

2. Description of the Maine Center for Public Health

The Maine State Legislature established the Maine Center for Public Health (MCPH), a private non-profit organization, in 1996. Its mission is "to improve the health of Maine citizens through an organized program of research, education/ training, technical assistance and policy analysis". Its efforts have been funded by a combination of federal, state and private sources. Because MCPH has a *public health* focus, most initiatives directly or indirectly benefit the entire *population* of Maine. Its projects have included the following:

"Turning Point": The Robert Wood Johnson Foundation funded approximately twenty states across the country to develop plans to strengthen public health capacity. The MCPH has managed this project, working closely with many state agencies and non-profit organizations to develop a plan for Maine available on the website: www.mcph.org.

Prevention Research Center: The MCPH, the Harvard School of Public Health and the State Bureau of Health have formed the Maine-Harvard Prevention Research Center to address childhood obesity. Its Steering Committee includes many other organizations and will soon be deliberating a second three-year strategic plan to guide the project.

Public Health Education: The MCPH formed the Public Health Education and Training Committee that has conducted needs assessments, identified gaps in knowledge, acted as the catalyst for a number of workshops and courses and led to the development of undergraduate and graduate certificate programs at the University of Southern Maine and the University of New England.

Public Health Preparedness and Bioterrorism: The Bureau has used CDC funding to contract with the MCPH to provide training activities related to public health preparedness, and the MCPH has formed a working relationship with the Harvard Center for Public Health Preparedness to access cutting-edge expertise on the subject. MCPH's initial assessments of knowledge gaps have led to a variety of training efforts that will bring together a broad audience of first responders, health care and public health staff.

MCPH will contribute substantial resources to the development and implementation of the *Integrating Primary Care and Mental Health Services Project*. Paul Campbell, ScD, MPH, President will provide research consultation services to the project and will participate as part of the Key Partner Group (described below). He will also liaison with Harvard HSPH. Administrative assistance on the project will be contributed. MCPH will also contribute meeting space. Ann Conway, PhD will serve as Project Director.

MCPH submits this proposal in close collaboration with a number of other entities, especially the Maine Department of Behavioral and Developmental Services (BDS), the Maine Bureau of Health (BOH), the Maine Bureau of Medical Services (BMS) and in consultation with Beth Molnar, PhD of Harvard School of Public Health. Their collaboration is described in the "Collaboration and Integration" section of this proposal, as well as in their attached letters of commitment.

3. Project Description

This project will collaborate with multiple stakeholders to identify viable, evidence-based and cost-effective practice models for the delivery of children's mental health services in primary care practices that could be pilot-tested and evaluated in multiple primary care settings throughout Maine. The testing and evaluation would then be based on the needs and resources in a given area. Using a planning process that has already been initiated, the project will assess strengths of selected practices, identify measurable outcomes and associated goals, and choose a program model to meet the goals and design evaluation measures. It will also develop plans for a State designation for primary care practices that meet a specific set of criteria and performance measures. This designation will allow these practices to bill for the mental health services delivered. We believe that through this integrated model, we can ultimately create an innovative, evidence-based and effective system of care for children and families.

A. Need for the Project

Recent Maine-based epidemiologic research delineates a significant increase in the rate of mental health disorders among children.¹ These findings dovetail with national trends, which suggest that 14% to 20% of all children have one or more mental health disorders in the moderate to severe range and that the overall incidence is increasing.²⁻⁴

One national study estimates that pediatricians do not identify 80% of children with diagnosable behavioral and emotional problems and even fewer children/youth receive mental health services.⁵ Needs in Maine are similar: lack of identification and underidentification of mental health problems, a low service utilization rate, which may be related to underidentification and associated issues of stigma, lack of resource coordination, shortages of child psychiatrists and other personnel and barriers to utilization (including finances, transportation and limited collaboration between multiple providers).⁶

Research in Maine further indicates that a large percentage of children with the most significant behavioral and emotional symptoms never received any services at all.⁷ Isolation and cultural attitudes complicate the utilization of mental health services in Maine, as they do in other rural states.⁸

As is the case nationally, this lack of identification, coordination and treatment has serious implications for Maine children and indeed, for the state's social fabric. Untreated mental health problems often lead to high rates of medical services and place children at increased risk for chronic psychosocial illness.⁹ Early intervention, particularly in the early childhood group, can significantly reduce problems before they become more difficult and costly to treat.¹⁰

The issues associated with poverty--lack of insurance or inadequate insurance, transportation problems, the severe shortage of qualified mental health personnel, especially psychiatrists, in rural areas--all worsen issues associated with lack of adequate mental health services for children. Recognizing this, both the American Academy of Pediatrics, Maine Chapter and the

Maine Medical Association have listed provision of children's mental health services as an area of major concern for Maine.

Linking Mental Health and Primary Care

Since most children with psychological and psychiatric problems receive routine preventive health and medical care from primary care practices¹¹, the link between the mental health and the primary mental health care systems is of vital importance. Primary care is a major setting for the potential recognition of mental disorders in children and adolescents.¹² The primary care "medical home" setting--whether in a family physician or pediatric office or through a rural health center --offers a comfortable, familiar and accessible environment that reduces the stigma associated with mental health issues.^{13,14} This setting supports continuity, trust and an emphasis on the strengths of children and families. It is ideal for an enhanced connection between mental health and primary care systems and services.

However, a number of barriers affect the ability of primary care practitioners to manage children's mental health problems. These include: inadequate knowledge of effective screening mechanisms, limited coordination between diverse providers, fragmented or unavailable resources, lack of knowledge of best practices in delivery of mental health services, an associated lack of case management services, separate record and data systems, time and energy demands on staff and especially, lack of reimbursement for time-consuming screening, provision and coordination of mental health services. These are *systemic* problems, and they demand a solution that seeks to change the *system of care* that addresses these concerns.

Mental Health Practice Models Integrated with Primary Care

A number of practice models that change systems have been published. Psychiatric consultation-liaison models¹⁵⁻¹⁸ linkage with community mental health teams,^{19,20} PCP training models,²¹ co-location of mental health models within the PCP office²² and shifted outpatient specialty clinics are among the most common.²³ The literature suggests that while it is important to determine which patients can derive most benefit from models of combined primary and mental health care, it is also important to decide which models can maximize the cost-effective delivery of that care.²⁴

Practice models that seek to address these issues have been developed, implemented and evaluated in order to overcome many of these barriers. Promising results have emerged in projects pertaining to such hard-to reach groups as the geriatric population and members of some racial and cultural minorities.²⁵ Health maintenance organizations have developed integrated systems, which provide information about model program components and cost-effectiveness, using existing resources. Benefits have been found in some projects integrating telemedicine into the provision of rural mental health services.

But much more remains to be evaluated about the implementation of integrated practice models, especially in rural areas and when it pertains to the care of children. Because of the pressing nature of the problem and the dearth of research on what works best for children and their

families, we believe that our project's planning and implementation will make a valuable contribution to children, families and providers alike. Our planning will allow us to provide the best fit between the needs of each practice and the available resources. We also wish to contribute to best practices in provision of collaborative, well-integrated, efficient and cost-effective mental health services in the primary care setting.

Project History

This project builds on MCPH's 2001 initiation of a dialogue between mental health providers and primary care physicians; its intent was to develop recommendations to support primary care physicians in the treatment and management of mental health. Conducted under contract with the Maine Department of Behavioral and Developmental Services (BDS), this effort: engaged a diverse group of practitioners in identification of pressing needs and gaps in services; conducted a literature review of innovative, effective practice models which address these problems and received preliminary feedback concerning the models and key recommendations to be implemented in Maine.

Potential major components of the project were then presented to a larger stakeholder group, composed of clinicians, representatives of provider and consumer organizations and hospitals, staff from the Department of Education, the Bureau of Health and others. Both the practitioner and stakeholder groups have given their approval to project direction and will participate in the planning and implementation phases. Representatives of the MCPH, BDS, BOH and BMS will continue to participate in all aspects of the project.

B. Target Population

The population for this planning project involves primary care providers in various settings, including private practice, hospital-based, hospital-owned, federally qualified health centers and school-based health centers. The intent is to select diverse pilot sites based on type, location (urban versus rural), staff and patients. Underserved children (aged B-18) and their families will be the ultimate beneficiaries of the project, once implemented. Because we plan to work with BMS and other parties to develop a designation for the practices, a large portion of the benefit will be to families and children who are Medicaid beneficiaries.

C. Work Plan

Convergence with MeHAF's Mission and Guiding Values

This project complements the Foundation's mission. The long-term goal is to have a positive impact on the mental health of every Maine child and adolescent through early intervention, detection and quality health care. The mental health field is plagued by disparities in the availability of and access to its services. This project will help fulfill a major objective noted in Healthy Maine 2010, increasing access to mental health services and resources in the primary care setting.²⁶

While this is a *planning process*, we believe that both it and its associated demonstration project are very much aligned with MeHAF values:

- The project will contribute to a *universal* system of care by developing models that cross payment groups.
- By developing and testing different models, it will allow for *individualization* among both providers and patients.
- By involving a variety of stakeholders in this project, from funders to providers to advocacy groups, we increase the likelihood of contributing to a *balanced* and *understandable* system.
- Early and enhanced identification of childhood mental health issues is inherently *prevention-oriented*.
- Collaboration and communication systems will provide for *seamless* services.
- We will develop and test *cost-effectiveness*, (*by decreasing the use of the Emergency Room, inpatient units and residential treatment*), including measures identified in the literature.
- We will focus on *evidence-based models*, basing our research design on literature review and best practices.
- Our project is *innovative* in both Maine and nationally due to its focus on children and rural primary care/mental health service integration.
- Our project, in both planning and demonstration phases, involves the *interconnectedness* of stakeholders and services in designing and implementing an important project. The project will ultimately strengthen connections between the fragmented services that assist children with mental health needs.

a. *Strategic Activities*

There are several major activities that will be undertaken as part of our planning for implementation of a practice model. These include:

1. We will assess primary care practice sites to evaluate needs in the following areas: 1) staff collaboration, 2) service needs and strengths, 3) community-family base, 4) operational fit, 5) access issues and financing, 6) location of services delivered, 7) family involvement, strengths and assets, 8) plan for financial viability. The assessment design (probably a survey) will be developed in consultation with Beth Molnar, Ph.D. The results from the assessment will complement the previously discussed literature review findings and input from practitioners and stakeholders.
2. We also intend to strengthen the collaboration and "buy-in" which we have already developed by actively engaging our practitioners and other stakeholders in the activities of an Advisory Committee (including family representatives) and a Key Partner group. The latter will be composed of representatives of MCPH, BDS, BMS, Harvard and BOH.

After review of prior project "pre-planning" activities, these groups will review findings of the assessment and literature review. They will then develop and prioritize recommendations for key components of practice models to be tested. They will also provide input on the major outcomes of the demonstration project. (Some desired outcomes have already been identified).

3. Our Research Consultant will help us refine our research design for Years 2 and 3, examining desired outcomes, goals and performance measures as well as practice models to be initiated. We will also determine evaluation mechanisms. After review by the Advisory Committee of stakeholders and the Key Partner group, this will be finalized and a workplan developed.
4. The Key Partner group will work with BDS and BMS to develop criteria for designation of integrated primary care/mental health services. The group will create performance measures and financial incentives. Activities will also include: determination of services to be delivered, examination of associated billing codes, agreement on criteria (staffing, licensure, etc.) for a designee to bill Mainecare for services, establishment of rates that will cover the costs of mental health treatment and case management and final agreement on project methodology (RFP vs. pilot site selection without RFP).
5. After input from the Advisory and Key Partner groups, pilot sites will be identified and a plan made to identify site champions and other stakeholders, since both the literature and stakeholder input indicate that this is central to Project success. We will provide preliminary education to these sites and involve them in seeking funding for the demonstration.
6. Funding will be sought from foundation sources for the demonstration project. A detailed workplan, including a timeline and deliverables, will be created in the grant proposals.

b. Outcomes

Because ours is a planning initiative, aimed at *improving capacity* to provide services, this project will lead to *process results* and *short-term outcomes* during Year 1. The former will include: practice assessment, Advisory Committee meetings and recommendations; creation of a research design and associated workplan to be used in the demonstration project, a written State Designation Plan by the Key Partner group, selection of pilot sites for the demonstration project and preparation of grant proposals for future funding.

We anticipate the *short-term outcomes* of the Project to include: increased stakeholder understanding of the integrated primary care/mental health model and the research design for the demonstration project, as well as support for the implementation of a statewide designation system.

Detail on the results/outcomes as well as evaluation mechanisms will be described in the "**Evaluation**" section. Once the planning period is over and the demonstration project initiated, we expect the models' implementation to have important long-term outcomes: a positive effect on the mental health of children and youth through early intervention and coordinated systems of care. The anticipated long-term outcomes include many systemic changes: increased expertise in detection and early intervention, increased coordination of information and treatment, improved health outcomes, increased systemic collaboration, increased family involvement, increased use of evidence-based assessment tools, increased use of evidence based treatments, decreased

barriers to care, more efficient use of scarce resources, and decreased use of emergency rooms, psychiatric hospitalization and use of out of community residential treatment.

c. Timeline

Grant period: September 1, 2003 - August 31, 2004

Activities	2003			2004								Result/Outcome	
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul		Aug
Assess Primary Care Practice Sites to Evaluate Needs													
Develop an assessment tool to evaluate needs	X												
Conduct the assessment		X											Assessment complete/report disseminated
Disseminate key findings in written report			X										Increased understanding integrated model
Convene Advisory Committee													
Meet quarterly	X			X			X				X		
Review "pre-planning" activities	X												
Activities	2003			2004								Result/Outcome	
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul		Aug
Review literature/practice models	X			X									
Review assessment				X									
Obtain recommendations for components				X									Meetings held:
Obtain consensus on outcomes				X									Recommendations re research design
Obtain input from Key Partners				X									and outcomes
Revise/finalize	X			X									Increased understanding of model
Develop Research Design													
Refine research questions		X	X	X	X								
Finalize outcomes, goals, performance measures			X	X	X	X	X						Written research report, work plan
Finalize models and key components					X	X	X						Approved and disseminated
Determine evaluation mechanisms and reporting							X	X					Increased understanding/support

requirements													
Review work plan with Advisory and Key Partner groups								X	X				for research design
Develop State Designation Plan													
Form Key Partner group/meet monthly	X	X	X	X	X	X	X	X	X	X	X	X	
Determine services to be delivered			X	X	X	X	X	X					Key Partner meetings held
Develop criteria for practices for billing purposes					X	X	X						Written Designation Plan developed
Develop performance measures						X	X						Increased understanding/support for
Determine rates for treatment, case mgt						X	X	X					research design
Establish associated billing codes							X	X					Increased support for
Reach agreement on RFP methodology								X	X				Statewide Designation System
Select Pilot Sites													
Review possible process with Advisory/Key Partner groups									X	X			Pilot sites selected
Activities	2003				2004								Result/Outcome
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
Implement site selection process (RFP or non-RFP)										X	X	X	Champions identified/site education
Identify champions and key stakeholders in pilot sites											X	X	Increased understanding/support for
Educate pilot sites re implementation												X	research design
Seek Funding Opportunities													
Work with pilot sites and key stakeholders on grant proposals											X	X	
Develop scope of work, work plan, timeline, deliverables and budget											X	X	Grant proposals developed

D. Evaluation

Process Results:

- Assessment of primary care practices completed and written report given to pertinent groups.
- Regular meetings of multidisciplinary Advisory Committee that comments on and provides input into key project activities. Products include recommendations for components, desired outcomes and overall design of the demonstration project.
- Development of the research design to be used, including practice models, outcomes, goals and performance measures. Creation of a written report and workplan. Approval by the Advisory Committee and Key Partner Groups.
- Regular meetings of the Key Partner Group to develop written State Designation Plan to be used in the demonstration phase. This will include practice criteria, services to be delivered performance measures, billing and rate designation.
- Pilot sites selected by RFP or other mechanisms, to be determined by Advisory and Key Partner Groups.
- Grant proposals created in collaboration with stakeholders and sites submitted to foundation funders, including MeHAF.

Measures: Activities completed 100%. Data sources: Written assessment, meeting minutes, written research design and workplan, written State Designation Plan, grant proposals and other project records. *Timeline:* Ongoing, all to be completed by end of Year 1.

Short-term Outcomes:

- Increased understanding (by all stakeholders) of the key components of an integrated primary care/mental health practice model
- Increased understanding of and support for the research design.
- Increased support for the implementation of a Statewide Designation System.

Measures: 100% of stakeholders in the Advisory Committee will understand and support the model, the research design and the designation plan developed by the project. Data sources: brief pre-post-project surveys developed and administered to Advisory Committee members. *Timeline:* Quarters 1 and 4.

E. Collaboration and Integration

This project builds on an established infrastructure of collaboration and extensive preliminary input on the components of an integrated system. As discussed, MCPH has a history of successfully collaborating with many key health care/public health stakeholders in its public health projects. In addition, Maine primary care physicians have a tradition of collaboration and innovation, as evidenced in the Maine Medical Assessment Foundation, the Maine Turning Point Project, involvement in healthy community coalitions and many other efforts.

This project will build on this history. It will strengthen the existing mental health system in Maine by enhancing primary care/mental health collaboration. To date, there are over twenty health care/mental health/consumer organizations throughout Maine that have expressed interest

and a commitment to strengthening this linkage. These include representatives of physician and mental health provider organizations, including "champions" who can help us define and educate regarding the practice models to be tested. This group includes new partnerships, such as that between the Maine Council on Child and Adolescent Psychiatry and the American Academy of Pediatrics, Maine Chapter, who intend to collaborate together on future projects.

Family members, the consumers of primary care and mental health services have been included in our discussions thus far and will be further represented on our Advisory Committee. We will continue to review literature on what works best from a consumer perspective and we will solicit their input on aspects of the projected practice model/s and on the planning process itself. Some practitioners who have been involved in the project have very successfully included families as key stakeholders in their practices and we will review their successes as well.

F. Staffing

Ann Conway, Ph.D. will be Project Director on this effort, providing overall coordination and liaison with MeHAF, our Advisory Committee and Key Partner groups. She will be responsible for MeHAF reports and development of future funding proposals. Dr. Conway has an extensive background in program management and also directs the Maine Turning Point Project. She is a past member of the National Alliance for the Mentally Ill. As mentioned, Paul Campbell, ScD, MPH will also provide research consultation on this initiative.

Beth Molnar, ScD, MPH is an Assistant Professor in the Department of Maternal and Child Health, Harvard School of Public Health, with research interests in children's mental health issues as well as their links to subsequent psychopathology. She will provide research consultation to our work.

Andy Cook, MD is BDS' Medical Director of Children's Services. A child psychiatrist with years of Maine-based clinical experience, he is past Assistant Clinical Professor at the University of Vermont College of Medicine and has held elected leadership positions in many medical and professional associations. He will provide clinical consultation services to our project and linkages with the provider community. Brenda Harvey, MEd, CRC is the Acting Deputy Commissioner for BDS and has served as Chair of the Governor's Mental Health Advisory Council. She will help us develop the administrative aspects of the project, especially the State Designation Plan. BMS and BOH representatives will serve on the Key Partner Group to help develop the Designation Plan. They will consult on other aspects of the project as necessary.

G. Sustainability

The MCPH will be seeking support from the Maine Health Access Foundation for the next "applied research" phase of this project, when the pilot sites will be functioning with integrated mental health services. Funding from other foundations will also be sought, if necessary, for research tasks. Project organizers know that sustainability beyond this research requires the involvement of key funders. For that reason, BDS and BMS (as well as other appropriate DHS Bureaus) have major roles in this planning phase.