et al. (1977) developed a framework for assessing quality of care in terms of short-run outcomes. (Outcome assessment depends on measuring some aspect of the patient's health status after he or she has received health care.) In developing measures for diseases such as breast cancer, Brook et al. (1977) actively involved mental health professionals (who are usually excluded from such efforts) and thus were able to compile a comprehensive list of outcomes. For instance, in the list of measures for women with a breast mass, outcomes such as sexual adjustment, body image, anxiety, and depression were explicitly included as relevant for any study of quality of care (Avery et al., 1976). This is but one way in which mental health personnel can participate in patient-centered quality of care assessment.

Quality Assessment in Long-term Care Facilities

Assessing quality in long-term care (LTC) facilities is another case in point. Much work is needed in identifying problems and establishing quality of care criteria, especially in the psychosocial area.* Professional Standards Review Organizations (PSROs) are becoming more involved in quality assessment in nursing homes, and nurses and physicians already in such facilities presumably have an ongoing interest in the quality of care delivered. To perform quality assessment functions more effectively, better assessment tools and more inclusive

*See Kane and Kane, 1968; Jones, Densen, and McNitt, 1978; Kane et al., 1979a and 1979b.

conceptual models of care are needed. A physician alone, using the traditional medical model, cannot deal with the large number of complex problems commonly encountered in long-term care. An interdisciplinary team, with strong mental health representation and using both a medical and a social model, could probably do so. Moreover, their efforts are much more likely to have a positive effect on the quality of care overall, and thereby on the health of LTC patients.

We do not mean to suggest that the involvement of mental health professionals in quality assessment activities should be or will be confined to patients with chronic or life-threatening diseases or to those in LTC facilities. We do mean, however, to note that perhaps the mental aspects or effects of "physical" diseases are areas that have the greatest deficiencies and potentially the largest payoff in terms of improving the health status of patients. Roskies et al. (1975), for instance, demonstrated the dramatic psychological effects of hospitalizing young children under emergency conditions. Yet such a topic would be an unlikely candidate for a quality assessment study without the collaboration of more than one discipline.

The Broader Approach To Quality of Care

In summary, mental health personnel are in a unique position to enhance quality of care audits performed by other health personnel and to do audits on mental health patients, such as schizophrenic patients admitted to a psychiatric facility or depressed or anxious patients treated by a psychologist. Instead of confining their attention to mental health patients, mental health personnel can choose to become involved in the quality assessment field by combining their talents with those of other health professionals in studying the quality of care given to patients with chronic diseases and those in long-term care facilities. Such participation might uncover many correctable deficiencies in care because such patients tend to "fall between the cracks" of the health care system.

Quality of care criteria used in such multidisciplinary studies would, we hope, represent a variety of viewpoints and cover all aspects of the outcomes or processes of care deemed to be important for the

patient. Narrow criteria reflecting only research interests of particular health professionals should be avoided. Commitment to this broader patient-oriented approach is one contribution that mental health professionals can definitely make to the quality assessment field.

QUALITY ASSESSMENT STUDIES IN MENTAL HEALTH

From the above discussion, the reader might conclude that mental health professionals should concentrate solely on combining their talents with those of other health professionals to establish viable quality assessment criteria for medical conditions. We would emphasize, however, that studies of the quality of mental health care per se are also needed. To make them effective, certain issues must be systematically considered.

Target of Study

When efforts are made to assess quality of care, professionals must be cognizant of both the purpose of the quality assessment study and the methods available. If the purpose of quality assessment is to identify an outlier group of health professionals (i.e., particularly aberrant providers) who will be subjected to sanctions if educational techniques do not substantially improve their performance, then very simple criteria and assessment methods may suffice. For instance, Brook, Williams, and Rolph (1978) found, using simple criteria (e.g., use of lincomycin injections for colds), that outlier physicians could be identified; 3 percent of the physicians who delivered care to people enrolled in the New Mexico Medicaid program gave 40 percent of the medically unnecessary injections. In such circumstances, many of the issues discussed below pertaining to quality of care methods will be irrelevant. If, however, the purpose is to improve the quality of care given by the average health professional, more complex criteria and sophisticated methods for assessing quality may be required, and early attention to possible methodologic problems is necessary.

The decision whether to focus quality assessment activities on identifying outliers or on improving the performance of the average

competent health professional depends on the distribution and patterns of deficiencies of care. If most problems are thought to be caused by a few providers, then the study should focus on the outliers. If outliers are thought to make only trivial contributions to the overall pattern of deficiencies and yet deficiencies are numerous and clinically important, then quality assessment efforts should concentrate on the average competent practitioner.

Process or Outcome Studies?

A controversy exists in the quality of care field as to whether process studies--what professionals do to patients--or outcome studies--what happens to patients in terms of changes in health status--or both, should be emphasized. Which approach is most useful and valid for mental health quality of care assessment depends on several factors, including collecting adequate data, establishing criteria and standards, and planning ahead to avoid common pitfalls in those two activities.

Collecting Reliable and Valid Data

The results of an assessment of quality of care will vary as a function of the types of data collected (Brook and Appel, 1973). Corrective actions taken on the basis of the quality assessment results will also vary as a function of the data collected. We do not know at present what types of data, for what problems, collected under what conditions will identify the most appropriate actions to be taken; neither do we know what actions will result in the most cost-effective improvements in health status.

The medical record (other than one kept specifically by a mental health professional) often lacks information relevant to mental health concerns. For example, the amount and intensity of careful, empathetic listening are commonly not noted; even the outcomes of mental health care are not usually recorded in the medical record. Complex and expensive data collection activities, such as patient interviews performed by a quality assessment team at various times after therapy, might be required to assess some outcomes validly.

By implication, then, the choice of whether to do process or outcome studies in the mental health field is intricately bound to the nature of the data and collection techniques available. Common sense is always a helpful guide. If, for example, one wished to study the adequacy of drug prescribing (e.g., Tyrer's 1978 study of general practitioners' prescription of psychotropic drugs), one could investigate the use of those drugs as a function of the diagnoses for which they were prescribed or the number of patients seen. One presumably would not attempt to assess quality by looking at the outcomes of care in terms of, for example, the number of side effects produced by the drugs. Such a study would be extremely costly, difficult to do, and unnecessary. On the other hand, if one wished to understand whether psychological support for newly diagnosed hypertensive patients was sufficient to prevent the effects of being labeled as hypertensive (such as loss of work or loss of self-esteem), then one might develop a patient questionnaire on which to collect standardized outcome data at specified points following the diagnosis of hypertension. Examining the process of care by means of the medical record would not be adequate because documentation of actions to support a hypertensive patient emotionally would probably be missing from the record. Even if outcomes were recorded, they might be biased because the provider might wish to indicate or to believe that care was better than it was (Linn and Linn, 1975).

Data collection may become the major problem facing quality assessment of mental health care, and warrants somewhat greater attention here. In particular, the question of what and how to use information in a medical record is more complex than the previous paragraph implies. In the "medical" field, although medical records are limited and may be nearly illegible or extremely brief, some relevant aspects of care, such as vital signs and laboratory test results, are routinely recorded. Even for questions of mental health, some important data may be commonly present, such as estimates of the severity of a given condition, and drugs prescribed. Equally critical data of interest to people assessing mental health care, however, may be completely missing or recorded incompletely in a medical record. For example,

information about the psychological support given to a patient with asthma or about efforts to increase compliance is not likely to be found in the records of a child with asthma. Hence, accurate assessment of some aspects of the process of care--those concerning diagnosis and treatment--may be quite feasible, whereas any assessment of other factors--including patient education, changes in psychosocial functioning, or underlying health beliefs--may be nearly impossible. Perhaps more importantly for mental health problems, the medical record can shed little if any light on interpersonal relations between physician and patient, because intonations and nonverbal behavior are not generally part of any medical record.

The reliability of data in the mental health arena is of particular concern. Problems of reliability exist even in simple "medical" quality of care studies--laboratory test results may be erroneously recorded or coded, predilections for using diagnosis labels may vary among providers or from time to time (making data aggregation by diagnostic groups wrong in unpredictable ways). Such difficulties may be compounded in the mental health area, especially to the degree that quantitative measures of psychosocial functioning are not yet widely used or even agreed upon.

The level of data reliability--for instance, the amount of agreement among observers or record abstractors and the amount of agreement over time about ways to define or measure mental health conditions--plays an important role in how valid a quality assessment will be. An additional validity issue is what data are relevant to address the issues at hand. For example, is information about social support systems or about social participation of patients suffering from anxiety or depressive conditions needed for a comprehensive assessment of the eventual outcomes of their care?

In sum, traditional sources of information used in medical audits of quality of care provide little information for evaluating mental health problems. This is true whether the focus is on the mental health aspects of medical problems or on a particular mental problem itself. The danger is that most studies in the mental health area may come to emphasize very narrow (although not necessarily unimportant)

issues--such as the correct use of antidepressants in terms of dose and diagnosis--because relevant information is readily available in records. If this occurs, too little attention may be paid to other potentially important deficiencies in quality of care.

Establishing Quality of Care Criteria

The ability to establish valid standards by which care can be evaluated as good or poor (e.g., the appropriate number of visits for patients with schizophrenia, the proper amount of time spent with a depressed person, or the level of relaxation achieved by groups of patients with anxiety) may determine whether process or outcome techniques should be used. Setting process criteria and standards in the mental health field is difficult, perhaps more difficult than in the rest of medicine, largely because of a lack of agreement on the efficacy of treatment modalities. Therapies used by mental health professionals are varied, sometimes difficult to describe or quantify, and often controversial; agreement regarding which of them should be used as standards in quality assessment studies may be difficult to obtain. Setting outcome criteria (i.e., whether or not the patient "improves") may not be much easier, however. They require an understanding of what is meant by improvement (not always an easy task in the mental health area) and what aspects of which outcomes are altered by mental health care, by medical care, or by factors outside those systems (e.g., schools). Focusing on outcomes may also require knowing how, conceptually at least, to make complex tradeoffs between different outcome states, such as whether a little improvement in one outcome is worth a decrease in another (e.g., less anxiety but more time lost from work).

Validity of Criteria

For process criteria to be valid, one must have a good reason to believe that improvements in the process of care would bring about improvements in health status. Some process criteria used in medical quality assessment studies have been invalid, in the sense that compliance with them will not improve health status. If patient outcomes

are used to assess quality of care, a valid methodology must permit adequate investigation of the components of outcomes that are primarily under the influence of the personal health care system (versus, for example, the educational system). One must be extremely careful not to falsely attribute differences or deficiencies in outcome to the medical care system when they should be attributed elsewhere. A large amount of the variation in outcomes, particularly mental health outcomes, may arise from factors other than those relating to the quality of medical care. For instance, when mortality rates from common operations were used to evaluate the quality of surgical care as a function of the hospital in which the operation was performed, crude variations were as high as 24 to 1; after adjustment for the patient's status before the operation, variation in outcome of care was reduced to 3 to 1 (Moses and Mosteller, 1968; Staff of the Stanford Center for Health Care Research, 1976). How much of the remaining variation could be explained by differences in patient characteristics that went unmeasured in this study is unknown.

Thus, when performing process studies, one must be careful to include only criteria of known validity. This should be determined by at least a cursory review of the literature; ideally, in the mental health field, actual studies to validate mental health criteria should be undertaken. The situation for outcome studies is more complex. Not only must criteria used for judging care be valid, they must also permit one, with some reasonable level of certainty, to draw causal inferences as to what particular aspects of the process of care ought to be altered to improve quality. Comparative studies should be performed soon to help determine which quality assessment method produces the "best" results under which circumstances, where best is defined as identifying the most cost-effective way to improve the health status of patients.

Although the above issues and statements may appear rather simplistic, they are rarely considered before quality of care assessments are undertaken. Thus, some data collected may be filed away and never used to change behavior. Questions may be raised belatedly about the validity of the standards and data, or about whether the study identified any problem important enough for corrective action.

These issues are likely to be far more serious in quality of care studies in the mental health field than in the medical field. For example, evidence to support the efficacy of procedures and therapies is probably much more ephemeral in mental health than in the medical area. If the true usefulness of care processes is unknown, then audits based on process criteria are unlikely to lead to meaningful corrective actions. Should this result occur too often, professionals will understandably oppose attempts to change the system, especially if quality assessment is seen to use personnel, time, and money resources that might otherwise go for patient care. To avoid this unfortunate circumstance in the mental health field, attention must be given to the focus and targets of studies, and to the reliability and validity of the data and methods used, before such studies are designed and implemented.

SUMMARY AND CONCLUSIONS

We have suggested that mental health professionals have two contributions to make to quality assessment--one as part of multidisciplinary efforts to assess psychosocial aspects of care for patients with essentially "medical" problems, and one as investigators of mental health conditions per se.

In the mental health field, performing good quality of care studies will be difficult because such studies will require more effort than medical evaluations, both in terms of developing valid criteria and in terms of collecting reliable and valid data. More literature will need to be reviewed on the efficacy of procedures before quality assessment studies are begun. The results of some steps in quality assessment--e.g., designing data forms, determining what kinds of studies work, and confirming the validity of criteria--should be shared among organizations, so that audits being carried out by different PSROs, hospitals, or groups of professionals do not endlessly repeat efforts successfully carried out elsewhere.

If a cooperative atmosphere can develop, and a system can be devised by which such information can be used to facilitate learning, then the future of quality assessment activities in the mental health

field may be bright. If not, then results may be similar to those in the medical field--where payoffs from quality assessment activities have been disappointing, especially in regard to meaningful and lasting improvements in health status. If positive impacts of quality assessment activities on health are not forthcoming in the near future, interest in quality assessment may wane and attention may turn even more severely toward the issue of cost containment. The mental health field would seem particularly vulnerable to such a turn of events. A viable quality assessment mechanism, drawing on hard lessons from the medical field, would, we hope, help prevent that unacceptable eventuality from occurring.

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