

# BRANCHES



## Toyota Production System

Applying auto industry lessons to health care reform.  
*Details on pages 4-5*



## Begin at the Beginning

New initiatives in treating mental illness in children.  
*Details on page 6*



## Falling Through the Cracks

The real cost of untreated mental illness.  
*Details on page 7*

## MOVING TOWARD THE IDEAL IN MENTAL HEALTH SERVICES

**P**eople who suffer from it don't want to admit it, and may not even know it, so this disease remains largely hidden. But depression now affects 10 to 14 million Americans every year and is the leading cause of disability worldwide. An estimated 5 to 25 percent of people in the United States will experience a major depressive disorder in their lifetime, with women suffering at rates two to three times higher than those of men. Half of all men will experience a clinical depression. Moreover, the burden of mental illness on health and productivity in the United States and throughout the world has long been underestimated.

Depression is a potentially fatal disease. The morbidity for depression is comparable to that of angina and advanced coronary disease, and includes suicide attempts and completions, accidents due to impaired concentration, failure to advance in career and school, loss of employment, and increased risk of substance abuse.

But can depression alter the course of a simultaneously occurring physical disease? Recent studies say the answer is yes.

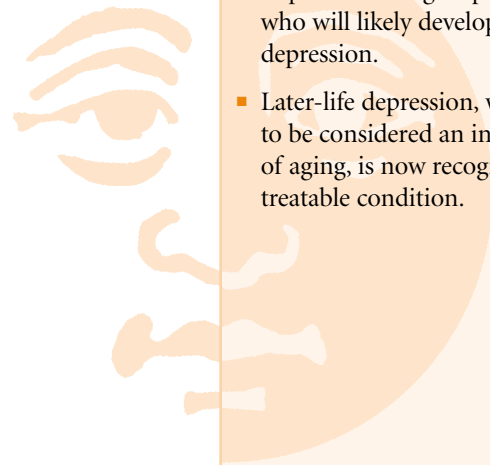
Over the past 25 years, research has established conclusively the strong connection between physical and mental health. Mental health professionals are learning that depression may actually precede physical illnesses.

When a person is depressed, biological changes take place at the physiological and cellular levels. Untreated depression worsens the prognosis for patients suffering from breast and prostate cancer, heart disease, stroke, AIDS, Parkinson's disease and most other major illnesses.

## DEPRESSION: OUR #1 HEALTH PROBLEM

Studies from around the world are showing that the cost of untreated depression at any time of life is high—monetarily and medically. Consider that the United States loses between \$30 and \$53 billion in productivity and direct medical costs related to depression each year, a figure that does not include the growing market in complementary, over-the-counter medicine aimed at reducing negative mood. Now consider the “cost” of depression represented in these recent findings:

- Women with a history of childhood depression may be up to 400% more likely to develop breast cancer later in life.
- Depressed patients who have had a heart attack are more likely to die afterwards if their depression remains untreated.
- Small-cell lung cancer is likely to advance more quickly in patients whose depression remains untreated.
- Women with untreated depression show a lowered bone density, making later-life hip fractures and falls both more common and potentially fatal.
- Widowed men are at greatly increased risk for death in the period immediately following their wives' deaths.
- A recently identified pattern of psychoendocrine risk factors appears to predict a subgroup of adolescents who will likely develop later-life depression.
- Later-life depression, which used to be considered an inevitable part of aging, is now recognized as a treatable condition.



## THE COST OF DEPRESSION

### The Leading Causes of Disability, World, 1990

	Total (millions)	Percent of Total
All Causes	472.7	100
1 Unipolar major depression	50.8	10.7
2 Iron-deficiency anaemia	22.0	4.7
3 Falls	22.0	4.6
4 Alcohol use	15.8	3.3
5 Chronic obstructive pulmonary disease	14.7	3.1
6 Bipolar disorder	14.1	3.0
7 Congenital anomalies	13.5	2.9
8 Osteoarthritis	13.3	2.8
9 Schizophrenia	12.1	2.6
10 Obsessive-compulsive disorders	10.2	2.2

Murray & Lopez, World Health Organization, *The Global Burden of Disease*, 1996

### Costs of Depression in the United States, 1990

#### Direct Costs:

\$1.2 billion in pharmaceuticals

\$2.9 billion in outpatient care/day treatment

\$8.3 billion in inpatient care

#### Indirect Costs:

\$7.5 billion, death from suicide

\$12.1 billion, decreased productivity

\$11.7 billion, increased absenteeism

Source: Greenberg et al (1993). "The Economic Burden of Depression in 1990", *Journal of Clinical Psychiatry*, 54, 405-418.



# TREATMENT WORKS

## THEN WHY ARE SO MANY LEFT BEHIND?

Success rates for the treatment of mental illness are as high or higher than for most physical illnesses. While success rates for the treatment of heart disease range from 41 percent to 52 percent, the success rate for the treatment of schizophrenia is 60 percent; for major depression, 65 percent; and for bi-polar disorder, 80 percent. Moreover, outcomes for most serious physical illnesses are improved significantly when co-occurring depression is simultaneously identified and treated.

Conversely, lack of adequate mental health treatment escalates health costs and imposes enormous additional financial and societal burdens. With more effective mental health treatments available, it seems, with every passing day, and with the dire consequences of leaving this disease untreated, why do so many people with mental disorders remain outside the healthcare system?

Three major barriers exist to treatment:

1 Because mental illness is viewed as separate from physical illness, many insurers cover it inadequately, in the mistaken belief that cost savings will result. While all federal government employee insurance policies now cover mental health in the same way as physical health, only 30 states do the same for their Medicaid recipients. Many employee insurance policies provide lower benefits for mental illness than for physical illness.

2 One symptom of depression—the feeling of powerlessness—tells the sufferer that nothing can help. In this way, the disease itself discourages treatment.

3 Mental illness still bears social stigma that discourages almost half of adults and a third of children with mental health disorders from seeking treatment. As Surgeon General David Satcher observed, "Stigmatization of mental illness is an excuse for inaction and discrimination that is inexcusably outmoded."

Depression is a major focus of the Jewish Healthcare Foundation's 2000 – 2001 Behavioral Health strategy.

### Pittsburgh Regional Healthcare Initiative

Over the past three years, the Pittsburgh Regional Healthcare Initiative (PRHI) has formed a collaboration among over 30 hospitals, four major insurers, over 32 major and small-business healthcare purchasers, hundreds of physicians, dozens of corporate and civic leaders, the Pennsylvania Health Care Cost Containment Council, and even Pennsylvania's Attorney General. One stated purpose of the initiative is to provide the world's best outcomes of care in five clinical areas, one of which is Depression and other Mood Disorders.

A core group is gathering data on the acute treatment of depression in Western Pennsylvania hospitals to 1) understand the prevalence, treatment and outcome of depression; and 2) lay the foundation for a qualitative analysis and later recommendations about care. The goal of the effort is build benchmarks for care delivery, outcome and cost, and to tap the energy of clinicians and health systems to improve models of care.

These are Jewish Healthcare Foundation initiatives which move our region toward the ideal in mental health services.

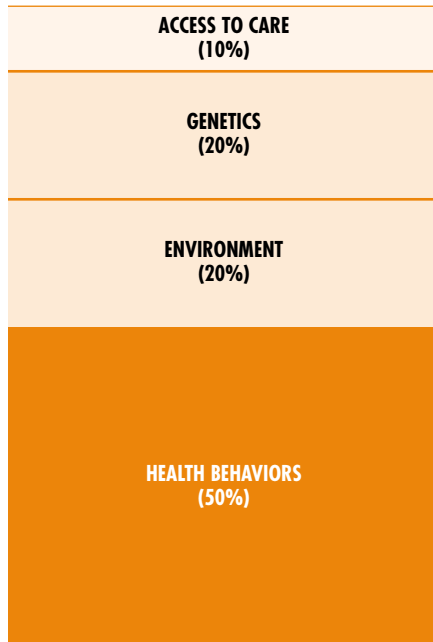
### RAND/University of Pittsburgh Health Institute

In January 2001, the Foundation granted support to the newly formed RAND-University of Pittsburgh Health Institute's "Community Based Health Initiative" (CBHI). This initiative will investigate treatment for depression in the Pittsburgh community and look for best practice or ideal models of care. This seed grant is also intended stimulate national funding to complete even further analysis and design models on how the treatment of depression could best be conducted in various community settings, e.g. physician's offices, mental health centers, private psychiatrists or psychologist's offices, etc., with various populations. Coupled with PRHI, this initiative gives the Foundation an analysis of the full service continuum of treatment for depression...as well as the perspective of the consumer at each level.

### National Institute of Mental Health Partnership

Mental illnesses—especially depression—are health disorders that are intimately tied to physical health. They are treatable, and we can no longer afford not to treat them. Adequate access to treatment of mental illness will be the topic when the Jewish Healthcare Foundation joins the University of Pittsburgh, Western Psychiatric Institute and Clinic, to host a national forum in March. The forum will be part of the National Institute on Mental Health (NIMH) conference, held in Pittsburgh, on The Unwanted Co-traveler: Depression's Toll on Other Illnesses. This "state-of-the-art-and-science" meeting will convene leading researchers, government and health policy leaders, insurers, business leaders, consumer advocates and clinicians, challenging them to recognize the value of appropriate mental health coverage and treatment and initiate policies that provide them.

#### Determinants of Health



Source: Centers for Disease Control and Prevention

*“Our failure to enforce insurance parity for depression with other medical illnesses has increased both the economic and social cost of depression, and decreased efforts for early recognition and treatment.”*

David J. Kupfer, M.D.  
Chairman, UPMC Department of Psychiatry



## TOYOTA'S NOTION OF THE IDEAL

The output of an ideal person, group of people or machine:

1. Is defect free (that is, it has the features and performance the customer expects);
2. Can be delivered one request at a time (a batch size of one);
3. Can be supplied on demand in the version requested;
4. Can be delivered immediately;
5. Can be produced without wasting any materials, labor, energy, or other resources (such as costs associated with inventory); and
6. Can be produced in a work environment that is safe physically, emotionally and professionally for every employee.



# BUILDING A BETTER MENTAL

Can lessons from the auto industry apply to health care? Decreasing revenues and increasing problems with healthcare delivery have prompted hospitals, insurers, and care providers to consider adapting the Toyota Production System (TPS) to maximize efficiency and quality. TPS incorporates four principles and conditions to approach a “defect-free” outcome—the outcome every healthcare provider strives for. Profoundly successful in industry, TPS encompasses every level of an organization, eventually becoming its standard of operation.

A hand-drawn TPS analysis of a problem, called an A3, is used to understand the problem from the consumer’s perspective and set corrective action plans. Below is an A3 for one health issue: depression.

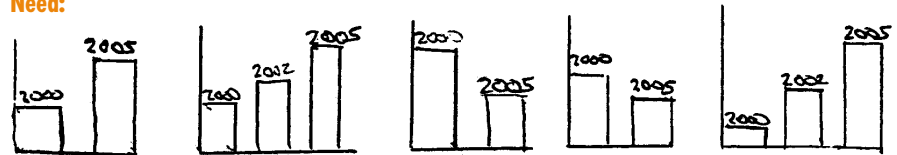
No, human beings are not cars. Nevertheless, adapting TPS principles to health care holds promise in addressing the stresses currently encumbering health care, while improving patient outcomes.

## Anatomy (A3) of an Illness: Depression

### Background:

- Depression is the number one cause of disability world-wide.
- 24% of all women and 15% of all men experience depression.
- Fewer than 1/3 of those with depression will receive proper medical care.
- Serious physical illness is greatly improved if related depression is treated.
- Without proper treatment, 80% will experience recurrence within three years.
- 75% of those leaving the doctor's office don't feel their depression was addressed.

### Need:



### Current Condition:

Two-thirds of those suffering with depression remain outside care.



Depression in children remains largely undiagnosed and untreated.



Existing systems of care create barriers and gaps in a continuum of care.



Individuals don't want to access care—until it's acute or too late.



# HEALTH SYSTEM: DEPRESSION

## A patient is not a car, but...

The Pittsburgh Regional Healthcare Initiative (PRHI) is promoting a revolutionary approach to redesigning healthcare delivery. PRHI's constituents have begun sharing data and learning ways of delivering better care, one patient at a time.

The approach is adapted from one of the most successful business improvement models in the world—the Toyota Production System (TPS). TPS enables Toyota, unlike any other company in the world, to operate something like the human body, with its parts connected together in a system, yet with each area adjusting continuously to problems and changes. Every worker is empowered to experiment with ways to map and solve problems on the spot, using scientific methods, measuring results and sharing what they learn. Rather than issuing orders, managers help workers solve problems. Everyone works toward the common goal of meeting needs, one customer at a time.

PRHI is working on applying the TPS model in five areas of healthcare delivery—one of which is depression. While the work is in its infancy, the results are promising.

**Problem:** Individuals and families with depression aren't accessing the care they need, ultimately increasing costs and fostering poorer clinical outcome.

**Why?** The illness itself causes one to not be motivated for treatment.

**Why?** Fear, stigma, perceived weakness of character, loss of privacy.

**Why?** Attitude of society, insurers that reinforces consumers fears and adds barriers to accessing care (e.g. shame, seeking authorizations, etc.)

**Why?** Healthcare costs mandate controls and reductions of expenditures; care is now "managed"; mental health is not prioritized.

**Why?** Science, policy and practice are not aligned; resource allocation is disparate; current medical expenditures are too high and the cost offset of treating depression is not understood.

### Target Condition

Build a System of care that anticipates the needs of those with depression, that regains consumer confidence and that improves access and coordination of care. The new System must integrate the latest science with practice and policy, incorporating this knowledge in a way that anticipates individual need and that removes all barriers to meeting that need.

### Actions:

- Identify a single depressed adult and child and meet all needs;
- Change system as a result of applying scientific assessment and identifying barriers from meeting the needs of these depressed individuals;
- Teach staff at the service level to change to meet the individual's need;
- Bring service and system change in an environment that is emotionally, physically and professionally safe for the client and for every employee;
- Bring System changes to support the service changes identified to meet the patient's needs; include accountability, cost and outcome.

## JEWISH HEALTHCARE FOUNDATION'S NOTION OF THE IDEAL

**Behavioral health is integral to health, not ancillary to it. Built on these premises:**

1. All care should anticipate the needs of individuals and use only methods that are scientifically valid, error free and compassionate.
2. Care should be customized, respecting the unique needs and concerns of each patient.
3. Behavioral care must be available and accessible with a minimum of barriers.
4. Behavioral care should be confidential.
5. Decision making should involve the patient to the extent feasible.
6. Behavioral care should continually improve individual outcomes through scientific measurement, consumer feedback and participation, and ongoing analysis of quality and efficiency.





# BEGIN AT THE BEGINNING

## —TREATING CHILDREN

*“The nation is facing a public health crisis in mental health for infants, children and adolescents. Many children have mental health problems that interfere with normal development and functioning. In the United States, one in ten children and adolescents suffer from mental illness severe enough to cause some level of impairment. Yet, in any given year, it is estimated that only one in five needing it receive mental health services. Unmet need for services remains as high now as it was 20 years ago. Recent evidence compiled by the World Health Organization indicates that by the year 2020, childhood neuropsychiatric disorders will rise proportionately by over 50% internationally, to become one of the five most common causes of morbidity, mortality, and disability among children.”*

David Satcher, M.D., Ph.D.  
Assistant Secretary of Health and Surgeon General  
Report of the Surgeon General, 2000

**O**ften adult mental health problems originate in early childhood. A child’s behavioral health is an important barometer of early psychological, social and intellectual development. According to American Psychological Association, vulnerable children and their families are best served when social services, caregivers and mental health specialists work together to design and implement appropriate, early intervention that nurtures and builds on a child’s emotional intelligence and productive behaviors. How can this be accomplished effectively?

Incorporating principles from the National Academy of Sciences’ report, *Early Childhood Intervention: Views from the Field* (2000), JHF has joined with the University of Pittsburgh, Office of Child Development, to discover ways to work together with day-care directors and teachers to identify and respond to children at risk for mental health difficulties. Too often teachers and caregivers don’t have the skills to identify or manage behavioral problems effectively, and don’t know where to turn for help.

The initiative will work to equip teachers and day-care workers in four communities with the skills to identify and respond to early behavioral problems. It will develop a collaboration among parents, teachers, child-care providers, pediatricians and mental health specialists to meet each child’s needs...one child at a time.

As part of its two-year process, the initiative will include four additional key goals:

- Conduct a community survey of children’s mental health services and identify appropriate early childhood providers;
- Research and implement parent and teacher training on how to identify children at risk for mental health problems;
- Develop appropriate behavioral interventions using the principles described above, that decrease the child’s vulnerabilities to mental health difficulties or lessen current difficulties;
- Build a child-centric network of caregivers representing a variety of disciplines to which day-care centers and families can turn for help with affected children.

By enhancing a child’s skills and putting into place models of collaboration between parents, teachers, childcare providers, pediatricians and mental health specialists, we can reach more vulnerable children with early intervention and treatment... diverting perhaps a lifetime of problems while presenting a better future for them and their families.





# FALLING THROUGH THE CRACKS:

—WHEN MENTAL ILLNESS REMAINS UNTREATED

In the past year, three separate episodes of violence rocked Pittsburgh.

**March 1, 2000, Wilkesburg.** A gunman goes on an apparently racially motivated shooting spree through several neighborhood establishments, killing three and wounding two. The accused gunman, a man with a lifelong history of mental illness, files an insanity plea. His trial begins this Spring.

**April 28, 2000, Mt. Lebanon area.** A gunman kills five and wounds one in another racially motivated shooting spree that starts in Mt. Lebanon and ends in Beaver County. The accused gunman, who has a history of mental illness, files a mental infirmity defense.

**September 25, 2000, North Side.** An 11-year-old boy is brutally murdered. A homeless man with a history of mental illness confesses to police—a confession later retracted by his attorneys. His court date is pending.

*While the vast majority of people with mental illness—even severe mental illness—are not violent, these incidents demonstrate graphically and tragically the potential cost to society of untreated mental illness. The Jewish Healthcare Foundation stepped forward to energize the community to find answers.*

## Establishing a Mental Health Platform

On the heels of the first two acts of violence, the Jewish Healthcare Foundation, the Staunton Farm Foundation and the University of Pittsburgh Institute of Politics convened a community forum to examine whether such tragedies could be prevented in the future by better mental health systems.

Over 100 health policy leaders, insurers, providers, consumer advocates and consumers, public and private, participated in drafting “Falling Through The Cracks—A Framework for Discussion; Developing a Pittsburgh Platform on Mental Health.” Karen Wolk Feinstein, Ph.D., President of the Jewish Healthcare Foundation, urged that this platform become a blueprint for our community and that each participant now bring it to life. It has become a basis for the mental health agenda for the Jewish Healthcare Foundation behavioral initiatives in 2001.

Among the many findings and recommendations of this four-month effort were:

- The likelihood of a person with a mental disorder engaging in a violent act is only slightly greater than it is for the general population, unless there is co-occurring substance abuse.
- The best predictors of violence are youth, male gender, substance abuse, and history of prior violence—not mental illness.

The “Platform” (released in January 2001) studies 16 areas critical to access and coordination of behavioral care. Removing barriers to care will require:

- Providing flexible and adequate funding.
- Providing insurance parity for behavioral care.
- Redesigning the plan for behavioral health services in Allegheny County.
- Removing regulatory barriers to consumer care.
- Improving and delivering school-based mental health services.
- Improving the coordination of care among involved systems, including clinical, housing, transportation and care management.

## CRACKS IN THE SYSTEM

The Jewish Healthcare Foundation, The Staunton Farm Foundation and the University of Pittsburgh Institute of Politics convened a community forum in the wake of these violent crimes.

The forum concluded that while examples of excellent care abound in a generally improved system, there are “cracks” in the mental healthcare system. Among them:

- New regulatory changes in funding and oversight have left antiquated policies and restrictive funding streams;
- Funding definitions (i.e. silos) leave agencies lacking the flexibility to put consumers’ needs first;
- Clinical gaps and barriers to care are common;
- Stigma adds to these barriers for some—particularly those with drug and alcohol problems;
- Culturally compatible services must make care accessible for all populations.

These “cracks” can be traced to rapidly increasing burdens on an already-overloaded system. Stresses include the increased responsibilities for behavioral healthcare providers, continual downsizing of state hospitals, increased demand for community-based services and the entry of managed care in both public health and commercial care.



## WHEN MENTAL ILLNESS REMAINS UNTREATED

CONTINUED FROM PAGE 7

- Examining the purpose of confidentiality regulations.
- Establishing proactive dialogue between all funders to remove any barriers derived by policy or funding.
- Enhancing coordination of criminal justice services including in jail treatment and services as alternatives to incarceration.
- Establishing fairer access to housing for those in need, including a review of eligibility rules.
- Incorporating employment and vocational opportunities with behavioral care.
- Developing system-wide cultural competence.
- Improving coordination of the aging and mental health service system.

*For a copy of the report, "Falling Through the Cracks," or other behavioral health inquiries contact Michael Flaherty, Ph.D., Director of Behavioral Initiatives at JHF.*

### Homelessness, Street People and Mental Illness

Following the third act of violence, the brutal slaying of a child allegedly by a homeless man, Pittsburgh Mayor Tom Murphy formed a special 40-member Task Force, co-chaired by JHF President Karen Wolk Feinstein, Ph.D., and Pittsburgh City Councilwoman Barbara Burns. The task force, with the participation of Allegheny County, is addressing homelessness and other related phenomena of street life. This coordinated effort convenes key representatives of public safety, government, law enforcement, business, housing, and community organizations working with this population. The goal of the task force is to promote the welfare of urban neighborhoods and people living on the streets, while protecting public safety.

Although Pittsburgh currently has a broad range of services and programs to help homeless people return to stable lives, some still live on the streets, unconnected to assistance programs. Most who do not seek services are mentally ill, alcohol- or drug-dependent, or both, according to a January 2001 study by Allegheny County's Consumer Action Response Team (CART). Compounding the difficulty of garnering community support for the homeless is the presence of those who are not homeless, but often presumed to be, who engage in panhandling, public intoxication, and other aggressive behaviors.

Drawing on clinical and legal skills from within the community, the task force is developing an individualized approach to addressing the needs of those harder to reach with existing programs. Theirs is an intervention "team" model, combining law enforcement and skilled outreach staff, who can be summoned as needed by local merchants and neighbors. This model will address aggressive, threatening behavior in a way that will ensure public safety; identify and remove barriers to services for homeless individuals, especially those needing mental health or addiction services; and follow up every intervention.

## Resources

### Organizations:

American Psychiatric Association  
www.psych.org  
1-888-357-7924

American Psychological Association  
www.apa.org  
1-800-374-2721

National Institute on Mental Health  
www.nimh.nih.com  
1-800-421-4211 or (301) 443-4513

National Alliance for the Mentally Ill  
amiofswpa@aol.com  
1-800-950-6264 (nationally)  
1-800-264-7972 (locally)

### References:

*U.S. Public Health Service, Report on the Surgeon General's Conference on Children's Mental Health; A National Action Agenda—Washington, D.C. 2000*

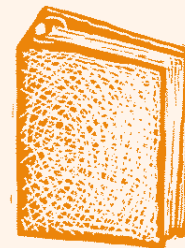
*U.S. Public Health Service, Mental Health: A Report of the Surgeon General, December 1999*

*Primary Care Meets Mental Health: Tools for the 21st Century—J.D. Haber, Ph.D. and G. E. Mitchell, M.D., Eds., CentralLink Publications, Tiburon, California, 1997*

*Managing Mental Illness in the Workplace, Hogg Foundation for Mental Health, Austin—Texas, 2000*

*Health and Healthcare 2010, The Forecast, The Challenge—Institute for the Future, Robert Wood Johnson Foundation, Princeton, NJ, 2000*

*Health Affairs, The New Mental Health Care Market—Health Affairs, Congers, NY, October 1999*



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