

Codman Awards

Building a System of Perfect Depression Care in Behavioral Health

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For the “Blues Busters” of Behavioral Health Services

Behavioral Health Services, a division of the Henry Ford Health System (HFHS; Detroit), provides a full continuum of mental health and substance abuse services through a large integrated delivery system of 2 hospitals, 10 clinics, and more than 500 employees that serves southeastern Michigan and adjacent states. Through its department of psychiatry, Behavioral Health Services is also engaged in a large academic enterprise, which includes numerous education, training, and research programs.

In 2001, the Institute of Medicine (IOM) report, *Crossing the Quality Chasm: A New Health System for the 21st Century*,^{1,2} served as a wake-up call to American health care. While praising the unparalleled advances in medical science in the United States, as well as health care workers' skill, dedication, and self-sacrifice, it indicted the health care delivery system for not translating those strengths into meaningfully better care for each and every patient.

The Chasm Report spotlighted behavioral health care, identifying depression and anxiety disorders on the short list of priority conditions for immediate national attention and improvement. Annually, depression affects about 10% of adults in the United States. The leading cause of disability in developed countries, depression results in substantial medical care expenditures, lost productivity, and absenteeism. Untreated or poorly treated, it can be deadly; each year as many as 10 percent of patients with major depression die from suicide.³

Shortly after publication of the Chasm Report, the Robert Wood Johnson Foundation (RWJF) issued a challenge to American health care leaders to “pursue perfect

Article-at-a-Glance

Background: Depression, a common, serious disorder, may result in suicide in up to 10% of afflicted persons.

Methods: In 2001, the Division of Behavioral Health Services of the Henry Ford Health System (Detroit) launched an initiative to completely redesign depression care delivery using the Six Aims and the Ten Rules from the Institute of Medicine report *Crossing the Quality Chasm*. This “Perfect Depression Care” initiative, whose key goal was the elimination of suicide, entailed performance improvement activities in four domains—partnership with patients, clinical care (planned care model), access, and information flow.

Results: The rate of suicide in the patient population decreased by 75% ($p = .007$), from ~89 per 100,000 at baseline (2000) to ~22 per 100,000 for the four-year follow-up interval (the average rate for 2002–2005).

Discussion: This sustained reduction in suicide rate suggests that the process improvements implemented as part of the Perfect Depression Care initiative substantially improved the care of persons with depression. The initiative is the prototype for a comprehensive redesign of behavioral health care. Work is under way to “perfect” the care of persons with anxiety or psychotic disorders, and similar care systems are being developed for violence prevention and medication safety, with a particular focus on perfecting communication between providers. Pursuing perfection is no longer a project or initiative but a principle driving force embedded in the fabric of our care.

Table 1. Contents Page for the Suicide Prevention Guideline*

Henry Ford Health System Behavioral Health Services Suicide Prevention Guideline

1. What is the Planned Care Model?
 - Background & Definition
 - Planned Care Model for HFBH Perfect Depression Care
2. Decision Support: Evidence-Based Guidelines
 - HFBH Suicide Prevention Guideline
 - Risk Assessment—Key Definitions
 - Protocol to Remove Weapons
 - Family Interventions
 - Handout: “Understanding and Helping Someone Who Is Suicidal”
 - Psychotherapy
3. Delivery of Care Design
4. Patient Self-Management
 - Handout: “If you are thinking about suicide...read this first”
 - HFBH Depression Web site
 - Self-Help Books
5. Community Resources and Support
 - List of Community Support Groups
6. IT Support / Clinical Information Systems
7. Measurement
 - Six Dimensions of Care
 - Risk assessment and outcome measures
 - Patient Satisfaction
 - Ambulatory Chart Audits
8. Guideline Review Schedule
9. Appendix
 - A. Key Articles
 - B. APA Practice Guidelines for the Treatment of Patients with Major Depression

* HFBH, Henry Ford Behavioral Health; IT, information technology; APA, American Psychiatric Association. A full copy of the guideline is available on e-mail request from the author

care” by embracing the IOM framework of the Six Aims (Table 1, above) and then Ten Rules for redesign (for example, care based on continuous healing relationships, customization based on patient needs and values)² as an approach to achieve “perfect” care. We accepted the RWJF challenge, choosing as our overall goal the pursuit of a sys-

tem of perfect care for persons with depression. Through a competitive process, behavioral health services was selected from among approximately 300 applicants as one of 12 demonstration projects (“finalists”) for Phase I of “Pursuing Perfection.” Participation in this national collaborative in 2002 provided our Perfect Depression Care initiative focus, structure, discipline, and visibility in the start-up phase.

Today we can report a large and sustained reduction in suicide that is, to our knowledge, unprecedented in the clinical and quality improvement literature.

Methods

PLANNING

Our Goal—No Suicides! The overarching goal in the Perfect Depression Care initiative was to eliminate suicide. This audacious goal was a key lever in a broader aim: to achieve breakthrough improvement in quality and safety by completely redesigning depression care delivery using the Six Aims and Ten New Rules articulated in the Chasm Report. To communicate our bold vision, we called the initiative “Perfect Depression Care.”

OUR STRATEGY

Our approach to achieving Perfect Depression Care consisted of the following six major tactics:

1. Commit to “perfection” (zero defects) as a goal.
2. Develop a clear vision of how each patient’s care will change.
3. Partner with patients to ensure their voice in care redesign.
4. Conceptualize, design, and test strategies for improvement in four high-leverage domains identified when we mapped our current care processes:
 - Patient partnership
 - Clinical practice (planned care model)
 - Access to care
 - Information systems
5. Implement relevant measures of care quality, continually assess progress, and adjust the plan as needed.
6. Communicate the results, communicate the results, and communicate the results again, and celebrate the victories.

We extensively redesigned depression care, which included the development and implementation of a suicide prevention protocol across both outpatient and inpatient

Table 2. Perfect Depression Care: Key Goals and Indicators*

IOM Aim	Goal	Measure	Data Source
Safety	Eliminate inpatient falls Eliminate inpatient medication errors	Inpatient falls/1,000 days of care Inpatient medication errors/1,000 days of care	Incident reporting system
Effectiveness	Eliminate suicides	Number of suicides/100,000 network members	Incident reporting system
Patient-centeredness	100% of patients completely satisfied with their care	Overall patient satisfaction	PressGaney survey, Assessment of care survey
Timeliness	100% complete satisfaction	Patient satisfaction with timeliness	Assessment of care survey
Efficiency	100% complete satisfaction	Patient satisfaction with efficiency	Assessment of care survey
Equity	100% complete satisfaction	Patient satisfaction with equity	Assessment of care survey

* The Six IOM (Institute of Medicine) Aims are drawn from Institute of Medicine: *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, D.C.: National Academy Press, 2001.

facilities. This protocol has become a central component of our evidence-based depression care guidelines (Table 1).

PERFECT DEPRESSION CARE AS AN ORGANIZING STRATEGIC PLANNING CONCEPT

We leveraged Perfect Depression Care as a core strategy to drive quality. By using our strategic and operational planning process to target and plan for Perfect Depression Care, we ensured that the initiative was aligned with overall organization priorities, fully integrated into the work of leaders and others across the organization, and subject to ongoing review of progress and “lessons learned.”

IMPLEMENTING THE PERFECT DEPRESSION CARE INITIATIVE

In 2001, the vice president of the Division of Behavioral Health Services [C.E.C.], as leader of the Perfect Depression Care initiative, formed and led a 15-member steering team, which set the initiative’s vision and strategic goals; conceptualized, planned, and launched the initiative; and provided initial leadership direction and oversight. The team consisted of key members of the executive team (chief operations officer, medical directors of inpatient and outpatient services, director of quality management), as well as other key clinicians and managers (for example, inpatient nursing leader, several key physicians, therapists, and clinical managers). When possible, the chair chose members known to be leaders and change

agents; both leadership and front-line caregiver perspectives were represented.

Early on, the team adopted a name and logo (Figure 1, page 196) and after some vigorous discussion, united in a commitment to pursuing perfection. We captured that commitment in a promise we make to our patients. These critical first steps helped unite our Blues Busters team and gave our purpose an identity within the department and the larger health system.

The psychiatry department’s board of trustees, an advisory board composed of 20 volunteer community leaders, also played a key leadership role in Perfect Depression Care. The board and its quality committee reviewed progress quarterly, provided encouragement to leaders and staff, recognized accomplishments in written communications, and undertook major philanthropic efforts to support the initiative, in particular raising substantial sums of money to support the development of critical information technology, including a Depression Care Web site accessible to registered patients.

All psychotherapists were provided training to develop competency in Cognitive Behavior Therapy and the suicide prevention protocol. Nonclinical staff had important roles in practice changes such as access improvements and information systems innovations.

FISCAL AND STAFF RESOURCES

The Perfect Depression Care initiative required one-time financial support in three key areas:

Blues Busters Logo



*Our promise to each and every patient:
"We will work with you to achieve the best
possible care, always respecting your
individual wants and needs."*

Figure 1. The logo for the Perfect Depression Care initiative is shown.

1. Project management: One full-time equivalent (FTE) of project management support for one year
2. Departmentwide competency in Cognitive Behavior Therapy, as stated above
3. Information systems development: Depression Care Web site (substantially funded by the board of trustees), departmental Intranet, electronic medical record (EMR) enhancements

We received considerable guidance and support from faculty at the Institute for Healthcare Improvement and the RWJF during our participation in "Pursuing Perfection," as well as others (see Acknowledgments).

PERFORMANCE MEASUREMENT

As a participant in Phase I of the Pursuing Perfection initiative in 2001, Behavioral Health Services set goals and indicators to drive and monitor improvement during the Perfect Depression Care Initiative in terms of the IOM's Six Aims (Table 2, page 195) to drive and monitor improvement. Consistent with the concept of pursuing "perfection," the Blues Busters team conceptualized goals in terms of "zero defects"—that is, eliminating suicides, not merely reducing them incrementally—and "complete satisfaction" of every patient every time, not merely appeasing some of them some of the time.

Defining the goal for effectiveness of care stirred controversy in our department. Some members of the Blues Busters team who embraced the "pursuing perfection" concept argued that truly effective care could only mean no suicides. Other team members challenged such a goal, viewing it as unrealistic for a network of approximately 200,000 members. The debate was finally resolved when the question was asked, "If zero is not the right number of suicides, then what number is? 1? 4? 40?" This debate was a milestone in the Blues Busters' development—a galva-

nizing issue that helped skeptics see the "logic" of striving for perfection and launched our initiative to transform depression care.

DATA ANALYSIS

We compared the incidence of suicide between the baseline period (the year 2000), the start-up period (the year 2001) and the follow-up interval (the years 2002–2005). Poisson regression was used for testing using each quarter of data for the three time periods.

We displayed the suicide data using a run chart, which plotted the running 12-month rate of suicide (Figure 2, page 197). The chart also shows the annual rate of suicide in the general population (~11 per 100,000 population, based upon the 2000 U.S. Census), as well as the reported rate in patients with a history of a mood disorder who are currently in remission (~4X–10X the rate in the general population). The rate of suicide in patients with an active mood disorder is estimated at 80–90X the rate in the general population, and the suicide rate in patients with a history of suicide attempts is 100X the rate in the general population.

DATA DISSEMINATION

From the start of the initiative, the Blues Busters team regularly reviewed results with leaders and managers of Behavioral Health Services as part of its ongoing strategic and operational performance review. The Blues Busters also designed a communication strategy that leveraged the department's array of established communication methods, ensuring that results, analyses, and lessons learned were widely shared with staff and other stakeholders.

Through Web sites and participation in national meetings and conferences, department leaders also shared the results of the Perfect Depression Care initiative with a broader health industry audience, including such groups as the American Psychiatric Association and the American Medical Group Association.

Performance Improvement Activities

Our first step in the Perfect Depression Care initiative was to use the IOM's Six Aims and Ten Rules to develop a clear vision of how each patient's care would be different and to drive bold and innovative thinking about optimal care. If

we aimed to eliminate suicide, we asked ourselves, what would it mean to offer a continuous healing relationship (Rule 1) or to anticipate needs (Rule 8)? We concluded that perfect depression care must be barrier free and that we must consistently provide for timely and accurate recognition of suicide risk. We found all ten rules useful as design specifications, and our care process changes indeed reflect them all.

We mapped our current care processes and identified four domains of activity that offered an opportunity for high-leverage changes to close the gap between current and perfect care—partnership with patients, clinical care (planned care model), access, and information flow. The components of these domains of activity are shown in Table 3 (page 198).

Throughout the initiative we maintained a focus on improving the entire system of behavioral health care not simply on managing a particular disease such as depression. Some needed improvements were obvious at once—the suicide prevention protocol, for example. Other improvements already under way now assumed new priority, such as establishing department-wide competency in Cognitive Behavior Therapy. Still others emerged over time, as team members examined the literature and benchmarked processes in high-performing organizations across the United States worth emulating—such as advanced access and the drop-in group medical appointment, each of which has only rarely been implemented in a behavioral health care setting.

In change management, whenever possible, we test changes on a small scale initially, through a pilot project involving one or a few clinicians. Depending on the pilot results, we may test the change again or begin implementation and spread. In addition, whenever possible, we build the internal capacity to make and sustain the change. For example, we equipped a small clinical team with the knowledge and skills to train and certify their colleagues in Cognitive Behavior Therapy. Finally, we have implemented a measurement system that is integrated into ongoing organizational performance review and reporting as a means of assessing the short- and long-term success of our changes.

Suicides per 100,000 Health Maintenance Organization Patients, 2000–2005

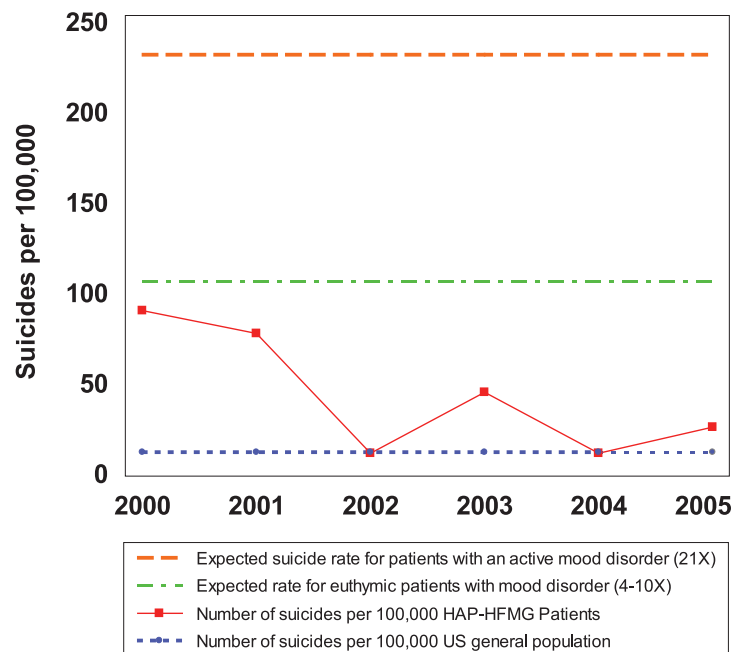


Figure 2. This run chart shows the running 12-month rate of suicide for each year since inception of the Perfect Depression Care Initiative. The annual rates of suicide are also shown for reference populations.

Results

As shown in Figure 2, the observed suicide rates ranged from 89 per 100,000 for baseline (2000), 77 per 100,000 for the start-up (2001), and 22 per 100,000 for the follow-up interval (the average rate for 2002–2005). The overall Poisson regression model (2 degrees of freedom, Chi-square test for a period effect) was statistically significant, $\chi^2 = 8.0$, $p = .018$. The difference in suicide rate between baseline and start-up years was not significant ($p = .768$), but the suicide rate for the follow-up period was significantly lower than that for both the baseline year ($p = .007$) and the start-up year ($p = .022$).

Discussion

During the period of 2001–2005 we designed, tested, and implemented multiple practice improvements, so it is difficult to determine which contributed most to our achievement. Yet we are confident that beyond our practice improvements, our determination to strive for

Table 3. Performance Improvement Activities in Four Domains

Partnership with Patients

- Established a consumer advisory panel to ensure the “voice of the customer” in care redesign
- Redesigned the treatment planning process, with input from the consumer advisory panel, to ensure that every patient has a voice in the design of his or her care working in an active partnership with clinicians

Clinical Care (Planned Care Model)

- Developed and implemented an evidence-based suicide prevention protocol, which has been embedded in the depression care guidelines.* The suicide prevention protocol stratified patients into three levels of risk, each of which required specific interventions. In every case, we focused heavily on the availability of weapons.
- Revised the depression care guidelines to ensure a systematic and evidenced-based approach to coordinating our array of somatic and psychotherapeutic treatments, including psychotherapy, psychopharmacology, and brain stimulation techniques such as electroconvulsive therapy
- Partnered with a therapy and research organization to establish and maintain departmentwide competency in Cognitive Behavior Therapy.
- Implemented standardized evidence-based clinical protocols to reduce the risk of falls (modified from the American Geriatrics Society and the American Medical Directors Association) and medication errors (modified from the Institute for Safe Medication Practices) in our inpatient facilities.

Access

- Implemented three access innovations: drop-in group medication appointments, advanced (same-day) access, and e-mail “visits.” Each outpatient site offers one or

more 90-minute drop-in group appointment(s) weekly, led by a psychiatrist and a social worker. This approach provides temporary additional access and group support on short notice.

- Physically reintegrated a number of our stand-alone behavioral health outpatient clinics into the medical group’s outpatient clinic buildings, to improve access and continuity of care.

Information Flow

- Created an electronic medical record for behavioral healthcare that complies with legal and institutional confidentiality policies, ensures that complete behavioral health information (including suicide risk) is immediately available to the behavioral health clinician at any site at which the patient is seen, and gives our group practice colleagues access to critical data for safe patient care through the health system’s electronic medical record for medical-surgical care
- Partnered with David Gustafson, Ph.D. and the CHES Consortium of the University of Wisconsin to develop and implement a state-of-the-art depression Web site for patients and family members that includes evidence-based information via patient videos and “ask the expert” forums as well as secure chat rooms for information and support
- Established secure e-mail communication for the growing number of patients who prefer this vehicle for at least some interactions with their behavioral health care provider.
- Partnered with the health system’s information technology department to develop an intranet to disseminate depression guidelines to all clinicians, as well as a patient registry and other electronic tools to improve the quality and efficiency of our care.

* Shown in Figure 2 (page 197).

perfection, rather than incremental goals, had a powerful effect on our results.

Studies such as ours, which rely on a time-series design, are susceptible to potential bias. The main threat to internal validity is “history,” that is, the concern that an observed change might be due to an event that is not the treatment of interest. In the context of our study, suicide rates might have reflected major shifts in the community in factors known to be associated with suicide, such as unemployment and socioeconomic downturn or declining family “connectedness” (for example, declining marriage rates). We are compiling statistics for our primary service

area to formally evaluate such time trends. A preliminary analyses revealed relatively stable marriage rates (~44%-59%, depending upon county) but unemployment has increased dramatically (from 3.2% in 2000 to 7.3% in 2003). Yet the actual suicide rate in our state and tri-county service area remained relatively stable from 1999 to 2003 (-9.8 to 10.0 per 100,000).

A second threat to validity arises due to the potential for maturation-selection bias. In the context of this study, suicide rates could have changed if characteristics of our patient population (the denominator population), such as age, sex, and race-ethnicity, were changing over time in a

manner likely to affect suicide rates. For example, suicide is more common among men, the elderly, and whites and Native Americans. We are evaluating the extent to which such characteristics may have changed over time in our patients. Preliminary analyses have revealed no clear changes in age, sex, and race-ethnicity.

The encouraging results of the Perfect Depression Care Initiative suggest that the Chasm Report can be a highly effective model for achieving and sustaining breakthrough quality improvement in mental health care.

Energized by this success, we remain focused on driving our suicide rate down to zero, and we are spreading our success and lessons learned both within and beyond our department. The Perfect Depression Care initiative is the prototype for a comprehensive redesign of behavioral health care across the psychiatry department. Work is under way to “perfect” the care of persons with anxiety or psychotic disorders, and similar care systems are being developed for violence prevention and medication safety, with a particular focus on “perfecting” communication between providers. Essentially, pursuing perfection is no longer a project or initiative but a principle driving force embedded in the fabric of our care.

Beyond the psychiatry department, we are also partnering with our health system and community. We have implemented an initiative to spread “perfect depression care” to the primary and specialty medical care settings of our health system. We are also collaborating with the insurance division of our health system to develop a depression care management product designed to provide major employers (in particular the automotive manufacturers in Detroit) with a system of depression care that will improve their employee productivity and lower health care costs. We have received funding to leverage information technology to help the State of Michigan develop and implement evidence-based guidelines for the care of persons with mood disorders throughout the state. Finally, we are consulting with

numerous mental health care providers, insurers, and professional organizations throughout the United States to support their efforts to improve their behavioral health care services.

Summary and Conclusions

Striving for perfect depression care set the Blues Busters and our entire department on a transformational journey. “Perfect” care required audacious goals—goals that could only be accomplished by challenging the most basic assumptions. Usual care and incremental approaches were taken off the table. Although the business case for pursuing perfection is complex, we found it is possible to dramatically improve care and financial performance at the same time. This approach is not only economically viable but is readily applicable to other behavioral health care delivery systems. **J**

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