ELDER SUICIDE PREVENTION, A REVIEW OF BEST PRACTICES AND RECOMMENDATIONS FOR STATE INITIATIVES IN MAINE

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Executive summary

Suicide rates for older adults have consistently been the highest among all population groups in the United States and in Maine. The most recent report published on suicide statistics in Maine confirms this trend. Prevention efforts have historically targeted their efforts towards youth; however, there is a growing movement to make preventative efforts inclusive of all age groups. Thirty-three states have created suicide prevention plans that now target groups across the lifespan and a handful of states have created prevention plans that are elder-specific in their scope.

Research investigating the evidence base behind prevention initiatives is in its infancy, but some promising studies have emerged. Research efforts are expanding as suicide gains more recognition from the public as an important public health problem. Preliminary studies show that screening and treatment of depression in the primary care environment is effective in depression treatment and reduction in suicidal behaviors in older adults by using the primary care physician's office as a point of screening and treatment through collaborative care models. The training of "gatekeepers" is also a promising way in which to detect and refer older adults who may be at risk for late life depression or suicide. And outreach to homebound seniors as well as the promotion of healthy aging initiatives can increase the protective factors associated with the prevention of elder suicide. Many states have developed their plans based upon the *National Strategy for Suicide Prevention* using the 11 goals of the National Strategy as a framework from which to design applicable objectives for their respective states.

There is also momentum in the advocacy efforts of suicide prevention groups to change public policy relevant to suicide prevention. Such policy topics as insurance parity, increased funding of prevention initiatives, and improved reimbursement rates for emerging evidence-based practices all have an impact on improving the well being of at-risk older adults. Recently, the Senate Special Committee on Aging called for improvements in elder suicide prevention efforts and increased access to geriatric mental health services. Also, improvements in elder suicide prevention are objectives in both the *National Suicide Prevention Strategy* and the *President's New Freedom Initiative*.

Recommendations for state initiatives include moving forward with more frequent depression screening in the primary care setting, coordination with existing state suicide prevention efforts to include older adults in their efforts, and to support the training of "gatekeepers" that have close contact with older adults in identifying and referring elders at risk for late life suicide.

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Section 1: Rates and prevalence

Each year there are over 30,000 suicides completed in the United States making suicide the 11th leading cause of death. Over 5,000 older Americans die each year by suicide and adults aged 70 years old and older make up 14% of all suicides. The suicide rate for this age group is twice the rate for 15 to 19 year olds (SPRC, 2004). In 1999, the United States Surgeon General released *The National Strategy for Suicide Prevention* and adults aged 65 and older were identified in this document as a priority population for prevention efforts.

In Maine there is an average of 160 completed suicides annually and it is the 10th leading cause of death in this state (SPRC, 2004). There were 146 suicide deaths in Maine for people 65 years old and older from latest data available for the five year period covering 1999-2003 representing 18.4% of all suicide deaths in Maine. This averages out to 30 older adult suicide deaths per year in Maine. Particularly alarming is the fact that 70% of all elder suicide deaths in Maine are committed with a firearm (Meyer et al., 2006).

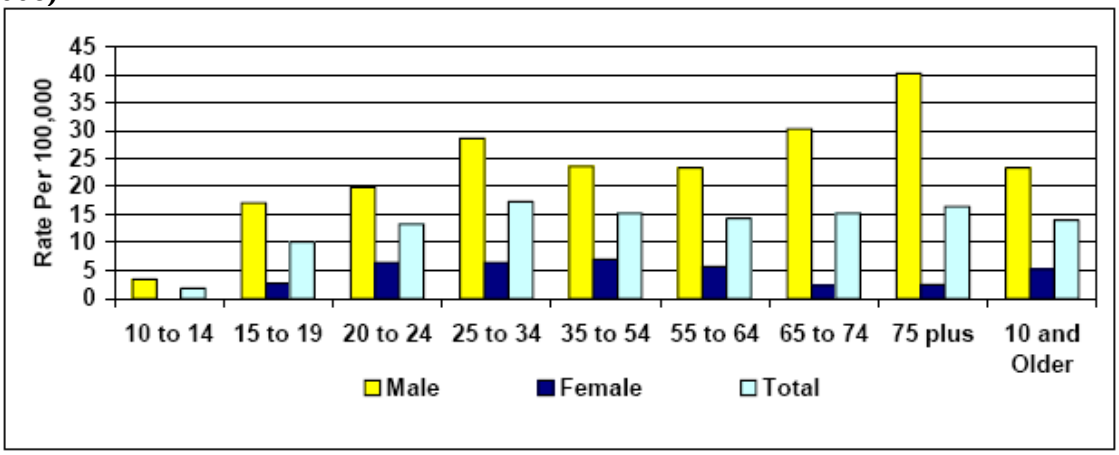
While Maine has a formalized effort to reduce suicides among youth (ages 10-24) in the Maine Youth Suicide Prevention Program (MYSPP), rates among adults aged 65 and older are consistently higher than rates for those aged 10-24. The primary funding sources for the MYSPP specifically require that funds are directed at youth suicide prevention efforts. In 2005, the MYSPP secured a core capacity injury prevention grant from the Centers for disease Control and Prevention (CDC) that is not limited to the youth population.

Coordinating efforts of the MYSPP with elder suicide prevention proponents is cited as a goal in the recent state health plan. As Maine's population ages, the problem of suicide among older adults is likely to grow as well. Deaths from suicide are preventable and now is the time for action to help prevent these deaths.

Current statistics

In December 2006 the *Maine Suicide and Self-inflicted Injury Surveillance Report* was published by the Maine Youth Suicide Prevention Program (MYSPP). Included in this report are the most current and comprehensive suicide surveillance statistics for all age groups in Maine. The graph below illustrates suicide rates by age and gender in Maine between 1999 and 2003. Males have higher suicide rates than females for all age categories. Adults 75 years and older have a rate of 40.2 per 100,000 population, the highest suicide rate for all age groups in the state. Older males aged 65 and older are at elevated risk for suicide death in Maine (Meyer et al., 2006).

Age and gender-specific suicide rates (per 100,000), Maine, 1999-2003 (Meyer et al., 2006)



*Data Source: NCHS Database & Maine Suicide and Self-Inflicted Injury Surveillance Report

Suicide rates and numbers (per 100,000) by age and gender in Maine 1999-2003 (Meyer et al., 2006).

	Male Rate	Female Rate	Total Rate	Total Number
10 to 14	3.4	0	1.8	8
15 to 19	17.1	2.7	10.1	46
20 to 24	19.9	6.4	13.3	50
25 to 34	28.6	6.4	17.3	132
35 to 54	23.6	7.0	15.2	317
55 to 64	23.3	5.7	14.3	94
65 to 74	30.3	2.3	15.2	73
75 plus	40.2	2.5	16.4	73
10 and older	23.3	5.2	14.0	793

Data Source: NCHS Database & Maine Suicide and Self-Inflicted Injury Surveillance Report

Firearms

Firearms accounted for more than half of all suicides in Maine between 1999 and 2003 and are the most common cause of suicide across all age groups. For older adults over the age of 65, 70% of suicides were completed with a firearm. Elder suicide represented 18.4% of Maine suicide deaths for this time period. The 35 to 64 year old age group represents 51.8% of Maine suicide deaths from 1999-2003 and demonstrates further the need for a comprehensive lifespan prevention plan for the state.

Distribution of suicide methods by age in Maine, 1999-2003 (Meyer et al., 2006).

	10 to 14	15 to 19	20 to 24	25 to 34	35 to 64	65 plus	Total All Ages 10 and Older
Number of Deaths	8	46	50	132	411	146	793
Percentages (%):							
Firearms	50%	48%	52%	45%	53%	70%	54%
Hanging	50	39	40	25	14	11	19
Poison/gases	0	4	6	22	25	12	19
Other methods	0	9	2	8	9	8	8

Data Source: NCHS Database & Maine Suicide and Self-Inflicted Injury Surveillance Report

Suicide rates by age, gender, and methods in Maine, 1999-2003 (Meyer et al., 2006)

Method	10 to 14			15 to 19			20 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Firearms	1.7	0	0.9	9.0	0.5	4.8	11.0	2.7	6.9
Hanging	1.7	0	0.9	6.0	1.8	3.9	7.9	2.7	5.3
Poisoning	0	0	0	0.4	0.5	0.4	1.1	0.5	0.8
Other	0	0	0	0	0	0	0	0.5	0.3
Method	**25 to 34**			**35 to 64**			**65 Plus**		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Firearms	13.3	2.3	7.7	13.8	2.1	7.9	25.4	0.6	11.0
Hanging	7.7	1.0	4.3	3.6	0.7	2.1	3.6	0.3	1.7
Poisoning	5.1	2.6	3.8	4.0	3.5	3.7	2.9	1.1	1.8
Other	2.4	0.5	1.4	2.2	0.7	1.4	2.6	0.4	1.3

Data Source: NCHS Database & Maine Suicide and Self-Inflicted Injury Surveillance Report

Highest suicide rate of all age groups

Suicide among older adults is a particular concern given the fact that older adults have the highest suicide rates of any age cohort and are experiencing the largest population growth in recent history (CDC, 2002; WHO, 1996). Among the most prominent sociological risk factors associated with elder suicide is access to lethal means (Conwell, 2002; Shenassa, Catlin, & Buca, 2003), making elder firearm suicide a significant public health problem. Older adult males are at the highest risk for firearm suicide. The chart below reveals the overwhelming majority of suicides by males over the age of 60 were completed by firearm in each year of the last eleven years of available data (MEDHHS/MECDC, 2006)

Suicide by Method Used for Age 60+ -- **MALES**
1993- 2003 Maine Resident Data

METHOD	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	**SUM**
Firearm	24	33	27	39	28	19	25	20	28	23	24	**290**
Percentage of Total	64.9%	73.3%	73.0%	83.0%	84.8%	59.4%	71.4%	76.9%	70.0%	74.2%	77.4%	**73.5%**
TOTAL ELDER SUICIDES	37	45	37	47	33	32	35	26	40	31	31	**394**

Suicide by Method Used for Age 60+ -- **FEMALES**
1993 - 2003 Maine Resident Data

METHOD	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Firearm	0	1	0	1	4	1	2	1	1	0	1	**12**
Percentage of Total	0.0%	20.0%	0.0%	33.3%	50.0%	16.7%	33.3%	50.0%	16.7%	0.0%	20.0%	**21.8%**
TOTAL ELDER SUICIDES	6	5	3	3	8	6	6	2	6	4	5	**54**

Data Source: ME DHHS and the Maine Center for Disease Control and Prevention (2006). Suicide by Method Used Age 60+ in Maine by gender, 1989 to 2003.

Leading causes of elderly death in Maine

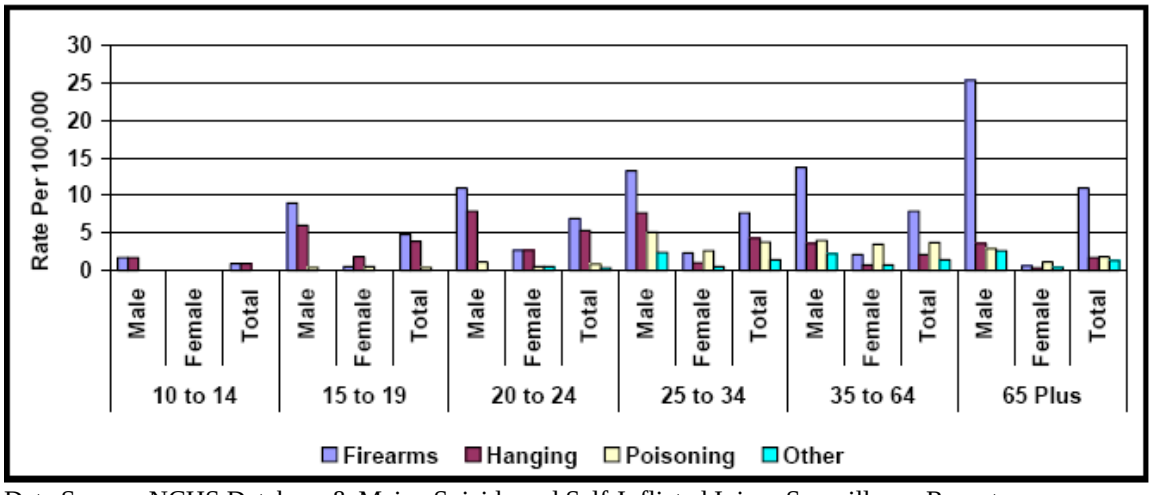
Elder suicide, in general, has not received the public attention and action needed to contain the situation. Nationwide, there are far more sources of information and prevention programs for youth suicide than for adults. The table below indicates that suicide by firearm was among the top 5 leading causes of injury deaths for Maine residents ages 65 and older during the time period of 2000-2003..

5 Leading Causes of Injury Deaths for older Mainers 2000-2003 (Mervis, 2006)

Rank	65-74	75-84	85+
1	Unintentional MV traffic 71	Unintentional Fall 90	Unintentional Fall 128
2	Unintentional Fall 44	Unintentional MV traffic 87	Unintentional Suffocation 47
3	**Suicide Firearm 40**	Unintentional Suffocation 44	Unintentional MV traffic 29
4	Unintentional Suffocation 16	**Suicide Firearm 23**	Unintentional Unspecified 25
5	Adverse effects 10	Unintentional Unspecified 19	**Suicide Firearm 15**

The chart below further illustrates that males 65 and over have the highest rate of suicide by firearm.

Causes of suicide by gender and age in Maine, 1999-2003 (Meyer et al., 2006)

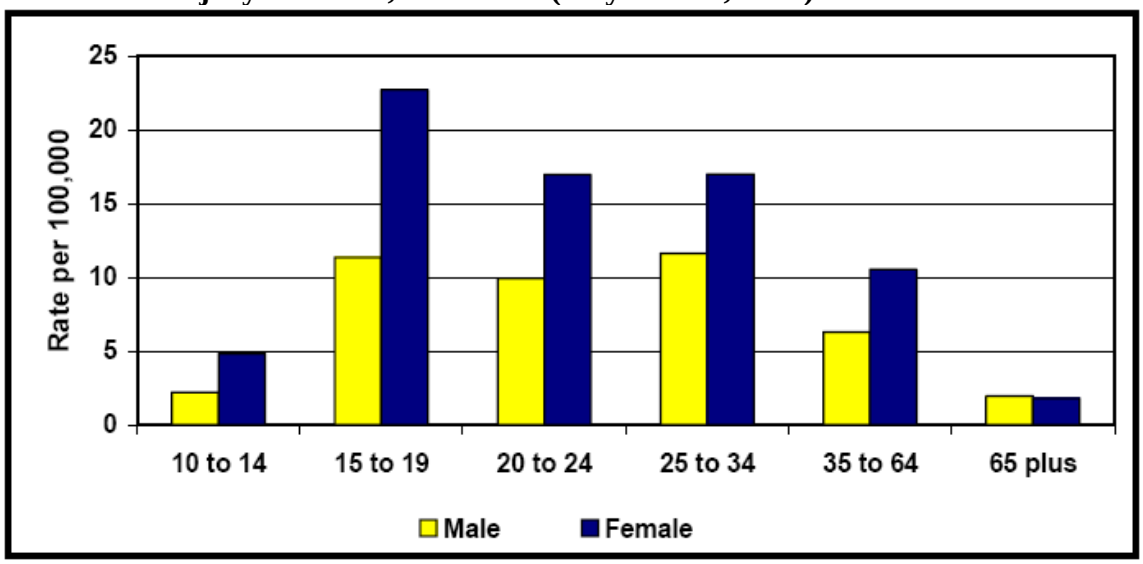


Data Source: NCHS Database & Maine Suicide and Self-Inflicted Injury Surveillance Report

Hospitalization rates

When looking at self inflicted injury that results in hospitalization, the rates were higher for females in every age group, except for individuals over age 65, among whom male and female rates were approximately equal (see graph below). This graphic illustrates the fact that older adults use more lethal means and the ratio of attempts to completion in suicide is dramatically lower compared to similar rates of younger age groups. It has been estimated that the ratio is 200:1 for young adults compared to a startling 4:1 ratio of attempts to completions for older adults (Parkin & Stengel, 1965).

Age and gender-specific rates of hospitalization (per 10,000) for self-inflicted injury in Maine, 1998-2004 (Meyer et al., 2006).



*Data Source: Maine Uniform Hospital Discharge Database

Section 2: An overview of national suicide prevention policies

Surgeon General's Call to Action

Suicide prevention is a relatively new science with most of the organized and coordinated progress happening in the last decade or so. In 1996, the World Health Organization (WHO) urged its member nations to address suicide in an organized and collaborative fashion in its *Prevention of Suicide: Guidelines for the Formulation and Implementation of National Strategies* report. This movement motivated the beginnings of a public and private partnership venture in the US to seek a national suicide prevention strategy for this country. Members of the partnership included the US Department of Health and Human Services (USDHHS), Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), Indian Health Services (IHS), National Institute of Mental Health (NIMH), Substance Abuse and Mental Health Services Administration (SAMHSA), and the Suicide Prevention Advocacy Network (SPAN). A national conference on suicide prevention was held in Reno, NV in 1998 and out of this emerged, *The Surgeon General's Call to Action to Prevent Suicide*. The Surgeon General, Dr. David Satcher, introduced a three pronged blueprint by which to address suicide – Awareness, Intervention, and Methodology (AIM). This blueprint uses the public health model of prevention. By raising awareness of suicide, enhancing services and programs, and advancing suicide prevention research the AIM call-to-action laid the foundational work for a national strategy for suicide prevention. In this report the prevalence of high rates in older adults was discussed as well as the importance of depression screening for older adults in primary care settings (US Public Health Service, 1999).

During this time period significant public awareness of older adult suicide and depression issues was raised at public hearings of the Senate Special Committee on Aging in 1997. During these hearings "60 Minutes" correspondent Mike Wallace testified before the committee about his personal struggles with depression and suicidal thoughts and behaviors. It is notable that Maine's own Senator William Cohen was a member and Chairman of this committee at the time.

National Strategy for Suicide Prevention

Promoting health and well-being, preventing disease and injury, and prolonging life are the major tenets in the public health philosophy. It was recommended in the *National Strategy for Suicide Prevention* (NSSP) that the public health approach be utilized in the development of suicide prevention initiatives. The public health approach utilizes five evidence based steps that are applicable to any health problem that affects significant portions of a group or population and is widely regarded as the approach that will produce reductions in suicide and differs from the medical model which focuses on individuals (SPRC, 2003). These five steps are: 1) define the problem, 2) identify causes, 3) develop and test interventions, 4) implement interventions, 5) evaluate effectiveness.

With regard to suicide prevention, defining the problem relates to understanding the prevalence of suicide and mechanisms for tracking suicidal behaviors, known as surveillance. Identifying causes involves knowing the associated risk factors for and protective factors against suicide. Developing and testing interventions is the basis for

finding evidence based practices. It is imperative to have an evidence base to a preventative measure before it is disseminated and implemented for wider use. Implementation of interventions is the next step to take when evidence based practices are identified. Whenever possible the preventative measure should be implemented as it was designed and tested to ensure success of the program. The importance of evaluating effectiveness of programs cannot be overstated. It is important that the objectives measured are specific, attainable, relevant, and time-based. The ideal condition is to be able to implement an evaluated program that is both safe and effective (SPRC, 2003, p.3).

In 2001 the *National Strategy for Suicide Prevention* was released and was a response to the Surgeon General's Call to Action recommendations. This national strategy presented an 11 goal framework for suicide prevention initiatives to be built around across the country (see box below).

National Strategy for Suicide Prevention goals (USDHHS, 2001)

- Goal 1: Promote awareness that suicide is a public health problem that is preventable
- Goal 2: Develop broad-based support for suicide prevention
- Goal 3: Develop and implement strategies to reduce the stigma associated with being a consumer of mental health, substance abuse, and suicide prevention services
- Goal 4: Develop and implement suicide prevention programs
- Goal 5: Promote efforts to reduce access to lethal means and methods of self-harm
- Goal 6: Implement training for recognition of at-risk behavior and delivery of effective treatment
- Goal 7: Develop and promote effective clinical and professional practices
- Goal 8: Improve access to and community linkages with mental health and substance abuse services
- Goal 9: Improve reporting and portrayals of suicidal behavior, mental illness, and substance abuse in the entertainment and news media
- Goal 10: Promote and support research on suicide and suicide prevention
- Goal 11: Improve and expand surveillance systems

There were two objectives within the NSSP that have specific application for older adult suicide prevention (Reed, 2006). Objective 4.6 reads: "By 2005, increase the proportion of State Aging Networks (AAA) that have evidence based suicide prevention programs designed to identify and refer for treatment of elderly people at risk for suicidal behavior" (USDHHS, 2001). The rationale behind this objective is that workers and volunteers within the AAA network have frequent contact with older adults in the services that older adults seek in their programs. There is great opportunity for detection of risk factors such as depression by AAA staff and volunteers as well as maintaining protective factors through active participation in the aging network. An idea for action for this objective was to develop and implement a training program to aid in the detection of older adults at risk for suicide.

Objective 7.9 reads: "By 2005, incorporate screening for depression, substance abuse and suicide risk as a minimum standard of care for assessment in primary care

settings, hospice, and skilled nursing facilities for all Federally-supported healthcare programs (e.g., Medicaid, CHAMPUS/ TRICARE, CHIP, Medicare)" (USDHHS, 2001). The rationale behind this objective was that large numbers of population segments, including the elderly, receive services through federally funded programs and screening initiatives within these settings could become models to replicate for broader use. In the box below are some national statistics on elder suicide from the NSSP.

National statistics of older adult suicide from the NSSP (USDHHS, 2001)

- The highest suicide rates of any age group occur among persons aged 65 years and older
- There is an average of one suicide among the elderly every 90 minutes
- In 1998, suicide ranked as the sixteenth leading cause of death among those aged 65 years and older and accounted for 5,803 deaths among this age group in the US
- Suicide disproportionately impacts the elderly. In 1998, this group represented 13% of the population, but suffered 19% of all suicide deaths
- The rate among adults aged 65-69 was 13.1 per 100,000 (all rates are per 100,000 population), the rate among those aged 70-74 was 15.2, the rate for those aged 75-79 was 17.6, among persons aged 80-84 the rate was 22.9, and among persons aged 85+ the rate was 21.0
- Firearms (71%), overdose (liquids, pills or gas) (11%) and suffocation (11%) were the three most common methods of suicide used by persons aged 65+ years. In 1998, firearms were the most common method of suicide by both males and females, accounting for 78% of male and 35% of female suicides in that age group
- Risk factors for suicide among older persons differ from those among the young. In addition to a higher prevalence of depression, older persons are more socially isolated and more frequently use highly lethal methods. They also make fewer attempts per completed suicide, have a higher-male-to-female ratio than other groups, have often visited a health-care provider before their suicide, and have more physical illnesses
- It is estimated that 20% of adults over 65 old who commit suicide visited a physician within 24 hours of their act, 41% visited within a week of their suicide and 75% have been seen by a physician within one month of their suicide
- In 1998, men accounted for 84% of suicides among persons aged 65 years and older
- Suicide rates among the elderly are highest for those who are divorced or widowed. In 1998, among males aged 75 years and older, the rate for divorced men was 3.4 times and widowed men was 2.6 times that for married men. In the same age group, the suicide rate for divorced women was 2.8 times and widowed women was 1.9 times the rate among married women
- Several factors relative to those over 65 years will play a role in future suicide rates among the elderly, including growth in the absolute and proportionate size of that population; health status; availability of services, and attitudes about aging and suicide

In the box below are the NSSP goals adapted specifically for elder suicide prevention efforts.

NSSP goals and objectives for older adults (SAMHSA, 2006):

- Promote awareness that suicide in older adults is a public health problem that is preventable
- Develop broad-based support for elder suicide prevention
- Develop and implement strategies to reduce the stigma associated with aging and with being a senior consumer of mental health, substance abuse, and suicide prevention services
- Develop and implement community-based suicide prevention programs for older adults
- Promote efforts to reduce access to lethal means and methods of self-harm by older adults
- Implement training for recognition and assessment of at-risk behavior and delivery of effective treatment to older adults
- Develop and promote effective clinical and professional practices
- Improve access to and community linkages with mental health, substance abuse, and social services designed for the evaluation and treatment of older adults in primary and long-term care settings
- Improve reporting and portrayals of suicidal behavior, mental illness, and substance abuse among older adults in the entertainment and news media
- Promote and support research on late-life suicide and suicide prevention
- Improve and expand surveillance systems
- Implement interventions that improve social relations and decrease isolation in older adults
- Increase access to geriatric specialty health care

Institute of Medicine's National Imperative

In 2002, the Institute of Medicine (IOM) released its report entitled, *Reducing Suicide: A National Imperative*. This report was put together at the request of many of the agencies working in collaboration on the NSSP to gain an idea of the state of scientific knowledge at the time in suicide prevention and treatment. The aim of the report was to examine scientific knowledge of suicide, identify where the gaps in knowledge were, put forth strategies for prevention, and recommend research designs for investigating suicide (IOM, 2002). A summary of recommendations from the IOM is found in the box below.

Institute of Medicine recommendations

1. The National Institute of Mental Health (in collaboration with other agencies) should develop and support a national network of suicide research Population Laboratories devoted to interdisciplinary research on suicide and suicide prevention across the life cycle
2. National monitoring of suicide and suicidality should be improved

3. Because primary care providers are often the first and only medical contact of suicidal patients, tools for recognition and screening of patients should be developed and disseminated
4. Programs for suicide prevention should be developed, tested, expanded, and implemented through funding from appropriate agencies including NIMH, DVA, CDC, and SAMHSA

Recommendations that are the most relevant to elder suicide prevention from the IOM involve screening and training initiatives. The development and dissemination of screening tools is of particular importance because of the correlation between presenting depression symptoms in the primary care setting and completed elder suicide. It was also recommended that gatekeeper trainings and screening programs for both youth and elderly populations should be implemented more broadly. These trainings would improve identification and intervention with those at suicide risk and can be implemented in both a work and educational setting (IOM, 2002).

President's New Freedom Initiative

In 2003, The President's New Freedom Commission on Mental Health (PNFCMH) released *Achieving the Promise: Transforming Mental Health Care in America*. President George W. Bush requested that the Commission study the mental health delivery system in the US and to make recommendations on how to improve it. There were six major goals outlined in the report (see box below) and suicide was recognized as a major public health issue to be addressed.

President's New Freedom goals (PNFCMH, 2003)

1. Americans understand that mental health is essential to overall health
2. Mental health care is consumer and family driven
3. Disparities in mental health services are eliminated
4. Early mental health screening, assessment, and referral to services are common practice
5. Excellent mental health care is delivered and research is accelerated
6. Technology is used to access mental health care and information

Specific to suicide prevention was Objective 1.1 of the *President's New Freedom* report. It reads, "Advance and implement a national campaign to reduce the stigma of seeking care and a national strategy for suicide prevention." Stigma is a significant barrier to seeking mental health services. The elderly as well as residents of rural areas are among the identified populations where this stigma is a significant issue. The Commission calls for swift implementation and enhancement of the NSSP to be used as a guide for communities and governments at all levels. There is also a directive provided from the New Freedom Commission regarding public health education being targeted to "distinct and hard to reach populations, such as ethnic and racial minorities, older men, and adolescents" (PNFCMH, 2003, p.24). The commission further recommended that a national level public-private partnership be formed to advance the NSSP goals and that this body propose local projects in every state.

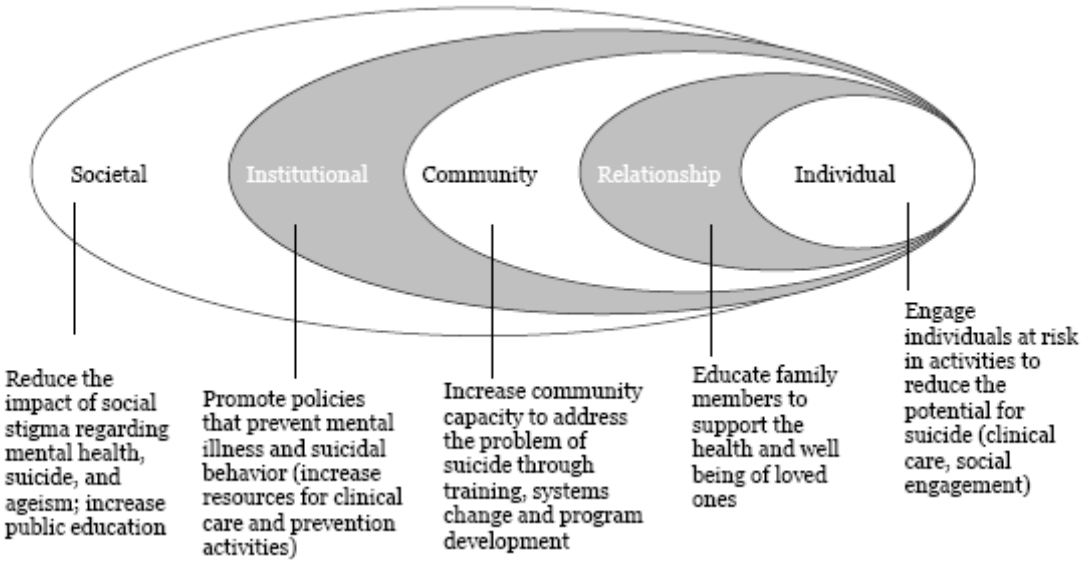
Recent elder suicide prevention national policy developments

At the 2005 White House Conference on Aging the goal to "Improve recognition, assessment, and treatment of mental illness and depression among older Americans" was in the top 10 resolutions voted on by conference delegates (WHCOA, 2005). In September of 2006, the Senate Special Committee on Aging heard expert testimony to address the alarming trend of elder suicide in America and to identify ways to improve mental health care for seniors. Maine Senator Susan Collins sits on this committee. During the hearings, Committee Chairman Gordon H. Smith (R-OR) said, "It is a sad irony that as medical technology evolves to extend lives, seniors are choosing to end theirs…Retirement should be a time to relax, travel and spend time with family. Unfortunately, seniors often are exposed to circumstances that can lead to depression-such as social isolation, physical illness and the death of loved ones. I think it is very important that we understand that depression is neither a weakness nor a normal part of aging. Depression at any age is a very real disease. No one should suffer in silence" (SSCA, 2006). This hearing coincided with the release of the IMPACT study that demonstrated that mental health care in a primary care setting lowers suicidal ideation in older adults. IMPACT will be reviewed in further detail later on in this paper.

Finally, there were a number of bills before the 109th Congress that had implications to varying degrees for elder suicide prevention efforts: The Positive Aging Act of 2005 (S.1116 & H.R. 2629); the Medicare Mental Health Equity Act (S.1152 & H.R. 1125); Medicare Mental Health Modernization Act (S. 927 & H.R. 1946); and Senior's Mental Health Access Improvement Act (S. 784 & H.R. 1447).

Section 3: Risk and protective factors for elder suicide

Suicide is a phenomenon that can best be understood as the result of the interplay of numerous complex factors rather than due to one causal factor alone (Havens, 1965). There is no universal cause for suicide therefore no two suicides can be understood to result from exactly the same constellation of factors (Conwell, 2001). With this in mind, it is important to realize that no one intervention can prevent all suicide deaths. Although there is a tendency to oversimplify the causes of older adult suicide to single factors such as depression or severe illness, it is important to utilize an ecological approach in prevention efforts targeting all societal levels that interact with the older adult (see figure below).



(Krug et al., 2002)

Determining the effectiveness of suicide prevention initiatives targeting older adults depends on the "degree to which causal factors have been identified, the strengths of the causal relationships between those factors and suicide, their prevalence in the elderly population, and their 'alterability'" (Fried, 1990). With the data that is presently available, it has been determined that affective illness, a past history of suicidal behavior, hopelessness, a characteristic personality style, and physical disorders and functional impairment should be the emphases of future preventive efforts (Conwell, 1997). Elder suicide prevention must rely on a knowledge base that is relatively incomplete due to a lack of studies that have control samples, standardized instrumentation, and informant sources that are comparable between studies (Conwell, 2001; Beskow et al., 1990; Younger et al., 1990). Research in the field of elder suicide is expanding and as the evidence base builds it can further guide preventative strategies to target risk factors and enhance protective factors effectively.

Risk factors

Factors of risk for suicide can be thought of as traits or behaviors that lead to or are associated with suicide. If an individual has risk factors present then they are more likely to be "at risk" for suicidal behavior (SPRC, 2003). Just as the older adult population is its own distinct population group, there are distinct suicide risk factors for this age cohort that Blow and associates (2006, p. 5) summarize in the following excerpt:

> *Early research has identified several risk factors for suicide. Non-modifiable risk factors include older age, male sex, race, and ethnicity (Heisel & Duberstein, 2005). However, several risk factors are modifiable, including the presence of suicidal thoughts and behavior, the presence of a physical or mental illness, alcohol consumption, difficulty adjusting to transitional life events, social support problems, personality vulnerability factors, hopelessness, bereavement, and access to lethal means (Heisel & Duberstein, 2005; Szanto et al., 2002). Significant risk factors for suicide also include depression (Turvey et al., 2002; Tsoh et al., 2005; Bartels, et al. 2002) and substance abuse (Blow et al., 2004; Waern, 2003). Of note, co-occurring substance abuse and mental disorders are associated with an increased risk for suicide among older adults (Bartels, et al. 2002; Blixen et al., 1997). Moreover, benzodiazepines have been linked with suicide among older adults who have poisoned themselves (Carlsten et al., 2003).*

Demographic risk factors

Being older, Caucasian, and male are the demographic traits that have the highest association with elder suicide (Garand et. al., 2006).

Mental health risk factors

It was found that between 71% and 95% of suicide victims age 65 years and older suffered from a major psychiatric illness. Conwell and associates conducted the review of late life suicides where these statistics were found and noted that major depression was the most prevalent of the mood disorders found (Conwell et al., 1996). People with a diagnosis of depression have far higher suicide rates than those of the general population (Szanto et al., 2002) and older suicide victims are more likely to have suffered from depression (Conwell & Brent, 1995). It is notable that psychiatric illnesses such as personality, anxiety, or psychotic disorders played a relatively small role in suicide among older adults. Also, alcohol and substance use disorders were present in a smaller proportion of completed suicides in comparison to younger aged cohorts (Conwell et al., 1996). Although the prevalence of dementia is relatively high in older adults, in 3 of 4 psychological autopsy studies that examined individuals with dementia no significant difference was found between the controls and the suicide subjects (Garand et al., 2006). It can be assumed that in the more advanced stages of dementia the individual is under more supervision and may not be able to effectively carry out or conceptualize an act of self-destruction (Conwell et al., 2001). It was found that affective illness is the predominant psychopathology associated with late life suicide (Conwell et al., 2002).

Physical health

Szanto and associates found that physical illness plays an important role in suicidal behavior among the elderly. In some cases it was found that the physical illness

or the medications used to treat the symptoms are the causes of related depressive symptoms. In most cases, physical illness and suicidal behavior occur together (Szanto et al., 2002). When individuals learn of a malignant condition risk for suicide is at its greatest in the year following the diagnosis and often the fear of the illness and its potential of an unfavorable course increase the risk as well (Harris & Barraclough, 1994). However, one study reported depression severity rather than physical illness or overall functioning that differentiates older adult suicide victims from the subjects who did not complete suicide (Conwell et al., 2000). It is important to note that only 2 to 4 % of older adults who are terminally ill complete suicide (Robins et al., 1959). Untreated or inadequately treated pain, anticipatory anxiety of the progression of one's physical illness, fear of dependence on others, and fear of burdening one's family are the major contributing factors in the suicidality of older adults that have a physical illness (Szanto et al., 2002).

Social functioning

It was found that suicide in older adults was more highly correlated with living alone than with any social variable in Barraclough's landmark psychological autopsy study conducted in Great Brittain. The study found that 50% of the elder suicide victims examined lived alone. The rate of older adults living alone in the region sampled was only 20% (Barraclough, 1971). Various other studies conducted since then found that between 19% and 60% of elder suicide victims lived alone at the time of death (Conwell et al., 2001). Because constructs like "loneliness" and "social isolation" are complex concepts, more research is needed in this area (Conwell et al., 2001). In the months and weeks before a suicide attempt by an older adult, stressful life events tend to cluster (Luscomb, Clum, & Patsiokas, 1980). These events differ from younger cohorts who may experience relationship troubles, problems with finances or with one's employer. Older adults tend to experience the stresses of physical illness or personal loss prior to suicide (Carney, Rich, Burke, & Fowler, 1994; Conwell, Rotenberger, & Caine, 1990; Heikkinen &Lonnqvist, 1995). The effect of spousal loss on suicidality appears to be most pronounced in elderly men and the highest suicide rate in the US is among bereaved elderly Caucasian men (NCHS, 1992). In the first year of bereavement the risk of suicide is the highest and the risk remains elevated until the fifth year after the loss (Zisook & Lyons, 1989).

Indirect self-destructive behaviors (ISDB)

One phenomenon to consider with regards to elder suicide and preventative efforts aimed at older adult suicidal behavior is that of "indirect self-destructive behaviors" (ISDB). This phenomenon occurs when the older adult displays behaviors, whether conscious or unconscious, with the intent to die. Such behaviors include refusal of food, refusal of necessary medications, and self-neglect. These subtle behaviors often lead to premature death and may be more common in the nursing home environment or among individuals whose religion view suicide as an immoral act (Szanto et al., 2002).

Protective factors

Risk factors can be thought of as factors leading to suicide or suicidal behavior, whereas protective factors reduce the likelihood of suicide. In addition to working to

remove risk factors, prevention outreach efforts should also focus on enhancing protective factors. Protective factors can be enhanced, for example, through community supports for older adults often offered by Area Agencies on Aging or faith-based organizations, senior centers, social groups, and elder transportation programs. The list in the box below are protective factors for suicide taken from the *National Strategy for Suicide Prevention*

Protective factors for suicide (USDHHS, 2001)

- Effective clinical care for mental, physical and substance use disorders
- Easy access to a variety of clinical interventions and support for help seeking
- Restricted access to highly lethal means of suicide
- Strong connections to family and community support
- Support through ongoing medical and mental health care relationships
- Skills in problem solving, conflict resolution and nonviolent handling of disputes
- Cultural and religious beliefs that discourage suicide and support self preservation

Conclusion

Elder suicide prevention research is a relatively new field and the evidence base is growing as more researchers investigate this tragic public health issue. Below is an analysis by Conwell of the next steps needed to further older adult suicide prevention efforts.

> *Biased attitudes towards aging, deficits in knowledge about depression and suicide on the parts of health care providers and their older patients, and systemic barriers to mental health care access make suicide prevention more difficult in this population than in younger age groups. A comprehensive approach to suicide prevention in late life, therefore, must include the creative input of health policy makers with regard to the financial, medicolegal, and organizational barriers to effective suicide prevention. It also should include education programs aimed both at health care providers as well as elderly consumers and their families. The objectives of the education programs should be to foster an appreciation of healthy aging, improve understanding of signs and symptoms of clinical depression, and to teach older people and their support systems about the risks, warning signs, and treatment responsiveness of suicidal ideation and behavior in late life (Conwell et al., 2001, p.43).*

Section 4: Preferred models for prevention, measures of program outcome and impact

Preferred models of prevention

It is imperative that suicide prevention efforts be built upon the foundation of evidence based findings. Prevention begins with formulating strategies and targets of focus. These measures also need to be evaluated regularly to ensure their effectiveness. In the box below are the principles of suicide prevention effectiveness put forth by the Suicide Prevention Action Network USA (SPAN). SPAN USA is a grass-roots advocacy network that is made up of family members and loved ones affected by a completed suicide (suicide survivors), community activists, mental health and healthcare professionals, persons who have attempted suicide in the past, and concerned citizens organized to advocate the advancement of suicide prevention. The organization's executive director, Jerry Reed, MSW, is a strong proponent of improving elder suicide prevention efforts in this country.

Principles of suicide prevention effectiveness (SPAN, 2001)

1. Prevention programs should be designed to enhance protective factors. They should also work toward reversing or reducing known risk factors. Risk for negative health outcomes can be reduced or eliminated for some or all of a population
2. Prevention programs should be long-term, with repeat interventions to reinforce the original prevention goals
3. Family-focused prevention efforts may have a greater impact than strategies that focus only on individuals
4. Community programs that include media campaigns and policy changes are more effective when individual and family interventions accompany them
5. Community programs need to strengthen norms that support help-seeking behavior in all settings, including family, work, school, and community
6. Prevention programming should be adapted to address the specific nature of the problem in the local community or population group
7. The higher the level of risk of the target population, the more intensive the prevention effort must be and the earlier it must begin
8. Prevention programs should be age-specific, developmentally appropriate, and culturally sensitive
9. Prevention programs should be implemented with no or minimal differences from how they were designed and tested

Prevention targeting

Targeting in reference to suicide prevention initiatives refers to focusing on breaking the chain of events between cause and self-injurious behavior within a specific population. Two methods of looking at targeting causes work together in intervention strategies. The first is focusing on the level of the prevention target and the second focuses on the stage of injury (SPAN, 2001).

Target levels

There are three target levels of intervention: indicated, selective, and universal. *Indicated interventions* are more likely to occur within the health and mental health care systems. Activities of indicated interventions usually include identification, treatment, and skill building among individuals and well as groups or families. There is a focus on early detection and one-to-one treatment and as a result these interventions tend to be resource-intensive.
Selective interventions are less resource intensive than indicated interventions. Selective interventions target groups at high risk and activities here focus on screening and group prevention.
Universal interventions can be thought of as wide reaching public education or media campaigns released to the community at-large as a broad based prevention strategy. Interventions that focus on physical or environmental factors that reduce suicide risk would be considered universal. An example of this would be reducing access among those at risk to lethal means such as firearms (SPAN, 2001).

Stages of injury

There are three stages of suicide prevention: 1) primary – before suicidal behavior occurs; 2) secondary – as suicidal behavior occurs; and 3) tertiary – after suicidal behavior occurs.
Primary prevention efforts work towards reducing contributing factors to suicidal behavior such as depression, alcohol/drug abuse, or impulsive behavior and building protective factors. Primary prevention also addresses improving media coverage of suicide is as well as education about the importance of restricting access to lethal means around potentially suicidal individuals. An example of a primary prevention strategy for older adults would be outreach initiatives to homebound seniors to reduce social isolation or improvements in access to health and mental health care.
Secondary prevention interventions are used as suicidal behaviors are occurring with the goal of minimizing self injury. Appropriate referral and treatment for suicide risk as well as early detection of suicidal ideation and suicidal planning are examples of this intervention stage.
Tertiary prevention interventions are employed after suicidal behavior has occurred in order to minimize the impact of the suicidal behavior and to reduce similar behaviors from occurring in the future. Examples of tertiary prevention are therapeutic treatment after an attempt, crisis intervention, or referral to other types of supportive services after an attempt (SPAN, 2001).

Determining effectiveness of prevention

Determining the effectiveness of prevention activities should include these four steps: 1) identifying which strategies will be most likely to reduce suicidal behavior, injury, and death; 2) determining the potential social, legal, ethical, and economic effects of those strategies; 3) determining the best ways to implement strategies; and 4) periodically assessing the strategy for effectiveness (SPAN, 2001).

Implications for elder suicide prevention

Premier elder suicide researcher Yeates Conwell, MD, Professor of Psychiatry at the University of Rochester School of Medicine and Dentistry and Co-Director of the

Center for the Study and Prevention of Suicide from the Rochester School of Medicine, summarizes preventative strategies for older adult suicide nicely in the paragraph below.

> *Two general approaches to suicide prevention in late life have been identified: public health or population based strategies, and high-risk models (Lewis et al., 1997). The public health model advocates universal prevention through interventions that have a potential impact on large segments of a society. Examples include gun control legislation (Kellerman et al., 1992), detoxification of domestic gas (Charlton et al., 1992), or restrictions on access to drugs with a low therapeutic index (Gunnell & Frankel, 1994). The high-risk model targets more highly selected populations. Among the elderly, two approaches to selective interventions in high risk samples have been proposed: interventions in primary care settings designed to improve recognition and treatment of depressed and suicidal older patients, and community outreach to isolated elders at risk (Conwell, 2001).*

<u>*Preferred measures of program outcome and impact*</u>

Evaluating suicide prevention programs

There is a significant gap in suicide prevention information regarding identification and implementation of effective interventions because of a lack of evaluation research in the area of suicide and suicidal behaviors to date. Evaluative information can help to guide improvements in service delivery, determine program efficacy and effectiveness, and ensure maximization of limited resources available to suicide prevention initiatives (SPAN, 2001).

Programs that can demonstrate both effectiveness and efficiency tend to have an advantage of gaining support in the form of financing and technical assistance, as well as community and legislative approval. With a proper and well thought out evaluation strategy, program administrators, program users, and funding sources alike are able to gain an understanding of measurable achievements in a given program. Evaluation takes planning and foresight, but is well worth both the effort and resources. Whether a program is working, has problems, helps, or is ineffective are all pieces of information that are found through program evaluation and are necessary to ensure safe and well founded preventative practice. "Without evaluation of programs, we do not know if the program benefits or harms the people we are trying to help" (SPAN, 2001, p.20). The box below highlights the many benefits of having an evaluative component in a suicide prevention program.

Benefits of program evaluation (SPAN, 2001)

1. Learning whether proposed program materials are suitable
2. Learning whether program plans are feasible
3. Providing an early warning system for problem identification
4. Learning whether programs are producing the desired results
5. Learning whether programs have any unexpected benefits or problems
6. Enabling managers to improve service
7. Monitoring progress toward the program's goals

8. Producing data on which to base future programs
9. Demonstrating the effectiveness of the program
10. Identifying the most effective parts of the program for refinement
11. Gathering valuable information that can be shared

Proper budgetary consideration should be made for evaluation activities when planning a program. A general rule of thumb is between 15 and 20% of program funds should be designated for evaluation. When selecting an evaluator for the program it is a good idea to select an individual or organization that does not have a stake in the program such as a consultant. Evaluation activities should be a routine part of program operations and efforts should include both program staff and stakeholders in gathering information to continue program improvements.

It is wise to pilot test program procedures, establish an organized information gathering system, and lay out strategies by which to determine if programs are working as planned before programs are implemented broadly.

There are basic components that every evaluation should contain: 1) clear objectives; 2) a description of the target population; and 3) description of what is to be evaluated. This process does take some time and is where the use of a professional evaluator would pay off over time (SPAN, 2001).

In the box below are the six basic steps of program evaluation with relevant questions to consider for each step. This tool was created by SPAN USA.

Six steps to program evaluation (SPAN, 2001)

1. Engage stakeholders—identifying the information they need will drive the evaluation

2. Describe the program

a. Statement of need—why is the program needed?
b. Expected effects—how does the program intend to address the need(s)?
c. Activities—what does the program do?
d. Resources—what does the program have that will enable its activities?
e. Stage of development—how far along is the program in addressing the need(s)?
f. Context—what is the environment of the program?
g. Logic model—planned sequence and design of the program?

3. Focus the evaluation design

a. Purpose—what are the objectives of the evaluation?
b. Users—who's consuming the evaluation output?
c. Uses—what are the users' information needs?
d. Questions—what information will address users' needs?
e. Methods—how will the information be collected, analyzed, and reported?
f. Agreements—who's going to do what, and when?

4. Gather credible evidence

a. Indicators—what information will address questions?
b. Sources—where will the information come from?
c. Quality—how good is the information?
d. Quantity—how much information is needed?
e. Logistics—what are the systems for collecting and managing information?

5. Justify conclusions

a. Standards—what do we compare evaluation information to?
b. Analysis and synthesis—how do we summarize and organize the information?
c. Interpretation—how do we make sense of the information?
d. Judgment—how do we compare findings to the standards?
e. Recommendations—what should we do with our findings?

6. Ensure use and share lessons learned

a. Design—think through the whole evaluation
b. Preparation—plan for the evaluation and dissemination
c. Feedback—communicate with users
d. Follow-up—help users interpret findings and recommendations
e. Dissemination—the most important part of a good evaluation

Implications for elder suicide prevention

The ultimate outcomes and impact that any suicide prevention program desires is decreases in completed suicides and suicidal behavior. The AIM framework – Awareness, Intervention, & Methodology – offered by the Surgeon General in the *Call to Action* report should be considered in planning programs. Falling within the AIM framework for elder suicide prevention are: raising awareness of elder suicide rates and prevalence, enhancing services and programs for elder suicide prevention, and advancing the science of elder suicide prevention. Measuring the impact and outcomes of these focus areas involves continual evaluation of program efforts to guide future endeavors and advance an understanding of what works and what improvements need to be made. It is extremely important to include evaluative measures into existing and developing suicide prevention programs in order to measure the impact of program activities as well as furthering the knowledge base and scientific foundation of suicide prevention. While efforts to measure the impact on suicide rates of specific programs are hard to determine over time, a strong evaluation plan can generate valuable information with regard to short term impacts that persons at risk experience through utilization of program services. Program impact can be measured in terms such as reduction of risk factors, enhancements of protective factors, number of referrals generated by a gatekeeper program, or reductions in depressive symptoms.

Section 5: Evidence based practices

Universal, selective and indicated prevention strategies for elder suicide

There is little evidence based support of universal prevention approaches to elder suicide as cases where a community-wide approach to reduce older adult suicide rates are few in number. Studies conducted in Japan by Oyama and associates (2004) examined universal suicide prevention programs targeting individuals 65 and older through depression screening, group activities, and health education workshops. Participants in the study completed the Zung Self Rated Depression Scale where individuals screening positive for depression were treated by a public health nurse or psychiatrist. Workshops were offered to community residents and included such topics as navigating the mental health care system, recognizing symptoms of depression, treatment options for depression, and relationship building with neighbors. This intervention was associated with reductions in suicide rates and reductions in suicide completions for older adults of both genders. In additional Japanese studies by the same investigators (2005), a three-pronged elder suicide prevention approach was used that utilized group activities designed to increase socialization, education workshops on depression and suicide risk, and self-administration of a depression screening tool. Results from this study showed reductions in suicide for women after the intervention, however, there were no changes in suicide in the control or the male groups (Blow et al., 2006). Several "gatekeeper" models are considered a universal approach and are widely accepted as useful ways to identify individuals at-risk and refer them for professional intervention. Few of these programs, however, have been fully evaluated for effectiveness.

The evidence base for indicated and selective prevention of suicide among older adults is also limited. Programs that target the reduction of modifiable risk factors include depression treatment and telephone-based social support (Blow et al., 2006). The ElderVention program that will be discussed in more detail later is an example of a community based prevention program that utilizes both indicative and selective interventions in its outreach.

The analysis of evidence based practices and practices that have not been fully evaluated but show great promise will follow in the section below. The order of presentation will be: elder suicide prevention programs that have an evidence based rating through the SPRC registry; evidence based models targeting late-life depression; evidence based models with "promising" rating from SPRC; gatekeeper models, and innovative community models.

SPRC registry

The Suicide Prevention Resource Center (SPRC) is a national suicide prevention information and resource clearinghouse that is supported by funding through the Substance Abuse & Mental Health Services Administration (SAMHSA) and is housed within Education Development Center (EDC), Inc's Health and Human Development (HHD) Programs. The SPRC maintains an online registry of evidence based suicide prevention programs in cooperation with the American Foundation for Suicide Prevention (AFSP). The goals of the registry project are to review the effectiveness of suicide prevention programs and to disseminate this information through an online registry of evidence based suicide prevention programs based upon that review. The

SPRC registry represents an initial step in the collection, evaluation and promotion of evidence based suicide prevention programs. Ratings within the registry are tri-fold and ranked in descending order: effective, promising, and unrated. There was one program in the registry that had specific applicability to older adults, although several are applicable to multiple age groups. Following the section on SPRC evaluated program are two programs that have been cited by numerous sources to have a sound evidence based foundation for use with older adults. Several programs targeting an "adult population" (i.e. 18 year old and older age group) were listed in the SPRC registry and will conclude the section as it is possible to tailor portions of these programs for elder specific interventions.

PROSPECT

The National Institute of Mental Health (NIMH) funded intervention "Prevention of Suicide in Primary Care Elderly: Collaborative Trial" (PROSPECT) utilizes a combination of treatment guidelines for community-dwelling older adult populations and depression care management for a depression diagnosis. This model received an "effective" rating from the evidenced-based registry of the SPRC and is the only intervention in this registry that specifically targets older adults.

A clinical protocol is followed for treating geriatric depression in a primary care setting and the drug Citalopram is recommended as a first line pharmacotherapy intervention. The client is linked with a "depression care manager" (DCM) who works with the primary care physician (PCP) and a supervising psychiatrist to develop intervention strategies. DCM's implement the various clinical steps necessary for a successful treatment outcome, including educating clients and their families about depression, identifying and addressing co-morbid physical and psychiatric conditions interfering with antidepressant treatment, monitoring program compliance, managing adverse effects that emerge as a result of treatment and regularly assessing change in depressive symptoms. Evaluation of the effectiveness of current treatment protocols and recommendations of modifying those protocols if necessary is an ongoing process.

It was found that PROSPECT participants demonstrated statistically significant reductions in suicidal ideation at four and eight month retesting points compared with the control group (treatment as usual). This result was greater for those diagnosed with major depression than for those diagnosed with minor depression. Participants also demonstrated statistically significant reductions in depression at four-, eight-, and twelve-month retesting when compared with the control group. Differences were most pronounced at the four-month follow-up and for those participants diagnosed with major depression (SPRC, 2005).

<u>Evidenced based models targeting late-life depression</u>

IMPACT

The Improving Mood – Promoting Access to Collaborative Treatment for late life depression study (IMPACT) was funded by the John A. Hartford Foundation and is the largest treatment trial for late-life depression to date. Additional funding was provided by the California HealthCare Foundation, the Robert Wood Johnson Foundation, and the Hogg Foundation.

For two years researchers followed 1,801 older adults with a depression diagnosis in diverse primary care settings across the United States. The 18 participating clinics were located in California, Indiana, North Carolina, Texas, and Washington. The diversity of clinic settings included Health Maintenance Organizations (HMO's), fee-for-service clinics, an Independent Provider Association (IPA), an inner-city public health clinic and a Veteran's Administration (VA) clinic.

The IMPACT study utilized a classic experimental and control-group research design where half of the enrolled study participants received IMPACT care and the other half received the care that they would usually receive in their primary care office. The study examined the effects of the IMPACT intervention on depression, quality of life, physical functioning and other areas of physical and mental health.

Study results showed that the IMPACT model of depression care more than doubles the effectiveness of depression treatment for older adults in primary care settings. At 12 months, about half of the patients receiving IMPACT care reported at least a 50% reduction in depressive symptoms, compared with only 19% of those in usual care. Analysis of data from the survey conducted one year after the IMPACT services were completed shows that the benefits of the IMPACT intervention persist after one year. IMPACT patients experienced more than 100 additional depression-free days over a 2-year period than those treated in usual care (Unutzer & Steffens, 2006). This program is appropriate for inclusion in an elder suicide prevention best practice because of the high correlation of the risk factor of depression with late life suicide.

PRISM-E

The purpose of the Primary Care Research in Substance Abuse and Mental Health Services for the Elderly (PRISM-E) study was to develop two methods of organizing mental health care and to implement these models in diverse primary care settings, while maintaining existing standards of treatment (Krahn, et al, 2006, p. 947). Patients were randomly assigned to one of two methods of organizing mental health care: 1) integrated care and 2) enhanced specialty referral. Integrated care consisted of mental health services co-located in primary care in collaboration with primary care physicians. Enhanced specialty referral consisted of referral to physically separate, clearly identified mental health or substance abuse clinics (Krahn, et al, 2006, p. 946).

There were 1,531 patients that were included in the study and their average age was approximately 74 years old. It was found that remission rates and a reduction in symptoms for both models of intervention were found to be similar for all depressive disorders at the three and six month follow-ups. The enhanced specialty referral model was associated with a greater reduction in depression severity compared to the integrated care model when the patient had a diagnosis of major depression. Rates of remission and change in function, however, did not differ across models of care for major depression patients.

This study provides empirical support of a recent recommendation put forth by the Older Adults Subcommittee of the President’s New Freedom Commission on Mental Health (2003) for greater access to providers with expertise in geriatric psychiatry, greater consumer choice and access to services, and greater coordination of mental health services with primary health care (Krahn, et al, 2006, p. 953).

Collaborative care model discussion

Descriptions of the Hartford Foundation funded IMPACT study and the SAMHSA funded PRISM-E study were not listed in the SPRC registry, however, these studies have been cited as promising by other sources and have great implications for the primary care setting as a venue of depression management and suicide prevention. Similar to the PROSPECT model, both the IMPACT and the PRISM-E models utilize a collaborative care approach to depression management for the older adult patient in the primary care setting. It is important to note that current Medicare funding does not reimburse this model of care so replication would be difficult until this public policy is modified.

Study examining suicidal ideation

A study conducted in 2003 examined the effects of short term depression treatment on suicidal ideation in older adults. The subjects ranged in age from 59 to 95 years of age diagnosed with major depression receiving either stand alone antidepressant medication treatment or a combination of such treatment combined with psychotherapy. Researchers did a secondary analysis of nearly 400 cases of older adults and it was found that suicidal ideation decreased rapidly at the beginning of treatment, followed by a gradual decline through the course of treatment. Initial measures of suicidal ideation, thoughts of death, and feeling that life is empty showed that 77.5% of the subjects had such thoughts. After 12 weeks of treatment that number was reduced to 18.4%. Subjects were separated into three categories: 1) high risk – recent attempt or current suicidal ideation; 2) moderate risk – recurrent thoughts of death; and 3) low risk – no attempt, ideation or thoughts of death. It was found that the older adults in the two higher risk categories responded slower to treatment and needed more treatment time compared to the low risk group (average response time was 6 and 5 weeks vs. 3 weeks) (Szanto, et al., 2003).

<u>Evidence based models with "promising" rating from SPRC</u>

Brief psychological intervention after deliberate self-poisoning

This model was developed in Great Britain and was utilized on 119 adults between the ages of 18 and 65. The program provided four 50-minute psychotherapy sessions over the course of a month in the person's home for people who had deliberately poisoned themselves. The therapy was performed by a nurse therapist and the focus of therapy is to treat depression by identifying and resolving interpersonal difficulties in the sessions. The nurse therapist assessed suicide risk in the each of the psychotherapy sessions and maintained direct communication with the client's primary care physician.

The Brief Psychological Intervention after Deliberate Self-Poisoning intervention was evaluated by looking at half of the research subjects that received the psychotherapy intervention (experimental group) and half of the subjects receiving usual care (control group). It was found that those subjects that received the psychotherapy intervention had statistically significant less suicidal ideation and depression when compared to the group receiving usual care. Also revealed in the evaluation was that at the 6-month follow up point 9% of the psychotherapy group had attempted to harm themselves again compared to 28% of the control group subjects (SPRC, 2005).

Gatekeeper models

QPR gatekeeper

A "gatekeeper" is any person that has close contact with individuals who may be at risk of suicidal behavior by way of their job function or role within the community who is trained to recognize signs or symptoms and to respond in a helpful way. After the gatekeeper determines that assistance may be needed the gatekeeper then calls the state Elderly Service unit to come and visit the older adult to evaluate them and offer further assistance.

The QPR program is an offshoot of the original Gatekeepers Program of Spokane Mental Health in Spokane, WA. The Spokane Gatekeepers program was created in response to a high rate of medical and psychiatric hospitalizations and premature nursing home placements in that county in the late 1970's. The Spokane Gatekeepers program was developed as a strategic intervention whereby a community-based multi-disciplinary team of professionals as well as concerned citizens sought to address this crisis. The two guiding principles behind this movement were: instilling a greater sense of responsibility for the well being of at-risk elders into the community at-large coupled with enhanced means of identifying and referring at risk older adults to Elderly Services outreach workers. Those seniors who were at the most risk were the least likely to seek assistance. The gatekeepers became the eyes and ears of the community and a valuable referral source for the program generating 42% (745 cases) of the referrals to Elderly Services in 1990. The original intent of the program was not elder suicide prevention but simply to reduce hospitalization and institutionalization of older adults. It is notable, however, that since the inception of the program in 1978, Spokane county's elder suicide rate dropped from 28 per 100,000 to 16 per 100,000, which is the lowest in the state of Washington.

QPR stands for Question, Persuade and Refer and are the three steps that gatekeepers can be trained to take when an older adult shows signs of suicidal risk. Although this program has not been fully evaluated, it is specific to older adult suicide prevention and intervention. The QPR Institute, Inc. took the original Spokane Gatekeeper model and designed it specifically for elder suicide prevention. QPR utilizes the train-the-trainer method of dissemination and has trained over 250,000 gatekeepers since 1995. The train-the-trainer sessions are 8 hours in length designed to teach instructors to conduct a three hour training for the gatekeepers that they in turn will train in the QPR method (Quinnett, 2006).

ASIST

Applied Suicide Intervention Skills Training (ASIST) is a community based gatekeeper intervention model appropriate for adults aged 18 and older. ASIST is listed on the SPRC evidence based registry; however, it has been evaluated but has not been deemed an evidence based practice yet. Gatekeepers are trained in the ASIST curriculum to recognize the signs of suicide and to intervene with appropriate help. ASIST participants are trained to: recognize that personal and societal attitudes about suicide affect caregivers and persons at risk, directly discuss suicide with a person at risk, identify suicidal risk factors and develop safety plans related to the risk factors, demonstrate intervention skills, locate resources available to a person at risk, commit to

improving community resources and, recognize that suicide prevention includes life promotion and self-care for the caregivers.

ASIST is taught over the course of two days (14 hours) and utilizes two facilitators. Approximately 2,000 ASIST workshops are conducted each year with 50,000 people in attendance (SPRC, 2005).

Yellow ribbon suicide prevention program

The Yellow Ribbon Suicide Prevention Program seeks to reduce suicide risk by promoting help-seeking behavior. This collaborative, grass-roots model is appropriate for all age groups and can be used in a school or community based setting. The three main aspects of Yellow Ribbon are: 1) increasing public awareness of suicide prevention, 2) training gatekeepers, and 3) facilitating help-seeking by distributing "Ask for help" cards. Public awareness is facilitated through distributed materials and community collaborations. Gatekeepers are taught a three-step rubric "Stay, Listen, and Get Help" to reinforce their training. "Ask for Help" cards contain help seeking instructions and are distributed by gatekeepers. This model is included on the SPRC evidence based registry but has not yet been evaluated (SPRC, 2005).

Innovative community models

ElderVention

Enhancement of behavioral health services for adults age 55 and older became a priority area of focus in Maricopa County, Arizona in the early 1990's. This was due to high rates of elder suicide and depression identified in the Region One service area coupled with input from public hearings. For the last decade ElderVention has been pioneering elder suicide prevention efforts through their innovative and multi-faceted behavioral health prevention program. ElderVention is operated through the Area Agency on Aging network and provides a wide range of fee-free programmatic activities that focus on reducing risk factors for depression for older adults as well as increasing protective factors for this population. Jewish Family and Children Service and Valle del Sol partner with Region One to provide these services; and Value Options, which serves as a pass-through for Medicaid funds, provides the majority of funding.

ElderVention was influenced by the Spokane Mental Health's Gatekeeper Program (reviewed earlier) that emphasized the importance of community outreach and education as an essential strategy for elder suicide prevention (Florio et al., 1996). Maricopa County/Region One was recognized by the US Department of Health and Human Services Administration on Aging's Office of Evaluation as having innovative approaches to health promotion activities within the Agency on Aging network and the ElderVention program was highlighted along with other Region One programs in the 2006 evaluation (Maier et al., 2006).

Some examples of the types of services that the ElderVention program provides are: educational presentations and transition workshops at senior centers and in the community, prevention education provided within the homes of at risk seniors, caregiver forums, trainings for professionals in the healthcare field, and social marketing through health fairs, exhibits, and staffed information tables. The program is staffed by one

director and four Master's level social workers and is also supported by the efforts of volunteers (Maier et al., 2006).

Educational sessions are provided by staff on a monthly basis in venues such as congregate housing units, senior community centers, assisted living facilities, and faith-based organizations. These one hour sessions offer 20 different topic areas such as grief and loss, stress, and anxiety. Pre- and post-tests are administered during the sessions to measure knowledge retention and participants are encouraged to select future topics of interest for their next presentation sessions (Maier et al., 2006).

Transitional workshops are also presented by ElderVention staff members in a support group format. The workshops are designed to assist older adults in developing effective coping skills during major life stage transitions such as the death of a spouse, leaving the workforce due to retirement or disability, the impact of declining health factors, or late life relocation. Participants are administered a Life Satisfaction Index (Neugarten et al., 1961) before and after the 8 to 10 week series to measure the impact of the transition workshop program. The topics for the workshops are chosen by the members and cover such topics as healthy aging, communication, stress management, grief and loss, emotional health, and access to healthcare services (Maier et al., 2006).

Isolated and homebound seniors can be at particular risk for depression and suicide. ElderVention provides in-home suicide prevention services in the form of individualized education to older adults and their family members that are designed to enhance coping skills and resource networks. The in-home outreach program gets its referrals from case managers, family members, and from older adults themselves by way of the 24-hour Senior Help Line. Some common elements of those individuals referred for in-home services are: experience of a major loss such as the death of a spouse, a vulnerable support system, the inability to get to services because of transportation barriers, or unwillingness to attend senior center program activities. Similar to the transitional workshops, the Life Satisfaction Index is administered on a pre- and post-test basis in the in-home program. If the individual scores low initially in the "life-satisfaction" section they are then administered the Geriatric Depression Scale Short Version (Sheikh & Yesavage, 1986). A score greater than 9 on the GDSSV initiates a referral for professional treatment for clinical depression; less that 5% of the total in-home caseload are referred for professional treatment.

ElderVention also holds quarterly caregiver forums in the community emphasizing self-care techniques and concepts for caregivers who care for older adults. The program also provides an average of 8 social marketing and informational sessions weekly for the public in the form of staffed information tables and health fair participation. There is also an intergenerational component to Region One's efforts called "Connecting Generations." This program links older adults with youth participating in area Boys & Girls Clubs with the goal of reducing depression, suicide, and isolation among seniors and reducing the school drop out rate for youths. Suicide prevention presentations are also made by ElderVention staff members to professionals who work with older adults in the community. Nearly 100 professionals received education and training regarding the identification of risk factors associated with suicide, prevention strategies and local referral resources in 2004. This professional education initiative was done in conjunction with the Arizona Suicide Prevention Coalition.

ElderVention continues to gain national recognition as a model behavioral health prevention program for older adults. The National Center on Elder Abuse includes ElderVention among its promising practices program and the state of Pennsylvania is currently using ElderVention as a model to develop prevention services. The results of surveys completed by program participants reveal that ElderVention reduces risk factors associated with depression and suicide and also increases protective factors such as coping skills, increased social contact, and enhanced resiliency (Maier et al., 2006).

TeleHelp-TeleCheck program

An eleven year evaluation of the TeleHelp-TeleCheck service in Italy examined the impact of assistive telephone services on overall suicide rates for adults aged 65 and older. The program provided participants with an in-home signaling device to request assistance from a response network (TeleHelp) or were called twice weekly by trained staff to assess their well-being (TeleCheck). The TeleCheck line also could be called 24 hours/day by program recipients. Persons with elevated risk factors were referred by physicians or social workers to be participants in the program. The risk factors targeted included disability, social isolation, psychiatric issues, non-compliance with outpatient discharge instructions, or being on a waiting list for placement in an institutional setting. Over the course of the evaluation more than 18,000 older adults received services from the programs. It was found that the TeleCheck portion of the program was linked to reduced depression levels, fewer hospital admissions, and fewer home physician visits. The program in its entirety was found to be successful in lowering the number of observed suicides for older women. Completed suicides for older men were not significantly affected (DeLeo et al., 2002).

Section 6: Screening tools for assessing elder suicide risk

There are very few screening tools that have been designed specifically for assessing suicide ideation or suicide risk for older adults (Blow et al., 2005; Brown, 2002). The need for such instruments will become greater as the US population ages. The babyboom generation has had higher suicide rates at all ages than previous generations (McIntosh, 1992) and as this generational cohort grows older their rates are likely to surpass the current elderly cohort (Conwell, 2001). In 2002 Gregory K. Brown, PhD. from the University of Pennsylvania published "*A Review of Suicide Assessment Measures for Intervention Research with Adults and Older Adults*" which systematically evaluated screening tools used to evaluate suicidal ideation and behavior in adults. With regard to future research around instruments detecting suicide risk in older adults Brown states:

> *Further measures of suicide-related behavior for the elderly are definitely needed. Future studies using elderly samples should employ previously developed measures of suicide ideation and behavior for younger adults to allow for age-related comparisons as well as measures that are specific to older adult populations (Brown, 2002).*

Identified scales

One scale that has been identified to measure suicide risk in older adults, the Harmful Behaviors Scale (HBS), examined self-destructive acts of patients in the nursing home environment. This is a 20 question instrument had internal consistency and inter-rater reliability, however, its limitation is that it relies on observer ratings of the behavior and was tested in the nursing home environment only. The study validating the HBS found that self destructive behaviors were common in the nursing home environment and were more common in patients with dementia rather than with depression (Draper et al., 2002 & 2003). Blow and associates identified two other scales with potential after further evaluation– the Reasons for Living Scale – Older Adults version (RLS-OA) and the Geriatric Suicide Ideation Scale (GSIS). These instruments, however, are much longer than the HBS in length and also have not yet been evaluated fully (Blow et al., 2006).

Depression screening in primary care settings

The opportunity for and importance of depression screening of older adults in the primary care setting cannot be overstated. Such factors that contribute to physicians not recognizing depression or suicide risk in older patients are: lack of knowledge of the signs and symptoms, an assumption that depressive symptoms are a part of the normal aging process, and a concern about stigmatizing their patients by giving them a psychiatric diagnosis. Two self-administered depression screening tools have been validated for use with older adults in the primary care setting – the Geriatric Depression Scale and the Center for Epidemiological Studies-Depression Scale (Conwell, 2001) (See Appendices A & B for copies of scales).

Szanto and associates recommend that physicians ask the following questions when patients appear depressed, express loss of interest in pleasurable activities, or

having a sad mood: 1) Have you been feeling so sad lately that you were thinking about death or dying? 2) Have you had thoughts that life is not worth living? 3) Have you been thinking about harming yourself? These questions should be followed up with direct questions aimed at knowing their suicidal intent. If the person is intent on killing themselves, the person's access to lethal means, presence of a plan in place to harm themselves, as well as deterrents that would prevent them from committing suicide should all be assessed. Family members and caregivers should also be asked whether the person has been displaying any warning signs recently (Szanto et al., 2002). Screening for depression in the primary care environment has the richest evidence base with regards to detection and effective treatment for a significant risk factor of late life suicide – depression.

Section 7: The Maine Youth Suicide Prevention Program (MYSPP)

The Maine Youth Suicide Prevention Program (MYSPP) has been in operation for nearly a decade now. It is located in and managed by a staff member of the Maine Center for Disease Control and Prevention, a part of the Maine DHHS. Program planning started in 1997 with extensive input from a gubernatorial task force including youth, suicide survivors, professionals, and clinicians (DiCara & Gotreau, 2005). The program was implemented in 1998 as an initiative of the Governor's Children's Cabinet and each Children's Cabinet agency was required to include youth suicide as a priority area to be addressed in their departmental activities. Start-up funds were made available by the Children's Cabinet in 1999 to initiate MYSPP activities. The program is guided by a Steering Committee comprised of public and private sector stakeholders who serve in an advisory capacity to the program.

The long term goal of the MYSPP is: *To reduce the incidence of fatal and non-fatal suicidal behavior among Maine youth aged 10-24.* In 2005, the program revised its program plan and developed 10 new goals that align with the National Strategy. The MYSPP conducts a wide range of programmatic activities that include: 1) statewide information and resource center; 2) statewide crisis hotline; 3) gatekeeper training and technical assistance for multiple audiences; 4) awareness education programs and resources; 5) training of trainers to conduct awareness education; 6) annual suicide prevention conference; 7) school protocol guidelines to help schools establish administrative protocols for all facets of suicide prevention and intervention; 8) training for school health educators in teaching "Lifelines" student lessons; 9) training for instructors in the Reconnecting Youth curriculum for high risk youth; 10) education regarding access to lethal means; 11) media contagion education and guidelines; and 12) suicide and self-inflicted injury data collection and tracking (DiCara & Gotreau, 2005, p.4). As resources permit, evaluation of MYSPP activities is conducted. Evaluation results are used to determine impact and to modify program activities.

The MYSPP is currently funded by: the Maternal and Child Health block grant (MCH), the Substance Abuse and Mental Health Services Administration (SAMHSA), and the Preventive Health and Health Services block grant (PHHS).

The program has been recognized both regionally and nationally for its efforts and published a state suicide surveillance report in December of 2006. The surveillance report is a result of the MYSPP efforts to create a comprehensive public health surveillance system for suicide and self-inflicted injury. Development and publication of this report was funded by the Division of Injury Disability Outcomes and Programs within the federal Centers for Disease Control and Prevention (CDCP) through a four year grant from 2002-2006. This report provides the state with up to date statistics and analysis of suicide rates and prevalence of all age groups in the state.

Included in this recent surveillance report are results from the Maine Youth Risk Behavior Survey (YRBS), a statewide survey of students enrolled in publicly-funded schools designed to measure self reported suicidal ideation and suicide attempts of Maine youth. A long term surveillance system enhancement may be to tailor such behavioral risk surveys for use with the older population to capture similar risk and behavior factors in older adults (see Appendix C for full YRBS questions). Suicide behavior questions were added to the Maine Behavioral Risk Factor Surveillance system (BRFSS) in 2006 &

2007 and these data should provide some useful information on suicidal behavior among Maine's adult population.

YRBS questions asked of students are designed to gauge suicidal ideation and behavior over the last 12-months and are listed in the box below:

High school student questions (Meyer et al., 2006):

Within the past 12 months:
- "Did you seriously consider attempting suicide?"
- "Did you make a plan about how you would attempt suicide?"
- "How many times did you actually attempt suicide?"
- "If you attempted suicide, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?"

YRBS results from 2006 surveillance report

The percentage of Maine high school and middle school students reporting having seriously considered suicide in the last year has declined over time. For high school students measured in 1995, 25% had considered suicide over the last year compared to 13.3% reporting such thoughts in 2005. The 1997 statistics for middle school students revealed that 30% of students had considered suicide over the last year, while in 2005 19.8% reported considering suicide. The percentage of Maine students reporting having planned a suicide in the last year has also declined. The rate of reported suicide attempts among high school students in the past 12 months has declined since 2001, while the rates for middle school student reports of ever having made an attempt decreased from 14% in 1997 to 8.5% in 2005 (Meyer et al., 2006).

MYSPP Lifelines program

A strong component of the MYSPP is the "Lifelines Program", developed by a team of suicide prevention experts from New Jersey and modified for implementation in Maine. This program utilizes a comprehensive prevention approach which is thought to be essential in addressing the complicated nature of identifying and assisting students at risk for suicide. With this promising model schools establish administrative protocols, train key individuals as "gatekeepers," build staff awareness of suicide prevention and school protocols, create an environment that encourages and supports help seeking among students, develop agreements with mental health providers, and identify and assist students who may be at risk of suicide (DiCara & Gotreau, 2005, p.4). Final and formalized evaluation of Maine implementation of the "Lifelines Program" is slated for completion in January 2007. During suicide prevention week in 2006, the Bangor Daily News reported preliminary results from the CDC grant that funded the implementation of "Lifelines" in a dozen Maine schools. .

> "…o*ver the three years of the program, participating schools recorded 344 reports of students in distress. Almost half of these reports came from teachers who observed reportable behaviors in their students, including statements of intention to harm themselves, evidence of heightened stress and emotional instability, changes in behavior, a drop in grades and difficult breakups with their*

boyfriends or girlfriends. Students self-reported their distress 35 percent of the time, while friends and school employees reported the rest. All reports were taken seriously, and most students received counseling and evaluation the same day. Many were referred to mental health professionals for ongoing therapy." (Haskell, 2006, p.1)

Preliminary evaluation of the Lifelines Program demonstrates that administrators and staff members in project schools are more prepared to prevent and respond to a crisis. Teachers were responsible for making the most referrals of students at risk. Evaluation of classroom lessons indicates significant gains among students in knowledge, willingness to talk about suicide, and willingness to seek help.A final project evaluation report will be published f in January 2007.

MYSPP gatekeeper trainings

Gatekeeper training has been a consistent cornerstone of the MYSPP since inception of the program in 1998. It has served as a crucial element of Maine's comprehensive approach to youth suicide prevention.. Since 1998, the MYSPP has trained over 4,500 adults as gatekeepers. The gatekeeper trainings that the MYSPP conducts are similar in content to gatekeeper models of suicide prevention training explored earlier in this paper. It is a full-day training, with continuing education credits, for adults in school and community settings designed to 1) provide up-to-date information about suicide; 2) teach basic suicide intervention skills; 3) increase personal confidence and ability to effectively respond to suicidal behavior; and 4) identify helpful resources. (Coleman & O'Halloran, 2004, p. 9) Gatekeeper training serves as a pre-requisite to attend other MYSPP training programs. Maine's Gatekeeper training was routinely evaluated from 2000-2005. A single group longitudinal design was utilized to measure changes in comfort, confidence and willingness to intervene among training participants. Short questionnaires were administered at the beginning and end of the training day, and again six months later. Participants were asked to rate themselves on seven items measuring readiness to intervene. In addition, they were asked if they had identified, and then referred, anyone for professional help for suicidal behavior in the previous six months. In the spring of 2003, in-depth interviews were conducted with trained Gatekeepers to learn more about the process of making referrals, and the role of Gatekeeper training in preparing them to do so. Key findings of MYSPP gatekeeper training evaluation include:

- ⇒ Consistent, significant increases in Readiness to Intervene (RTI) scores from pretest to posttest, maintained at six month follow-up
- ⇒ Higher RTI scores are associated with identification of someone who might be at risk of suicide
- ⇒ Slight increase in number of trainees reporting that they had made referrals
- ⇒ Role plays are an important aspect of the training, as is the emphasis on "asking the question."
- ⇒ The role of the gatekeeper in his/her organization determines how often he/she will utilize what was learned in the training
- ⇒ Gatekeepers stressed the importance of having all adults in the organization receive some suicide prevention education.

Formalized and copyrighted gatekeeper models such as QPR or ASIST have costs associated with rights of distribution and program materials. In an environment where resources are scarce, it would be prudent to draw from the already established gatekeeper trainings developed by the MYSPP and expand the trainings for elder suicide prevention efforts building on the basic concepts in the MYSPP gatekeeper training program. The underlying philosophy emphasizes the need for gatekeepers to ask direct questions, to always err on the side of caution by referring the person for additional intervention when in doubt.

Translating MYSPP best practices to elder suicide prevention

Several of the strategies that the MYSPP has employed could be translated into use for elder suicide prevention outreach and will be explored in depth in the Recommendations section of this paper.

Section 8: Best practices in suicide prevention programs in other states

Best practices for suicide prevention in Maine are represented by the efforts of the MYSPP covered in depth in the previous section of this paper. In March of 2006, the states of Oregon and Pennsylvania developed elder specific suicide prevention plans that are separate documents from their respective state suicide prevention plans. These two plans will be covered in the next section followed by a summation of state suicide prevention plans in the US that have elder specific goals, objectives, or language in them. The state of Connecticut has a comprehensive older adult suicide prevention plan that is included within the larger state prevention plan (2005) that covers all age groups and at-risk populations in that state. This and other states in the forefront of elder suicide prevention will be explored in the "other states" section following the review of the Oregon and Pennsylvania plans.

Oregon

The "*Oregon older adult suicide prevention plan: a call to action"* is the most comprehensive elder specific state suicide prevention plan available in the nation in terms of design and content. In 2003, Oregon had the 4th highest suicide rate for older adults in the nation. The Oregon plan was the result of many years of hard work, multi-disciplinary collaboration, and citizen input and was supported by funding from the Centers for Disease Control and Prevention (CDCP), the Injury and Violence Prevention Program and through support by the Oregon Department of Human Services. The workgroup used the National Strategy for Suicide Prevention and the Elder Specific Goals and Objectives developed therein as a framework from which to develop this public health initiative. The workgroup reviewed data from the CDCP funded Oregon Violent Death Reporting System and Injury Surveillance Programs which tracks data on suicidal behavior among persons of all ages. A review of scholarly literature was conducted as well as interviews with key national and regional experts in the subject of elder suicide. Input from older adults, physicians, and social service professionals was also gathered. All of the preliminary efforts were combined to develop draft prevention concepts that were then presented to six community forums. These prevention concepts are framed around the 11 goals laid out in the NSSP with specific tailoring for focusing on older adults (see box below).

Oregon prevention elder suicide prevention concepts (Alexander et al., 2006).

1. **PROMOTE AWARENESS** that suicide in older adults is a public health problem that is preventable
2. **DEVELOP BROAD-BASED SUPPORT** for elder suicide prevention
3. Develop and implement strategies to **REDUCE THE STIGMA** associated with aging and with being a senior consumer of mental health, substance abuse and suicide prevention services
4. Develop and implement **COMMUNITY-BASED SUICIDE PREVENTION PROGRAMS** for older adults
5. Promote efforts to **REDUCE ACCESS** to lethal means and methods of self- harm by older adults

6. Implement **TRAINING FOR RECOGNITION AND ASSESSMENT** of at-risk behavior in and delivery of effective treatment to older adults
7. Develop and promote effective **CLINICAL AND PROFESSIONAL PRACTICES**
8. Improve **REPORTING AND PORTRAYALS** of suicidal behavior, mental illness, and substance abuse among older adults in the entertainment and news media
9. Promote and **SUPPORT RESEARCH** on late life suicide and suicide prevention
10. Improve and expand **SURVEILLANCE SYSTEMS**
11. **EVALUATION** of prevention programs

These community forums where the prevention concepts were presented were facilitated by project staff throughout the state of Oregon to collect public input and feedback to further develop the state elder suicide prevention plan. Through this comprehensive and inclusive process the plan was developed and recommendations were made in the form of a formal written elder suicide prevention plan. The three primary strategy areas to address elder suicide that are identified in the plan are enhancements in: 1) clinically based suicide prevention; 2) community-based suicide prevention; and 3) public health surveillance, program evaluation, and research (Alexander et al., 2006).

Clinically based

The clinically based suicide prevention strategy is based upon the rationale that older adults rely on their primary care physicians for most health needs and are often resistant to mental health interventions. One national study found that nearly two-thirds of older adults who died by suicide had seen their doctor within the last month (Goldsmith, et al., 2002). With this in mind, there is opportunity to screen and treat suicide risk factors, such as depression, in the primary care or similar clinical setting. Below is an outline of the objectives that the Oregon plan developed within their clinically based suicide prevention strategy.

Oregon's clinically based elder suicide prevention objectives (Alexander et al., 2006)

1. Increase the confidence and competence of primary care providers and other clinicians to identify, assess, and treat older adult suicidal behavior and depression
2. Improve the availability of medical and behavioral health care providers trained in geriatrics
3. Reduce financial barriers to medical and behavioral care for older adults
4. Institute clinical outreach programs to older adults

There were many ideas for action presented for each objective. Select action steps that may translate for use in Maine are: disseminating screening and assessment tools to primary care physicians and training them to use them, improving cross system referrals to ensure continuity of care for older adults, increase financial resources for primary care and behavioral health services, advocate for mental health insurance coverage parity, enhancing telehealth links for outreach to rural older adults, encourage visiting nurses to screen older adults and enhance their linkage to clinical resources, and increase the number of counties that incorporate behavioral health services into health and social service outreach efforts.

Community based

The community based suicide prevention strategy focuses on prevention efforts that can be enhanced or developed at the community level to decrease suicide risk factors and increase protective factors for older adults. Cultural sensitivity, inclusion of older adults in programmatic planning and evaluative input, as well as addressing mental health stigma, ageism, and responsible media reporting guidelines of suicides are examples of items that would fall into this category. Other applicable areas are reduction of the access to lethal means for at-risk individuals, community intervention skills training, and public policy work. Below is an outline of the objectives that the Oregon plan developed within their community based suicide prevention strategy.

Oregon's community based elder suicide prevention objectives (Alexander et al., 2006)

1. Develop state and local partnerships and the resources to support those partnerships
2. Increase awareness that suicide is preventable and reduce the stigma associated with aging and the use of treatment services
3. Improve reporting of suicides and behavioral health issues in the media
4. Provide suicide intervention skills training for community members
5. Reduce social isolation and increase a sense of social support among older adults
6. Enhance the abilities of older adults to cope with difficult challenges
7. Reduce access to lethal means among older adults at-risk for suicide
8. Subvert negative societal stereotypes about aging. Expand the societal definition of retirement to include an understanding of the value of older adults as role models, wisdom-keepers, mentors, and living historians
9. Develop public policy to assure that older adults have increased opportunities to engage in society in the fullest way

Selected action steps from the Oregon community based objectives that could be implemented in Maine are listed in the box below:

1. Build coalitions among commissions, associations, businesses, faith based organizations, and older adult groups to promote suicide prevention efforts
2. Promote public policies that will reduce risk factors of suicide for older adults
3. Incorporate late life suicide prevention activities into state mental health plans coordinate efforts across agencies
4. Seek/garner support and involvement from the private sector
5. Implement and evaluate prevention strategies, and work with local, state, county, and federal governments, non-profits, and foundations to secure funding to move elder suicide prevention initiatives forward
6. Conduct a coordinated public education campaign
7. Obtain and disseminate elder suicide prevention awareness materials
8. Implement late-life suicide prevention education into existing programs for older adults
9. Educate health care providers and policy makers on elder suicide prevention
10. Provide national guidelines for reporting suicide to media outlets in the state
11. Establish a citizen's group to monitor media reporting of suicide in the state

12. Train individuals to provide suicide prevention training to community members, professionals, and first-responders (gatekeepers) and provide technical assistance for these efforts
13. Increase outreach to homebound seniors, develop telephone support, assistance, and assessment interventions for older adults
14. Publicize crisis hotline numbers and other available resources widely
15. Establish bereavement groups in the community
16. Increase access to pain management, rehabilitation, and home health services
17. Increase the assessment efforts of clinicians with regards to lethal means, educate families and older adults on safety issues and procedures relevant to lethal means
18. Work with the gun owner's associations to develop suicide prevention information and distribution of these materials
19. Promote healthy aging through educating journalists, children, and the public in general about positive aspects of aging
20. Promote intergenerational activities such as mentorship programs
21. Set up volunteer opportunities where older adults can act as role models such as teaching and storytelling
22. Promote public policy to reduce age discrimination
23. Establish a task force to evaluate community efforts to ensure that they meet the needs of older adults in the areas of transportation, housing, and design

Surveillance and research

The final Oregon strategy is based on enhancing public health surveillance, program evaluation, and research for elder suicide prevention. In order to move elder suicide prevention efforts forward it is essential to have an effective system of data collection upon which to base policy and program development. As discussed previously, evaluation components within a prevention program will add to the evidence based knowledge available. Evaluation components are also crucial in finding out what programs are effective and maximizing scarce resources available to prevention programs. It is also important to link researchers with prevention specialists to ensure that what is being researched is relevant to preventative practice and to aid in the development of new prevention initiatives. Below is an outline of the applicable objectives that the Oregon plan developed within this strategic category.

Oregon's public health surveillance, research and evaluation objectives for elder suicide prevention (Alexander et al., 2006)

1. Enhance public health surveillance systems to capture more detailed information on suicide events, victims and survivors
2. Encourage evaluation of suicide prevention programs implemented in Oregon
3. Improve research-based knowledge about late life suicide and suicide prevention practice

The Oregon plan's implications for Maine

The public health approach that the state of Oregon used to develop and write its elder suicide prevention plan is one that Maine should consider replicating due to its comprehensiveness and use of community input. Some action steps that were brought to

light in the creation of the Oregon plan are also ideas from which additional state planning could be done in Maine.

Pennsylvania

The *Pennsylvania older adult suicide prevention plan* uses the 11 goals laid out in the National Strategy for Suicide Prevention as its framework to build an elder specific suicide prevention plan for the state. A statewide workgroup of both public and private stakeholders was convened in July of 2005 to create adult and older adult suicide prevention plans which were released in March of 2006. It is notable that the objectives in the Pennsylvania plan mirror many of those laid out in the NSSP, the action steps are more specific to items that are elder and/or state specific. For review, the 11 goals of the NSSP that the Pennsylvania older adult suicide prevention plan are framed around are listed in the box below (USDHHS, 2001).

- Goal 1: Promote awareness that suicide is a public health problem that is preventable
- Goal 2: Develop broad based support for suicide prevention
- Goal 3: Develop and implement strategies to reduce the stigma associated with being a consumer of mental health, substance abuse, and suicide prevention services
- Goal 4: Develop and implement suicide prevention programs
- Goal 5: Promote efforts to reduce access to lethal means and methods of self-harm
- Goal 6: Implement training for recognition of at-risk behavior and delivery of effective treatment
- Goal 7: Develop and promote effective clinical and professional practices
- Goal 8: Improve access to and community linkages with mental health and substance abuse services
- Goal 9: Improve reporting and portrayals of suicidal behavior, mental illness, and substance abuse in the entertainment and news media
- Goal 10: Promote and support research on suicide and suicide prevention
- Goal 11: Improve and expand surveillance systems

Raising awareness

With regards to the goal of raising awareness of suicide prevalence there were several action items called for within the plan. One item was the development of public education campaigns and materials that target the general public, older adults and their families, faith based organizations, and organizations that serve or are primarily made up of older adults. The sponsorship of statewide educational conferences as well as regional forums through which to disseminate the older adult suicide prevention plan were efforts that were also endorsed.

Gathering support for suicide prevention

There were four objectives put forth for the goal of developing broad based support of suicide prevention. The first objective was to organize a statewide interagency committee comprised of the Pennsylvania Department of Aging, Pennsylvania

Department of Health, Office of Mental Health and Substance Abuse Services, Pennsylvania Medical Society, Pennsylvania Community Providers Association, Pennsylvania Psychological Association, Pennsylvania Psychiatric Society and the Pennsylvania Behavioral Health and Aging Coalition. The second objective was to develop public and private partnerships within organizations that serve and are composed of older adults that are dedicated to implementing the older adult suicide prevention strategy. The third objective under this goal was to increase the number of volunteer, professional, and Area Agency on Aging groups that integrate suicide prevention information into their ongoing activities. The final objective was to increase the number of faith based communities that adopt suicide prevention policies. The action ideas created to accomplish these objectives were to visit leaders of organizations to elicit their support in integrating suicide prevention into ongoing programs, recruit and train a point person within the aging system at the county level to be a community organizer for suicide prevention efforts, and to do annual mailings to healthcare professionals that include elder suicide statistics, screening and assessment tools, and guides to community resources.

Reducing stigma

The action ideas to highlight for the reduction of stigma goal are: the development of a public awareness campaign focusing on aging and behavioral health issues and the utilization of wellness and peer-to-peer education models to aid in the normalization of the behavioral aspects of aging.

Developing and implementing suicide prevention programs

The development and implementation of suicide prevention program goal had three main objectives: 1) increasing the numbers of local communities that have comprehensive suicide prevention plans in the state; 2) increasing the number of evidence based suicide prevention plans in community service programs, Area Agencies on Aging, primary care sites, senior centers and housing sites; and 3) develop technical support centers that would assist with capacity building as well as with the implementation and evaluation of suicide of prevention programs. The action steps for these objectives were to identify lead organizations to coordinate elder suicide prevention efforts and to identify if there were any older adult suicide prevention programs in operation presently in the state.

Reducing access to lethal means

The promotion of efforts to reduce access of lethal means and self harm objectives are: 1) educating health care providers and public safety officials on the assessment of and actions needed to reduce older adult suicide risk in the home and care facility environments; 2) launching a public information campaign designed to reduce the lethal means accessibility; 3) improvements in firearm safety and design as well as prescribing practices for medications; and 4) support of new prevention technology discoveries (USDHHS, 2001; Pennsylvania Department of Public Welfare, 2006). The action items for this category are to encourage healthcare professionals, medical staff, aging care managers, community social workers, and long term care staff to routinely ask

about the presence of lethal means and to educate family members of older adults on the safe storage and security measures of lethal means.

Training gatekeepers

The training of recognizing at-risk behavior and delivery of effective treatment goal focuses on training of gatekeepers as its primary objective. These gatekeeper educational initiatives entail the training of health care professionals such as doctors and nurses, senior center and retirement community staff focused trainings, trainings for older adults themselves, and trainings for family members of older adults identified to be at elevated risk. Action ideas for this objective entail suicide prevention workshops at professional associations, special emphasis on primary care physician education on screening, detecting, and treating older adult suicide risk, educational outreach to area agencies on aging and long term care facilities, and the encouragement of professional schools to include suicide prevention within their curriculum.

Promoting effective clinical practice

The promotion of effective clinical and professional practices goal entails activities that reduce risk factors, promote protective factors, improve clinical practice in assessment, management, and treatment of older adults at-risk for suicide, and advocate for better triage systems and allocation of resources for specialized treatment. Incorporating suicide risk screening into primary care, ensuring that older adults seen in the emergency department for trauma, sexual assault, or physical abuse receive mental health services are screened for suicide risk, and improving education of suicide risk factors presented to family members and caretakers of older adults being treated for mental health or substance abuse issues are important aspects of promoting effective clinical practices. Some notable action steps from this goal area are: work with hospital administration to develop tracking procedures for mental health follow-up, distribute suicide prevention materials to hospitals, provide suicide prevention to hospital staff, sponsor depression screening days at hospitals, promote successful aging activities and programs, and promote professional education on effective clinical practices for suicide screening, treatment, and prevention.

Linking to mental health and substance abuse services

Improve access to and build community linkages with mental health and substance abuse services is the next goal in the Pennsylvania older adult suicide prevention plan explored. Some highlighted objectives in this goal are: exploring mental health insurance parity, implementing utilization management guidelines for suicidal risk in managed care and insurance plans, integrating suicide prevention into health and social service outreach efforts that exist for older adults, defining and implementing suicide risk screening and service linkage guidelines for primary care, senior centers, and long term care. Action steps of note were: improve training of agency staff with regard to mental health referrals, promote cross-system cooperation with regards to education and outreach to older adults on suicide prevention, and train facilitators to hold suicide survivor support groups.

Media reporting

The wording in the improving reporting and portrayals of suicide behavior, mental illness and substance abuse in the entertainment and news media goal is taken directly from the NSSP. Its main focus is on advocating for responsible media reporting of suicide by radio, newspaper, and television reporters as well as the promotion of responsible representation of suicide and mental illness in movies and television. There are national guidelines that have been published with regard to these reporting protocols available through the American Foundation for Suicide Prevention (AFSP). Action steps call for including survivors of suicide in the efforts of monitoring media reporting as well as advocating for responsible reporting and training of reporters in the recommended guidelines.

Research

The tenth goal of the plan is to promote and support research on suicide and suicide prevention. The objectives for this goal again mirror those of the NSSP and are composed of: increasing funding for suicide prevention research efforts, evaluating prevention initiatives in place, and establishing a registry of evidence based interventions. Such a registry is available to a national audience in the form of the SPRC registry referenced throughout this paper. The action steps for these objectives are to develop and distribute easy to follow evaluation tool-kits and to increase the number of jurisdictions in Pennsylvania that collect and provide information on suicides.

Surveillance

Finally, the goal to improve and expand surveillance is focused on enhancing the quality and amount of available data on suicide to make sure that this data is relevant in the efforts of prevention. The objectives for this goal are: standardizing protocols for death scene investigations, increasing external injury coding procedures at hospitals, and supporting pilot projects that link various data reporting systems together for analysis of suicidal behavior. The action steps that support these objectives for the state of Pennsylvania are: to implement a violent death reporting system that enhances data collection efforts regarding suicide and develop evaluation components that measure suicide prevention progress at the community level (Pennsylvania Department of Public Welfare, 2006).

The Pennsylvania plan's implications for Maine

Pennsylvania used a similar public health approach to that which Oregon employed in developing its older adult state suicide prevention plan by using the 11 goals of the NSSP as a blueprint from which to develop objectives and action steps. There are many recurring themes that are presented in both state plans that could be of great use in the elder suicide prevention efforts that the state of Maine pursues going forward. These themes are: screening for suicide risk in the primary care setting, public awareness education, gatekeeper trainings, engaging community involvement in prevention initiatives, public policy work, reducing access to lethal means for at-risk elders, advocating for responsible reporting of suicide in the media, reduction of mental health stigma and service barriers, implementation of evidence based prevention practices, presence of evaluative components in prevention programs, and improved surveillance infrastructure.

Other state plans

Many preliminary efforts in suicide prevention were geared towards youth including Maine's plan. Over time and with the influence of important national directives such as the NSSP, the Institute of Medicine's Reducing Suicide National Imperative, and the President's New Freedom initiative there has been some progress towards including all age groups in suicide prevention planning – the lifespan approach. In a review of the state prevention plans available through the SPRC it was found that there were 33 states that have completed or are in the process of completing plans embracing the lifespan approach. The extent of objectives, specific initiatives, and elder specific language used in these plans varies widely. As mentioned previously, the state of Connecticut has a comprehensive suicide prevention plan for older adults within its overall state plan. New York has made great strides in geriatric mental health and Yeates Conwell, MD at the University of Rochester is a leading researcher in elder suicide. Rhode Island drafted a plan in 2004 and is in the process of formalizing their elder specific suicide prevention plan. Connecticut's plan also utilizes the 11 goals outlined in the NSSP and frames elder suicide prevention objectives around them. Florida calls for increases in depression screening for older adults and in educational efforts for physicians in recognizing the signs and symptoms of depression and suicide risk. Finally, the action steps called for in the New York plan are found in the box below.

State of New York elder suicide prevention action steps (Conwell, 2005)

1. State policy should reflect the fact that the suicide rate for elderly (>65) males is the highest for any sub-population in New York
2. Depression is more prevalent among elders than the general population. However, it is not a normal part of the aging process and should be treated appropriately. Validated, self-administered, voluntary screening tools for depression should be routinely used with elderly patients in primary care health offices. Diagnosis and treatment of depression in elders should be aggressively pursued in the primary care practitioner's office
3. Gatekeeper programs and telephone support (warm lines) systems should be implemented and evaluated as "indicated" preventive interventions for isolated, high-risk elders. These services should be part of a comprehensive network of offerings, including case-finding, acute response, multi-disciplinary assessments, and other support services
4. Elders tend to employ more lethal means of self-harm in the act of suicide. Restricting access to such means of self-harm as firearms and household poisons could save lives
5. Since the vast majority of elders who die by suicide have seen their health care provider within 30 days of their death, it is essential that such visits include an assessment of suicidal thoughts, intent and plans they may have
6. Chronic pain and debilitating physical illnesses are frequent precursors to suicide among elders. Death of a spouse, loss of companions and social isolation are also contributing risk factors
7. Greater emphasis should be placed on medical, nursing and social service training on recognizing and treating depressive disorders and suicidal states in elders.

8. Research should seek to determine whether treatments designed to mitigate hopelessness and related effects in older people are effective in lowering suicide risk
9. Include high-risk suicidal elders in controlled clinical trials of preventive interventions, while guaranteeing the ethical conduct of the research and the rights of the subjects themselves

Section 9: Training programs for direct care staff with regard to elder suicide prevention

The Suicide Resource and Prevention Center offers workshops for mental health professionals entitled, "Assessing and Managing Suicide Risk: Competencies for Behavioral Health Professionals." These one-day workshops cover such topics as clinical evaluation, formulation of risk, treatment planning, and management of individuals at risk for suicide (www.sprc.org). There are also the gatekeeper trainings that were explored in depth previously in this paper that would apply to direct care staff.

One study by Herron and associates investigated attitudes towards suicide prevention of front-line health staff using the Attitudes in Suicide Prevention (ASP) scale. In this study front-line health staff were defined as community psychiatric nurses, emergency nurses, psychiatrists in training, and general practice physicians. The study found that general practitioners and accident/emergency nurses had the most negative attitudes towards suicide prevention and that community psychiatric nurses had the most positive. It was also found there were more positive attitudes toward suicide prevention in people who have had previous training in suicide risk assessment (Herron et al., 2001) (See Appendix D for the full ASP scale).

An instrument called the "Quiz on Depression and Suicide in Late Life" that was created by Pratt, Wilson, Benthin & Schmall (1992) was created to assess knowledge levels of service providers and the public in general through a 12 question true or false quiz. It was found that there was a high level of internal consistency in using the quiz and participants who attended workshops on depression in older adults improved their scores on the quiz (Brown, 2002). (See Appendix E for a copy of the quiz).

Section 10: Public awareness education campaigns targeting elder suicide

Currently there are no nationwide public awareness education campaigns specifically targeting suicide prevention in older adults. One of the major goals of the *National Suicide Prevention Strategy* and the *President's New Freedom Initiative* is to raise awareness that suicide is a public health problem. Some states and suicide prevention groups have launched their own public awareness campaigns to coincide with their prevention efforts.

The task of raising awareness of suicide needs to be pursued with caution for several reasons. Research shows that the media can have a contagion effect if messages are delivered improperly, recent anti-drug campaigns were found to have little influence and possible untoward effects despite being well funded, and there are no media campaigns that can act as models of safety and effectiveness (Knox, 2003). More research is needed to find out which specific components of a campaign have untoward effects and which components lead to safe and effective messages (Knox, 2003).

The American Foundation for Suicide Prevention holds "Out of the Darkness Community Walks" throughout the country that support the following efforts:

- Research to improve the understanding of biological, genetic and psychosocial factors that contribute to suicide
- Suicide prevention on college campuses through the dissemination of an educational film, *The Truth about Suicide: Real Stories of Depression in College*
- National Survivors of Suicide Day conferences, which inform, assist and empower families and friends bereaved by suicide
- Development of national centers that will evaluate the effectiveness of suicide prevention treatments
- Creation of new survivor support groups and strengthening of existing groups through training
- Local suicide prevention programs (AFSP, 2006)

Real Men, Real Depression campaign

The National Institute of Mental Health (NIMH) funded a national campaign aimed at men and depression from 2003 through 2005. "Real Men, Real Depression" was the nation's first formal public effort to raise awareness of depression and utilized a multi-method media campaign targeting men. Men were targeted in this campaign due to the fact that they often do not seek treatment for depression and their depressive symptoms are not always recognized by their family or their physicians. The campaign used documentary film type interviews having men talking directly with other men about depression, its symptoms, and treatment options. Public service announcements, educational materials, web based information resources, fact sheets, telephone and email hotlines, were all products from this campaign. It was deemed highly successful as evidenced by the distribution of over 1 million resource materials to interested individuals and organizations, 14 million hits on its website, 150,000 materials downloaded from the website, and over 5,000 calls and emails to its hotline. (See

Appendix F for the portion of this campaign targeting older men as well as information on suicide from the campaign.)

Other public education approaches were reviewed earlier in this paper. The ElderVention program utilizes educational forums to raise awareness of older adults and their caregivers and the social marketing component promotes well being and resource linkage. Gatekeeper trainings such as the one utilized by the MYSPP are designed to raise awareness about signs and symptoms of suicide as well as developing intervention skills and enhancing knowledge of referral protocols.

Section 11: Funding sources for elder suicide prevention initiatives

Funding for suicide prevention is limited in comparison to many other public health initiatives. There have been some improvements in funding over time, particularly with youth specific grant programs like the Garrett Lee Smith program. Funding for the Suicide Prevention Resource Center and the Lifelines program is also significant. The Centers for Disease Control Injury Prevention Division, SAMHSA, NIMH, NIH, and the American Foundation for Suicide Prevention (AFSP) are major funding sources for suicide prevention research.

An example of a comprehensive statewide elder suicide planning initiative can be found in Oregon's Older Adult Suicide Prevention Plan that was funded by the Centers for Disease Control and Prevention (CDCP), the Injury and Violence Prevention Program and through support by the Oregon Department of Human Services. The Maine Youth Suicide Prevention Program has several funding sources, some of which have age group restrictions. The MYSPP is currently funded by: the Maternal and Child Health block grant (MCH), the Substance Abuse and Mental Health Services Administration (SAMHSA), and the Preventive Health and Health Services block grant (PHHS). The Maine Health Access Foundation (MeHAF) may be a potential source of funding for elder suicide prevention initiatives in the state especially as they apply to the foundation's *Integration Initiative* project which aims to improve patient centered care through the integration of Maine's behavioral, and physical health care systems in the state (MeHAF, 2006).

SAMHSA

The Substance Abuse and Mental Health Services Administration (SAMHSA) funds some of the elder specific prevention and research initiatives that were explored previously in this paper (ElderVention and PRISM-E for example). Continuing to monitor funding opportunities through this agency should be an ongoing goal to promote elder suicide prevention initiatives in Maine. A review of all 50 state's SAMHSA fund distributions over the last 2 years was conducted by this writer. See Appendix G for the full details of SAMHSA funded elder suicide/geriatric mental health initiatives.

AFSP

The American Foundation for Suicide Prevention (AFSP) is "the only national not-for-profit organization exclusively dedicated to understanding and preventing suicide through research and education, and to reaching out to people with mood disorders and those affected by suicide" (AFSP, 2006). AFSP funding is primarily directed at research initiatives. (See Appendix H for recently funded research projects that are elder suicide specific currently being pursued through the support of the AFSP.)

Finally the National Institute of Health (NIH), in partnership with the National Institute for Mental Health (NIMH), the National Institute on Drug Abuse (NIDA), and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) released the program announcement (PA-06-438) entitled "*Research On The Reduction And Prevention Of Suicidality"* which is open for applications through July 2, 2009. The summary of this

potential funding source for elder suicide prevention research efforts in Maine is summarized below.

> *The National Institute of Mental Health (NIMH), the National Institute on Alcohol Abuse and Alcoholism (NIAAA), and the National Institute on Drug Abuse (NIDA) invite grant applications for research that will reduce the burden of suicidality (deaths, attempts, and ideation). While NIMH has a long-standing commitment to studying the mental health-related factors contributing to suicide risk, NIDA, and NIAAA supported research in suicidality is growing and has provided a broader perspective on the range of risk and protective factors. For this FOA, mental disorders, along with alcohol use disorders (AUDs) and substance use disorders (SUDs) and their respective trajectories, are of particular interest as they pertain to risk and protective factors and treatment efficacy and effectiveness for suicidality. The intent of the funding opportunity announcement is to intensify investigator-initiated research on this topic, to attract new investigators to the field, and increase interdisciplinary approaches to developing effective strategies to reduce suicidality (NIH, 2006)*

This program announcement is very wide reaching calling for research in such topics as: Risk and protective factors of suicide research (including psychological, cultural, biological, and genetic factors); clinical trials; multi-level prevention approaches; services research; contagion, media campaigns, and health education; and ethical and safety issues.

Section 12: Recommendations

Goals from Maine state health plan relevant to elder suicide prevention

There are several goals laid out in the most recent Maine State Health Plan (MSHP) that are relevant to elder suicide prevention efforts. Depression and suicide risk screening initiatives could be enhanced in the state and would fall under the major goal of "increasing the proportion of patients screened for mental health status in a primary care setting." The state health plan also acknowledges that "since depression is one of the leading risk factors for suicide in all age groups, increased awareness and early identification and treatment of depression will greatly enhance our effort to reduce the impact of suicide in youth, adults and elders in Maine."

With regard to prevention, the MSHP states that, "coordination with suicide prevention activities will be a priority. Prevention and mental health promotion activities need to be supported for persons across the lifespan, from school age children and adolescents to elders, as well as for communities and the workplace." The Mental Health/Public Health workgroup to be convened by the DHHS Commissioner "…will identify preferred screening instruments for depression, appropriate to the different phases of lifespan, working toward the development and adoption of policy for promotion of the use of a universal screening tool across a range of non-mental health DHHS activities including substance abuse activities, public health activities, school health activities, elder services activities and so on." While waiting for the identification of such a universal screening tool, one of the objectives called for by the plan in the meantime is to "ensure routine depression screening among elders applying for long term care services."

The plan acknowledges that older adults and people living in rural parts of the state prefer to see their primary care provider for depression treatment. It calls for "developing a strategic plan for the promotion of effective integration of depression care into geriatric care settings." It also goes on to talk about the implementation of the Care Model which is a model that integrates mental, behavioral, and physical health systems and is currently being evaluated by the Maine Health Access Foundation (MeHAF).

There is also potential opportunity to piggy-back on depression screening initiatives in the DHHS/OSA Co-SIG project. It seems most applicable in year two of the project when "a primary care demonstration site will be added, to advance screening and treatment for both depression and substance abuse in primary care. This will be an opportunity to promote best practices regarding the prescribing of pain medications and benzodiazepines, as well as antidepressant medication, among health care providers who are, in general, the major prescribers of these medications."

A specific objective regarding the training of gatekeepers was outlined in the state health plan. "The Mental Health/Public Health Work Group will support the Maine Youth Suicide Prevention Program and the Office of Elder Services in their on-going work in suicide prevention. This will include technical assistance in developing educational materials about depression for public distribution, for use in school health education, for the training of community "gatekeepers" and for use in training of direct service providers in long term care settings. Both youth and elder-serving organizations, including education, community, primary care and long term care facilities, will be engaged in activities that promote awareness, early screening and referral for treatment of

depression as part of on-going activities in suicide prevention. Additionally, the Mental Health/Public Health Work Group will include representation from the Maine Office of Substance Abuse so as to ensure information regarding screening and interventions for substance abuse are included in technical assistance provided to programs for youth and for elders in suicide prevention."

An objective specific to depression screening reads, "The DHHS Office of Elder Services and Adult Mental Health will develop policies and procedures for tracking those elders who screen positive for depression, increasing provider awareness of the signs and symptoms of depression and educating providers about evidence based practices for the treatment of depression in elders" (Baldacci, 2006).

Translating MYSPP best practices to elder suicide prevention

Several of the strategies that the MYSPP has employed could be translated into use for elder suicide prevention. MYSPP has developed suicide prevention resources and tools that could be modified for use with other populations. The MYSPP gatekeeper training program could be modified for those individuals in close contact with older adults, such as home health workers, clergy, and volunteers, would be the most logical strategy to be employed first. This could be coupled with a train-the-trainer approach that MYSPP currently uses in order to maximize public awareness education. Additionally, disseminating the statewide crisis hotline information could be accomplished by distributing this information through the aging network and to primary care settings. Training of primary care physicians in screening and detecting warning signs for elder suicide and depression is an important initiative that will require buy-in from physicians and professional societies representing physicians in order to be a viable strategy. Public awareness efforts could be coordinated to reach multiple marketing channels and be wide reaching in nature. Such efforts should include awareness education for employers, service providers, religious institutions, senior centers, nursing home staff, home health workers, and the general public. Awareness education about the importance of lethal means restriction, particularly around firearms, is essential given the alarming statistics documenting high rates of older adult firearm suicide. Again, the MYSPP has some information to share in this arena.

Work on protocol development to identify and assist older adults at risk of suicide needs to be done to aid employees of primary care, emergency department, service providers, religious groups and others. The MYSPP protocol work has primarily been geared towards assisting schools. Work has begun to assist community based agencies and service providers to develop protocols and may be able to be adapted for this purpose. MYSPP is currently working on assessing the needs of Emergency Department personnel for suicide prevention education and resources and this can help inform elder suicide prevention work.

Another area that can boost elder suicide prevention efforts is in the planning and implementation of evaluation strategies. Collaboration on suicide data dissemination, data collection, and surveillance enhancements need to be developed further to include more specific information on older adults (DiCara, no date).

The website domain of the MYSPP is http://www.mainesuicideprevention.org . This domain is operated throughout the Maine DHHS, Office of Substance and is a searchable site. There is potential to add elder specific suicide prevention resources to

this site including reports, links, and news. Finally the guidance of a well represented steering and advisory committee is essential to maintain momentum and continued support around elder suicide prevention and the JAC committee which has taken the lead on the elder suicide prevention front in the state is well positioned to carry on this initiative.

Appendix A

Geriatric Depression Scale (Yesvage et al., 1983)

1. Are you basically satisfied with your life?
2. Have you dropped many of your activities and interests?
3. Do you feel that your life is empty?
4. Do you often get bored?
5. Are you hopeful about the future?
6. Are you bothered by thoughts you can't get out of your head?
7. Are you in good spirits most of the time?
8. Are you afraid that something bad is going to happen to you?
9. Do you feel happy most of the time?
10. Do you often feel helpless?
11. Do you often get restless and fidgety?
12. Do you prefer to stay at home, rather than going out and doing new things?
13. Do you frequently worry about the future?
14. Do you feel you have more problems with memory than most?
15 Do you think it is wonderful to be alive now?
16 Do you often feel downhearted and blue?
17 Do you feel pretty worthless the way you are now?
18 Do you worry a lot about the past?
19 Do you find life very exciting?
20 Is it hard for you to get started on new projects?
21 Do you feel full of energy?
22 Do you feel that your situation is hopeless?
23 Do you think that most people are better off than you are?
24 Do you frequently get upset over little things?
25 Do you frequently feel like crying?
26 Do you have trouble concentrating?
27 Do you enjoy getting up in the morning?
28 Do you prefer to avoid social gatherings?
29 Is it easy for you to make decisions?
30 Is your mind as clear as it used to be?

This is the original scoring for the scale: One point for each of these answers. Cutoff: **normal**-0-9; **mild depressives**-10-19; **severe depressives**-20-30.
1. no 6. yes 11. yes 16. yes 21. no 26. yes 2. yes 7. no 12. yes 17. yes 22. yes 27. no 3. yes 8. yes 13. yes 18. yes 23. yes 28. yes 4. yes 9. no 14. yes 19. no 24. yes 29. no 5. no 10. yes 15. no 20. yes 25. yes 30. no

Appendix B

Center for Epidemiologic Studies Depression Scale (CES-D), NIMH (Radloff, 1992)

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week

	During the Past Week			
	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all o the time (5-7 days)
1. I was bothered by things that usually don't bother me.	☐	☐	☐	☐
2. I did not feel like eating; my appetite was poor.	☐	☐	☐	☐
3. I felt that I could not shake off the blues even with help from my family or friends.	☐	☐	☐	☐
4. I felt I was just as good as other people.	☐	☐	☐	☐
5. I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐
6. I felt depressed.	☐	☐	☐	☐
7. I felt that everything I did was an effort.	☐	☐	☐	☐
8. I felt hopeful about the future.	☐	☐	☐	☐
9. I thought my life had been a failure.	☐	☐	☐	☐
10. I felt fearful.	☐	☐	☐	☐
11. My sleep was restless.	☐	☐	☐	☐
12. I was happy.	☐	☐	☐	☐
13. I talked less than usual.	☐	☐	☐	☐
14. I felt lonely.	☐	☐	☐	☐
15. People were unfriendly.	☐	☐	☐	☐
16. I enjoyed life.	☐	☐	☐	☐
17. I had crying spells.	☐	☐	☐	☐
18. I felt sad.	☐	☐	☐	☐
19. I felt that people dislike me.	☐	☐	☐	☐
20. I could not get "going."	☐	☐	☐	☐

SCORING: zero for answers in the first column, 1 for answers in the second column, 2 for answers in the third column, 3 for answers in the fourth column. The scoring of positive items is reversed. Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology.

Appendix C

Youth Risk Behavior Survey Questions (Meyer et al., 2006)

YRBS High School Questions

During the past 12 months, when you felt sad or hopeless, from whom did you get help?
A. I did not feel sad or hopeless
B. Parent or other adult relative
C. Teacher or other school staff
D. Other adults
E. Friends
F. I did feel sad or hopeless, but did not get the help I needed

During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks? or more in a row that you stopped doing some usual activities?
A. Yes
B. No

During the past 12 months, did you ever seriously consider attempting suicide?
A. Yes
B. No

During the past 12 months, did you make a plan about how you would attempt suicide?
A. Yes
B. No

During the past 12 months, how many times did you actually attempt suicide?
A. 0 times
B. 1 time
C. 2 or 3 times
D. 4 or 5 times
E. 6 or more times

If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?
A. I did not attempt suicide during the past 12 months
B. Yes
C. No

During the past 12 months, how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?
A. 0 times
B. 1 time
C. 2 or 3 times
D. 4 or 5 times
E. 6 or 7 times
F. 8 or 9 times
G. 10 or 11 times
H. 12 or more times

Appendix D

Attitudes in Suicide Prevention (ASP) Scale *(Herron et al., 2001)*

1. I resent being asked to do more about suicide.
2. Suicide prevention is not my responsibility.
3. Making more funds available to the appropriate health services would make no difference to the suicide rate.
4. Working with suicidal patients is rewarding.
5. If people are serious about committing suicide they don't tell anyone.
6. I feel defensive when people offer advice about suicide prevention.
7. It is easy for people not involved in clinical practice to make judgments about suicide prevention.
8. If a person survives a suicide attempt, then this was a ploy for attentions.
9. People have the right to take their own lives.
10. Since unemployment and poverty are the main causes of suicide, there is little that an individual can do to prevent it.
11. I don't feel comfortable assessing someone for suicide risk.
12. Suicide prevention measures are a drain on resources, which would be more useful elsewhere.
13. There is no way of knowing who is going to commit suicide.
14. What proportion of suicides to you consider preventable? (none-all)

Respondents were asked to respond to five points on a Likert scale ranging from "strongly disagree" to "strongly agree".

Appendix E

Quiz on Depression in Later Life (Pratt et al., 1992)

True or False

1. It is normal for older people to feel depressed a good part of the time.

2. Memory problems may be a sign of depression.

3. Depression is easy to recognize in an older person who is physically ill.

4. Older people are more likely than younger people to say “I am depressed.”

5. A complete medical evaluation is needed to rule out physical reasons for depression.

6. Family and friends can usually help the depressed older person by telling him or her to “count your blessings” or “look at the bright side.”

7. There is a higher suicide rate among the elderly than among younger adults.

8. It is common for older people to talk about potential suicide.

9. Most older people who talk about committing suicide are *not* serious.

10. Health professionals often have difficulty diagnosing depression in the older person.

11. If depression is severe, there is little the depressed person can do to help him/herself.

12. Depression among the elderly can be effectively treated with medication.

Appendix F

Depression in Older Men From the Real Men, Real Depression Campaign (NIMH, 2005)

Men must cope with several kinds of stress as they age. If they have been the primary wage earners for their families and have identified heavily with their jobs, they may feel stress upon retirement, loss of an important role, or loss of self esteem that can lead to depression. Similarly, the loss of friends and family and the onset of other health problems can trigger depression.

Depression is not a normal part of aging. Depression is an illness that can be effectively treated, thereby decreasing unnecessary suffering, improving the chances for recovery from other illnesses, and prolonging productive life. However, health care professionals may miss depressive symptoms in older patients. Older adults may be reluctant to discuss feelings of sadness or grief, or loss of interest in pleasurable activities. They may complain primarily of physical symptoms. It may be difficult to discern a co-occurring depressive disorder in patients who present with other illnesses, such as heart disease, stroke, or cancer, which may cause depressive symptoms or may be treated with medications that have side effects that cause depression. If a depressive illness is diagnosed, treatment with appropriate medication and/or brief psychotherapy can help older adults manage both diseases, thus enhancing survival and quality of life.

"As you get sick, as you become drawn in more and more by depression, you lose that perspective. Events become more irritating, you get more frustrated about getting things done. You feel angrier, you feel sadder. Everything's magnified in an abnormal way."

-Paul Gottlieb, Publisher

Identifying and treating depression in older adults is critical. There is a common misperception that suicide rates are highest among the young, but it is older white males who suffer the highest rate. Over 70 percent of older suicide victims visit their primary care physician within the month of their death; many have a depressive illness that goes undetected during these visits. This fact has led to research efforts to determine how to best improve physicians' abilities to detect and treat depression in older adults.

Approximately 80 percent of older adults with depression improve when they receive treatment with antidepressant medication, psychotherapy, or a combination of both. In addition, research has shown that a combination of psychotherapy and antidepressant medication is highly effective for reducing recurrences of depression among older adults. Psychotherapy alone has been shown to prolong periods of good health free from depression, and is particularly useful for older patients who cannot or will not take medication. Improved recognition and treatment of depression in later life will make those years more enjoyable and fulfilling for the depressed elderly person, and his family and caregivers.

Suicide From the Real Men, Real Depression Campaign (NIMH, 2005)

"You are pushed to the point of considering suicide, because living becomes very painful. You are looking for a way out. You're looking for a way to eliminate this terrible psychic pain. And I remember, I never really tried to commit suicide, but I came awful close, because I used to play matador with buses. You know, I would walk out into the traffic of New York City, with no reference to traffic lights, red or green, almost hoping that I would get knocked down."

-Paul Gottlieb, Publisher

Sometimes depression can cause people to feel like putting themselves in harm's way, or killing themselves. Although the majority of people with depression do not die by suicide, having depression does increase suicide risk compared to people without depression.

If you are thinking about suicide, get help immediately:

- Call your doctor's office.
- Call 911 for emergency services.
- Go to the emergency room of the nearest hospital.
- Ask a family member or friend to take you to the hospital or call your doctor.
- Call the toll free, 24 hour hotline of the National Suicide Prevention Lifeline at 1-800-273-TALK (1-800-273-8255) to be connected to a trained counselor at the suicide crisis center nearest you.

Website Link:

http://menanddepression.nimh.nih.gov/infopage.asp?id=10#suicide

Appendix G

State Specific Elder Suicide/Geriatric Mental Health SAMHSA Funding (2004 & 2005)

SAMHSA State Grant Awards FY 2004

Discretionary Funds in Detail Center for Mental Health Services (CMHS)

Grantee: **Valle del Sol** **Phoenix, AZ**
Program: Elderly Mental Health Outreach SM54814
Congressional District: AZ-01
FY 2004 Funding: : $399,283
Project Period: 09/30/2002 - 09/29/2005

The Area Agency on Aging's ElderVention program currently provides many services to improve the quality of elder mental health in Maricopa County. The program trains professionals in the area of mental health, educates elders in senior centers and at home about mental health conditions, and provides telephone reassurance services. Mentorship, peer leadership, and life skills development further promote good mental health care and outcomes. Tiempo de Oro is a new program that will expand services already offered by ElderVention. The Tiempo de Oro project will target Latino elders over the age of 65 with mental health needs residing in either Guadalupe or El Mirage, Arizona. In addition to continuing the regular activities of ElderVention described above, Tiempo de Oro will provide integrated preventive and treatment services, including home-based prevention education, family education, and individual and family counseling. Providers of preventive services will coordinate with those of treatment services to ensure a seamless, culturally appropriate transition. Further, various innovative outreach strategies will be implemented to address unmet mental health service needs in these areas. Partners include the Area Agency on Aging, Region 1 and ValueOptions, the Regional Behavioral Health Authority in Maricopa County.

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Grantee: **Jewish Family & Children's Svc** **Tucson, AZ**
Program: Elderly Mental Health Outreach SM54750
Congressional District: AZ-05
FY 2004 Funding: : $400,000
Project Period: 09/30/2002 - 09/29/2005

The Health Improvement Program for the Elderly (HIPE) seeks to expand the services offered by the existing consortium of behavioral health providers of mental health services for the elderly that includes Catholic Social Services, Family Counseling Agency, and Marana Health Center. The consortium currently serves approximately 123 older adults and is so successful, that it can no longer meet the demand for services. Services include home and community based mental health and substance abuse prevention and treatment to elders. HIPE will expand the provision of mental health and substance abuse services provided to elders, their family members, and caregivers. These services will also be modified in accordance with evidence based practices to better serve program participants. Specifically, the program will provide home-based behavioral health services to 200 clients per year, and community-based behavioral health services to 300 clients per year. Educational presentations on the identification and treatment of behavioral health problems to 750 providers, case managers, and caregivers per year will be offered. Services will treat behavioral health concerns, including substance abuse, risk factors associated with mental illness or addictions, as well as offering bilingual services in Spanish. The HIPE Program will be culturally competent, with staff representing the diversity of the community.

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Grantee: **COPE Behavioral Services, Inc** **Tucson, AZ**
Program: Elderly Mental Health Outreach SM54749
Congressional District: AZ-08
FY 2004 Funding: : $398,858
Project Period: 09/30/2002 - 09/29/2005

COPE Behavioral Services currently serves 120 older adults through its Elder Services Program. It provides a variety of much-needed services, including specialized case management that incorporates the physical and social needs of the client into their mental health treatment. In partnership with the El Rio Santa Cruz Community Health Center and a rural behavioral health provider, Casa de Esperanza, COPE Behavioral services will expand its Elder Services Program to provide mental health services to currently unserved Mexican American, American Indian and rural older adults in Pima County, Arizona. Vietnamese and Russian communities in the area may also be served. The program aims to reach out to the elderly community as well as to design more appropriate and effective mental health services for them. To address unmet mental health needs, COPE will educate the community about mental health conditions, perform outreach activities, and conduct mental health screening. Their goal is to provide early intervention for mental health conditions, such as depression and anxiety disorders, and to thereby permit the elderly to live more independently; concurrent screening and treatment will similarly take place for substance abuse conditions. Mental health services will be provided either onsite or in the elders' homes and will be integrated with primary health care; a case management model will be followed. The proposed program will assess and build upon individuals' functional capacities and strengths, interests, cultural values and preferences, to better ensure positive outcomes.

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Grantee: **City of El Paso** **El Paso, TX**
Program: Elderly Mental Health Outreach SM54759
Congressional District: TX-16
FY 2004 Funding: : $400,000
Project Period: 08/30/2002 - 09/29/2005

The Focus Project of the City of El Paso expands mental health services to mostly lower income Hispanic seniors at high-risk for depression and dementia due to frail health and social isolation. The Focus Project will draw its participants from homebound seniors in El Paso who are receiving home-delivered meals through the City-County Nutrition Program. During the first year of the project 300 nutrition program participants will be screened for mental health conditions. Seniors evaluated to have mild to moderate mental health conditions will be referred to the

expanded Bienvivir Senior Health Services program, which will include mental health services for depression, anxiety and dementia. Bienvivir Senior Health Services, a PACE (Program of All-Inclusive Care for the Elderly) program, currently provides all-inclusive care to frail elderly in primary care settings. Eligibility for the program includes being medically needy of nursing home care. The care provided by Bienvivir addresses both medical and social needs and enables elders to live independently and safely in the community as opposed to in nursing homes. An interdisciplinary team assesses participants' needs, works with families to develop care plans, and delivers services in adult day health centers and at home. The Focus Project will increase Bienvivir's capacity to address mental health conditions. Seniors who do not qualify for the PACE program or opt not to participate will be offered priority status, a Service Coordinator, and financial assistance to help them access, pay for, and adhere to treatment from El Paso's Community Mental Health and Mental Retardation Center (MHMR). The Focus Project will enhance MHMR's capacity to service older adults and access other aging services available in the community.

SAMHSA State Grant Awards FY 2005

Discretionary Funds in Detail Center for Mental Health Services (CMHS)

Grantee: **Jefferson Center for Mental Health** **Arvada, CO**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM56937
Congressional District: CO-06
FY 2005 Funding: $395,340
Project Period: 09/30/2005 - 09/29/2008

The proposed project will be modeled after the Gatekeeper program, developed in 1978 in Spokane, Washington. It will be the first use of this program to benefit elderly adults within the confines of the state of Colorado and it will include the entirety of the five counties of: Jefferson, Boulder, Gilpin, Clear Creek and Broomfield. This program will be an extensive collaboration with four agencies which have worked together in the past but without the extent of overlap and infrastructure necessary to make this project a success. The four agencies include the Senior Resource Center, Jefferson Center for Mental Health, Tri-West Group Inc., and the Mental Health Center of Boulder County (which is in the process of a name change to the Mental Health Center of Boulder and Broomfield Counties). During this proposed three year project an advisory group will consist of key personnel from the four agencies. They will be joined by constituents of the target population, several agencies and government entities to form an advisory board which will assist in strategic planning, directing the activities of the program, reporting back to their agencies, and looking for opportunities to import the model to their, and other agencies around the state. A coordinator will be hired to conduct implementation of the program elements, area resources for elderly adults will be collated, a centralized 'single-point entry' call center put in place, and outreach teams hired and trained to be sent on referred home visits of elderly adults in need.

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Grantee: **Longview Wellness Center, Inc** **Longview, TX**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM57181
Congressional District: TX-01
FY 2005 Funding: $399,940
Project Period: 09/30/2005 - 09/29/2008

The Longview Wellness Center Wellsprings Program will develop community based service delivery systems and infrastructure for the Longview-Marshall MSA. This project will work through area organizations to reach people over 60 at risk for mental illness; improve the current infrastructure and coordination of care between physicians and mental health practitioners; and implement a fully integrated treatment program through a primary health care clinic. Wellsprings has three main components: 1) provide awareness and education to the community on mental health issues and the impact on physical health; 2) increase the utilization of available mental health services by primary care practitioners; 3) stabilize the existing mental health delivery system while creating infrastructure that integrates primary health care services and mental health into a single entity. This project will work through area organizations to reach people over 60, and implement a fully integrated treatment program, based on best practices, through the Longview Wellness Center's Community Health Clinic. By using a specific three-pronged approach that is patient driven, practitioner driven and community driven, the system will be seamless to facilitate a smooth transition between services. Wellsprings will use several evidence based model programs including Gatekeepers Case Finding and Response System to recruit participants, and the Texas Medication Algorithm Project (TMAP) for medication guidelines to treat Schizophrenia, Bipolar disorder and Major Depression. For clients with the diagnosed disorders of: borderline personality, eating disorders, panic disorder, Alzheimer's disease and other dementias of late life, major

depression, schizophrenia, suicidal behaviors, acute stress, and posttraumatic stress, Wellsprings will use the American Psychiatric Association guidelines.

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Grantee: **Mental Health Assoc/Tarrant County** **Ft. Worth, TX**
Program: CMHS 2005 Earmarks SM56820
Congressional District: TX-06
Project Period: 07/01/2005 - 06/30/2006

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Grantee: **Montrose Counseling Center, Inc.** **Houston, TX**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM56872
Congressional District: TX-07
FY 2005 Funding: $400,000
Project Period: 09/30/2005 - 09/29/2008

Montrose Counseling Center and Montrose Clinic have developed a continuum of mental health care using peer outreach, education and counseling provided by adults age 60 and older; professional counseling and case management; and psychiatry as indicated for 250 vulnerable and disenfranchised consumers age 60 and older per year for each of three years in Houston, Harris County, TX. Abstract: Montrose Counseling Center, Inc. (MCC) is an outpatient mental health and substance abuse treatment center founded in 1978 and licensed by Texas Department of State Health Services as an outpatient treatment site since 1986 and accredited as a Behavioral Health facility by the Joint Commission on Accreditation of HealthCare Organizations (JCAHO) since 2003. MCC will employ, train and supervise outreach workers to engage 150 consumers and peer educator/counselors to serve 120 of those adult consumers age 60 and older per year. A case manager and licensed masters level therapists will provide a comprehensive assessment and psychotherapy to at least 50/60 consumers respectively per year. Montrose Clinic (MC) became a Federally Qualified Health Center (FQHC) look-alike in 2004. MC will provide outreach to engage 100 consumers per year and psychiatric services to 25 consumers per year. A total of 750 unduplicated consumers will be engaged for the three year period. These consumers present with a range of disorders including depression, bipolar disorder, anxiety, and other mood disorders. Further, MCC will provide cultural sensitivity materials and presentations and mental health screening and assessment tools to non-profit organizations that serve seniors and gerontologists' offices.

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Grantee: **Valle del Sol, Inc.** **Phoenix, AZ**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM56905
Congressional District: AZ-01
FY 2005 Funding: $398,800
Project Period: 09/30/2005 - 09/29/2008

Oro (TdO) program targeting Latino elders, 60 years of age and older at risk for, or experiencing mental health problems in southwest Phoenix and the communities of Surprise and El Mirage. The program is grounded in community outreach principles of the ElderVention and Promotora Models adapted for appropriate implementation with Latino elders. TdO consists of three main service components: Prevention-Education Presentations, Home Visits, and Transition Workshops employing a Spanish-speaking community based psychoeducational approach. The expansion will include a clinical component. A key feature of TdO is the use of active and engaged Advisory Councils at each site ensuring that services are consumer driven.TdO has two goals: to provide culturally adapted depression and suicide prevention services to Latino elders residing in our target areas and to identify at risk, clinically depressed Latino seniors. Depressed seniors will be offered culturally adapted Cognitive Behavioral Therapy (CACBT) in order to reduce depressive symptoms and suicidal ideation. A Community Training and Volunteer Coordinator will conduct training for professionals and community members on elder abuse, depression, and suicide prevention valley-wide and oversee the volunteers (who will conduct friendly visits and presentations) in all three communities.

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Grantee: **Chiricahua Comm. Health Ctr. Inc** **Elfrida, AZ**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM56938
Congressional District: AZ-08

FY 2005 Funding: $400,000
Project Period: 09/30/2005 - 09/29/2008

The purpose of the proposed project is to provide a culturally based intervention program which addresses behavioral health prevention of depression, both related and unrelated to diabetes, and dementia in residents over the age of 60 in Elfrida, Cochise County, Arizona. In a nontraditional approach, activities will focus in large part around an organic community garden with a walking path. Additional activities will take place both outdoors and indoors, depending on the time of year. Project activities will address all three areas which affect mental health increasing social interaction, providing mentally stimulating projects, and physical exercise, as well as prevention programs, to address life-style changes necessary to control depression in diabetics. Activities will also be targeting dementia and non-diabetic depression prevention. Research shows a strong correlation between reduction or elimination of depression with increased physical exercise. Studies also show a greatly reduced risk of developing dementia when older adults are engaged socially, mentally stimulated, and participate in physical exercise. Many seniors in Elfrida are living below the poverty level and a significant number are living alone. Their isolation often times leads to depression, and risk of dementia increases. Organized activities for those over the age of 60 who are not employed are extremely limited. In addition to garden activities, this project will provide activities which bring seniors together, stimulate their minds, and provide exercise. Activities suggested by community members include an oral history project, formation of musical groups, and walking groups.

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Grantee: **Centerstone Comm MH Centers, Inc** **Nashville , TN**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM56910
Congressional District: TN-05
FY 2005 Funding: $400,000
Project Period: 09/30/2005 - 09/29/2008

Centerstone's initiative, IMPACT Nashville, will build a solid foundation for delivering and sustaining mental health outreach, treatment, and prevention services for adults age 60+ in Davidson County. The project will collaborate with primary care physicians, implement the IMPACT model for late life depression, form a community workgroup, enhance an Electronic Medical Record system, and build stakeholder consensus to support/expand collaborative care. The manualized, evidence based model, Improving Mood-Promoting Access to Collaborative Treatment for Late Life Depression (IMPACT), will be implemented within a primary care clinic. Together clinic and mental health staff will make up a Treatment Team and deliver services including: screenings: antidepressant medications and/or brief psychotherapy; medication management; consumer/family education; and intensive follow-up. To support infrastructure development, the project will establish an Advisory Council and a Community Workgroup comprising consumers, healthcare professionals, and others interested in or familiar with the target population's needs. Combined, these groups, along with project healthcare and technical staff will ensure ongoing consumer project input, build community support, and establish stakeholder consensus, as well as sustained infrastructure for the maintenance and expansion of collaborative care. The project will also enhance and customize an electronic medical record system to address age specific issues and support the IMPACT model.

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Grantee: **Tennessee Dept of Mental Hlth & Dev Dis** **Nashville, TN**
Program: TCE Rural Populations TI16356
Congressional District: TN-04
FY 2005 Funding: $500,000
Project Period: 09/30/2004 - 09/29/2007

The grant supports targeted outreach to older adults who are abusing alcohol or other drugs including prescription and over-the-counter medication. Outpatient culturally sensitive care services will be provided for 260 persons.

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Grantee: **Cuyahoga Cty. Comm. Mental Health Board** **Cleveland, OH**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM57184
Congressional District: OH-11

FY 2005 Funding: $376,536
Project Period: 09/30/2005 - 09/29/2008

The System of Care for Older Adults enhances the current system by increasing access and capacity through the collaboration of mental health service providers, the county Department of Senior and Adult Services, and Adult Guardianship Services. It serves the most vulnerable of Greater Cleveland's older citizens, those in a crisis or homeless. The project creates an interagency assessment team to respond 24/7 to crises. An ongoing interagency treatment team will provide Illness Management and Recovery, Family Psychoeducation, and Integrated Dual Disorders Treatment. The assessment team is jointly staffed by the mental health system's mobile crisis service and the Department of Senior and Adult Services. The team consists of a crisis intervention specialist, an intake worker, and a nurse. The assessment team resolves the crisis and links the older adult to ongoing services with a specialized interagency treatment team that includes the appropriate combination of mental health professionals who specialize in the treatment of older adults, a substance abuse counselor, Adult Protective Services, Adult Guardianship Services, and a community resource specialist. The infrastructure enhancements create a collaborative approach to service delivery among systems that previously were at odds over responsibility for older adults who were in crisis. The mental health system was ill equipped to deal with issues of aging and Senior and Adult Services lacked expertise in mental health. Together the team has the skills and the resources to more effectively resolve crises and wrap needed services around the older adult. The project will improve access to services through outreach and engagement. It will also increase the capacity, both quantitatively and qualitatively, through the infusion of evidence based practices. These changes will lead to less disparity in service access and improved outcomes.

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Grantee: **United Way of Broward County** **Ft. Lauderdale, FL**
Program: SAMHSA Conference Grants SP12825
Congressional District: FL-20
FY 2005 Funding: $25,000
Project Period: 09/30/2005 - 09/29/2006

The proposed conference seeks to review and present a wide spectrum of approaches to understanding a broad range of cross-cutting themes and issues across the lifespan as they relate to substance use and abuse. The conference seeks to dissemination knowledge addressing how risk (specifically any trauma associated with these) arid protective factors, if not addressed at the appropriate time, can lead to a range of psychiatric and chemical abuse disorders. The conference seeks to explore risk and protective factors as well and the significance of early intervention and treatment as related to individual development across all phases of life; from childhood, to adolescence, adulthood and old age. The conference adheres to SAMHSA's priorities as detailed in its Programs and Principles Matrix by addressing several of the agency's cross cutting principles and programs/issues. Specifically, the proposed conference will address substance use and abuse in relation to its link with HIV/AIDS; older adults; prevention frameworks; violence and trauma; homelessness, and; co- occurring disorders.

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Grantee: **Office of the Governor** **Tallahassee, FL**
Program: Access to Recovery SM56906
Congressional District: FL-01
FY 2005 Funding: $6,798,709
Project Period: 08/03/2004 - 08/02/2007

This project will significantly increase access to mental health service for approximately 3,000 Vietnamese elders in Northern Virginia, including some 1,000 torture survivors and their spouses. Boat People SOS (BPSOS) will acquire the capacity to offer three modalities of service: home-based care, peer support groups, and clinical counseling. Through BPSOS medical interpreters, clients will also be able to access services at public mental health centers. Due to historical reasons and U. S. refugee resettlement patterns, Northern Virginia is home to a disproportionately large number of torture survivors, who arguably make up the most neurologically impaired group of refugees ever resettled to This project will significantly increase access to mental health service for approximately 3,000 Vietnamese elders in Northern Virginia, including some 1,000 torture survivors and their spouses. Boat People SOS (BPSOS) will acquire the capacity to offer three modalities of service: home-based care, peer support groups, and clinical counseling. Through BPSOS medical interpreters, clients will also be able to access services at public mental health centers. Due to historical reasons and U. S. refugee resettlement patterns, Northern Virginia is home to a disproportionately large number of torture survivors, who arguably make up the most neurologically impaired group of refugees ever resettled to this country. Despite documented mental health need, few of these torture survivors,

and older Vietnamese in general, have been able to access mental health care because of the serious lack of linguistically and culturally appropriate services-there is only one Vietnamese-speaking therapist in the entire public mental health system in Northern Virginia. We propose the following three-pronged strategy to address this disparity problem (1) Increase language capacity for Fairfax County Community Services Board (CSB) to treat older Vietnamese with acute mental illness; (2) Build capacity for BPSOS to provide evaluation and counseling; (3) Build capacity for the local community to provide wrap-around services: a. Family members providing home-based care and support to elders; b. Peer support groups providing mutual assistance; and c. Community-based and faith-based organizations conducting outreach, recruiting participants, and assisting the peer support groups.

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Grantee: **Nachas Health & Family Network, Inc.** **Brooklyn, NY**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM56926
Congressional District: NY-08
FY 2005 Funding: $400,000
Project Period: 09/30/2005 - 09/29/2008

Project Chai will address the unmet needs of Jewish survivors of the Holocaust and their children aged 60 and older, who live in three sections of Brooklyn that have heavy concentrations of Holocaust survivors. The project's objectives are to strengthen the infrastructure governing the provision of services to this population and to enhance the outreach, engagement, and referral services to isolated, withdrawn Holocaust survivors and their aging children. The goals will be achieved by creating a Project Advisory Board comprised primarily of Holocaust survivors and empowered to monitor the formation of a formal provider network of mental health, health care, and social service agencies with specific agency roles and responsibilities. The enhancement of the outreach services will be achieved by the application of ACT team principles using staff recruited from the diverse communities of Holocaust survivors and trained to assess PTSD and depression. Nachas Health and Family Network, with its staff totally recruited from the communities it serves, has worked since its inception in 1990 with the aging survivor population and is ideally suited to this project. The Nachas staff reflects the diversity of the Holocaust survivor community from the most secular to the most religious and communicates with this population in the variety of languages spoken by its clients. Additionally, Nachas has the support of the different provider agencies with which it partners to ensure appropriate treatment of each client's needs. The Project Advisory Body, with a core of Holocaust survivors, will serve as Project Chai's oversight and monitoring agency. The proposed Nachas ACT team will, with its enhanced skill sets, be able to reach out more effectively and engage the isolated and withdrawn Holocaust survivor. With increased assessment skills, the team will make timely, accessible referrals to mental health, healthcare, and social service agencies.

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Grantee: **Cambridge Public Health Commission** **Cambridge, MA**
Program: TCE-Meeting the Mental Health Needs of Older Adults SM57088
Congressional District: MA-08
FY 2005 Funding: $400,000
Project Period: 09/30/2005 - 09/29/2008

The Cambridge Health Alliance, a public health hospital system, is proposing to expand access to underserved elderly residents of its new adjacent service area in the Metronorth area of Boston, Massachusetts. The project has three components. First it will expand accessible mental health services to functionally-homebound elderly persons with serious mental illness in the four-city region of Malden, Everett, Revere, and Medford, MA by means of a program, modeled on Assertive Community Treatment (ACT) evidence based practice, that has been in operation for twenty-five years in the adjoining cities of Cambridge and Somerville, MA,. The second component is infrastructure development in the form of developing a collaborative network among community agencies providing social services to the elderly in the catchment area. The third component is an evidence- base practice, known as Enhanced Referral Care, designed to improve quality by integrating mental health and primary health care, and studied in the SAMHSA-sponsored PRISM-E multi-site evaluation. The project will include a needs assessment and action plan for transportation options, which informants have identified as a major obstacle to care. The evaluation will be conducted by the Human Services Research Institute. The implementation evaluation will include fidelity measures for the ACT and Enhanced Referral models. The outcomes evaluation will measure client functioning, symptoms, satisfaction (using the Press-Ganey survey) and self-report assessment of r cultural competence using the Cultural Assessment of Treatment Services, an instrument developed and currently pilot tested.

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Grantee: **Kirksville College of Osteopathic Med** **Kirksville, MO**
Program: Elderly Mental Health Outreach SM54852
Congressional District: MO-09
FY 2004 Funding: : $358,783
Project Period: 09/30/2002 - 09/29/2005

ElderLynk was founded in 2000 and is a model rural mental health outreach program targeting underserved elderly persons age 65+. The ongoing goal of the ElderLynk outreach project has been to implement a locally accessible and seamless mental health delivery system that is well coordinated and integrated with primary care services. ElderLynk follows a case management/interdisciplinary team model for clinical services based on evidence from several research studies. It provides community education and awareness programs on mental health, as well as trains local health professionals and helps develop new models of mental health service delivery for rural older adults. The ElderLynk Expansion Program will expand its service area to include two additional rural, underserved counties so that the elderly in ten counties of northeastern Missouri will gain access to mental health care. All rural patients over the age of 65 in targeted primary care clinics will be screened for mental health disorders, in a consumer-sensitive manner, and will be provided with appropriate treatment services, as necessary. To improve the quality of care and to increase awareness among health care providers of mental health conditions, professional education programs will be expanded to identify and develop "home-grown" mental health practitioners committed to the region. A faith-based outreach program will be implemented to enhance support within the community for those with mental illness, and consumers and their family members will be encouraged to provide feedback on and suggestions for mental health services. An integrated electronic medical record system and mental health treatment database will be designed to improve patient management. Services will be evaluated on an on-going basis to ensure continued service delivery.

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Grantee: **Mental Health Center of Dane Country** **Madison, WI**
Program: Elderly Mental Health Outreach SM54758
Congressional District: WI-02
FY 2004 Funding: : $400,000
Project Period: 09/30/2002 - 09/29/2005

Kajsiab House serves the Hmong community, providing mental health treatment and social services. It is unique in that its mental health treatment and social services takes place in the Hmong atmosphere, within the context of Hmong values and customs, and it primarily conducts itself using the Hmong language. It treats primarily major depression, post-traumatic stress disorder, and anxiety. Kajsiab House seeks to increase the number older participants (65+) and to make its services more culture- and age-sensitive for elders. This will include the addition of therapy and social groups for elders incorporating culturally appropriate activities, such as T'ai Chi and alternative healing methods and medicines. In addition, many older Hmongs require at-home care, and a mobile outreach capability will be developed to provide psychiatric and social services to homebound Hmong elders. Lastly, Kajsiab House seeks to develop and strengthen relationships between the Hmong community and the Aging and Physical Disabilities systems in Dane County, through collaboration between staff members and the Hmong; English and acculturation classes will be offered to the Hmong to facilitate this process. Continuation and improvement in providing all treatment in ways taking into account customs, traditions, and beliefs of elders will be a hallmark of the project. This truly culturally competent service provision will improve the quality and accessibility of mental health services to Hmong elders.

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Grantee: **Tennessee Dept of Health and** **Nashville, TN**
Program: TCE Rural Populations TI16356
Congressional District: TN-04
FY 2004 Funding: : $500,000
Project Period: 09/30/2004 - 09/29/2007

The grant supports targeted outreach to older adults who are abusing alcohol or other drugs including prescription and over-the-counter medication. Outpatient culturally sensitive care services will be provided for 260 persons.

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Grantee: **County of Summit ADA/MHSB** **Akron, OH**
Program: Targeted Capacity Expansion TI13530
Congressional District: OH-13
FY 2004 Funding: $487,824
Project Period: 05/01/2002 - 04/30/2005

The County of Summit is the grantee, and Mature Services, Inc. is the provider. The intent of the grant is to serve older adults - 25% women, 35% members of minority groups, and 50% over age 65. Assessments, case management (to assist with financial, medical, housing, and other vital issues) and counseling will be provided. An additional 200 older adults will be served in outpatient treatment. .

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Grantee: **Office of the Governor** **Tallahassee, FL**
Program: Access to Recovery TI16811
Congressional District: FL-01
FY 2004 Funding: : $6,813,101
Project Period: 08/03/2004 - 08/02/2007

This program will focus on individuals involved with the criminal justice system, families putting children at risk, or other high-risk populations such as persons with co-occurring disorders and individuals, including older adults, who abuse prescription drugs. The Florida program involves partnerships with Florida's Faith-Based Association, the Florida Alcohol and Drug Abuse Association, the Southern Coast Addiction Technology Transfer Center, and the NET Training Institute

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Grantee: **Unity Hlth System/Park Ridge Hos** **Rochester, NY**
Program: Elderly Mental Health Outreach SM54831
Congressional District: NY-27
FY 2004 Funding: : $400,000
Project Period: 09/30/2002 - 09/29/2005

The Unity Health System currently provides integrated primary care and mental health services in twenty of its primary care clinics. Its Senior Outreach Program, which began in 1993, is supported by a United Way grant and provides a variety of supportive and mental health services in the community free-of-charge and serves about 65 clients at any one time. This project will expand the services provided by the Senior Outreach Program to include more outreach, screening and assessment, and intervention as well as to serve a larger number of older adults. It is anticipated that the clinical team will serve over 300 individuals annually. Mental health assessment and evaluation, treatment, and support will be offered in a diversity of settings, including homes, primary care offices, and senior residences; case management will also be used to increase older consumers' access to mental health services. All interventions will be based on evidence based practices, and the program aims to build an infrastructure for high-quality, continuous mental health care for the elderly. The interventions are further designed to provide accessible, non-stigmatizing care to elders, and afford the consumer an opportunity to select the most appropriate and comfortable treatment for him or her. Quality of care is also ensured through the provision of training and consultation with mental health specialists to primary care physicians and others treating mentally ill older adults.

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Grantee: **Brigham and Women's Hospital** **Boston, MA**
Program: Elderly Mental Health Outreach SM55043
Congressional District: MA-09
FY 2004 Funding: : $893,819
Project Period: 09/30/2002 - 09/29/2005

A National Technical Assistance Center (NTAC) on Mental Health and Aging will be established to address the unmet need for mental health services among this population. The NTAC seeks to facilitate the adoption and implementation of evidence based practices at 9 Group 1 sites and be a resource for other programs and consumer

groups nationally. The NTAC's approach will be to combine the collaborative model developed for the SAMHSA-funded Primary Care Research in Substance Abuse and Mental Health for the Elderly (PRISMe) multi-site study, with the model developed by Donald Berwick an the Institute for Health Care Improvement. The IHI model assumes that quality improvements in the delivery of mental health care require concurrent changes to be effected at the consumers, provider, organizational, systems, and policy levels. The structure and process for delivering technical assistance to the Group 1 sites involves responding rapidly to requests from Group 1 sites, as well as providing opportunities for joint-learning among Group 1 sites, expert work groups, consumers, and the GPO. It also involves synthesizing knowledge about EBPs into toolkits and manuals, tailored to the cultures served, and training rapid feedback front front-line users. Our dissemination strategy involves working collaboratively with the PRISMe network, the Group 1 sites, our federal partners, provider, and consumer organizations and to the public through the web and mass media. Our evaluation program is a forum for assessing and monitoring our work. A collaborative team will manage the NTAC including the Harvard/JSI Coordinating Center for the PRISMe study, 7 of the 11 PRISMe study sites, the Dartmouth Center on Aging, the Institute for Healthcare Improvement, leading provider and consumer organizations, and over 70 multidisciplinary and multiethnic consultants. The NTAC will build upon PRISMe and will create new services and systems that will help older adults

Appendix H

American Foundation for Suicide Prevention (AFSP) Funded Research

Matthew Miller, M.D. (David Hemenway, Ph.D., Mentor), Harvard University
Physical Illness and Suicide in Elderly Americans. $69,754 (over two years)

The primary goal of this study is to determine whether elderly individuals who die by suicide differ from others with similar medical conditions in their patterns of prescription drug use, especially analgesics and other pain medications. The study is focusing on the relationship between physical illness and suicidality among the elderly. Their research will examine a large data base of New Jersey Medicare recipients aged 65 and over who received pharmaceutical assistance during the years 1994-2004. Individuals who died by suicide will be identified though state mortality records and compared to age, gender and race-matched control patients who died from other causes on the basis of physical diagnoses, particularly chronic diseases, psychiatric diagnoses and prescribed medications.

Yeates Conwell, M.D., University of Rochester
Adaptation of a Depression Care Management Intervention for Elder Suicide Prevention in the Aging Services Network, $99,700

This project will develop and test an innovative depression treatment program for older adults who are being cared for by an aging services network. The treatment will be based on the depression care management protocol developed by the MacArthur Initiative on Depression in Primary Care, designed to enhance the ability of primary care physicians to recognize and manage depression, and will be modified for use by aging services care managers. Following development and training, the protocol will be tested with 25 new depressed clients of an upstate New York aging services network.

Other Funded Research

Yeates Conwell, M.D., University of Rochester
Elder Suicide Prevention in the Aging Services Network. $50,000

Marnin J. Heisel, Ph.D. (Paul Duberstein, Ph.D., Mentor)
University of Western Ontario/University of Rochester
Adapting IPT for Older Adults at Risk for Suicide. $70,000

Annette Erlangsen, M.A. (Yeates Conwell, M.D., Mentor)
University of Rochester Medical Center
Record Linkage Studies of Suicide in Later Life. $100,000

Appendix I

ANNUAL SAMHSA FUNDING FOR SUICIDE PREVENTION 2001-2006

2001	Improve & Evaluate Crisis Hotlines	$2.999 million
	Total	**$2.999 million**
2002	Improve & Evaluate Crisis Hotlines	$2.999 million
	Suicide Prevention Resource Center	$2.549 million
	Total	**$5.548 million**
2003	Improve & Evaluate Crisis Hotlines	$2.999 million
	Suicide Prevention Resource Center	$2.549 million
	Total	**$5.548 million**
2004	Networking and Certifying Suicide Prevention Hotlines	$2.3 million
	Suicide Prevention Resource Center	$2.549 million
	Total	**$4.849 million**
2005	Networking and Certifying Suicide Prevention Hotlines	$2.3 million
	Suicide Prevention Resource Center	$2.6 million
	Adolescents at Risk Grant	$1.877 million
	State/Tribal Youth Suicide Prevention Grants	$5.5 million
	Campus Suicide Prevention Grants	$1.5 million
	Total	**$13.777 million**
2006	Networking & Certifying Suicide Prevention Hotlines	$2.669 million
	Suicide Prevention Resource Center	$3.864 million
	Adolescents at Risk Grant	$1.877 million
	State/Tribal Youth Suicide Prevention Grants	$10.3 million
	Campus Suicide Prevention Grants	$3.8 million
	Hurricane Katrina related Suicide Prevention Grants	$800,000
	Total	**$23.31 million**

Source: Jerry Reed, MSW, Executive Director of SPAN USA

Appendix J
Suicide Prevention Resources and Links

- Suicide Prevention Resource Center http://www.sprc.org
- American Foundation for Suicide Prevention http://www.afsp.org
- American Association of Suicidology http://www.suicidology.org
- The Center for Suicide Prevention http://suicideinfo.ca
- SAVE: Suicide Awareness Voices of Education http://www.save.org
- Suicide Prevention Action Network (SPAN) USA, Inc. http://www.spanusa.org
- The Jed Foundation http://www.jedfoundation.org/
- The National Organization for People of Color Against Suicide http://www.nopcas.com
- Link's National Resource Center for Suicide Prevention and Aftercare http://www.thelink.org
- National Strategy for Suicide Prevention http://www.mentalhealth.samhsa.gov/suicideprevention
- National Alliance on Mental Illness (NAMI) http://www.nami.org
- GLBT National Help Center http://www.glnh.org
- CADCA: Community Anti-Drug Coalition of America http://www.cadca.org
- Council of Juvenile correctional Administrations http://www.cjca.net/sitecode/cjca_home.html
- Critical Illness and Trauma Foundation http://www.citmt.org
- First Nations Behavioral Health Association (FNBHA) http://www.fnbha.org/
- Organization for Attempters and Survivors of Suicide in Interfaith Services http://www.oassis.org
- Suicide Prevention Partnership http://www.SuicidePreventionPartnership.org
- Survivors of Suicide http://www.survivorsofsuicide.com/
- For Better Times http://www.forbettertimes.com/
- Befrienders International http://www.befrienders.org/
- Center for Disease Control and Prevention http://www.cdc.gov/ncipc/factsheets/suicide-overview.htm
- National Mental Health Information Center http://mentalhealth.samhsa.gov/topics/explore/suicide/
- National Strategy for Suicide Prevention http://mentalhealth.samhsa.gov/suicideprevention/
- Suicide Reference Library http://www.suicidereferencelibrary.com/index.php
- Depression and Suicide in Older Adults Resource Guide http://www.apa.org/pi/aging/depression.html
- Suicide and Mental Health Association International http://www.suicideandmentalhealthassociationinternational.org/libeldersui.html
- Oregon State Elder Suicide Prevention Program http://www.oregon.gov/DHS/ph/ipe/esp/index.shtml

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Maine Links

- Cheryl DiCara, Director of the Maine Youth Suicide Prevention Program
  Department of Health & Human Services, Division of Family Health
  11 State House Station, 5th Floor, Key Bank Plaza, 286 Water St
  Augusta, ME 04333
  Tel: 207-287-5362
  Fax: 207-287-7213
  Email: cheryl.m.dicara@maine.gov
  http://www.state.me.us/suicide/

- **AFSP/Maine Chapter**
  Suzanne Benoit
  10 Knight Street
  Falmouth, ME 04105
  Tel: 207-781-4103

Email: svbenoit@aol.com
http://www.afsp-maine.org

- **NAMI Maine**
  Carole Carothers
  1 Bangor Street
  Augusta ME 04330
  Toll-free: 1-800-464-5767
  Tel: 207-622-5767
  Fax: 207-621-8430
  Email: NAMI-ME@nami.org
  http://me.nami.org/

- **SPAN New England**
  Gregory A. Miller, Regional Director
  Suicide Prevention Action Network USA, Inc.
  PO Box 400752
  Cambridge, MA 02140-0008
  Tel: 781-396-4930
  Email: gregmiller2@comcast.net
  http://www.spanusa.org

- **American Foundation for Suicide Prevention of Maine** http://www.afsp-maine.org/index.html
- **National Alliance of Mental Health of Maine**
  http://www.nami.org/MSTemplate.cfm?MicrositeID=186

Hotlines

- Maine Crisis Hotline 1-888-568-1112
  A 24 hour crisis hotline that connects the caller to the crisis service provider nearest the calling location for supportive counseling, problem solving information and referral for anyone in distress

- The Trevor Helpline 1-866-4.U.-TREVOR; 1-866-480-7386
  A national 24 hour, toll-free suicide prevention hotline aimed at gay and questioning youth.
  http://www.thetrevorproject.org

- National Hopeline Network
  1-800-SUICIDE
  1-800-784-2433
  http://suicidehotlines.com/national.html

- National Suicide Prevention Lifeline
  1-800-273 TALK
  1-800-273-8255
  http://suicidehotlines.com/national.html

- Gay and Lesbian National Hotline
  1-888-THE-GLNH
  1-888-843-4564

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