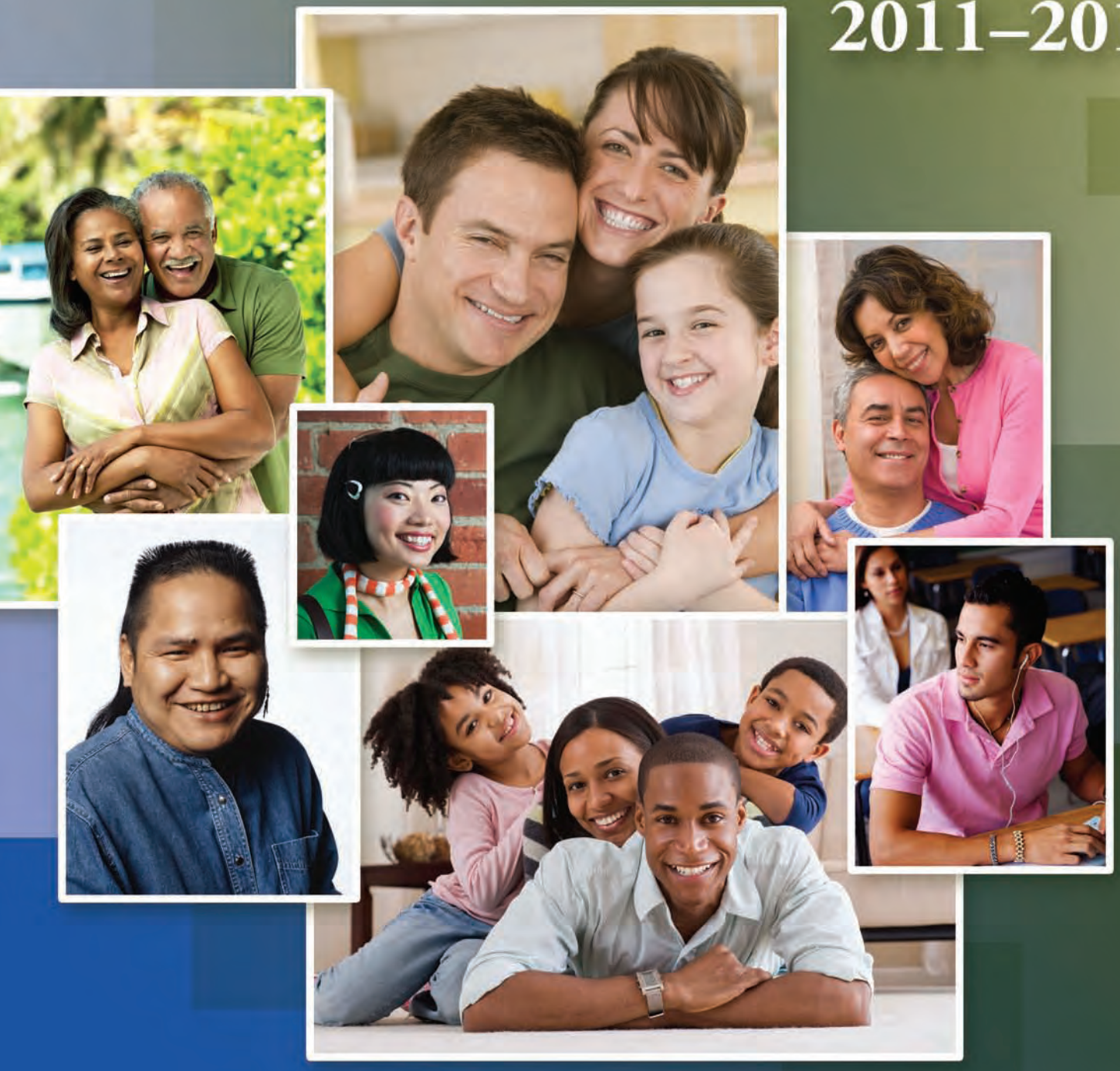
Public Health Action Plan to Integrate Mental Health Promotion and Mental Illness Prevention with Chronic Disease Prevention, 2011–2015



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Abbreviations

CDC—Centers for Disease Control and Prevention

DACH—Division of Adult and Community Health

MH—Mental Health

MI—Mental Illness

Executive Summary

Mental health (MH) is increasingly recognized by the public health community as critical to good health. An estimated 26% of Americans age 18 and older suffer from a diagnosable mental disorder in a given year. The estimated lifetime prevalence of any mental disorder among the U.S. adult population is 46%.

The interconnections between chronic disease, injury, and mental illness (MI) are striking. For example, tobacco use among people diagnosed with a MI condition is twice that of the general population. In addition, the evidence is extensive for associations between MI and chronic diseases, such as cardiovascular disease, diabetes, obesity, asthma, arthritis, epilepsy, and cancer. Injury rates for both intentional (e.g., homicide) and unintentional (e.g., motor vehicle injuries) injuries are 26 times higher among people with a history of MI than for the general population.

The absence of MI does not mean the presence of MH. Growing research supports the view that MH and MI are independent but related dimensions. MH and well-being are characterized by the presence of positive affect (e.g., optimism, cheerfulness, interest), absence of negative affect, and satisfaction with life. On the other hand, MI is characterized by alterations in thinking, mood, or behavior associated with distress or impaired functioning.

In 1999, the Surgeon General's office released its first report on MH, calling for the full integration of MH into the nation's public health system. The report concluded that mental disorders are among the most prevalent and costly conditions in the United States and that effective treatment can reduce their prevalence and decrease their adverse effect on other health conditions. This report called for a broad public health approach that included clinical diagnosis and treatment of MI, as well as surveillance, research, and promotion of MH.

Integrating MH and public health programs that address chronic disease is a challenging but essential task in protecting the health of Americans. The Division of Adult and Community Health (DACH) in the National Center for Chronic Disease Prevention and Health Promotion at the Centers for Disease Control and Prevention (CDC) has a mission to prevent death and disability from chronic disease and to promote healthy behaviors. With this report, the *Public Health Action Plan to Integrate Mental Health Promotion and Mental Illness Prevention with Chronic Disease Prevention, 2011–2015*, DACH outlines its goal to include the promotion of MH as a part of its efforts to prevent chronic disease.

In 2008, DACH convened a Mental Health/Mental Illness Expert Workgroup (see Appendix A) to evaluate current DACH activities and proposals for integrating MH and MI programs in public health. The workgroup was asked to identify research gaps, new activities in the field, and action priorities for public health. The expert workgroup met three times and provided guidance that was used to create this action plan. The action plan includes eight strategies, each with specific actions that can be taken to achieve these strategies during 2011–2015.

Executive Summary

Mental Health (MH) Promotion and Mental Illness (MI) Prevention: Public Health Strategies for Integration with Chronic Disease Prevention

Surveillance

Support collaboration of public health and MH agencies and organizations to develop shared operational definitions of MH, MI, and determinants associated with each by using clinical, public health, MH, and policy perspectives.

Epidemiology

Support research into determinants and protective factors for MH, antecedents and risk factors for MI, and their relationships to chronic diseases.

Prevention Research

Determine the importance of MH and MI as factors in broader public health promotion and prevention programs.

Communication

Develop educational products that include appropriate cultural, linguistic, and developmental characteristics.

Education of Health Professionals

Develop education plans that are appropriate for each professional audience.

Program Integration

Support the integration of traditional public health, MH promotion, and MI health services at the state and local levels.

Policy Integration

Develop policies at all government levels for all audiences, including the public, public health and health care providers, and policy makers.

Systems to Promote Integration

Establish systems integration within CDC's Division of Adult and Community Health to promote program and policy integration across multiple infrastructures.

Background

Description of the Issues

In 1999, the Surgeon General's office released its first report on MH, calling for the full integration of MH into the nation's public health system.[1] The report concluded that mental disorders are among the most prevalent and costly conditions in the United States and that effective treatments can reduce their prevalence and decrease their adverse effect on other health conditions. This report took a broad public health approach, including clinical diagnosis and treatment of MI, as well as surveillance, research, and promotion of MH.[2,3] Concerns about MH promotion and MI prevention are increasingly recognized by the public health community as critical to good health.[4] Approximately 26% of Americans aged 18 years or older suffer from a diagnosable mental disorder in a given year.[5] The estimated lifetime prevalence of any mental disorder among the U.S. adult population is 46%.[6]

The interconnections of injury, chronic disease and its risk factors, and MI are striking. Injury rates for both intentional (e.g., homicide) and unintentional (e.g., motor vehicle injuries) injuries are 2–6 times higher among people with a history of MI than for the overall population.[7,8] Tobacco use among people diagnosed with a MI is twice that of the overall population.[9] MI and chronic diseases are frequently associated; the incidence, course, and outcomes of each are affected by the presence of the others. In addition, there is extensive evidence connecting MI to chronic diseases, such as cardiovascular disease, diabetes, obesity, asthma, arthritis, epilepsy, and cancer.[10,11]

The National Arthritis Action Plan identifies the need to, "define the impact of coping, depression, and other emotional responses to arthritis."[12] In addition, there is a reciprocal relationship between chronic disease self-management and MH. Self-efficacy, goal-setting, and problem-solving enable self-management behaviors, and these components are dependent on MH. On the other hand, self-management behaviors that enhance health, such as physical activity and stress reduction, can improve MH status and quality of life.

The absence of MI does not mean the presence of MH. Growing research supports the view that MH and MI are independent but related dimensions. MH generally refers to "the successful performance of mental function, resulting in productive activities, fulfilling relationships, and the ability to adapt to change and adversity."[1] MH can also be characterized as the presence of positive affect (e.g., optimism, cheerfulness, interest), absence of negative affect, and satisfaction with life.[13] These domains are commonly referred to as "well-being."

MI is "characterized by alterations in thinking, mood, or behavior associated with distress or impaired functioning."[1] MI includes diseases with classic psychiatric diagnoses, such as depression, bipolar disorder, and schizophrenia.[14] MH and MI can be influenced by multiple determinants, including genetics and biology and their interactions with social and environmental factors. For example, social determinants of health—including income, stressful circumstances and life events, early childhood experiences, social exclusion, occupation, education level, sanitation, social support, stigma, discrimination (e.g., racism), and lack of access to health resources—can influence MH and MI.[15]

Emotional well-being is associated with numerous benefits to health, family, work, and economic status.[16] For example, positive emotions and evaluations of life are associated with decreased risk for disease, illness, and injury; better immune functioning; better coping and quicker recovery; and increased longevity.[16] In addition, MH and MI may influence physical health and biologic functioning. Positive MH is associated with better endocrine function (i.e., lower levels of cortisol, epinephrine, and norepinephrine), and better immune response (i.e., higher antibody production and greater resistance to illness).[17] Positive MH has also been shown to be associated with longevity.[18]

Higher levels of purpose in life, personal growth, and positive relations have been linked with lower cardiovascular risk including lower glycosylated hemoglobin, lower weight, lower waist to hip ratios, and higher good or HDL cholesterol.[19] They also have been linked with better neuroendocrine regulation (i.e., lower salivary cortisol throughout the day). Higher levels of interpersonal well-being and purpose in life are also linked with lower inflammatory factors (e.g., interleukin 6).[20] A strong sense of well-being also has been linked with brain function—asymmetric activation of the prefrontal cortex, as well as reduced amygdala activation to aversive stimuli, accompanied by greater activation of the ventral anterior cingulated cortex.[14] Other findings suggest that well-being has its own biomarkers, contrasted with those associated with ill-being, but more studies are required.[19] The fields of MH promotion, positive psychology and health psychology offer strategies to promote MH and well-being.[21,22]

Burden

The estimated lifetime prevalence of mental disorders among the U.S. adult population is 29% for anxiety disorders, 25% for impulse-control disorders, 21% for mood disorders, 15% for substance use disorders, and 46% for any of these.[6] Depression is among the leading global causes of life-years lived with disability.[6] Further, variations in the prevalence of MI diagnoses have been reported in disparate populations. For example, the prevalence of any psychiatric disorder in the past 12 months is 15% for African Americans, 9% for Asian Americans, 16% for Hispanics, and 21% for non-Hispanic Whites.[23]

People from disadvantaged populations who have diagnosed disorders often face problems accessing medical care. Limited English language proficiency, limited medical literacy, geographic inaccessibility, and lack of medical insurance are all more common among immigrants, minority populations, and people in rural areas. The influences on MH and MI disparities among diverse populations have been described in terms of social determinants, interventions, and outcomes.[15] These influences may also operate in more advantaged groups.

Social determinants include, but are not limited to, housing status, income, education, stigma and discrimination, access to resources, stress, physical environment, and institutionalization. Social determinants may have positive or negative consequences. For example, an intact family provides a strong, protective social network. Other protective factors include religion and spirituality, social support and social participation. On the other hand, a lack of infrastructure development in poor urban neighborhoods has led to communities that are disenfranchised and has deteriorated social networks.[15]

Poor health outcomes increase in the presence of multiple negative social indicators, and MI often occurs concurrently with chronic diseases.[15] Among American Indians, the presence of trauma, stress, and depression increases the risk for diabetes. Depression and diabetes comorbidity causes fewer people to seek treatment, poorer blood glucose control, and increased risk for heart disease, pain, and respiratory disorders. Lack of insurance, stigma, limited health literacy, and cultural beliefs also may interfere with people seeking help, screening, and health assessment.[15]

Public Health interventions can create major improvements in MH and MI. It is essential that the public health system clearly define population disparities, set goals for improvement, focus on community-based research, and educate the community about the effects of social determinants of health on MH and MI. The interaction of the three elements—social determinants of health, health outcomes, and public health interventions—can yield central insights for all populations.[15]

Public Health Approach

The public health approach to addressing MH and MI includes surveillance, epidemiology, prevention research, communication, education programs, policies, and systems changes. Public health surveillance can provide data about the burden of disease, risk factors, and effects of interventions. Epidemiology is an essential tool in public health that examines the influences on disease and health in populations and supports research for new scientific insights and policy development. Prevention research develops and evaluates interventions to improve health, including MH.

Communication to the public and education for health professionals provide evidence-based information about the results of epidemiologic and prevention research. Public health programs are applications of interventions in the field; these programs must be regularly evaluated for their success in improving health. Policies and legislation operate at the most comprehensive levels of population health. Medical care systems and others support the operation of multiple programs. As is true for programs, changes in policies and systems require periodic assessment.

Integration of MH and chronic disease public health programs is a challenging but essential task in protecting the health of Americans.[21] Especially in times of limited resources, partnerships can capitalize on existing programs and develop new ideas that make the most of smaller budgets. Synergistic integration of activities for mental and public health is more effective than individual stakeholder efforts.[24]

History of the Division of Adult and Community Health (DACH) Mental Health Activities

The Centers for Disease Control and Prevention (CDC), the Division of Adult and Community Health (DACH) in the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) has the mission to prevent death and disability from chronic disease and to promote healthy behaviors.[25] DACH has long recognized the vital links between chronic disease, MH, and MI and has examined this topic since 1993. Early efforts focused on surveillance of health-related quality of life, culminating in 2004 with an interagency agreement between DACH and the Substance Abuse and Mental Health Services Administration (SAMHSA) to conduct surveillance for depression, anxiety, serious psychological distress, and MI stigma. Other DACH activities have included supporting prevention research in depression through telehealth and other community-based approaches, epidemiologic studies of adverse childhood experiences, effects of workplace stress, promoting brain health in older adults, participation in MH disaster response activities, and CDC-wide MH workgroup initiatives.[25]

Given its history in this area, DACH is uniquely positioned to champion the integration of MH into public health and into its own health promotion activities. The division is leading the strategic planning process and using a community-based, lifespan approach to address MH, MI, and associated risk factors.

DACH uses CDC's core mandates for essential public health activities, including epidemiology, surveillance, intervention research, program and policy development and evaluation, and science communication. The agency collaborates with state and local health departments and community-based organizations to implement programs, policies, and clinical and public health practice recommendations on the ground and can extend these partnerships for MH and MI activities. The effectiveness of these type partnerships have been demonstrated by state and local agencies.[26] Other partnerships include MH advocates; other federal agencies, such as SAMHSA and NIH; and primary care providers, who provide more than 50% of the health care for mental disorders.[25,27,28]

Development of the Plan

Although there are other national public MH objectives, such as *Healthy People 2020*, the purpose for DACH is to focus on MH promotion and MI prevention as it relates to chronic disease prevention. In 2008, DACH convened the Mental Health/Mental Illness Expert Workgroup to evaluate its current activities and staff proposals for MH and MI programs in public health. The workgroup was asked to identify research gaps, identify and suggest new activities in the field, and identify action priorities for public health. Workgroup members represented diverse areas of expertise within MH and public health and had backgrounds in federal and state MH, public health, policy, academia, professional organizations, nongovernment organizations, and private business. The workgroup provided 22 suggestions to DACH; the first of these was to develop a MH and MI strategic plan (1–3 years) and share the plan with key stakeholders.

In response to this and other key suggestions from the 2008 meeting, DACH developed two initiatives. The first was a special issue of a journal on MH and public health integration. The second initiative was this MH and MI strategic action plan to guide DACH's future activities.

On April 27, 2009, the expert workgroup reconvened in Atlanta. During this meeting, members provided feedback to the authors preparing manuscripts for a special issue of *Preventing Chronic Disease*. They also gave guidance for the plan's development on the basis of a framework prepared by DACH staff, which included DACH's MH and MI mission and vision statements, overall goals, objectives, and activities for all the focal areas addressed in the plan. On March 15, 2010, the workgroup met to finalize the public health action plan and provide guidance on proposed strategies, actions, and performance measures for implementation.

Public Health Action Plan Framework

DACH's Mission for Integration of Mental Health Promotion and Mental Illness and Chronic Diseases Prevention and Control

DACH will use a community-based, lifespan approach to promote MH, prevent MI and associated risk factors, and improve the public's health and well-being.

Goal

Increase public awareness of MI as an important public health problem and promote change to improve MH.

Objectives

1. Examine the relationships between MH, MI, and chronic diseases.
2. Identify partners to accomplish MH promotion and MI prevention goals.
3. Identify the public health tools needed to accomplish MH promotion and MI prevention goals in the areas of surveillance, epidemiology, prevention research, programs, and policies.
4. Identify strategies to improve the public's understanding of MH and MI.
5. Develop strategies for integrating MH and MI and public health systems.

Action Framework

The three underlying principles of the MH and MI action framework are as follows:

- Obtain better scientific information (through surveillance, epidemiology, and prevention research).
- Disseminate the information to appropriate audiences (through communication and education).
- Translate the information into action (through programs, policies, and systems).

Surveillance, Epidemiology, Prevention Research, and Implementation

Surveillance, epidemiology, and health promotion and disease prevention research are key tools for public health programs and are essential to accomplishing the overall goals of the strategic action plan. These activities support Objectives 1 and 3.

Surveillance

The most critical surveillance strategies for integrating MH and MI into public health require improvement in the way these conditions are defined and measured in public health contexts (Strategy 1). To maximize the integration of chronic disease and MH surveillance systems, agencies and organizations from both arenas should collaborate to identify shared operational definitions of MH, MI, and the factors and consequences associated with each. These collaborations should include evaluation of information from current population-based surveys in both fields. This information can also help researchers measure progress toward meeting the national *Healthy People 2020* objectives for MH, as well as measures developed by states.

Epidemiology

Although surveillance can collect existing information on MH and MI, epidemiologic studies are needed to examine the relationships between MH, MI, and chronic diseases, including the effects of functional status, quality of life, and morbidity and mortality outcomes (Strategy 2). This includes reviewing relevant existing studies and examining MI morbidity, protective factors against MI, social determinants of MH, and determinants of positive MH among the population.

Health Promotion and Disease Prevention Research

Health promotion and disease prevention research focuses on the effectiveness and costs of promotion and prevention programs and services (Strategy 3). For MH, MI, and chronic diseases, such research could examine current and new interventions, including community-based programs that can integrate chronic disease, MH and MI activities. A priority for these programs is the emphasis on preventing MI, as well as on reducing barriers to treatment, such as stigma and access to behavioral health care. The research should assess the effect of policy changes on outcomes or services and make the case for cost-effectiveness of these policies when appropriate. MH promotion and MI prevention research also should examine the role of nonprofessional support systems, such as community, spiritual, family, and peer networks and other established resilience factors in protecting health and reducing illness.

MH promotion and protection are equal in importance to prevention and treatment of MI. Perhaps most critical, research into the integration of programs for chronic diseases and MH and MI should stress the importance of MH in promoting overall health and preventing or reducing disability and death from chronic disease.

Strategies 1–3 present specific actions and performance measures that will be needed to implement the surveillance, epidemiology, and research components of this public health action plan.

Strategy 1

Surveillance for Mental Health (MH) Promotion and Mental Illness (MI) Prevention: Implementation

Strategy: Support collaboration of public health and MH agencies and organizations to develop shared operational definitions of MH, MI, and determinants associated with each by using clinical, public health, MH, and policy perspectives.

Actions

- Inventory current surveillance systems and surveys.
- Convene discussions to define or supplement survey measures for MH, MI, well-being, and quality of life.
- Incorporate new measures into current surveys.

Performance Measures

- Complete inventory by 2012.
- Develop agreed definitions, terminology, and applications by 2013.
- Incorporate new measures into national surveys by 2015.

Strategy 2

Epidemiology Research for Mental Health (MH) Promotion and Mental Illness (MI) Prevention: Implementation

Strategy: Support research into determinants and protective factors of MH, antecedents and risk factors for MI, and their relationships to chronic diseases.

Actions

- Review existing research on MH and MI.
- Review current chronic disease research to find ways to incorporate studies of MH and MI investigations.
- Strengthen existing and support new epidemiologic research in DACH that integrates chronic disease, MH and MI determinants of health.

Performance Measures

- Include integrated determinants for chronic disease, MH and MI into current epidemiologic research supported by DACH by 2013.
- Include MH and MI in new epidemiologic research supported by DACH by 2014.

Strategy 3

Prevention Research on Mental Health (MH) Promotion and Mental Illness (MI) Prevention: Implementation

Strategy: Determine the importance of MH and MI as factors in broader public health promotion and disease prevention programs.

Actions

- Review DACH's existing programs to identify gaps related to MH and MI as factors in chronic disease prevention and control.
- Support new research on the relationship of MH and MI to chronic disease prevention, including self-management.

Performance Measures

- Review and report current health promotion and disease prevention research being conducted by DACH that examines the relationship of MH and MI to chronic diseases by 2012.
- Incorporate new prevention research support by 2014.

Communication, Education, and Implementation

Developing the scientific foundation for integrating MH promotion and MI prevention into public health systems is essential but it is not sufficient to bring about change. Communication to the public and education of health professionals will be needed to encourage the use of new knowledge. Other audiences include policy makers, health care providers, behavioral health providers, health insurers, and decision makers in the public health and MH systems. These activities address Objectives 2, 3, and 4.

Communication

Communication strategies such as, social marketing and frames analysis can address many key audiences, including the public, people with or at risk for disease, or the families of people with disease (Strategy 4). Information campaigns can convey the importance of MH and approaches to promote and protect MH and resiliency. They can also help to reduce the stigma of MI and let people know that MI can become chronic if untreated and that it can affect the course of other chronic diseases. Social marketing plans should be community-focused and include strategies to reach hard-to-reach populations, such as rural or incarcerated populations, out of school youth, and racial and ethnic minorities.

Education of Health Workforce

The joint training needs of the public health, MH, and health care provider workforces, as well as other professional groups likely to encounter MH issues (e.g., school teachers), require identification and development (Strategy 5). These professionals need to be aware of the signs, symptoms, and treatability of common mental disorders and their relevance to physical health. They also should recognize the importance of protective factors of MH and strategies for MH promotion.

Strategies 4 and 5 present specific actions and performance measures that will be needed to implement the communication and education components of this public health action plan.

Strategy 4

Communication to the Public for Mental Health (MH) Promotion and Mental Illness (MH) Prevention: Implementation

Strategy: Develop educational products that include appropriate cultural, linguistic, and developmental characteristics.

Actions

- Define communication goals and messages.
- Define audiences such as policy makers, health care providers, parents, school children, families of people with MI, and communities.
- Define communication themes and terms for each audience (e.g., psychological health, emotional health, well-being, MH, behavioral health).
- Develop appropriate marketing products and educational programs.
- Implement and evaluate these programs.

Performance Measures

- Collaborate with appropriate partners (e.g., federal and state programs) by 2012.
- Define audiences and communication themes and implement programs by 2014.

Strategy 5

Education of Health Professionals Regarding Mental Health (MH) Promotion and Mental Illness (MI) Prevention: Implementation

Strategy: Develop education plans that are appropriate for each professional audience.

Actions

- Assess what information health professionals need to be able to promote MH and prevent MI as part of public health.
- Collaborate with leaders in the areas of public health, MH and MI, chronic disease, and clinical care to translate current research into educational products.

Performance Measures

- Develop professional education plans by 2012.
- Initiate education plans by 2013.
- Initiate evaluation of the effectiveness of these plans by 2014.

Programs, Policy, Systems Integration, and Implementation

As the scientific foundation for integrating MH and MI into public health systems is determined and communicated, public health action plans will include guidelines on how to develop and change programs, policies, and systems to support this integration. These activities address Objectives 2 and 5.

Program

Strong programs that promote good health are the ultimate goal for all public health activities (Strategy 6). These programs should integrate MH and MI into existing activities that are intended to prevent and control chronic disease. The approaches used by these programs should be evidence-based, defined by the community, and engage local racial and ethnic minority populations.

Policy

Clearly defined policies are needed to support chronic disease programs that include MH and MI (Strategy 7). Multiple stakeholders, such as representatives from MH organizations, the private sector, and state public health and MH programs should be included in policy discussions.

Systems Integration

Activities that are conducted across public health and MH systems will promote the integration of programs and policies across multiple infrastructures (Strategy 8). For DACH, effective systems change will require incorporating MH into Funding Opportunity Announcements (FOAs) in chronic disease topics, supporting community development projects, and tracking and evaluating the effects of MH initiatives on health outcomes.

Strategies 6–8 present specific actions and performance measures that will be needed to implement the programs, policies, and systems integration components of this public health action plan.

Strategy 6

Program Integration for Mental Health (MH) Promotion, Mental Illness (MI) Prevention and Chronic Disease Prevention and Control: Implementation

Strategy: Support the integration of traditional public health, MH promotion, and MI services at the state and local levels.

Actions

- Collaborate with stakeholders to identify successful approaches for encouraging local collaboration among public and private health providers.
- Support projects that encourage state departments in public health, MH, and Medicaid to collaborate.

Performance Measures

- Identify successful approaches to serve as best practices by 2013.
- Initiate a collaboration project by 2015.

Strategy 7

Policy Integration of Mental Health (MH) Promotion, Mental Illness (MI) Prevention and Chronic Disease Prevention and Control: Implementation

Strategy: Develop policies at all government levels for all audiences, including the public, public health and health care providers, and policy makers.

Actions

- Examine projects currently being conducted in the Prevention Research Centers to promote MH and prevent and control MI and chronic diseases to identify potential MH policy supplements.
- Support joint meetings and reports among stakeholders and use current professional meetings for mutual education regarding opportunities for program integration.
- Support dialogue with the private sector, community partners, and primary care practitioners emphasizing the interaction of health concerns related to MH, MI, and chronic diseases.

Performance Measures

- DACH or other chronic disease organizations will present at two or more MH-related conferences by 2013.
- DACH will support a session at a national conference on MH, MI, and chronic disease integration by 2014.

Strategy 8

Systems to Promote Integration of Mental Health (MH) Promotion, Mental Illness (MI) Prevention and Chronic Disease Prevention and Control: Implementation

Strategy: Establish systems integration within CDC's Division of Adult and Community Health to promote program and policy integration across multiple infrastructures.

Actions

- Incorporate MH and MI topics into Funding Opportunity Announcements (FOAs) for chronic disease and community development projects.
- Track and evaluate the effects of MH initiatives on health outcomes.

Performance Measures

- Announce at least one integrated FOA for integration by 2014.
- Establish at least one evaluation plan for an integrated FOA by 2015.

Conclusion

The eight strategies outlined in this public health action plan to integrate MH promotion and MI prevention with chronic disease prevention should help with the ongoing and future development of health initiatives. In addition, they support DACH's mission to prevent death and disability from chronic diseases and promote healthy behaviors. Integrating MH promotion and MI prevention with chronic disease prevention is critical to good health and an important step toward fulfilling the objectives outlined in the Surgeon General's report on MH.

References

1. Mental Health: a report of the Surgeon General. Washington (DC): U.S. Department of Health and Human Services; 1999.
2. President's New Freedom Commission on Mental Health. Achieving the promise: transforming mental health care in America. Final report. Washington (DC): U.S. Department of Health and Human Services; 2003.
3. Satcher D, Druss BG. Bridging mental health and public health. *Prev Chronic Dis* [serial online] 2010;7(1). http://www.cdc.gov/pcd/issues/2010/ jan/09_0133.htm. Accessed January 31, 2010.
4. Giles WH, Collins JL. A shared worldview: mental health and public health at the crossroads. *Prev Chronic Dis* [serial online] 2010;7(1). http://www.cdc.gov/pcd/issues/2010/jan/09_0181.htm. Accessed January 31, 2010.
5. Kessler RC, Chiu WT, Demler O, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV Disorders in the National Comorbidity Survey Replication. *Arch Gen Psych 2005*;62:617-27.
6. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psych* 2005;62:593-602.
7. Wan JJ, Morabito DJ, Khaw L, Knudson MM, Dicker RA. Mental illness as an independent risk factor for unintentional injury and injury recidivism. *J Trauma* 2006;61(6):1299-304.
8. Hiroeh U, Appleby L, Mortensen PB, Dunn G. Death by homicide, suicide and other unnatural causes in people with mental illness: a population-based study. *Lancet* 2001;358(9299):2110-2.
9. Lasser K, Boyd JW, Woolhandler S, Himmelstein DU, McCormick D, Bor DH. Smoking and mental illness: a population-based prevalence study. *JAMA* 2000;284(20):2606-10.
10. Chapman DP, Perry GS, Strine TW. The vital link between chronic disease and depressive disorders. *Prev Chronic Dis* [serial online] 2005;2(1). http://www.cdc.gov/pcd/issues/2005/jan/04_0066.htm. Accessed January 31, 2005.
11. American Epilepsy Society; Centers for Disease Control and Prevention; Chronic Disease Directors; Epilepsy Foundation; National Association of Epilepsy Centers. Living well with epilepsy II: Priorities for a public health agenda on epilepsy. Report of the National Conference on Public Health and Epilepsy, 2003. http://www.cdc.gov/epilepsy/pdfs/living_well_2003.pdf Accessed August 27, 2010.
12. Arthritis Foundation; Association of State and Territorial Health Officials; Centers for Disease Control and Prevention. National arthritis action plan: a public health strategy. 1999. http://www.arthritis.org/media/Delia/NAAP_full_plan.pdf. Accessed August 27, 2010.
13. Diener E, Lucas R, Schimmack U, Helliwell J. Well-being for public policy. New York: Oxford University Press; 2009.
14. Manderscheid RW, Ryff CD, Freeman EJ, McKnight-Eily LR, Dhingra S, Strine TW. Evolving definitions of mental illness and wellness. *Prev Chronic Dis* [serial online] 2010;7(1). http://www.cdc.gov/pcd/issues/2010/ jan/09_0126.htm. Accessed January 31, 2010.
15. Primm AB. Vasquez MJ, Mays RA, Sammons-Posey D, McKnight-Eily LR, Presley-Cantrell LR, et al. The role of public health in addressing racial and ethnic disparities in mental health and mental illness. *Prev Chronic Dis* [serial online] 2010;7(1). http://www.cdc.gov/pcd/issues/2010/ jan/09_0125.htm. Accessed January 31, 2010.
16. Lyubomirsky S, King L, Diener E. The benefits of frequent positive affect: does happiness lead to success? *Psychol Bull* 2005;131:803-55.
17. Steptoe A, Gibson EL, Hamer M, Wardle J. Neuroendocrine and cardiovascular correlates of positive affect measured by ecological momentary assessment and by questionnaire. *Psychoneuroendocrinology* 2007;32(1):56-64.
18. Danner DD, Snowdon DA, Friesen WV. Positive emotions in early life and longevity: findings from the Nun Study. *J Pers Soc Psychol* 2001;80(5):804-13.
19. Ryff CD, Love GD, Urry LH, Muller D, Rosenkranz MA, Friedman EM, et al. Psychological well-being and ill-being: do they have distinct or mirrored biological correlates? *Psychothe Psychos* 2006;75:85-95.
20. Friedman EM, Hayney MS, Love GD, Urry HL, Rosenkranz MA, Davidson RJ, et al. Social relationships, sleep quality, and interleukin-6 in aging women. *Proc Natl Acad Sci USA* 2005;102(51):18757–62.
21. Perry GS, Presley-Cantrell LR, Dhingra S. Addressing mental health promotion in chronic disease prevention and health promotion. *Am J Public Health* 2010;100(12):2337-9.
22. Taylor SE, Sherman DK. Positive psychology and health psychology: a fruitful liaison. In: Linley PA, Joseph S. Positive psychology in practice. Hoboken (NJ): John Wiley & Sons, Inc; 2004.
23. Alegria M, Woo M, Takeuchi D, Jackson J. Ethnic group differences in mental health and service use: findings from the Collaborative Psychiatric Epidemiology Surveys. In: Ruiz P, Primm A, editors. Disparities in psychiatric care: clinical and cross-cultural perspectives. Bethesda (MD): Wolters Kluwer Lippincott Williams and Wilkins; 2010.
24. Freeman E, Presley-Cantrell L, Edwards VJ, White- Cooper S, Thompson KS, Sturgis S, et al. Garnering partnerships to bridge gaps among mental health, health care, and public health. *Prev Chronic Dis* [serial online] 2010;7(1). http://www.cdc.gov/pcd/issues/2010/ jan/09_0127.htm. Accessed January 31, 2010.
25. Safran MA. Achieving recognition that mental health is part of the mission of CDC. *Psychiatr Serv* 2009;60(11):1532-4.
26. Sammons-Posey D, Guerrero R, Perry GS, Edwards VJ, White-Cooper S, Presley-Cantrell L. The role of state health departments in advancing a new mental health agenda. *Prev Chronic Dis* [serial online] 2010;7(1). http://www.cdc.gov/pcd/issues/2010/jan/09_0129.htm. Accessed January 31, 2010.
27. Power AK. Ensuring the nation's mental health: the role of federal agencies. *Prev Chronic Dis* [serial online] 2010;7(1). http://www.cdc.gov/pcd/ issues/2010/jan/09_0128.htm. Accessed January 31, 2010.
28. Druss BG, Mays RA Jr, Edwards VJ, Chapman DP. Primary care, public health, and mental health. *Prev Chronic Dis* [serial online] 2010;7(1). http://www.cdc.gov/pcd/issues/2010/jan/09_0131.htm. Accessed January 31, 2010.

Appendix

Members of the Expert Workgroup

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