CITIZENS HEALTH INITIATIVE

A Strategic Plan for Integrating the Work of New Hampshire's Public Health and Medical Care Systems

New Hampshire Citizens Health Initiative
Health Promotion and Disease Prevention Pillar Group

Updated May 2011

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The New Hampshire Citizens Health Initiative (the Initiative) was formed in early 2005. The Initiative builds on the work of the Endowment for Health's Pillars Project, with support from the University of New Hampshire and the Office of the Governor. The desire to build a long-term, sustainable structure to improve access to and management of health care services fueled its development. The goal of the Initiative is to build a system to measurably improve the health of the people of New Hampshire over the next decade.

The Health Promotion/Disease Prevention Pillar Project represents one of several core foci of the NH Citizens Health Initiative. The mission statement of the Health Promotion/Disease Prevention Pillar Group (HPDPPG), adopted in fall 2010, is "to facilitate the successful adoption at the organizational, community, and state levels of strategies to integrate the work of NH's health care and public health systems to improve the health of the people of NH."

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Executive Summary

"For too long, the personal health care++ and public health systems++ have shouldered their respective roles and responsibilities separately from each other…we need to invest in a process that mobilizes expertise and action…if we are to substantially improve community and population health."[1]

As illuminated by the above Institute of Medicine statement, on their own, neither public health nor medicine can effectively address the myriad factors impacting the health of a patient (the focus of medicine) or a population (the focus of public health). By performing their respective roles and responsibilities in tandem with each other, medicine and public health benefit from an increased: 1) capacity to carry out their individual missions through accessing the knowledge, skills, and capacity of the other discipline; 2) status and sphere of influence within a state/community; and 3) ability to respond to the economic and performance demands placed on each of them.[2]

A scattering of projects weaving together the work of public health and medical professionals in NH exist. To make a significant leap in addressing the major causes of death and disability in NH (tobacco use, unhealthy eating, sedentary lifestyle, and unhealthy alcohol use) will require a deliberate and calculated statewide strategy that links the work of medicine and public health. Developed by the Citizens Health Initiative's Health Promotion Disease Prevention Pillar Group (HPDPPG), this strategic plan provides a roadmap of action-oriented recommendations to catalyze and sustain collaborative work between NH's public health and medical care systems. Key plan recommendations include:

1. Obtain the input and support of key state level stakeholders on the plan content and implementation.
2. Identify a state level "home" for integration activity in NH.
3. Develop and distribute resources to support the use of "best practice" strategies for integrating the work of NH's public health and medical care systems.
4. Identify and implement strategies to catalyze collaborative action among public health, medicine, and community stakeholders within existing health promotion/disease prevention efforts in NH.
5. Build sustainable funding streams for integration activity in NH by "hardwiring" it into existing funding streams.
6. Develop mechanisms to continually acknowledge integration success/achievements.

++ Throughout this report the "personal health care system" is referred to as either the "medical care system" or "medicine." Public health throughout this report refers to population health.

Section I: Background

The New Hampshire Citizens Health Initiative (the Initiative) is a collaborative of citizen representatives, joined by businesses, medical providers, and community agencies focused on creating a system of care for New Hampshire that promotes health; where quality is assured; and care is accessible, affordable, effective and safe. Since the inception of the Initiative in 2005, the Health Promotion/Disease Prevention Pillar Group (HPDPPG) has focused on the question of how do we create a health citizenry in NH? As its first project, the HPDPPG produced "A Pound of Prevention" report (downloadable at http://www.nhhealthpolicyinstitute.unh.edu/pdf/032207PoundofPrevention.pdf) identifying the major causes of mortality and morbidity in NH as tobacco use, unhealthy eating, sedentary lifestyle, and unhealthy alcohol use. Building on this report, the HPDPPG then partnered with leading NH organizations in the areas of tobacco, nutrition, physical activity, and alcohol to promote the use of evidence-based interventions and policy to reduce the impact of these unhealthy behaviors. In 2009, the HPDPPG directed its attention to the strategic issue of how to foster more collaborative interaction between NH's public health and medical care sectors in order to improve the health of NH citizens. As illuminated by the Institute of Medicine:

> *"For too long, the personal health care and public health systems have shouldered their respective roles and responsibilities separately from each other…we need to invest in a process that mobilizes expertise and action…if we are to substantially improve community and population health."*[1]

On their own, neither public health nor medicine can effectively address the myriad factors impacting the health of a patient (the focus of medicine) or a population (the focus of public health). By performing their respective roles and responsibilities in tandem with each other as opposed to on parallel tracks, medicine and public health benefit from an increased: 1) capacity to carry out their individual missions through accessing the knowledge, skills, and capacity of the other discipline, 2) status and sphere of influence with a community/state, and 3) ability to respond to the economic and performance pressures placed on each discipline.[2]

The importance of linking the work of medicine and public health is permeating the national health reform dialog, most notably through the passage of the Patient Protection and Affordable Care Act in March 2010. For example, this legislation provides support to examine the use of the patient centered medical home (PCMH) care model. PCMH is defined as the delivery of primary care that is "accessible, accountable, comprehensive, integrated, patient-centered, safe, scientifically valid, and satisfying to both patients and their physicians.[3] One core tenet of the PCMH model is that care is coordinated not only across the health care system but also with the community-based services (CBS) and health promotion programs (HPP) needed to keep a patient healthy.[4] By the nature of its work promoting population health, public health can serve as a bridge for primary care to connect with the array of CBSs and HPPs available to their patient population. The Patient Protection and Affordable Care Act also includes opportunities for public health and medicine to collaborate on new preventive health service delivery models. For example, the Healthy Aging, Living Well demonstration project included in the legislation seeks to enhance the health status of individuals who will in the next ten years be Medicare eligible by providing community interventions to promote healthy lifestyles (such as increased physical activity), screenings for both mental and physical risk factors, and clinical referrals for those identified with chronic disease risk factors.[5]

Numerous state-level health reform initiatives incorporate the use of strategies to integrate the work of public health and medicine. Vermont, as part of their state health care reform effort passed in 2006, is incorporating the use of Community Care Teams (CCT) in their PCMH initiative. Comprised of experts from many disciplines, including medicine and public health, the CCTs seek to "help a general population engage with preventive health practices, and to improve health outcomes."[6] The CCTs support their

surrounding PCMH practices by providing care coordination services, linking patients to available community and public health services and programs, as well as participating in community health improvement processes to address the major underlying risk factors for chronic disease within the surrounding community.[6] In 2008 the state of Minnesota also enacted a state health reform bill that incorporates strategies to link public health and medicine. Coordinated by the Minnesota Department of Health, the Statewide Health Improvement Plan is designed to support comprehensive, multi-stakeholder initiatives (including the health care sector) to address obesity and smoking.[7] Through this legislation, the Minnesota Department of Health is also coordinating a statewide PCMH project, providing another interface between medicine and public health.[7] PCMH is also active in NH. In 2008, the Citizens Health Initiative launched a PCMH pilot project in nine primary site practices across the state (http://www.citizenshealthinitiative.org/index.cfm?id=F698B064-FA56-9CE4-D58622FEAD5F6176). Among the integration activities that are part of NH's PCMH pilot are the integration of behavioral health in one site and the use of electronic medical records across all sites. An active learning collaborative among all the NH PCMH's seeks to advance integrated activities as the project moves forward.

Based on the premise that collaborative health promotion efforts involving public health and medicine play a critical role in reducing the burden of preventable disease in NH, the HPDPPG began its work on this strategic issue in 2009. The HPDPPG started by gathering information on projects and programs taking place around the state directed at the coordination of public health sector efforts with medical care sector activity. Through this process, the HPDPPG: 1) gained an understanding of the breadth, depth, and range of integration activity occurring across the state (A Summary of the NH integration case studies reviewed is available at http://www.unh.edu/chi/media/meeting%20summaries/PublicHealthandPersonalHealthSystemIntegrationinNH.pdf); and 2) identified ways that the Citizens Health Initiative could move this pillar activity from study and review to support for specific actions and programs. Specifically with respect to the latter, the HPDPPG selected the following two action priorities for 2010:

1. Develop a state plan/strategy for fostering increased integration activity in NH
2. Identify and facilitate the connection between groups engaged in similar integration efforts

Section II: Plan Goal

The overarching goal of this plan is to create a climate in NH where interdisciplinary work between medicine and public health is the "norm" for promoting and protecting the health of NH citizens. This plan provides a concrete, yet flexible roadmap of action-oriented recommendations to catalyze and sustain collaborative work between NH's public health and medical systems along with other community stakeholders.

Section III: Methodology

After completing the above-noted NH integration case study review, the HPDPPG identified five key follow-up questions relative to creating a statewide movement aligning the work of public health and medicine in NH. These included:

1. Who are the system stakeholders that should be involved in a community initiative to integrate the work of the public health and medical care sectors?
2. How do we effectively engage identified stakeholders in a community initiative to integrate the public health and medical care sectors?
3. How do we effectively identify opportunities to integrate the work of the public health and medical care sector within a community?
4. What criteria should be used to evaluate whether an integration activity is "successful"?

5. How do we sustain these integration changes?

These five questions served as the framework for this state plan.

Since many interpretations of the terms "integration," "public health," and "medicine" exist, the HPDPPG then defined these terms to facilitate plan development.

Key Definitions

1. **Medical care/medicine:** Stakeholders in the health care/medical system whose services are reimbursed by health insurers (including, but not limited to, medical, dental, mental health, and nutrition practitioners).
2. **Public health:** Stakeholders whose work 1) focuses on promoting healthy conditions in the community AND 2) currently or in the future have the potential to directly intersect with the medical system.
3. **Integration:** The process of coordinating the knowledge, skills, and resources of the medical care and public health sectors in ways that maximize individual and population level health and well-being.

HPDPPG staff then searched and summarized available background research and information relative to each key question. Background research was collected from a variety of sources including: literature reviews, interviews with individuals involved in national and state level integration projects, the 2009 NH integration case study review, and internet searches. Building on this background information, staff then facilitated HPDPPG discussions to develop answers for each key question as well as discern implications relative to recommendation development. HPDPPG staff and leadership then reviewed the question answers and synthesized a draft list of key recommendations and associated activities. These draft recommendations and activities were presented to the HPDPPG for review and edited again based on feedback received.

Section IV. Key Findings

Question One: Who are the system stakeholders that should be involved in a community initiative to integrate the work of the public health and medical sectors?

The HPDPPG approached this question using the below parameters:

- The need to define "community" from two different perspectives - local (e.g. town/city) level and state level. The rationale for enumerating stakeholders at the state level is two-fold. First, in some cases, an integration project may operate statewide (for example, a state disease registry project). Second, some state level stakeholders (such as state professional associations) may have a role in encouraging their membership to participate in local integration efforts.
- In addition to stakeholders within the medicine and public health sectors, involvement of other community stakeholders such as funders, municipalities, schools, and employers in an integration project is critical as well.
- Certain stakeholder organizations will be involved in any integration project regardless of the health issue or population focus, while the involvement of others may be issue or population dependent.

Concurrent to identifying stakeholder organizations to engage in a community initiative, the HPDPPG examined the qualities of an ideal organizational representative to an integration team/partnership. Existing evidence suggested the following attributes as key:

- Passionate about the topic of integration and can serve as a "champion" for integration at their home organization[8,9]

- Visionary/entrepreneurial spirit[9]
- Provide influential backing/endorsement for integrative efforts[2,8,9]
- Through their work and/or education possess an understanding of both the public health and health care "worlds" and as such can function as a "boundary spanner/bridge" in an integration effort[2,10]
- Have the time (or will make the time) be involved[8]

In addition, the HPDPPG identified the below as crucial qualities of an organizational representative:

- Possess the authority to make decisions and are intimately knowledgeable about the "on the ground application" of integration concepts within their organizational setting
- Feel "the pressure" to explore integration as a way to alleviate current organizational "stressors"
- Personable, not abrasive

Core State Level Stakeholders

Table One outlines New Hampshire stakeholders that either should be involved in a **state level integration effort** and/or have a role to play in supporting local level stakeholder involvement in any medicine-public health integration project. In some cases, an organization may be listed as a representative of multiple sectors by the nature of its work. These organizations can serve as "boundary spanners" between the different sectors. Though expansive, as this plan is implemented, other stakeholders may need to be added to the below list.

Table 1
Core State Level Stakeholders

Medicine	Public Health	Community
NH Medical Group Mgt Association **Rationale:** a) link to local practice administrators who can educate their providers about integration and b) provide knowledge about practice setting/functioning	NH Public Health Association **Rationale:** a) disseminate info. & encourage participation of local practitioners, b) serve as state advocate for integration, and c) public health expertise	Large employers/purchasers (NH Purchasers Group on Health, Medicaid) **Rationale:** 1) Major purchasers of care that would benefit from integration activity and 2) help to create demand for integrated care
NH Hospital Assoc/Foundation for Healthy Communities **Rationale:** a) disseminate info. & encourage participation of local hospitals, b) link to existing integration efforts (HEAL) and physicians (since many own physician practices), and c) provide knowledge about their constituent audience	NH Dept of Health & Human Svcs, (particularly, Div. of PH Services) **Rationale:** a) access to knowledge, skills, & services provided by DHHS , b) data for evaluation work, c) link to PH personnel based in community settings (like PH nurses, health officers)	Funders (private & public) **Rationale:** a) provide resources to support medicine-public health efforts and b) discern linkages to related projects that they have funded and/or are familiar with
Higher education institutions w/clinical profession program(s) **Rationale:** a) offer courses/CEUs about integration concepts and biomedical concepts related to health promotion, b) possess clinical expertise, and c) facilitate access to students interested in participating in integration projects	Higher education institutions with public health and/or health education program(s) **Rationale:** a) offer courses/CEUs about integration concepts and on core public health (PH) fundamentals, b) possess public health expertise, and c) facilitate access to students interested in participating in integration projects	

Table 1
Core State Level Stakeholders

Medicine	Public Health	Community
Bi-state Primary Care Association **Rationale:** a) encourage participation of local community health centers (CHC), b) serve as state advocate for integration, c) provide knowledge about their constituent audience	Bi-state Primary Care Association **Rationale:** a) encourage participation of local community health centers (CHC), b) serve as a state advocate for integration, c) provide knowledge about their constituent audience	
NH Medical Society **Rationale:** a) disseminate info. & encourage participation of local practitioners, b) serve as a state advocate for integration , c) possess clinical knowledge, and d) provide knowledge about their constituent audience	NH Medical Society **Rationale:** a) disseminate info. & encourage participation of local practitioners, b) serve as a state advocate for integration , c) possess clinical knowledge, and d) provide knowledge about their constituent audience	
NH Nurse Practitioner Assoc. **Rationale:** a) disseminate info. & encourage participation of local practitioners, b) serve as a state advocate for integration , c) possess clinical knowledge, and d) provide knowledge about their constituent audience		
NH Nurses Association **Rationale:** a) disseminate info. & encourage participation of local practitioners, b) serve as state advocate for integration, c) possess clinical expertise, and d) provide knowledge about their constituent audience		
NH Community Behavioral Health Association **Rationale:** a) disseminate info/encourage participation of community mental health centers (CMHC), b) serve as a state advocate for integration, c) provide knowledge about their constituent audience, and d) offer clinical expertise	National Association of Social Workers – NH Chapter **Rationale:** a) disseminate info/encourage participation of local practitioners, b) serve as state advocate for integration, c) provide knowledge about their constituent audience, and d) offer clinical knowledge	National Association of Social Workers – NH Chapter **Rationale:** a) disseminate info/encourage participation of local practitioners, b) serve as state advocate for integration, c) knowledge about their constituent audience, and d) clinical knowledge
NH Psychological Assoc. **Rationale:** a) disseminate info. & encourage participation of local practitioners, b) identify opportunities to fold integration into State Mental Health Plan, c) provide clinical expertise, and d) offer knowledge about their constituent audience		

Core Local Level Stakeholders

Table Two outlines stakeholders that should be involved in **any local level medicine-public health integration project**. In some cases, an organization may be listed as a representative of multiple sectors by the nature of its work. These organizations could serve as "boundary spanners" between the different sectors. Though expansive, as this plan is implemented, other stakeholders may need to be added to the below list.

Table 2
Core Local Level Stakeholders

Medicine	Public Health	Community
Hospitals **Rationale:** a) access to physicians since many own physician practices, b) major player in local health care system, & c) major local purchaser of care that would benefit from integration activity	NH Public Health Networks and/or Departments (where they exist) and NH Div. of Public Health Services (in areas with no Public Health Network or department) **Rationale:** a) provide link to local public health sector, b) provide link to local social/health/human service agencies/orgs (e.g. health officers), and c) provide link to key local community players (fire, police, school, etc)	NH Public Health Networks and/or Departments (where they exist) and NH Div. of Public Health Services (in areas with no Public Health Network or department) **Rationale:** a) provide link to local public health sector, b) provide link to local social/health/human service agencies/orgs (e.g. health officers), and c) provide link to key local community players (fire, police, school, etc)
Community Health Centers (CHC)/ Federally Qualified Health Centers **Rationale**: a) many already using integrative care approaches (like patient centered medical home (PCMH)) since they receive Federal funding for this service, 2) ability to positively impact the high risk population they serve, 3) clinical expertise, and 4) major player in local health care system	Community Health Center/Federally Qualified Health Centers **Rationale:** a) many already using integrative care approaches (like patient centered medical home (PCMH)) since they receive Federal funding for this service, b) ability to positively impact the high risk population they serve, c) clinical expertise, and d) major player in local health care system	Funders (private & public) **Rationale:** a) provide resources to support medicine-public health efforts and b) discern linkages to related projects that they have funded and/or are familiar with
Private Provider Practices (specifically, the practice administrator) **Rationale:** a) access to clinician stakeholders, b) administrator knowledge of practice setting/functioning , and c) access to clinical knowledge	State level PH personnel based in community settings (e.g. PH Nurses & Immunization staff funded by NH DHHS through the PH Networks) **Rationale:** link to knowledge, skills, & services provided by DHHS Programs	Larger employers/purchasers (business, hospital, municipality) **Rationale:** a) Major purchasers of care that would benefit from integration activity and b) help to create demand for integrated care
Higher education institutions and technical high schools w/clinical program(s) **Rationale:** a) access to students interested in community projects, b) potential link to an existing local integration program (preventive medicine residency program), c) offering of courses/ CEUs to local practitioners about integration concepts and biomedical underpinning of disease, and d) access to clinical knowledge	Higher education institutions with public health program(s) **Rationale:** a) access to students interested in community projects, b) offering of courses/CEUs to local practitioners about integration concepts and core public health fundamentals, and c) access to public health expertise	

In Appendix One and Two, respectively, are two tables (one at a state level and another at the local level) describing additional stakeholders that may be involved in a medicine and public health integration project, depending on the health issue or population focus.

Question Two: How do we effectively engage identified stakeholders in a community initiative to integrate the public health and medical care sectors?

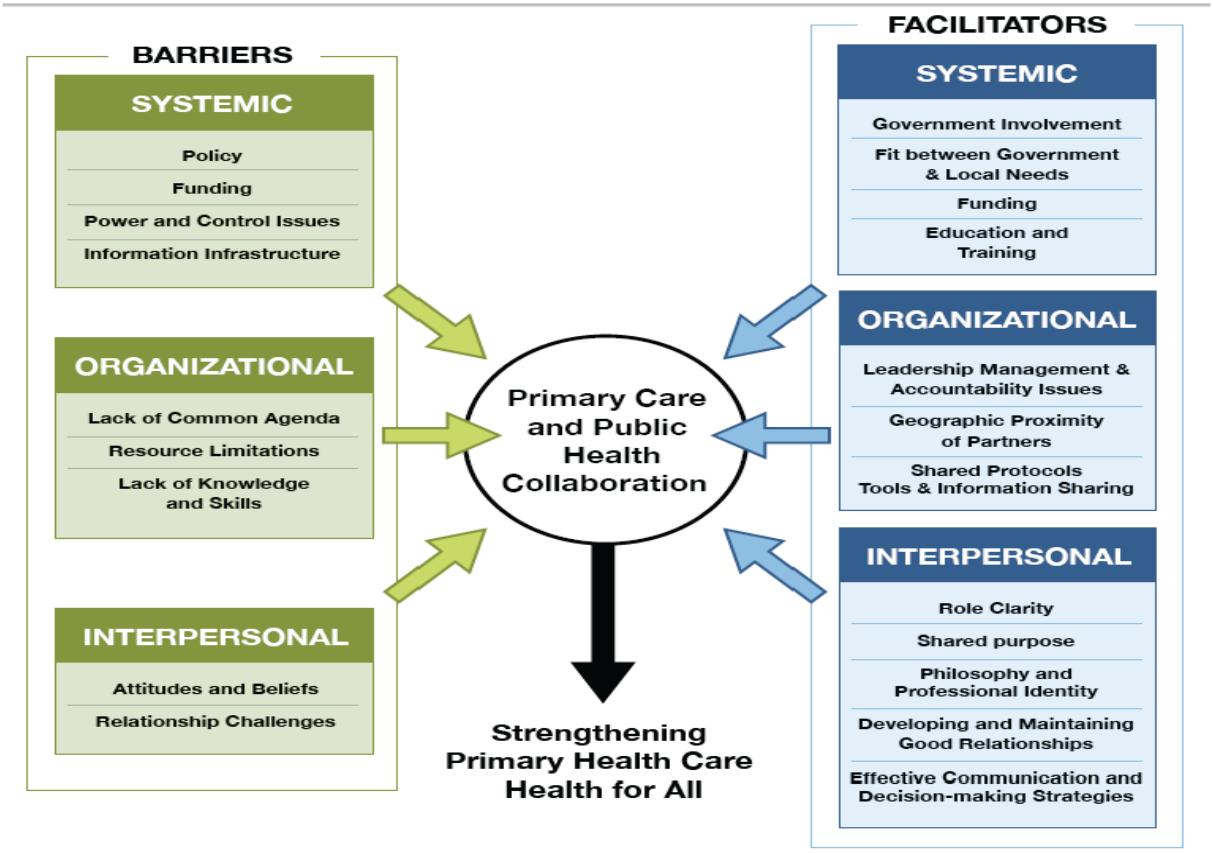
In order to have effective engagement, identified stakeholders first need to understand: 1) what integrating the work of public health and medicine means and 2) the benefits it provides to both the stakeholder's organization/clientele and to those individuals participating in the integration effort. To this end, Table Three summarizes the key audiences, messages, and potential outreach methods for an education/awareness campaign in NH about integration.

Table 3
Key Audiences, Messages, and Potential Outreach Methods for an Awareness Campaign about Integration

Stakeholder Organization	Individuals to Target	Key "Integration" Message	Potential Outreach Methods
Hospitals, community health Centers, Private primary care practices, NH Medical Group Mgt Assoc., NH Medical Society, NH Nurses Practitioner Assoc.	1. Leadership (CEOs, CFOs, Medical Directors) 2. Practice Administrators 3. Clinicians	1. Define integration and public health 2. Demonstrate integration in action by providing a case study highlighting a successful (and ideally NH based) integration effort that incorporates the involvement of the stakeholder organization to whom the presentation is targeted 3. Describe how integration will help address current pressures faced by the stakeholder organization (e.g. for employers - lower health care costs, increased productivity via lower employee absenteeism) 4. Offer a set of next steps for the stakeholder organization to learn more about and support/ become involved in an integration effort.	1. Presentations at meetings of stakeholder association groups 2. Association Listserve blasts 3. On-line trainings (with CEUs attached) 4. Develop a social media site for "integration in NH" to link "fans" of integration
Purchasers of health care (NH Purchasers Group on Health and other business/ commerce associations)	1. Leadership (CEOs, CFOs, Human Resource Mgrs, directors)		
NH-focused health/ health care funders	1. Leadership		
Public Health Networks (PHN)/NH Public Health Association (NHPHA), NH Dept of Health & Human Svcs.	1. PHN Leadership 2. NHPHA Board 3. Leaders of programs w/i Div. of PH Svcs., & Office of Medicaid Business & Policy, & Bureau of Behavioral Health)		

Once a stakeholder organization believes in the value of integration, creating an environment that supports healthy interactions among all organizations involved in a medicine-public health integration project becomes critical. To create this context requires minimizing the barriers and accentuating the facilitators to collaborative action. A team of Canadian researchers has developed the below framework depicting the barriers and facilitators to collaboration specifically between primary care and public health.[11] (See Figure One.)

Figure 1
Themes of Barriers and Facilitators for Primary Care and Public Health Collaboration



Source: Martin-Misener R, Valaitis R. A Scoping Literature Review of Collaboration between Primary Care and Public Health: A Report to the Canadian Health Services Research Foundation. 2008 (revised 4/1/2009), p. 19.

Using a slightly modified version of this framework (One additional "systems level" barrier, lack of external demand for integration, was added to the framework.), the HPDPPG developed a table listing specific factors falling under each barrier/facilitator domain. These factors were identified from a variety of sources including the above mentioned Canadian report, the 2009 NH case study review, the previous integration experiences of HPDPPG members, as well as other information sources.[2,8,9,12] The final version of this table can be found in Appendix Three – Barriers and Facilitators to Collaboration between Public Health and Medicine.

Since resources do not exist to address all the barriers and facilitators to collaboration between medicine and public heath, three members of the subcommittee were involved in a small prioritization exercise to pinpoint the most important ones to address. The prioritization criteria included frequency with which the barrier/facilitator occurred, importance, and feasibility of addressing. Table Four lists the top barriers while Table Five outlines the top facilitators to integration identified through the small group exercise.

Table 4
Top Integration Barriers

Barrier Domain	Examples of Factors Under this Domain
Lack of knowledge/skills	Lack of knowledge/skills about: 1. What integration is 2. The discipline and work of public health 3. How to integrate the work of public health and medicine 4. How to manage/organize interdisciplinary partnership/team work
Lack of common history/agenda	1. Lack/limited previous history of public health and medicine working together 2. Different target audience focuses (individuals for medicine and populations for public health) 3. Org. policies/practices that impede collaborative work
Beliefs/attitude barriers	1. Lack of understanding/valuing of public health 2. Lack of trust among team/partnership members 3. Doubts about capacity of collaboration to make a difference 4. Philosophical differences between partnership/team members (for example, not sharing the same mission for team/partnership work)

Table 5
Top Integration Facilitators

Facilitator Domain	Examples of Factors Under this Domain
Create a common focus between public health and medicine	1. Find common ground (win-win situations) for collaborative work. Build on the self interests AND health interests of organizations involved in the integration effort. 2. Ensure that public health and medical academic training programs teach the underpinnings and value of collaborative work between public health and medicine. 3. Examine org. policies and practices to ensure they promote collaborative work
Shared protocols, tools, information	1. Standardized, shared data collection system to facilitate interdisciplinary care (such as electronic medical records) 2. Shared protocols to facilitate evidence-based, interdisciplinary practice 3. Shared strategies and care processes 4. Evidence-based toolkits & decision support tools
Create external demand for integration	1. Outreach to and involvement with employers to support the need for integration work between public health and medicine 2. Alignment of benefit design, funding, and incentives to support integration efforts (for example, assuring that clinical preventive services are covered in health benefit packages)

Due to the limited scale of this prioritization exercise, the HPDPPG agreed it would be beneficial to have a follow up discussion with the "core state stakeholders" listed on pages 8–9 to augment understanding about the barriers and facilitators to integration activity in NH before discerning actionable strategies to create an environment in NH conducive to integration activity.

Question Three: How do we effectively identify opportunities to integrate the work of the public health and medical care sector within a community?

To address this question, two key issues were examined: 1) what are the "prime opportunities" for collaborative work between medicine and public health and 2) what methods could be used to identify/catalyze collaborative opportunities?

Previous research points to several "prime opportunities" for collaboration between public health and medicine. Some examples include focusing collaborative efforts on reducing the burden of chronic disease and improving the delivery of core public health services (such as health surveillance and promotion).[9,11,13] These "prime opportunities" mirror the areas where collaboration is already occurring in NH (as identified by the 2009 NH integration case study review) as well as to current projects being conducted under the broader New Hampshire Citizens Health Initiative (the Initiative) umbrella. For example, the Initiative's Patient Centered Medical Home and Accountable Care Organization Pilot Projects both seek to improve population health outcomes and the quality of care provided by coordinating clinical and community/public health services for patients served by health care delivery organizations participating in the pilots. Lastly, evidence also highlights the importance of considering community "readiness" to address a given health issue before embarking on a collaborative medicine-public health integration project.[14]

Many strategies for identifying linkages between public health and medicine have been proposed and/or used. They include tactics such as enveloping integration strategies into state health reform bills,[15] holding conferences/summits on how to spearhead collaboration,[16] developing centers at Universities that help communities undertake collaborative work (including finding the synergistic opportunities), offering continuing education opportunities outlining the need for collaborative work,[16] including medical community representation on state and local public health agency advisory committees,[12] and incorporating public health representation on state and local medical society governing and policy making boards.[12]

In light of this information, the following suggestions for catalyzing more collaborative interactions between public health and medicine were developed by the HPDPPG:

- Focus initial efforts to catalyze integrative projects in NH on the health behavior priorities of unhealthy eating, sedentary lifestyle, tobacco use and unhealthy alcohol use. These four health behaviors represent the leading causes of illness and death in NH. Furthermore, research supports the importance of collaborative action to reduce the burden of chronic disease caused by these underlying risk factors.
- Assure the target community is "ready" for an integration project. Two potentially useful "readiness" criteria include: a) do medicine, public health and community stakeholders all view a given health issue as a community priority? and 2) does the community currently have a data-driven, broad-based community health improvement planning coalition/effort in place to drive the integration project? Of note, with respect to implementing these criteria, the NH Public Health Improvement Action Plan (PHIAP) effort is currently cataloging NH community coalitions and partnerships via its website at http://nhphplan.org/. Information collected by these surveys could be used to identify community partnerships where both medicine and public health are at the table and identify the health priorities in communities across NH.
- Identify opportunities for institutionalizing communication and collaboration between state level medical associations (such as the NH Medical Society (NHMS)) and public health organizations (particularly, the NH Public Health Association (NHPHA) and the NH Division of Public Health Services (NH DPHS)). Though the previous NHMS Executive Vice President has served on the NHPHA's Board of Directors, the Board currently includes no NHMS representation. The NHMS does have a

Public Health Committee, but its current activity level is unclear. Beyond the NHMS, other medical associations to involve in these discussions include the NH Nurses Association, NH Nurse Practitioner Association, and the NH Hospital Association.

- Encourage all state health plans to incorporate the use of integration strategies. For example, the NH Healthy Eating Active Living (HEAL) Action Plan (downloadable at http://www.healnh.org/statewideInitiative/docs/HEALactionPlan.pdf) provides a wealth of evidence-based strategies and resources to implement cross-sector approaches to addressing obesity at a community level.
- Build on the 2009 joint HPDPPG/NHPHA fall forum focused on the theme of integrating the work of public health and medicine to organize a Northern New England integration conference to facilitate joint learning and communication with colleagues in Vermont and Maine also working on this issue.
- Capitalize on the NH Citizens Health Initiative's Patient Centered Medical Home and Accountable Care Organization Pilot Projects to initiate collaborative work between medicine and public health in the host communities for these pilots.
- Understand the current and potential opportunities for New Hampshire-based health institutes (in particular, Dartmouth's Prevention Research Center) to facilitate community level integration initiatives.
- Use the "best practices" recommendations outlined for the health care sector within the NH HEAL Action Plan to initiate collaborative work with public health and community stakeholders to address the issues of physical activity and nutrition.
- Examine a current NH community already heavily engaged in projects integrating the work of public health and medicine (for example Keene's Vision 2020 community health improvement effort) to identify key lessons learned about sparking integration activity between medicine and public health that could be used in a community where the need for integration is high, but no or minimal integration activity is occurring.

Question 4: What criteria should be used to evaluate whether an integration activity is "successful?"

Sparse evidence exists about what indicators should be used to gauge whether an integration activity involving public health and primary care is "successful."[11] Some indicators that have been employed include:[11]

- There was a feeling of being part of a team
- Full co-location of team members
- Health related outcome was improved
- Access to health services improved
- Health-related knowledge, attitude, or behaviors were improved
- Capacity and expertise were increased
- New collaborative initiatives were started
- Programs were sustained

The literature is also absent of sufficient evaluation data to determine answers to questions such as: what is the best way to operationalize an integration activity and do integrated efforts work better than individual organization efforts to improve community capacity to achieve health and health system goals?[11]

With respect to supporting NH integration efforts in evaluating the impact of their efforts, the following key strategies were identified by the HPDPPG:

- Help communities realize the importance of developing their evaluation plan before beginning their implementation phase.
- Assist communities in developing evaluation plans that accommodate their needs and budget. For example, providing support to help communities meet funder evaluation requirements.
- Recognize that communities, in general, are focused on evaluating intervention outcomes (e.g. did the intervention make a difference). Measures to evaluate the actual intervention process are rarely collected. For communities to develop evaluation plans that incorporate process and outcome measures, they need to be aware of: a) the value of process measurement and b) how to frame process oriented evaluation questions.

Question 5: How do we sustain these integration changes?

Based on existing evidence, several key factors influence whether a public health and medicine integration partnership/initiative is sustained. These factors are described in Table Six.

Table 6
Factors Influencing the Sustainability of a Public Health & Medicine Integration Partnership

Sustainability Factor	Explanation/Definition	Significance Relative to Sustainability
Commitment[2,8,9,17]	Stakeholders see the value of integrated approaches and are dedicated to the continued use of these approaches in their work.	1. If an organization is not committed to integration, then continued involvement is unlikely. Integration needs to be seen as a "core/mission" activity.
Resources[2,9,11,17]	Money, time, skills, knowledge, equipment, etc. needed to enact integration projects.	1. Resources are needed to sustain partner/team administration and the intervention.
Governance & Infrastructure[2,8,9]	A forum/vehicle (for example, a coalition, memorandum of understanding, etc.) that facilitates communication and coordination among the stakeholders involved in an integration effort.	1. Provide a vehicle for relationship building, shared decision making, communication & control. 2. Facilitate shared ownership of the collaborative process/ project.
Knowledge Transfer[9,10,16]	Methods/processes to 1) proactively plan for leadership and staffing changes, 2) inform stakeholders of current project status/outcomes, and 3) educate health profession students and practitioners about integrative team approaches to population health issues.	1. Make turnover/succession changes smooth. 2. Institutionalize a way for key stakeholders/leaders to stay informed about partnership/ project work. 3. Create a pipeline of health professionals that understand and value integration.

Table 6
Factors Influencing the Sustainability of a Public Health & Medicine Integration Partnership

Sustainability Factor	Explanation/Definition	Significance Relative to Sustainability
Measurement[8,9]	Collecting and reporting data monitoring the implementation and results of an integration effort.	1. Demonstrate outcomes (e.g. value) of partnership work (early win). 2. Monitor outcomes to assure they're sustained.
Celebration[8,9]	Developing mechanisms to recognize achievements made by the stakeholders involved in an integration effort.	1. Acknowledge accomplishments & energize commitment to future work. 2. Build relationships among partners.

Using the above factors as a guide, the HPDPPG developed the list of potential strategies outlined in Table Seven, for sustaining statewide interest in integrating the work of public health and medicine.

Table 7
Potential Strategies for Sustaining Statewide Interest for Integrating the Work of Public Health & Medicine

Sustainability Factor	Potential Strategy
Commitment	1. Build the commitment of core state and local stakeholders (See tables outlining "core stakeholder" groups in Question One) to the concept of integration by implementing the "integration awareness" campaign outlined in Question Two. 2. Identify ways to encourage the use of integration strategies into existing programs/activities of core state and local stakeholders identified in Question One. a. For example within the medical sector, promote the use of integration strategies within the Patient Centered Medical Home (PCMH) and Accountable Care Organization (ACO) pilots spearheaded by the NH Citizens Health Initiative. b. Explore with NH-focused health/health care funders the possibility of developing and implementing grant review criteria related to integration. For example, does this grant application encourage/employ collaboration between public health and medicine within their proposed scope of work? c. Explore with the NH Dept. of Health and Human Services the possibility of: i. Including in state contracts for medical care services a requirement for the contractor to be a participating member of a local public health network/department (and vice-versa for public health related contracts to be connected with local medical service contractors such as Community Health Centers and/or Mental Health Centers). ii. Spearheading a conversation among DHHS bureaus/divisions to identify ways to support state and local integration efforts through joint contracting arrangements, common data collection requirements, etc.

Resources	3. In addition to the above strategies that would help to facilitate sustainable funding streams for integration work, provide education/technical assistance opportunities (webinars, etc) for state and local level integration efforts to learn strategies for diversifying their funding streams.
Governance/ Infrastructure	4. Engage core state stakeholders (see table outlining these groups in Question One) to identify a state level "home"/"shepherd" to build/maintain momentum for the use of integration strategies in NH.
Knowledge Transfer	5. Explore mechanisms (annual conference, learning collaborative) to build communication, explore synergies, and share lessons learned among integration efforts occurring in NH. 6. Approach post-secondary institutions in NH offering health profession degrees (such as nursing, medicine, social work, public health) about: a. Offering courses/seminars to build the skillsets of current students and local practicing professionals to effectively participate in interdisciplinary team projects. b. Identifying ways to proactively link state and local integration projects to students in health profession programs that have an internship requirement. 7. Provide opportunities (webinars, learning collaboratives, social media channels, etc) for state and local level integration efforts to learn strategies for addressing knowledge transfer issues such as leadership succession planning, institutionalizing mechanisms to keep key stakeholders informed of progress/outcomes, and project staff turnover.
Measurement	8. Explore the possibility of developing a statewide research project that: a. Formulates a standard set of process tools/measures that could be used by integration efforts across the state (such as the PCMH and ACO pilots being facilitated by the Initiative, Keene 2020, the Prevention Research Center) to evaluate strategies for, the contribution of, and return on investment in employing integration strategies. b. Compares and summarizes process measures against outcomes measures achieved by integration efforts statewide to examine questions such as: Does collaboration work better than individual organizational efforts to address community health concerns and what are evidence-based "best practices" for organizing integration efforts? c. Feedback evaluation data about integration projects in NH to core state and local stakeholders identified in Question One. 9. Provide opportunities (webinars, learning collaboratives, social media channels, etc) for state and local level integration efforts to build their competency and share lessons learned about designing and implementing evaluation plans that incorporate both process and outcomes measures.
Celebration	10. Develop mechanisms to continually acknowledge integration success/achievements. For example, at the state level, an annual integration conference could be held to recognize the achievements of state and local integration efforts. At a local level, an annual event that updates the community about the past year's integration achievements and acknowledges local "champions for integration" with an award could be initiated.

Section V. Health Promotion Disease Prevention Pillar Group (HPDPPG) Recommendations

The HPDPPG offers the below set of recommendations and associated activities to launch a statewide effort to integrate the work of NH's public health and medical systems. These recommendations are listed in priority order; however, some may occur simultaneously, occur out of priority order based on available resources, and/or be addressed by a variety of stakeholders across the state. Since resources are not available to address every population health concern, the HPDPPG supports focusing the below recommendations initially on the four health behavior priorities of tobacco use, unhealthy eating, sedentary lifestyle, and unhealthy alcohol use. These four health behaviors provide a logical starting point for integration activity in NH as: 1) they represent the major underlying risk factors for mortality and morbidity in NH,[18] 2) previous research supports addressing health risk behaviors through the use of integration strategies,[9,11,13] 3) the NH DHHS, specifically the Division of Public Health Services, has focused new efforts, such as activities under the NH Public Health Improvement Action Plan and Center for Disease Control's Assessment Initiative (a cooperative agreement with UNH to expand access to health/health care data via the NH Web Reporting and Query System), on these four health behavior priorities, and 4) they mirror the same risk factors that several programs under the Patient Protection and Affordable Care Act are targeting.

1. Obtain the input and support of key state level stakeholders on the state integration plan content and implementation.

For this plan to have traction, it must be supported by key medicine, public health, and community stakeholders. Additionally, these stakeholders can provide valuable feedback about plan implementation. At minimum, the key stakeholders include those listed on the Core State Stakeholders Table on pages 8–9.

Activities

Host a meeting (s) of key stakeholder groups to gather their input about plan recommendations and implementation. For example,

i. Where would be an appropriate state level "home" to spearhead a movement in NH for integrating the work of public health and medicine?

ii. What are the most pressing barriers to integrating the work of public health and medicine in NH as well as the strategies to overcome these barriers?

iii. What strategies could be used to "hardwire" connections between medicine and public health at the state and community level (for instance, cross-membership on boards/subcommittees of the NH Public Health Association and the NH Medical Society)?

2. Identify a state level "home" for integration activity in NH.

To maintain statewide momentum for the use of integrative strategies requires having an accountable entity or entities that share accountability for keeping this issue at the forefront. Furthermore, groups in NH interested in integration projects currently have no central point of contact in NH for this expertise. The state level "home" (or "homes") would be responsible for: 1) assisting with the implementation of the recommendations outlined in this plan, 2) producing an annual summary of the progress made with respect to the State Integration Plan, 3) as necessary, convening appropriate stakeholders to update plan recommendations, and 4) serving as a central point of contact for integration activity.

This "home" for NH's integration movement would ideally possess the following attributes:

- Integrating the work of public health and medical care directly relates to its organizational mission
- Is intimately knowledgeable about and connected with both the NH public health and medical care systems (i.e. can function as a "boundary spanner")
- Possesses concrete experience with implementing integration projects involving public health and medicine
- Is well-respected for conducting quality work

3. Develop and distribute resources to support the use of "best practice" strategies for integrating the work of NH's public health and medical care systems.

Initiating a statewide integration movement requires that stakeholders understand what integration is and the benefits it provides. For example, how will integration strategies help relieve current pressures faced by clinicians and public health practitioners? Once stakeholders believe in the value of integrated work, they will need "best practices" resources and the requisite skills to apply them.

Activities

a. Create educational materials introducing the concept of integration to key public health, medical care, and community stakeholders. These materials should be tailored to the language and interests of each stakeholder group as well as distributed via multiple channels. They should also be used as an opportunity to market the State Integration Plan. (See table on page 11 for a summary of suggested audiences, messages, and channels for integration awareness and outreach efforts).

b. Create a web-based inventory of evidence-based tools, resources, and case studies for implementing integrative approaches that address the four health behavior priorities for NH.

c. Discern and develop appropriate mechanisms (webinars, learning collaboratives, "Linked In" on-line learning community, conferences, courses, etc) to enhance NH medical and public health student and practitioner knowledge and skills to implement integration projects (e.g. evidence-based practice, interdisciplinary team work/building, sustainability planning, evaluation design, etc).

d. Reach out to organizations in NH currently facilitating projects with an integration component (such as the Community Health Institute, Dartmouth Medical School's Prevention Research Center, the NH Institute for Health Policy and Practice, and the Foundation for Healthy Communities) to discern ways to build on each other's knowledge, skills, and capacities to jointly:

    i. Develop resources (such as those noted above) and grant applications to support integration activity in NH

    ii. Initiate a statewide research and evaluation consortium to examine and share best practices in the state for integrating the work of public health and medicine. This consortium would:

        1. Examine the possibility of using a common set of process tools/measures that could be used by integration efforts across the state to evaluate strategies for, the impact of, and return on investment in employing integration strategies.

        2. Conduct and disseminate cross-cutting analysis to examine research questions such as what are evidence-based "best practices" for organizing medicine-public health collaborative efforts?

e. Develop briefs summarizing the impact/implications of national and state health policy developments on the implementation of integration strategies in NH.

These briefs would highlight how state and national health policies could facilitate or hinder integration efforts and/or the role integration could play with the implementation of a given health policy. An example of the former could be a brief examining advances with respect to implementation of NH's State Health Information Exchange/Health Information Technology Plan and ways integration projects could leverage these advances. An example of the latter could be a brief featuring the role integration could play in helping NH's medical care and public health systems prepare for the influx of newly insured patients as a result of recent Federal health reform legislation.

f. Identify and build upon available opportunities (such as class projects, seminars, internships, etc) to involve students in health/health care professional degree programs in NH with NH-based integration projects.

4. Identify and implement strategies to catalyze collaborative action among public health, medicine, and community stakeholders within existing health promotion/disease prevention efforts in NH.

This recommendation centers on "real time" avenues to start implementing integration strategies in NH. In addition, it encourages the "hardwiring" of integration strategies into the existing NH health promotion/disease prevention infrastructure.

Activities

a. Promote the simultaneous use of clinical and public health strategies targeting NH's four health behavior priorities within the Patient Centered Medical Home (PCMH) and Accountable Care Organization (ACO) pilots spearheaded by the NH Citizens Health Initiative.

b. Support and collaborate with public and private programs focused on the prevention of one or more of NH's four health behavior priorities in their efforts to promote the use of both clinical and public health/community strategies. For example, encourage these organizations to incorporate in their state plans/strategies the use of integration strategies and promote the use of tools/resources created by these programs to foster more integrative activity.

c. Examine current NH efforts already heavily engaged in projects integrating the work of public health and medicine (for example, a community health improvement effort, a patient-centered medical home practice site, etc) to identify key lessons learned that could be used in other settings where the need for integration is high, but no or minimal integration activity is occurring.

d. Building on Recommendation One, discern key state level stakeholder interest in initiating a statewide integration project (for example, a state registry project). If interest exists, identify and conduct an integration project that focuses on mutual areas of interest and benefit.

5. Build sustainable funding streams for integration activity in NH by "hardwiring" it into existing funding streams.

Creating sustainable funding streams for integrative work is crucial to maintaining interest and capacity to undertake integration efforts.

Activities

a. Discuss with NH-focused health/health care funders the possibility of developing and implementing grant review criteria related to integration. For example, does a grant application encourage/employ collaboration between public health and medicine within their proposed scope of work?

b. Monitor and disseminate new grant announcements that could fund integration projects.

c. Explore feasible strategies to link public health, medicine, and community stakeholders within the grant and contract processes of state agencies involved in addressing NH's four health behavior priorities (at minimum, the NH DHHS, the NH Department of Environmental Services, the NH Department of Transportation, the NH Department of Education, the NH Office of Energy and Planning, and the NH Department of Resource and Economic Development). Examples of potential strategies could include:

   i. Encouraging the use of grant/contract eligibility requirements that support medicine-public health collaboration. For example, an organization applying for a contract to provide medical services in a community could be required to be actively involved with their local public health network/department.

   ii. Encouraging grant applicants to demonstrate in their proposed scope of work how they plan to link to local medicine and public health stakeholders. For example, a community-based organization applying for a grant to develop a map of local walking trails could be required to demonstrate how they plan to involve medicine and public health stakeholders in its development and/or dissemination.

   iii. Identifying ways to build upon existing and create new joint contracting and data collection arrangements among and within state agencies to support state and local integration efforts focused on the four health behavior priorities for NH.

6. Develop mechanisms to continually acknowledge integration successes/achievements.

Maintaining statewide interest in and momentum for integration will require that the contributions of and achievements made by those involved in integration projects be recognized.

Activities

a. Host an annual state integration conference to recognize the achievements of state and local integration efforts.

b. Develop an award to acknowledge state and local integration "champions."

Section VI. Bibliography

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Appendix One

Additional State Stakeholders to Involve in a Medicine-Public Health Integration Project Depending on the Health Issue or Population Focus

Additional State Level Stakeholders

Below are additional state level stakeholders that could be added to the list of core state stakeholders (see page 8) depending on the health issue and/or population level focus of the integration activity. In some cases, an organization may be listed as a representative of multiple sectors by the nature of its work. These organizations could serve as "boundary spanners" between the different sectors. Though this list is expansive, it is not exhaustive of all stakeholders.

ADDITIONAL STATE LEVEL STAKEHOLDERS		
Medicine	**Public Health**	**Community**
State Correctional Health System, (Medical & Forensic Services) **Rationale:** identify opportunities to integrate physical, social & mental services for the incarcerated (high risk population)	NH School Nurse Association **Rationale:** a) disseminate info/ encourage participation of local practitioners, b) serve as state advocate for integration, c) provide knowledge about their constituent audience, and d) offer clinical knowledge	National Alliance for the Mentally Ill (NAMI) - NH Chapter **Rationale:** 1) are facilitating a group focused on integrating behavioral health & medical care, 2) link to general public via their advocate network, and 3) provide link to local mental health practitioners
NH School Nurse Association **Rationale:** a) disseminate info/ encourage involvement of local practitioners, b) serve as state advocate for integration, c) provide knowledge about their constituent audience, and d) offer clinical knowledge	NH Minority Health Coalition **Rationale:** Possess knowledge about and access to culturally/ethnically diverse populations	NH Minority Health Coalition **Rationale:** Possess knowledge about and access to culturally/ethnically diverse populations
NH Dental Society **Rationale:** a) disseminate info. & encourage participation of local practitioners, b) serve as state advocate for integration, c) possess clinical knowledge, and d) provide knowledge about their constituent audience	State Departments providing services/programs that promote & protect public health (such as Dept of Safety, Transportation, etc.) **Rationale:** access to knowledge, skills, & services provided by the Department	General Public (Friends of Recovery NH, NH Voices for Health, etc.) **Rationale:** a) direct beneficiary of integrated care and b) their support is needed to create demand for integration.
NH Dental Hygienist Association **Rationale:** a) disseminate info. & encourage participation of local practitioners, b) serve as state advocate for integration, c) clinical knowledge, and d) knowledge about their constituent audience	NH Bureau of Behavioral Health (BBH) **Rationale:** access to knowledge, skills, & services provided by BBH programs	State Departments providing services/ programs that promote & protect public health (such as Dept of Safety, Transportation, etc.) **Rationale:** access to knowledge, skills, & services provided by their Department.
Home Care Association of NH **Rationale:** a) disseminate info/encourage participation of local VNAs, b) serve as a state advocate for integration, c) possess knowledge about their constituent audience, and d) provide clinical & community expertise	NH Bureau of Drug and Alcohol Services (BDAS) **Rationale:** access to knowledge, skills, & services provided by BDAS programs	Insurers **Rationale:** a) direct beneficiary (lower costs, better outcomes) of integrated care, b) knowledge & expertise, and c) facilitate access to data.

ADDITIONAL STATE LEVEL STAKEHOLDERS		
Medicine	**Public Health**	**Community**
NH Health Care Assoc. (long-term care) **Rationale:** a) disseminate info/encourage participation of local long-term care facilities, b) serve as a state advocate for integration, c) knowledge about their constituent audience, and d) clinical & community expertise		Media **Rationale:** expertise in and access to mechanisms to create awareness about integration
		State Legislature **Rationale:** Influence on creating policies that can facilitate or inhibit integrative work
		Statewide Faith-based Health and Social Service Organizations (Catholic Charities, Lutheran Social Services, etc.) **Rationale:** a) offer knowledge about their constituent audience, b) operate health care facilities/services, and c) link to local faith-based health and social service outreach efforts.
		NH Cooperative Extension Service **Rationale**: a) Link to state level extension experts, resources, and services related to health and b) disseminate info. & encourage participation of local extension agents in integration efforts (if appropriate)

Appendix Two

Additional Local (Community) Stakeholders to Involve in a Medicine-Public Health Integration Project Depending on the Health Issue or Population Focus

Additional Local Level Stakeholders

Below are additional local level stakeholders that could be added to the list of core local stakeholders (see page 10) depending on the health issue and/or population level focus of the integration activity. In some cases, an organization may be listed as a representative of multiple sectors by the nature of its work. These organizations could serve as "boundary spanners" between the different sectors. Though this list is expansive, it is not exhaustive of all stakeholders.

ADDITIONAL LOCAL LEVEL STAKEHOLDERS		
Medicine	**Public Health_**	**Community**
Local contractors of NH Bureau of Behavioral Health (BBH) such as community mental health center (CMHC) and private practice substance abuse providers. **Rationale:** a) major players in local mental health care system. b) possess clinical knowledge, c) are familiar with the local mental health system, and d) provide access to the high risk population served by CMHCs	School Nurse **Rationale:** a) familiar with local child/family health issues, b) serve as a "boundary spanner" between schools, families/community, & health system, and c) clinical knowledge	School Nurse **Rationale:** a) familiar with local child/family health issues, b) serve as a "boundary spanner" between schools, families/community, & health system, and c) clinical knowledge
School Nurse **Rationale:** a) familiar with local child/family health issues, b) serve as a "boundary spanner" between schools, families/community, & health system, and c) clinical knowledge	Local Social Work Practitioners **Rationale:** a) offer insight about community issues, b) possess clinical knowledge, and c) familiar with the local mental health system	Local Extension Agents **Rationale:** a) link to state extension experts resources, and service related to health and b) may be knowledge about local stakeholders and/or efforts related to a health issue
Local dental practices **Rationale:** a) major players in local oral health care system. b) possess clinical knowledge, and c) provide knowledge about local oral health care system	Municipalities **Rationale:** a) major local purchaser of care, b) role in setting local health policy, and c) provider of many local services that affect health (welfare office, departments of health/health officer, recreation, transportation, public works, etc)	Local Social Work Practitioners **Rationale:** a) offer insight about community issues, b) possess clinical knowledge, and c) familiar with the local mental health system
Local long term care facilities **Rationale:** a) major player in local medical care system, b) possess clinical and community knowledge and c) gain insight about their constituent audience		Media **Rationale:** expertise in and access to mechanisms to create awareness about integration

ADDITIONAL LOCAL LEVEL STAKEHOLDERS		
Medicine	**Public Health_**	**Community**
Local VNA **Rationale:** a) major player in local medical care system, b) clinical and community knowledge and c) insight about their constituent audience		Municipalities **Rationale**: a) major local purchaser of care, b) role in setting local health policy, and 3) provider of services that affect health (welfare office, recreation dept, transportation, public works, etc)
		Faith Organizations **Rationale:** a) offer insight about community issues and b) provide link to local faith-based health and social service outreach efforts
		General Public **Rationale:** a) direct beneficiary of integrated care, b) their support is needed to create demand for integration, and c) offer skills, community/subject knowledge, & connections

Appendix Three

Barriers and Facilitators to Collaboration between Public Health and Medicine

Collaboration Factor	Barrier	Facilitator
Systemic Factors (conditions outside the organization)	Policy Barriers a. National health policy/reform priorities taking precedence over local priorities b. Uncertainty about how Public Health (PH) and Primary Care (PC) would function under newly created structures & governance processes (PH Regionalization in NH) c. Privacy laws in NH are very restrictive	Govt Involvement and Fit a. Policy discussions need to occur among Fed-State-local government to discern: i. Fit between national-state priorities and local needs (American Reinvestment Recovery Act – need to fit into national objectives) ii. Ways to build more collaboration between PH and Primary Care (PC) as it relates to health policy issues such as coordination of services, priority setting, emergency preparedness, Medicaid, etc. b. Govt. (as a purchaser of care for the poor and their employees as well as a provider of PH services) endorsing the value of collaboration & outlining the benefits of collaboration, and acknowledging successful integration work
	Funding Barriers: a. Lack of stable/sustainable funding (vs. intermittent/one-time funding) for collaborative work and/or evaluation of coll. work b. No remuneration for PH work done in PC settings c. Fee for service payment does not incentivize PC involvement d. Cost of training (and re-training) staff due to turnover e. Lack of PH funding limits ability of PH workers to participate in collaborative efforts. (need grant before participate) f. Slow pace of collaborative work g. Lack of access to clinical, change mgt, coalition mgt experts due to lack of funds	**Funding Facilitators** a. Availability of sustained govt. (Fed & state/province) funding to support both collaborative admin activity & project implementation b. Funding facilitators to encourage PC involvement: i. reducing costs of running a medical office (funding for insurance premiums), ii. funded education iii. develop alternative to Fee for service payment structures to let MDs delegate tasks to their team & instead focus on more complex patients & community base care i.v Change MD payment mechanism to pay for quality c. Resources available by collaboration partners sharing/pooling/giving in-kind resources

Collaboration Factor	Barrier	Facilitator
	Power and Control Barriers a. Entrenched bureaucracies for PC and PH b. Power of secondary (hospital) care over PC c Providers fearing loss of practice autonomy if forced to use clinical guidelines d. Territorial and ownership conflicts e. Credentialing requirements preventing providers from involvement f. Greater resources/clout of medicine g. Legal/liability issues surrounding collaboration	**Education and Training** a. Re-tooled education Medical and PH systems i. Schools/Programs that emphasize the need for a system-wide, collaborative approach to health issues ii. Need for training in PH in med schools and biomedical underpinnings of diseases in PH Programs b. Skill building/technical assistance resources (ed/trainings, tools, websites, etc) that address knowledge/skill limitations noted under "Organizational Barriers"
	Information Infrastructure: Lack of structure & processes to promote info sharing a. Lack of integrated surveillance system to facilitate reporting between Med & PH b. Lack of community health assessments to determine community needs c. Lack of relevant clinical data d. Lack of evidence-based, cost-effective PH interventions e. Lack of or poor quality data collection systems (like EMRs) to facilitate interdisciplinary care f. Technological issues and confidentiality concerns surrounding data sharing (like EMRs). g. Lack of shared protocols to facilitate evidence-based practice	**Information Infrastructure** a. Development of shared health info systems AND communication system to link users of the integrated system b. A registry of information resources c. Linked electronic records d. Virtual networks for communication
	Limited External Demand for Integration a. govt, employers, & others have not pushed for more collaborative work	**Create an External Demand for Integration** a. Outreach to and involvement with employers to support the need for integration b. Alignment of benefit design, funding, and incentives to support integration efforts (for example, assuring that clinical preventive services are covered in health benefit packages)

Collaboration Factor	Barrier	Facilitator
Organizational Factors (conditions w/I the org)	**Lack of Common Focus/History** a. Lack of a common focus (PH focuses on populations and has a long term view while PC focuses on individual and has short term perspective) b. Collaboration is not the customary process of how PH and PC have interacted with each other c. Policies/practices of the org impede collaborative work d. PC does not understand what PH does at the local level and/or does not value PH	**Lack of Common Focus/History Facilitators** a. Explicitly enumerate from both the public health and medical care system perspective the benefit (value) of collaboration b. Need to be upfront about each partner's expectations for what they hope to get out of participation in a collaborative effort. If they don't feel that they are getting any value, they won't participate c. Need to find common ground (win-win situations) for collaborative work. (build on self interests AND health interests) d. Inculcate the value of integrative work in PH and PC related academic programs (see "Education & Training" Facilitators) e. See "Leadership Issues" below with respect to policies & practices that facilitate collaboration
	Resource/Infrastructure Limitations: Lack of human, time, space, & resources for collaboration a. Poor compensation for PH activities in an MD practice setting (no $ for this type of work b. Lack of team building/change mgt resources, clinical technical consultants and facilitators for collaborative work c. Formative stages takes time and this is a limited commodity (esp for MDs) d. Each sector has its own resource limitations e. Lack of infrastructure (EMRs, staff) in PC office for collaborative work f. Private practice largely unorganized, difficult to find a liaison and have interaction g. Slowing down of practice work as learn new systems (like EMRs) h. Re-training and buy-in issues related to staff turnover i. No structure/bridge (MOU, a community coalition) to facilitate communication and minimize competition among stakeholders	**Resource/Infrastructure Facilitators** a. See funding facilitators above b. Collaboration must be perceived as a benefit to each org. and to the clientele they serve in order for an org to invest resources in it. Collaboration must provide tangible benefits to both PC and PH. c. Need to plan for sustainability from the beginning d. Importance of bringing in new partners to acquire skills, knowledge, & other resources to the partnership

Collaboration Factor	Barrier	Facilitator
	Lack of Knowledge & Skills: a. About state laws & policies, b. About what integration is c. About how to effectively lead/manage coalitions/collaborative projects in a community setting , change management/evaluation skills, best practice with respect to clinical & PH d. Of PC about PH services/functions (community health assessment, implementing evidence-based PH interventions) e. Of PCs about community resources & contacts f. Of PH and community agencies about how to market services to clinicians g. Of PH about bio-medical underpinnings of disease h. Of effective strategies to integrate PH and medical care interventions (i.e. What are potential ways to blend the work of PH and PC to address a community health issue?) i. Lack of understanding about how to undertake interdisciplinary teamwork j. Of how to select & adapt an evidence-based intervention to a community context (translational research skills) k. Of existing toolkits & materials to use in a community intervention	**Leadership Mgt and Accountability Facilitators** a. Involve multiple people from each organization, including at least one "champion" at the leadership level b. Select an org. rep to the collaborative partnership that has integral knowledge about the work of the organization AND the time AND passion for integration work c. Develop advisory cmt or boards with representation from PH, PC, AND the community d. Ensure org. policies & practices promote collaboration e. Create structures that promote communication & minimize competition (contractual agreements, common governance structures, mentorship for new employees, clear accountability lines, job descriptions requiring collaboration,) both within the org. and with other orgs involved in a collaborative effort f. Supportive & accessible partnership managers that are equipped to facilitate collaborative work/project g. Need sufficient administrative support for the collaborative effort h. Assist partnership managers to develop skills and knowledge needed to manage collaborative teams (ex. interpersonal skill development) i. Use of smaller team with diverse backgrounds seen as more effective j. Stable teams w/higher % of FT staff & staff that had worked together longer were more effective
		Geographic Proximity of Partners Facilitators a. Co-location of PH and PC and other team partners facilitates communication, info exchange, sense of common purpose, and trust.

Collaboration Factor	Barrier	Facilitator
		Shared Protocols, Tools, Info Sharing Facilitators a. Using a standardized, shared data collection system to facilitate interdisciplinary care (like EMRs) b. Shared protocols to facilitate evidence-based, interdisciplinary practice & QA care processes c. Shared strategies and care processes d. Evidence-based toolkits & decision support tools
Interactional Factors (interpersonal interactions between team/ project members)	**Beliefs &Attitude Related Barriers** a. PC lack of trust/belief in prevention, pop needs assessment, & community development b. Doubts about collaboration organization, leadership, and/or program quality c. Lack of understanding about what "integration" means d. Resistance to change e. Refusal to participate in planned activities f. Philosophical differences between partnership members like not sharing the same mission for the partnership or the same philosophies of care g. Lack of trust. (In NH work is done independently & frugally.)	**Developing & Maintaining Good Relationships** a. Build on previous positive relationships b. Providing partners feedback about collaborative work c. Seeking partner input often d. Being patient to build relationships & realize that this takes time (especially at the beginning) e. Celebrate successes at each step f. Recognize that partners are not going to be like you and thus acknowledge the importance of different skills, knowledge that each partner brings g. Proactively address power, control, & politics such as bad/poor history issues or "blaming" the other discipline for current pop. health issues . In some cases you may need to change the org. rep to move forward. h. Create avenues to have stakeholders meet. For example, 1) brief unscheduled visits, 2) regular monthly meetings i. See "Power and Control" Facilitators above j. A paradigm shift where PC think of their patients as populations and public health officials think of PC as key partners in reaching the populations they serve. k. Need to understand each other's language and principles. (See Ed & Training Facilitators above) l. Need to define what integration is m. Need to involve "boundary spanners" (have a foot in PH and Med) n. Build on willingness (particularly of MDs) to participate in innovative work
	Relationship Barriers a. Poor rapport between PH and PC and/ or with the community b. Communication/language issues c. Lack of understanding about how to undertake interdisciplinary teamwork d. Confusion about what PH does (since what PH does varies particularly at the local level) e. Collaboration partners unclear about their partnership roles/responsibilities f. Clinicians are very competitive, not used to working in teams/collaborations	

Collaboration Factor	Barrier	Facilitator
		Role clarity a. Need to clarify what each partner does (what is PH? What does PC do?) b. Need to have clearly defined roles & responsibilities for all partners involved in the integration project
		Shared Purpose, Philosophy, Identity Facilitators a. Partnership members must buy-in to a shared mission b. Believe in value of the collaboration on improving community health c. Involve all stakeholders early in the process d. Need to share same philosophy of care e. Early partnership successes maintained enthusiasm f. Cultural competence and sensitivity when working with diverse populations
		Effective Communication & Decision-Making Facilitators a. Communicate regularly and in ways that fit the culture of each partner (e.g. MDs want BRIEF communication) b. Have multiple ways to communicate with partnership collaborators c. Need to have trust, tolerance and respect to foster good communication d. Upfront discussion of control/competition issues e. Involvement of the whole team, consensus driven decision making, & joint planning f. Listening to the needs of each partners – PC, PH, and the community