

# Management for Quality: Continuous Quality Improvement to Increase Access to Outpatient Mental Health Services

Gary A. Keller, M.D.

**Objective:** A health maintenance organization (HMO) examined whether continuous quality improvement could be used to address the problem of long waiting times for outpatient mental health services from a closed panel of providers during peak periods of demand. **Methods:** A task force at a staff model HMO in Burlington, Vermont, used continuous quality improvement methods to identify and solve specific service access problems in five categories: quality, protocol, and standards; systems and processes; management and administration; clinical practice management; and public relations and marketing. **Results:** Over a two-year period, the task force identified 13 specific problems, for which solutions were implemented. For example, two new support positions were created to meet clinicians' needs. Triage categories were defined, and acceptable waiting times for appointments, along with goals for percent compliance, were established. A weekly training program in brief psychotherapy and an extensive group psychotherapy program were implemented. A network of community providers was formed to complement the HMO's fixed provider panel during periods of high demand. The average waiting time was reduced from 22 days to six days, and patients' satisfaction increased markedly. **Conclusions:** Use of continuous quality improvement can guide clinical leaders in their central role of reinstating clinical quality as the goal of management. The author suggests that continuous quality improvement with balanced clinical and administrative leadership is the means to forge the needed synthesis of quality and cost capable of improving mental health. (*Psychiatric Services* 48: 821-825, 1997)

Improved biological treatments and brief psychotherapies have been embraced by managed care, which has accelerated acceptance of briefer treatments. Inpatient treatment is now almost entirely biological, and new models of psychotherapy—problem and solution focused—predominate. As our new administrative leaders respond to continuing demands to reduce health care costs, briefer hospital stays and psychother-

apies are often the result of a "management of quantity," that is, the number of hospital days or outpatient sessions allowed or the number of providers. Some basic controls of quality have been eliminated, such as providers' control of their own schedules or a patient's choice to go elsewhere if a wait is too long.

Limiting the number of providers has created new challenges to ensure access to services. This paper de-

scribes in detail a continuous quality improvement process as one of the successful efforts used by a staff model health maintenance organization (HMO) to improve access to services, a key indicator of quality. The paper describes an example of "management for quality" that can serve as a model in approaching the myriad challenges of resource management facing the health care industry.

Quality, traditionally defined as a property of a physical object, has more recently been viewed as the condition of being pleasing to a customer. Deming expanded this definition to apply to each step of industrial production (1). In health care, quality improvement is directed toward increasing patients' satisfaction and improving outcomes. Quality improvement focuses on all processes of health care (2). The goal of continuous quality improvement is to increase customer satisfaction. The method is most often applied to problems in service delivery, such as access problems. Especially when applied directly to the clinical product—the treatment outcome—continuous quality improvement methods can further the considerably broader goal of medicine and of mental health care: to improve health.

## Background

Community Health Plan is a staff model HMO based in New York that provides full medical care to approximately 500,000 enrollees in Massachusetts, New York, and Vermont. Our continuous quality improvement group focused on northern Vermont, including Vermont's largest city,

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*Dr. Keller is chief psychiatrist at the Community Health Plan of Northern Vermont and a member of the clinical faculty in the department of psychiatry at the University of Vermont, 789 Pine Street, Burlington, Vermont 05401. Since this work was done, the Community Health Plan has merged with Kaiser Permanente Northeast Division.*

Burlington, and the surrounding suburban and rural areas. Approximately 25,000 people are served from our main site—the Burlington Health Center—and two satellite offices.

In the last three years, the HMO's staff model—a closed-panel delivery system—showed its intrinsic flaw of having no mechanism to accommodate periods of peak demand or rapid growth other than by creating long waits for appointments. Waiting times of up to five weeks for a first mental health appointment and three weeks for a follow-up appointment were not uncommon. A very brief and intermittent psychotherapy was at times being practiced based on the availability of a follow-up appointment time rather than on clinical indication. (Brief intermittent psychotherapy uses short courses of treatment focused on the patient's stage of development as propounded by Simon Budman [3] and others.) Despite a highly skilled and committed staff, an atmosphere of increasing client complaints and burnout began to prevail.

An anonymous questionnaire completed by all of the plan's therapists at the Burlington Health Center identified the potential for reduced quality due to pressures of large numbers of clients. Coincidentally, a consortium of employer groups, the Vermont Employers Health Alliance, conducted an independent customer satisfaction survey that identified problems: only 64 percent of respondents throughout Vermont rated their access to the plan's mental health care as good to excellent, compared with 81 percent for general medical care. Access problems were endemic to most areas the plan served.

## Methods

Amid increasing external criticism and increasing dissatisfaction of our staff and customers, our chief psychiatrist proposed creating a continuous quality improvement task force on access to care. The group was made up of the coordinator of the Burlington Health Center; the Vermont region's chief psychiatrist, director of mental health services, director of operations, medical director, and health center coordinator; the plan's director of mental health services; the plan's

vice-president (who also facilitated the task force); and the quality improvement coordinator.

The plan's top management in New York and local Vermont management quickly formed a constructive working group. In something between a reaction formation (unconsciously doing the opposite) and a realization that the best defense is a good offense, we attacked the access problem. Our hypothesis was that if we could identify the specific process components that determined length of waiting time, document with data their relative contributions to the problem, and change the factors that contributed most significantly to the problem, we would reduce waiting times.

By brainstorming, the group divided the access crisis into five main categories: quality, protocol, and standards; systems and processes; management and administration; clinical practice management; and public relations and marketing. Three work subgroups reflected the flow of patients going through our system. One group addressed the incoming call to triage, another examined data from the period from triage to first appointment, and the third looked at the time from the first appointment to follow-up appointments.

The three groups worked to further define the five categories of the crisis. Basic scientific procedures were used to collect data, test hypotheses, and measure the effects of changes implemented. These procedures reflected the Deming-Shewhart cycle—plan, do, check, and act (1). The five components of the access crisis and the 13 solutions implemented are outlined in Table 1.

The first work group—covering the incoming call to triage—identified the complicated pathways of more than 300 phone calls per week related to mental health, and they identified the needs of our 21 mental health and substance abuse full- and part-time clinicians for multiple support staff. Support staffing had been based solely on the five family practice physicians in our facility. Two new mental health positions were created to meet support needs, an administrative assistant and a receptionist.

Our second work group—from triage to first appointment—found that it took up to three days just to triage nonurgent patients, with a four-week average waiting time for a first appointment; 20 percent of new cases were not seen within five weeks of triage. The status of a large group of patients became "urgent" simply because a five-week wait was inappropriate. The group decided that waiting times should follow a clinical protocol. Triage categories were defined, and acceptable waiting times, along with goals for percent compliance with these standards, were established. Emergency patients were to be seen the same day, with a goal of 100 percent compliance; urgent patients within three days, with a goal of 100 percent; and nonurgent patients within two weeks, with an 85 percent goal.

The second work group determined that 112 new patients per month sought mental health care from the Burlington Health Center, and the group calculated adequate staff capacity if every full-time-equivalent (FTE) therapist saw four new patients per week. The plan's staffing ratio in the northern Vermont area is one FTE therapist per 3,500 members. The group developed a standard workload: 30 scheduled clinical hours per week, including four initial visits and 26 return visits.

The third work group—first appointment to follow-up appointment—found extreme variation in therapists' schedules. The group standardized appointment types and designed a data collection process in which each therapist compiled his or her weekly number of total hours scheduled, patients seen for return visits, new patients seen, no-shows and cancellations, and number of therapy groups conducted. The number of face-to-face clinical hours worked by the therapist divided by the number that were expected to be worked yielded a measure of productivity for each therapist and for the Burlington Health Center. On average, a 70 percent productivity rate was found, and this low rate was only in part accounted for by the large no-show and cancellation rate. A no-show and cancellation rate of 22 per-

**Table 1**

Five components of the Burlington Health Center's service access crisis, problems identified, and solutions implemented based on the findings of a continuous quality improvement team

Crisis component and identified problem	Solution implemented
Clinical quality, protocols, and standards	
Four- or five-week average wait for a first appointment	Clinical access standards were established and implemented: all emergency, urgent, and nonurgent new patients were seen within one, three, and ten days, respectively
Marked variability in therapists' workloads	Therapist work standards were established: 30 scheduled clinical hours per week, including four new patients and one group per week
Variable and unmeasured productivity	Productivity was based on new work standards measured regularly
No sanctioned safeguards for overloaded therapists	A specific protocol was put in place for an overloaded therapist to be given a "reduced intake status"
Systems and processes	
Inadequate support staffing	A new receptionist was hired just for mental health clinicians
Large numbers of incoming calls (triage and administrative)	A new switchboard was added with voice mail capability
Reduced productivity due to a 22 percent rate of no-shows and cancellations	Receptionists were asked to confirm all appointments and use a waiting list to fill cancellations
Management and administration	
Inadequate handling of gradually increased administrative tasks locally and statewide	A new position of mental health site coordinator was created to augment the administrative director's increasingly statewide role
Unmet need for mental health administrative support	A new position of mental health administrative assistant was filled
Clinical leadership inadequately integrated into management	Additional management hours were designated for the chief psychiatrist.
Clinical practice management	
Practice of longer-term psychotherapies due to staff's lack of expertise in new brief therapies	A training program in brief therapy was begun
Minimal use of more efficient group psychotherapies	A group psychotherapy program with easy access was markedly expanded
Public relations and marketing	
Negative image of the plan's mental health service among the public, in the media, and in the marketplace	Eliminating long waits was the only step taken

cent was reduced to 8 percent by telephone confirmation of all appointments.

The third group hypothesized that there would be adequate availability in a therapist's schedule for return visits if therapists were skilled brief psychotherapists, if the center had a fully developed group therapy program to which patients could easily be referred, and if a "safety valve" existed for therapists if they became overloaded. The group developed a weekly training program in brief psychotherapy, which included behind-the-mirror observation and supervision. An extensive group psychotherapy program was started to more efficiently meet the needs of the center's five main triage presentations—25 percent of patients with depression, 24 percent with child and family problems, 24 percent with relationship problems, 6 percent with trauma, and 5 percent with anxiety.

Although the therapist's control of his or her schedule was taken from the therapist, a new protocol was implemented to reduce weekly intakes

for up to a month at a time when the therapist felt overstressed, overloaded, or in need of additional time for a particular project. In addition, a variable number of half-hour and hour slots were left available to each therapist for patients who needed to be seen more quickly than was otherwise possible.

### Results

While the variables of total enrollment, number of FTE provider staff, and number of new patients per month remained virtually constant, average waiting times for outpatient mental health appointments in the northern Vermont region were significantly reduced by the continuous quality improvement process—from 21.7 days in January 1994 to six days in September 1994. Figure 1 illustrates the reduction over a two-year period. Collecting data on productivity appeared to increase productivity and access—a Hawthorne effect.

After nine months, by September 1994, specific solutions were implemented for all of the five main com-

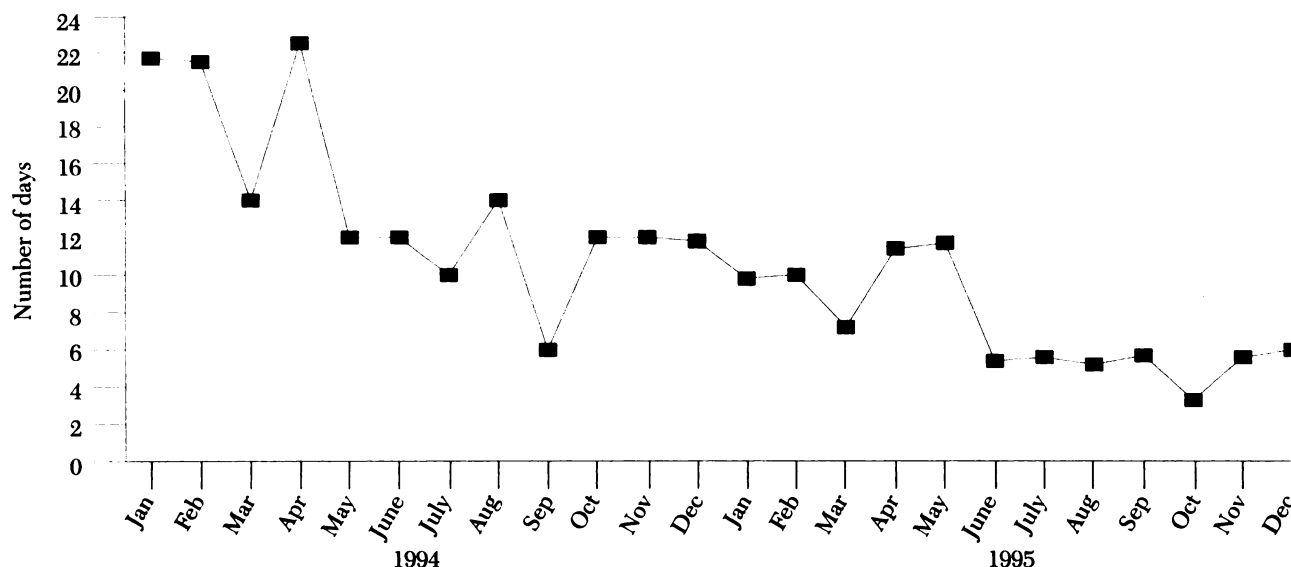
ponents of our access problem except the last one, public relations and marketing. Improving access to services had a profound effect on marketing with employer groups, whose concerns and complaints—which had been frequent—were eliminated.

One year after starting our project, the new access standards were put into place planwide as part of a whole-plan redesign project that included establishing a centralized triage and case management service. The percentage goals for access were met midway through the project in five of the plan's six regions (see Figure 2). However, through the first half of 1995, the waiting times again increased. Some variables proved to be more than we could regularly control, such as increased utilization during certain periods, reduced staffing, reduced compliance with record keeping, and other unforeseen factors (for example, the site manager's maternity leave).

Instead of increasing the number of intakes required per therapist to

**Figure 1**

Reduction in waiting time for the first mental health appointment after continuous quality improvement methods were implemented at the Burlington Health Center<sup>1</sup>



<sup>1</sup> Includes routine, urgent, and emergency appointments

six a week, we formalized an overflow network of community providers to complement our fixed panel. This approach eliminated the rationing inherent in a closed staff model when demand exceeds capacity.

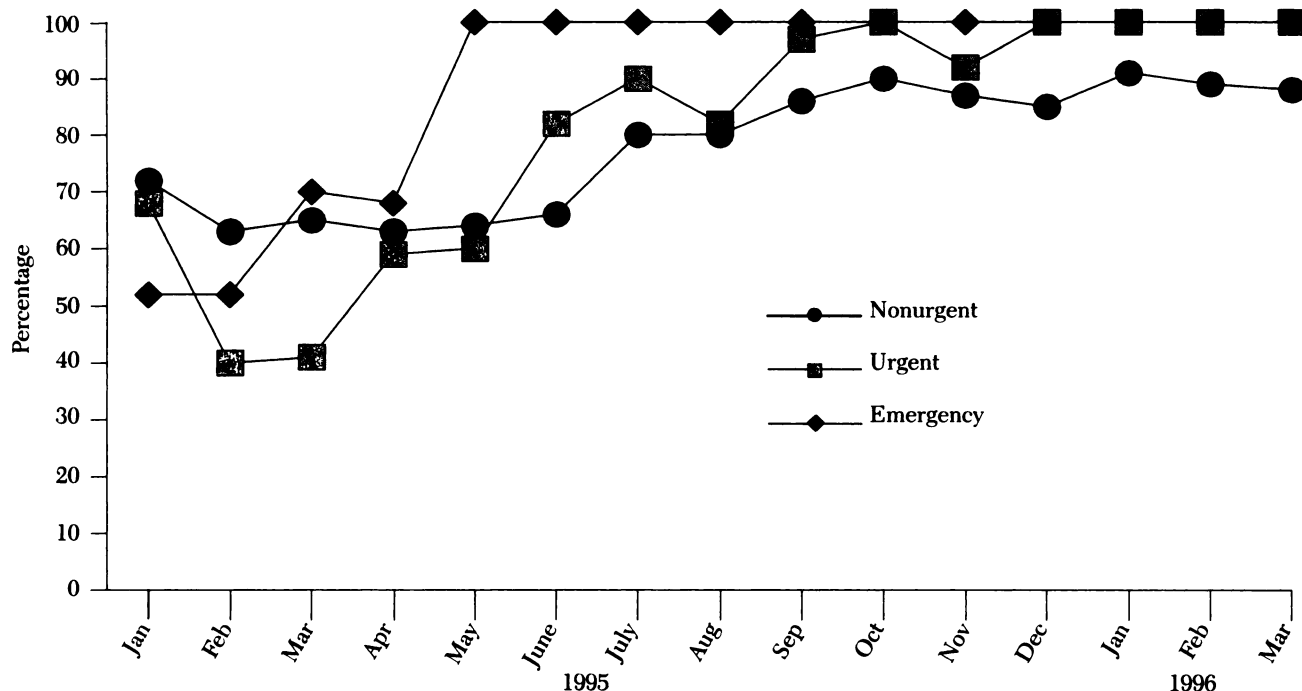
This solution preserved clinical quality and improved customer satisfaction by offering a partially mixed model of staff and network providers.

The same independent Vermont Employers Health Alliance that had

rated access to the plan's mental health services negatively (64 percent customer satisfaction) repeated the customer satisfaction survey one year after the first survey. Although the data were gathered only midway

**Figure 2**

Percentage of planwide compliance with goals for waiting time protocols for different patient groups<sup>1</sup>



<sup>1</sup> Goals: 100 percent of emergency patients will be seen immediately; 100 percent of patients needing urgent care will be seen within 72 hours; 85 percent of patients needing nonurgent care will be seen within 14 days.

through our project, the ratings of "good to excellent" for access to services (and quality of services) improved 7 percent. Although the most recent survey in December 1995 used a different format, it appeared to document continued improvement in access and quality of services over two years: the proportion of "very dissatisfied" patients decreased from 23 percent to 7 percent. In January 1995, the plan's own customer satisfaction survey of 357 cases found 84 percent satisfaction with mental health treatment and 95 percent satisfaction with the therapeutic relationship.

### Discussion

An approach using continuous quality improvement effectively reduced waiting times for outpatient mental health services, first by facilitating a careful analysis of the components of the problem. After the problem was examined, local managers, in some frustration with the leadership's relative inaction, repeatedly pushed implementation of innovations. The continuous quality improvement team, like a good psychotherapist, provided a regular forum where local management gained insight into a complex problem. The team was then empowered to implement its own solutions and to continue the quality improvement process. This team process may be as integral to success as the content (use of data collected), just as psychotherapy that attends to the process of therapy is more likely to be effective than therapy that quickly identifies goals but pays little attention to the process of psychotherapy (pretreatment, beginning phase, working-through, end phase, and follow-through) (4).

Our administrative director's responsibility to keep pace with a rapidly changing business environment increasingly overwhelmed his clinical responsibilities, and a relative void in clinical management occurred. Continuous quality improvement provided a method for integrating the position of chief psychiatrist, the plan's leader most responsible for clinical quality, into a more central management position. Establishing the balance and leadership to fully appreci-

ate the importance and intricacy of the clinical process remains the task of those who are responsible for creating more efficient service delivery systems.

### Conclusions

Our use of continuous quality improvement has increased customer satisfaction, has successfully fought off threats of a behavioral health carve-out, and has guided the administration of our health care system. We have worked to manage productivity and work standards. However, as Deming observed (5), "I have yet to see a work standard (or productivity quota) that includes any trace of a system that would help anyone do a better job."

When we apply the principles of continuous quality improvement directly to clinical work, by using clinical effectiveness as the measure of a therapist's productivity or improved health as the primary measure of outcome, we will have embraced Deming's philosophy (5): "Improve quality, then your costs go down." Continuous quality improvement can increase the expertise and creativity of providers—the "design engineers" of the health care industry.

The challenge and promise of continuous quality improvement is to improve clinical outcomes: to use new practical technologies to merge measures of satisfaction, outcome, and cost to encourage treatments of the highest value. Managed care is uniquely positioned to effect this synthesis through its ability to organize coordinated efforts of professionals of differing disciplines toward a common goal of improving care of a limited population (1). Future projects using these methods might include increasing the use of mental health services to reflect actual prevalence rates of mental illness (15.4 percent [6]) and improving primary and secondary prevention, early intervention, and long-term support programs for populations at risk. We are currently using continuous quality improvement methods to improve return visit availability for outpatients.

Use of continuous quality improvement as an applied scientific method-

ology can contribute to the considerable scientific evidence of the efficacy of mental health treatments (7) and guide health care to meet mental health needs more effectively and efficiently. If competition for health care dollars can focus on increasing utilization rates to more closely approximate prevalence rates of mental illness, and on documentation of positive outcomes, then such a change in the mental health field deserves active navigation. ♦

### Acknowledgments

The author acknowledges the following members of the continuous quality improvement team, whose daily commitment to quality was captured in this project: Tom Barritt, L.C.S.W., Tricia Cummings, Joe Doolittle, Dana Houlihan, Paul Jarris, M.D., Bill Little, Bill Reidy, L.C.S.W., and Gladys Peterson-Zelman, R.N.

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