Prevention and Early Intervention

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Acknowledgements

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“The United States has the know-how and technology to deliver world-class health care to the public, but often fails to translate such expertise into everyday clinical practice. For many Americans, this situation results in suffering that could be prevented.”

US Health Expenditures Top Other Countries

Costs & Competition

U.S. Health Care Spending In An International Context

Why is U.S. spending so high, and can we afford it?

by Uwe E. Reinhardt, Peter S. Hussey, and Gerard F. Anderson

ABSTRACT: Using the most recent data on health spending published by the Organization for Economic Cooperation and Development (OECD), we explore reasons why U.S. health spending towers over that of other countries with much older populations. Prominent

Source: Reinhardt, Hussey, & Anderson (2004); Health Affairs, 23(3), 11.
### EXHIBIT 1

**Health Spending in OECD Countries, 2001**

<table>
<thead>
<tr>
<th>Country</th>
<th>Total health spending per capita</th>
<th>GDP per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total health spending per capita</td>
<td>Average annual growth, 1991–2001 (%)</td>
</tr>
<tr>
<td>United States</td>
<td>4,867</td>
<td>100</td>
</tr>
<tr>
<td>Switzerland</td>
<td>3,222</td>
<td>68</td>
</tr>
<tr>
<td>Norway</td>
<td>2,920</td>
<td>60</td>
</tr>
<tr>
<td>Germany</td>
<td>2,808</td>
<td>57</td>
</tr>
<tr>
<td>Canada</td>
<td>2,792</td>
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<tr>
<td>Luxembourg</td>
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<tr>
<td>Iceland</td>
<td>2,643</td>
<td>54</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2,525</td>
<td>54</td>
</tr>
<tr>
<td>France</td>
<td>2,561</td>
<td>51</td>
</tr>
<tr>
<td>Australia</td>
<td>2,513</td>
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</tr>
<tr>
<td>Denmark</td>
<td>2,503</td>
<td>51</td>
</tr>
<tr>
<td>Belgium</td>
<td>2,400</td>
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<tr>
<td>Sweden</td>
<td>2,270</td>
<td>46</td>
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<td>Italy</td>
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<td>Austria</td>
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<td>45</td>
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<tr>
<td>Japan</td>
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<td>44</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1,992</td>
<td>44</td>
</tr>
<tr>
<td>Ireland</td>
<td>1,935</td>
<td>40</td>
</tr>
<tr>
<td>Finland</td>
<td>1,841</td>
<td>38</td>
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<td>New Zealand</td>
<td>1,710</td>
<td>35</td>
</tr>
<tr>
<td>Portugal</td>
<td>1,613</td>
<td>33</td>
</tr>
<tr>
<td>Spain</td>
<td>1,500</td>
<td>33</td>
</tr>
<tr>
<td>Greece</td>
<td>1,511</td>
<td>31</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1,106</td>
<td>23</td>
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<tr>
<td>Hungary</td>
<td>911</td>
<td>19</td>
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<tr>
<td>Korea</td>
<td>893</td>
<td>18</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>882</td>
<td>14</td>
</tr>
<tr>
<td>Poland</td>
<td>922</td>
<td>13</td>
</tr>
<tr>
<td>Mexico</td>
<td>535</td>
<td>11</td>
</tr>
<tr>
<td>Turkey</td>
<td>301</td>
<td>6</td>
</tr>
<tr>
<td>OECD median</td>
<td>2,161</td>
<td>44</td>
</tr>
</tbody>
</table>

**Source:** Organization for Economic Cooperation and Development (OECD) data, 2002.

**Note:** Growth rates are calculated from national currency units, not U.S. dollar purchasing power parity (PPPs). NA is not available.

*1990.
*1996.
HEALTH SPENDING AND AGING:
SELECTED OECD COUNTRIES 2000

PERCENT OF GDP SPENT ON HEALTH CARE

PERCENT OF POPULATION OVER AGE 65

SOURCE: OECD Data, 2002
PER CAPITA HEALTH SPENDING IN SELECTED OECD NATIONS, 2000

<table>
<thead>
<tr>
<th>Country</th>
<th>Per Capita Health Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$4,631</td>
</tr>
<tr>
<td>Switzerland</td>
<td>$3,222</td>
</tr>
<tr>
<td>Germany</td>
<td>$2,748</td>
</tr>
<tr>
<td>Canada</td>
<td>$2,535</td>
</tr>
<tr>
<td>France</td>
<td>$2,349</td>
</tr>
<tr>
<td>Australia</td>
<td>$2,211</td>
</tr>
<tr>
<td>Japan</td>
<td>$2,012</td>
</tr>
<tr>
<td>OECD Median</td>
<td>$1,983</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>$1,763</td>
</tr>
</tbody>
</table>

SOURCE: OECD Data, 2002; DoH, ROC, 2001 Health Statistical Trends.
TRENDS

U.S. Health Spending Projections For 2004–2014

Shifts in funding for prescription drugs and lower private health insurance premium growth are expected over the next ten years.

by Stephen Heffler, Sheila Smith, Sean Keehan, Christine Borger, M. Kent Clemens, and Christopher Truffer

ABSTRACT: National health spending growth is anticipated to remain stable at just over 7.0 percent through 2006, the result of diverging public- and private-sector spending trends. The faster public-sector spending growth is exemplified by the introduction of the new Medicare drug benefit in 2006. While this benefit is anticipated to have only a minor impact on overall health spending, it will result in a significant shift in funding from private payers and Medicaid to Medicare. By 2014, total health spending is projected to constitute 18.7 percent of gross domestic product, from 15.3 percent in 2003.

“Over the 2003–14 period, national health spending is forecast to continue growing faster than gross domestic product (GDP). The consequence is a projected increase in health’s share of GDP from 15.3 percent in 2003 to 18.7 percent by 2014.”

(p. W 5 - 74)

Spending for mental health and substance abuse (MHSA) treatment is on the Rise!

“Spending for mental health and substance abuse (MHSA) treatment in the United States totaled $104 billion in 2001, representing 7.6 percent of all health care spending.”

Highlights

- Five medical conditions—heart conditions, cancer, trauma, mental disorders, and pulmonary conditions—ranked higher than all other medical conditions in terms of direct medical spending in 1997 and 2002.

- Medical expenditures (in 2002 dollars) increased the most for mental disorders ($11.3 billion) and pulmonary conditions ($10.0 billion) between 1997 and 2002.

Source: Olin & Rhoades, 2005
After all that spending what do we have to show for?
Crossing the Quality Chasm

Conclusions

- There are serious problems in quality:
  - Between the health care we have and the care we could have lies not just a gap but a chasm.

- The problems come from poor systems…not bad people:
  - In its current form, habits, and environment, US health care is incapable of providing the public with the quality health care it expects and deserves.

- We can fix it… but it will require changes.

Source: Crossing the Quality Chasm, IOM, 2001
Behavioral health systems in the United States are:

- fragmented;
- fraught with barriers;
- leaving too many people seeking mental health care, with unmet needs.

This is particularly true for minority populations who are often over represented in our nation’s most vulnerable populations.
Are we going to allow “more of the same” with the fresh influx of resources from the MHSA?
Key Issues in Mental Health Care

- **Relevance**: Mental health issues are largely irrelevant to the public (individuals, families, communities).

- **Access** to care is a pervasive and persistent problem.

- **Quality** of care is a long way from what it could be.
There is a tremendous gap between the evidence of the magnitude and impact of mental disorders and the public understanding of mental health problems.
Relevance of Mental Disorders

Mental disorders:

- Are among the most prevalent classes of chronic diseases in the general population
- Are highly co-morbid within themselves, with substance use disorders, and with many medical conditions
- Typically have much earlier ages of onset than other chronic diseases
Relevance of Mental Disorders

Mental disorders:

- Only a minority with mental health needs receive treatment in the preceding year.
- Are among the most disabling of all chronic diseases.
Median Age at Onset of Mental Disorders in U.S. General Population (N=9282)

Source: Kessler et al, 2005
Among the top ten main causes of disability, five are mental disorders:

- major depression
- schizophrenia
- bipolar disorders
- alcohol use
- obsessive-compulsive disorders
Despite the evidence, we continue to be largely irrelevant to critical stakeholders such as consumers and their families, policy-makers, providers, administrators, the general public.

Mental health issues are just not in the radar of the public!
Relevance of Mental Health Issues to the Public

- “Governmental public health agencies must find ways to improve communication and openness with the public to maintain and increase their trustworthiness.” (IOM, Healthy Communities, 1996).
Relevance of Mental Health Issues to the Public: Do what it takes!

- Need to rethink traditional ways of doing things
- Need better communication (two-way) channels with the public
- Willingness to take the risks needed at the outset
- Come out from one’s comfort zone and venture into unfamiliar territories
“To… expend funds made available through this initiative to \textit{transform} the current mental health system in California

\ldots This will \textit{not be} “business as usual”. Eventually access will be easier, services more effective and out-of-home and institutional care will be reduced.”
DMH Proposed Intent

- Build long-term vision of transformation of the current mental health system
- Initiate phased-in multiple plan components which will eventually be integrated
MHSA: Purpose

- Define serious mental illness as a condition deserving priority attention;
- Reduce long-term adverse impact from untreated serious mental illness;
- Expand successful, innovative service programs;
- Provide funding to adequately meet the needs;
- Ensure that funds are expended in a cost effective manner and that services are provided consistent with best practices.
MHSA Vision

- Reduce long-term adverse impact of untreated mental illness
  - Including reduction of stigma and discrimination

- Expand access
  - To unserved and underserved populations
  - To successful service programs

- Focus on effective services and cost-effective expenditures
  - Including prevention and early intervention

- Ensure accountability
Sources for Vision

- President’s New Freedom Commission on Mental Health Report
- Surgeon Generals Report: Mental Health Culture, Race & Ethnicity
- Institute of Medicine’s *Crossing the Quality Chasm* Report
- California Planning Council’s *Master Plan*
- Little Hoover Commission Reports
- Reports of the Select Committee of the California Legislature
President’s New Freedom Commission on Mental Health

Charge

“The Commission …shall…recommend improvements to enable adults with serious mental illnesses and children with severe emotional disturbances to live, work, learn, and participate fully in their communities.”
“Achieving the Promise: Transforming Mental Health Care in America”

- **Goal 1** Americans Understand that Mental Health Is Essential to Overall Health
- **Goal 2** Mental Health Care Is Consumer and Family Driven
- **Goal 3** Disparities in Mental Health Services Are Eliminated
- **Goal 4** Early Mental Health Screening, Assessment, and Referral to Services Are Common Practice
- **Goal 5** Excellent Mental Health Care Is Delivered and Research Is Accelerated
- **Goal 6** Technology Is Used to Access Mental Health Care and Information
Goal 3: 
Disparities in Mental Health Services Are Eliminated

- 3.1 Improve access to quality, culturally competent care
- 3.2 Improve access to quality care in rural and geographically remote areas

[what works best for diverse populations, not what pays best; Culturally acceptable, affordable, accessible, accountable; improve primary care/mental health integration]
Goal 4:
Early Mental Health Screening, Assessment, and Referral to Services Are Common Practice

- 4.1 Promote mental health of young children
- 4.2 Improve and expand school mental health programs

[1/6 population in schools; school health centers improve access, school wraparound decreases out-of-home placement; stigma; maximize Medi-Cal]
Goal 4:
Early Mental Health Screening, Assessment, and Referral to Services Are Common Practice

- 4.3 Screen for co-occurring disorders, and link with integrated treatment
  - [high risk settings, child welfare & juvenile justice]
- 4.4 Screen in primary care, and connect to treatment and supports
  - [natural settings, better access for ethnic, racial populations, less stigma, ~12% in pediatric care SED only 50% identified]
Expanded the Mandate: A Public Health Approach

- Public education and national campaigns to reduce stigma
- Array of services along continuum of promotion, prevention, early intervention and treatment
- Screening and early identification
Figure 1: The spectrum of interventions for mental health problems and mental disorders

Source: adapted from Mrazek & Haggerty (1994).
What is Prevention?

- Prevention refers to interventions that occur prior to the onset of the disorder (Mrazek & Haggerty, 1994, p. 23).

- Preventive interventions can be divided into three categories:
  - Universal
  - Selective
  - Indicated
Median Age at Onset of Mental Disorders in U.S. General Population (N=9282)

- Anxiety: 11
- Mood: 30
- Substance: 20
- Total: 14

Source: Kessler et al, 2005
<table>
<thead>
<tr>
<th>Type of prevention intervention</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal</td>
<td>‘targeted to the general public or a whole population group that has not been identified on the basis of individual risk’ (Mrazek &amp; Haggerty, p. 24)</td>
<td>Good prenatal care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Programs to prevent bullying in schools</td>
</tr>
<tr>
<td>Selective</td>
<td>‘targeted to individuals or a subgroup of the population whose risk of developing mental disorders is significantly higher than average... The risk may be imminent or it may be a lifetime risk. Risk groups may be identified on the basis of biological, psychological, or social risk factors that are known to be associated with the onset of mental disorder’ (Mrazek &amp; Haggerty, p. 25)</td>
<td>Support for children of parents with a mental disorder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bereavement support groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Psychosocial support for people experiencing physical illness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social support programs to prevent depression for older people in residential care</td>
</tr>
<tr>
<td>Indicated</td>
<td>‘targeted to high-risk individuals who are identified as having minimal but detectable signs and symptoms foreshadowing mental disorder, or biological markers indicating predisposition for mental disorder, but who do not meet DSM-IV diagnostic levels at the current time’ (Mrazek &amp; Haggerty, p. 25)</td>
<td>Parenting programs for parents of preschool children who display aggression and noncompliance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Programs for children identified at school with some signs of behaviour problems</td>
</tr>
</tbody>
</table>
FIGURE 2: THE PUBLIC HEALTH APPROACH TO PREVENTION

Define the problem: Surveillance
Identify Causes: Risk & protective factor research
Develop and test interventions
Implement interventions
Evaluate effectiveness

PROBLEM RESPONSE
Prevention—Principles and Strategic Approaches

- The prevention of mental health problems and mental disorders depends on identifying and modifying the determinants of mental health and mental illness.

- Effective prevention requires an understanding of:
  - the risk and protective factors for mental health,
  - identification of the groups and individuals who can potentially benefit from interventions, and
  - the development, dissemination and implementation of effective interventions.
The Role of Prevention in Eliminating Health Disparities

- Populations currently experiencing poor health status are increasing while those experiencing good health status are decreasing.

- In particular, these deaths and other associated health problems occur disproportionately among poor and minority populations.

Source: Mikkelsen, Cohen, Bhattacharyya, Valenzuela, Davis, & Gantz, 2002.
The Role of Prevention in Eliminating Health Disparities

- Primary prevention — taking action before a health condition arises — can make a vital contribution to current efforts to reduce disparities in health.

- By addressing the underlying factors that negatively influence health, prevention has the power to reduce the incidence of poor health, injury, and premature death.

Source: Mikkelsen, Cohen, Bhattacharyya, Valenzuela, Davis, & Gantz, 2002.
Medical care is not the primary determinant of health

- Improving health access is only part of the solution to improving health outcomes and reducing health disparities
- There are three reasons why improving access to quality health care alone will not eliminate disparities:
  1. Medical care treats one person at a time
  2. Medical intervention often comes late
  3. Medical care is usually sought after people are sick

Source: Mikkelsen, Cohen, Bhattacharyya, Valenzuela, Davis, & Gantz, 2002.
1. Medical care treats one person at a time:
   - Of the 30-year increase in life expectancy since the turn of the century, only about five years of this increase are attributed to medical care.
   - The most important determinant of health is environmental conditions, followed by lifestyle.
   - Medical care ranks third as a determinant of health.

Source: Mikkelsen, Cohen, Bhattacharyya, Valenzuela, Davis, & Gantz, 2002.
2. Medical care is usually sought after people are sick:

- Today’s most common chronic health problems, such as heart disease, diabetes, asthma, and HIV/AIDS, are never cured. Therefore it is extremely important to prevent them from occurring in the first place.
- Prevention is also preferable for serious acute problems, such as traffic injuries, violence, and contagious diseases.
- While medical care can help some people recover from these conditions, they would undoubtedly be far better off never experiencing them in the first place.

Source: Mikkelsen, Cohen, Bhattacharyya, Valenzuela, Davis, & Gantz, 2002.
A preventive analysis addresses these questions:

- What are the most important mental health problems facing a community (or other defined population)?
- What are the ‘actual’ causes of these mental health problems?
- What are the underlying factors associated with these mental health problems?
- Which of the factors can have the greatest impact on the overall burden of disease?

Source: Mikkelsen, Cohen, Bhattacharyya, Valenzuela, Davis, & Gantz, 2002.
What is Early Intervention?

Actions that target early signs and symptoms of mental health problems or disorders, and people developing or experiencing a first episode of mental disorder but who do not meet current criteria for the disorder.

Source: Commonwealth Department of Health and Aged Care 2000,
Table 5: Potential early signs and symptoms for some mental health problems and mental disorders, particularly for young people

<table>
<thead>
<tr>
<th>Suspicousness</th>
<th>Withdrawal and loss of interest in socialising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tension</td>
<td>Excessive risk-taking behaviour</td>
</tr>
<tr>
<td>Irritability</td>
<td>Depressed mood</td>
</tr>
<tr>
<td>Mood swings</td>
<td>Rapid or persistent behavioural change</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Deterioration of work and study</td>
</tr>
<tr>
<td>Anger</td>
<td>Feelings of hopelessness</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>Hazardous substance use</td>
</tr>
<tr>
<td>Palpitations</td>
<td>Memory or concentration difficulties</td>
</tr>
<tr>
<td>Headaches</td>
<td>Decline in functioning</td>
</tr>
<tr>
<td>Intrusive or worrying thoughts</td>
<td>Appetite changes</td>
</tr>
<tr>
<td>Loss of energy or motivation</td>
<td>Emerging unusual beliefs</td>
</tr>
<tr>
<td>Perception that things around them have changed</td>
<td>Belief that thoughts have speeded up or slowed down</td>
</tr>
</tbody>
</table>

Source: Adapted from NSW Health (1999) p. 7.
<table>
<thead>
<tr>
<th>Key Indicators of Child Well-Being</th>
<th>California</th>
<th></th>
<th>USA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population under age 18 below poverty</td>
<td>1,757,100</td>
<td>19.5</td>
<td>11,746,858</td>
<td>16.6</td>
</tr>
<tr>
<td>Population ages 16 to 19 who are high school dropouts</td>
<td>195,244</td>
<td>10.1</td>
<td>1,566,039</td>
<td>9.8</td>
</tr>
<tr>
<td>Population ages 16 to 19 who are not in school and not working</td>
<td>183,277</td>
<td>9.5</td>
<td>1,423,283</td>
<td>8.9</td>
</tr>
<tr>
<td>Children ages 5 to 17 who have difficulty speaking English</td>
<td>1,111,387</td>
<td>16.4</td>
<td>3,493,118</td>
<td>6.6</td>
</tr>
<tr>
<td>Children ages 5 to 15 with one or more disabilities</td>
<td>277,503</td>
<td>4.8</td>
<td>2,614,919</td>
<td>5.8</td>
</tr>
<tr>
<td>Children living in high-poverty neighborhoods (where 20% or more of the population is below poverty)</td>
<td>2,735,544</td>
<td>29.6</td>
<td>14,746,918</td>
<td>20.4</td>
</tr>
</tbody>
</table>

Source: The Annie E. Casey Foundation
Further Exacerbated for Children:

- Developmental, dynamic nature of their mental health problems;
- Multiple system involvement;
- Disjointed funding mechanisms;
- Inadequate workforce;
- Cultural and linguistic factors.
Early intervention takes place when people are displaying the early signs and symptoms of a mental health problem or mental disorder, or developing or experiencing a first episode of mental illness.

Its focus is primarily on the individual who is experiencing problems, although the ongoing contribution of promotion and prevention interventions are fundamental to its effectiveness.
Challenges Impacting Prevention and Early Intervention Efforts

- Demographic trends
- Mental illness prevalence and onset
- Service access and utilization
- Disparities in care
- Avoiding doing “business as usual”; truly transforming the mental health system
Unique Challenges in Some Areas in California

- High poverty
- High unemployment
- Rural, dispersed communities
- Highly ethnically, linguistically diverse
- Intercultural, intergenerational stress

Yet, with:
Creative leadership, compelling commitment, new resources…

Present a Unique Opportunity for Discovery, Leading Innovation, Transforming Existing Practice
SAMHSA’s Strategic Prevention Framework

Sustainability & Cultural Competence

Monitor, evaluate, sustain, and improve or replace those that fail

Profile population needs, resources, and readiness to address needs and gaps

Mobilize and/or build capacity to address needs

Implement evidence-based prevention programs and activities

Develop a Comprehensive Strategic Plan
Services and treatments that –

- Are consumer and family-driven, not focused primarily on the demands of bureaucracies

- Provide real and meaningful choice of treatments, services and supports – and providers
Principles Underlying Transformation (2)

Care is geared to:

- Promoting consumers’ and family’s ability to manage life’s challenges successfully;
- Facilitating recovery;
- Building resilience, not just managing symptoms.
Principles Underlying Transformation (3)

Services and Supports are based on:

- Rebalancing of Services and Financing;
- Reducing Disparities;
- Early Identification and Intervention;
- Using What Works;
- Technology in Service to Quality Care.
To transform children’s mental health, we must...

- Send a message of hope for systems as well as for children and families
- If we provide a service the community wants, and it is funded, transformation will occur
Communities, legislatures, governors will not always understand why systems of care, or evidence-based practices, or recovery and resiliency or children’s self-esteem are good things.

They will understand why children who are not incarcerated, who do not drive drunk, who graduate, who have higher incomes as adults, and who contribute to the community is a good thing.
1 - Prevention and Early Intervention

- Includes outreach, access, reduction of stigma, reduction of discrimination.
- Emphasis on reducing negative outcomes of suicide, incarcerations, school failure or dropout, unemployment, prolonged suffering, homelessness, removal of children from their homes.
- State to develop overall plan, local services must be consistent with that plan.
Transformation Strategy for Children’s Mental Health: In Community and Services Supports Philosophy

- Driven by the needs and preferences of the child and family;
- Addressed through a strength-based approach;
- Focus and management of services occurs in multi agency and community base;
- Services, partners and programs are responsive to cultural characteristics of the populations served;
- Families are partners in all phases of the program.
“Being There: Making a Commitment to Mental Health”

“There is…a moral imperative for caring for those who cannot care for themselves, and on that basis alone we should change our policies…the value of quality mental health care is shared throughout our communities. Providing quality care…is a community responsibility.”

Richard R. Terzian, Chair